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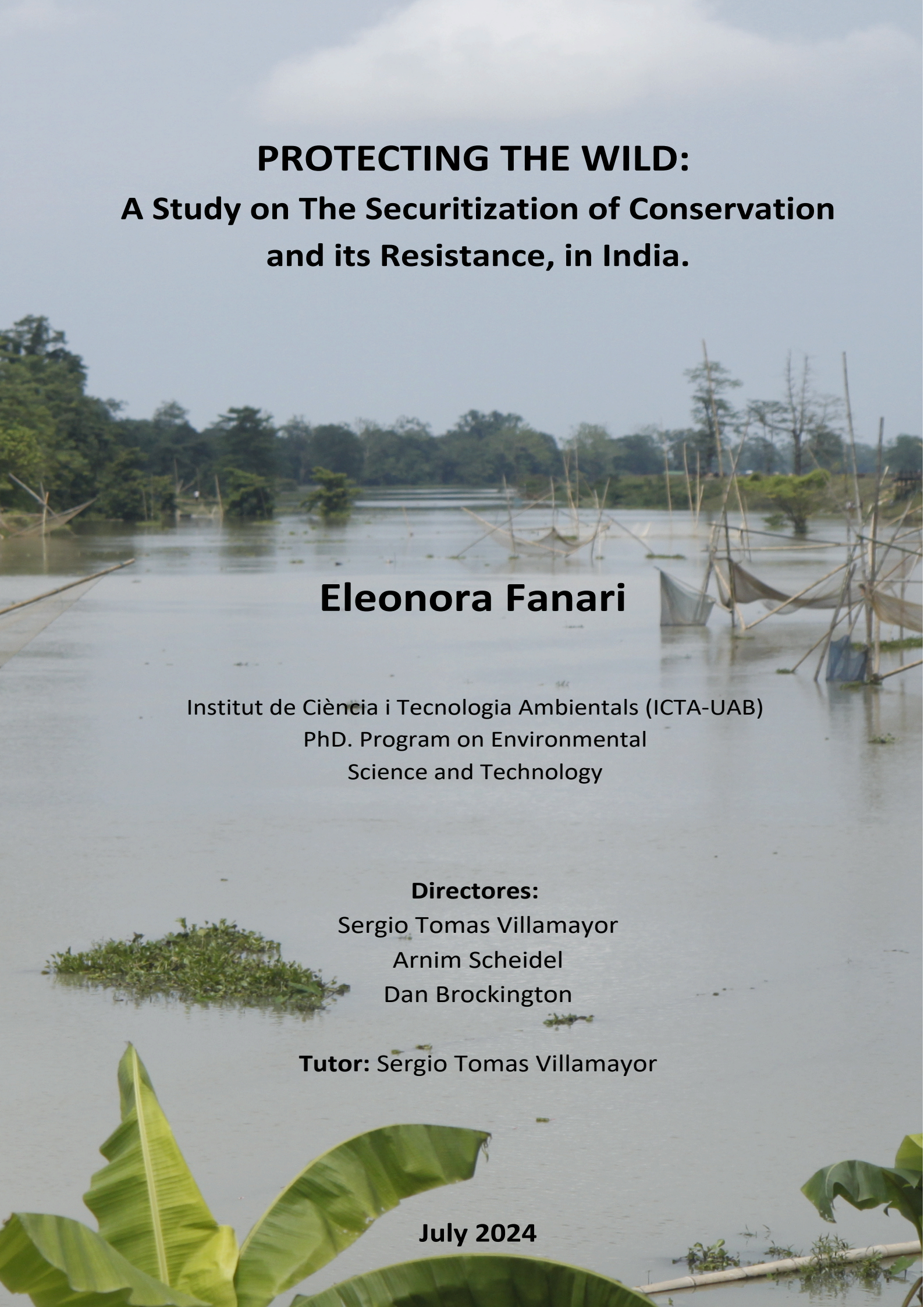
PROTECTING THE WILD:
A Study on The Securitization of Conservation and its Resistance, in India

Eleonora Fanari

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A Study on The Securitization of Conservation and its Resistance, in India.

Eleonora Fanari

Institut de Ciència i Tecnologia Ambientals (ICTA-UAB)
PhD. Program on Environmental
Science and Technology

Directores:
Sergio Tomas Villamayor
Arnim Scheidel
Dan Brockington

Tutor: Sergio Tomas Villamayor

July 2024

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This thesis was funded by:
"La Caixa Inphinit", grant number LCF/BQ/DI20/11780015
Periodo 2020-2023

This research was partially embedded within the EnvJustice Project:
European Research Council Advanced Grant-Agreement (GA695446)
Coordinated by Joan Martinez Alier at ICTA (UAB)

The research did also benefit from the financial support of the Spanish Ministry of Science, Innovation and Universities, through the "Maria de Maeztu" programme for Units of Excellence (CEX2019-000940-M)

Cover: Landscape surrounding Kaziranga National Park. Author: Eleonora Fanari.

Preface

During a journey from New Delhi to Dudhwa forest, I first learned that conservation policies were hampering the basic rights of the local communities living in forest areas considered protected by law. On that initial trip, I met a group of Indigenous women who were campaigning for their basic rights and against the threat of eviction under the guise of conservation. They were completely excluded from the imaginary of conservation. Their struggle moved me to better understand what was behind conservation and how this concept was used to control and seize land from the most marginalized communities in the country.

The research interests presented here are both academically and politically driven. This thesis has been inspired by my previous experience in India and the desire to delve deeper into the stories that were unfolding before me. The people I met along the way, from friends to colleagues, played a crucial role in guiding me towards those spaces of resistance and helping me comprehend the world I was experiencing. My interest in environmental issues and Indigenous rights likely began to take shape during my years studying social science in New Delhi, later enhanced by engaging with social organizations in India.

The stories of injustice in the name of conservation, as described in this thesis, revealed another terrible contradiction of the world. I was initially astonished to learn that conservation, something I always felt was extremely important and necessary, was the ‘enemy’ for many people living in designated 'conservation areas.' I felt sad, confused, and angry at the same time, and those sentiments translated into energy and work. Before this PhD, I first engaged with these issues as a volunteer and later as a researcher. The different experiences from then to now have shown me the myriads of cultures, knowledge and believes which are part of the richness of India. Those spaces I saw and those stories I heard are now part of myself because those shared collected stories entered my body and never left.

When I returned to Europe, I knew I needed to write, but I did not know how or through what channel. This Doctoral Research project helped me make sense of the dilemma of conservation that I had been studying and observing during those years in India, and to conceptualize it as a critical piece of research that connects with similar stories unfolding in other parts of the Global South. Through the research process I could unpack the complexities and explain injustices more systematically. What I learned has changed how I view conservation and community mobilizing work and will inevitably shape how I re-engage with these realities moving forward. I was (and still I am) driven by the ‘why’ and ‘how’ questions regarding the different activities occurring within and around those conflicting conservation areas. I am sure this research does not fully answer all my questions, but it surely gives me the tools to better engage with the ‘problem.’

This research is dedicated to all those beautiful minds and souls that inhabit those territories and that are engaged in resistance every day to protect their knowledge, ways of life, beliefs, and rights to be recognized. They are struggling to build a better society for all of us to live in. *Conserving* their livelihoods should be an integral part of how we understand 'conservation'. It is for them that I have decided to write this thesis, to not forget their voices and recognize the significance impact they have had on my life, so that I can make their stories reach wider audiences - and hopefully engender support to defend their ways of life and that of so many indigenous people embattled by conservation efforts. I hope this thesis is only the beginning of a stronger and more engaging journey to continue supporting a just conservation, where conservation practices, if they need to exist, become for and with the people.

This thesis has also been a journey for me to slowly come back to Europe, to the place where I was born, and to gradually regain knowledge and understanding of a culture I had forgotten. Indeed, I was not ready to leave India—perhaps physically, but not mentally. Therefore, these years have been a beautiful transition from Asia to Europe, and I feel I am now ready to embrace these two worlds with strength, courage, and a bit more wisdom.

The issues of conservation that I engage with in this thesis go beyond territorial boundaries, and it has been extremely important for me to understand that these practices, although highly influenced by local histories, are also global stories. Conservation as a practice responds to the needs and values of a global market system. Therefore, this research, which primarily deals with stories of violence and injustices, is also a strong commitment to reimagine, dream, live, and create a new world based on different values and needs—one based on justice, care, and wellbeing for the planet and for us all.

This thesis is for all those women, children, men, animals, plants, rivers, and seas that are together resisting violence and greed. It is for all those friends who live in those conflictive space.

I dedicate this thesis to all of them.

Johar. (Long Life).

Eleonora Fanari

Acknowledgments

This thesis is the result of many encounters and the support of numerous people before and throughout this work, making it possible. While I won't be able to mention all of them, I would like to mention some.

First, I would like to thank my supervisors, without whom this work would not have come to an end. To Sergio Tomas Villamayor, for supporting me since the beginning, when we first met at the IASC conference in Perú, and for believing this work was possible. Thank you for your patience, guidance and feedback. To Arnim Scheidel, whose continuous support throughout the thesis has been immense, for carefully reading my work and providing detailed comments. Thank you for your kindness, friendship, and for your ability to help me turn a passion into academic work. And finally, to Dan Brockington, who formally stepped into this thesis in the middle of it, but who supported me since the very first moment I was interested in exploring the issues of conservation from an academic perspective. Thank you for believing in me, for seeing the value in this work, and for trusting that I could carry it on. Your extensive knowledge on the subject, your clarity, and your guidance have been crucial in finalizing this thesis. It has been a privilege and an honor for me to work with all of you!

Besides my supervisors, special thanks go to Joan Martinez Alier, who first supported me and gave me the space to enter the ICTA community. Your knowledge of the political ecology of India and the world has been a great source of inspiration for me. Thank you for believing in me, for giving me hope and strength, and for welcoming me into the EJAtlas team. I know I came to Barcelona all of a sudden, but I knew there was a door open for me. Thank you for opening that door from the beginning, prior to my PhD, until the very end. Thank you for welcoming me into your house in Palautordera, reading my work, giving me feedback, and for the beautiful and inspiring conversations (even the conflictual ones!).

An immense thanks goes to the EJAtlas team, whose conversations in and out of academia have shaped this research, and the person I am today. I would like to especially thank Daniela Del Bene and Mariana Walter, whose love and deep conversations over the years have been precious for my academic growth. To Marcel Llavero-Pasquina for his suggestions, energy, and passion, and to Yannick Deniau for supporting me in developing the map for this thesis and the featured map in the EJAtlas. And to the other people of the group, for their love, support, feedback, and friendship, to Grettel Navas, Sofia Avila, Federico de Maria, Bowen Gu, May Aye, Roberto Cantoni, Teresa Sanz, Brototi Roy, Ksenija Hanaček, Dalena Tran, and Juan Liu.

I would also like to thank the members of the LASEG group, especially Esteve Corbera and Victoria Reyes, who welcomed me and gave me space in their research group. Thank you for supporting me in creating a Conservation group in ICTA. Thank you to the new members of

the Conservation group, who, over the last two years, gave me feedback on my work, helping me better reflect on the many facets of the political ecology of conservation. Special thanks to Agnese Marino, Karla Ramirez, Valeria Zapata, Marina Requena, Jocelyne Sze, Ryan Unks ad Danielle Latreche, for bringing lots of joy and engaging conversations on conservation to ICTA! Especially I'd like to thank to Antonio Bontempi, my friend and colleague with whom I shared some important parts of this work. *Grazie Anto per avere sempre tempo di una chiacchiera*!

I would also like to thank to friends and colleagues in ICTA, with whom I have shared this PhD journey. They have accompanied me throughout these years, shared my frustrations and anxieties, and helped me overcome the most difficult moments. Thanks to Annie James, Francesco D'Abate, Anh-Thu Nguyen, Anna Villan, Mouna Chambon, among others.

I am also very grateful to some friends who have been there over these years, listening to the stories of my research. To David, for being there sharing enthusiasm over this project at the very beginning—*te quiero un montón*. To Angelo, for listening to me endlessly and for the many inputs received during these years (*Grazie Ange, ti voglio bene*!). To Louisa, for listening and helping with so much love on the final editing of this thesis. *Thank you, Lou*! And to Quime, my flatmate, who has been there sharing days and nights in this last year of the PhD in the La Floresta house, thank you so much for your support in some editing parts of this work!

A special thanks to my friends Anushka Rajendran and Kana Kitaoka for being there for me in New Delhi during my year of fieldwork. To listen, to take care, and to ensure I was always safe. Thanks also to Maria Rosaria Centrone, with whom I have shared the most important years of my life… *senza te, Rossa, non so come avrei fatto in India! Grazie per esserci.*

And finally, I am grateful to all the people in India who shaped this research before and during this PhD. A special thanks goes to Roma Malik for first bringing me with her to Dudhwa National Park and introducing me to the forest rights resistance struggle. Thank you for bringing me under your wing and showing me the important work carried out by the All-India Union of Forest Working People. Thank you to the Kalpavriksh team, especially to Neema Pathak Broome and Ashish Kothari, whose knowledge and engagement in supporting forest people and conservation India is of immense value. Thank you for giving me the opportunity to collaborate with you, learn from your insights, knowledge, and kindness.

Naturally, I am extremely grateful to all the people interviewed during my fieldwork and those who supported my research. I am thankful to the forest guards, forest authorities and conservation organizations that have engaged with my work. To all the activists and environmental defenders, I met during my years traveling in protected areas in India, whose acts of defending their territories, livelihoods, and bodies represent their everyday forms of

living. Especially I am grateful to the youth group of Bokakhat, who supported me in Kaziranga: Brihatrabar Pegu, Probin Pegu, Monahar Pegu, Emmanuel Barla, Tithiram Pegu, Ritupam Pegu, and Devyani Borkataki. A special thanks goes to Pranab Doley, whose deep commitment to working for local people's rights has been a great source of inspiration. Thanks for the friendship, the sharing and the deep conversations.

Finally, I thank my family. To my brother, Nico, whose unconditional love and critical thinking have always challenged me and who has always been there in times of trouble. *Grazie, Nico, per esserci sempre*. To my mum and dad, who raised me in the countryside of a beautiful place, Sardegna, and gave me the freedom, courage, and values I embody today. Thanks to my dad, who taught me to observe the world in a deep and silent way, and to my mum, who always encouraged me to discover the unknown and to be kind. *Grazie, ma e pa, questo lavoro non sarebbe stata possibile senza i vostri insegnamenti.*

Abstract

India is home to endangered wildlife such as elephants, tigers, and rhinos. In line with international agreements on expanding green spaces by 2030 and protecting endangered species worldwide, the Indian government has taken strict measures to ensure biodiversity and wildlife protection in the name of national and global environmental security. Under new legal frameworks to protect rhinos and tigers against increasing illegal wildlife trade and to ensure its commitment to 'zero tolerance' on poaching, the country has reinforced ideas of 'humans as enemies,' justifying armed control and the use of different forms of violence in these conservation areas.

Attuned to these characteristics of green militarization and the use of violence to protect wildlife, this dissertation examines the different mechanisms of control used by the state of India to secure its ecological wildlife spots. This thesis is based on several years of travelling and cooperating with social organizations in India, on the analysis of conservation conflicts emerging in 26 protected areas which I have directly documented in the Environmental Justice Atlas, and on a six-month ethnographic fieldwork research based in Kaziranga National Park in the northeast state of Assam. Through the analysis of collected data and direct observation, I show the increasing socio-environmental injustices in conservation spaces in India, especially in the state of Assam.

This thesis describes different processes of securitization in conservation, highlighting the impact these processes have on people's lifeways, customary rights, and subjectivities in India. It recognizes both direct and indirect forms of control used in these conservation spaces, acknowledging the indirect forms of control as necessary to reinforce the fortress conservation deployed in these landscapes. It analyses decentralized forms of conservation, such as participatory practices and co-existence approaches to conservation, as indirect mechanisms of control used to govern people's minds, territories, and wildlife. In doing so, it recognizes the tyranny behind decentralization, recognizing a shift from direct to indirect forms of violence.

This dissertation offers three contributions to the political ecology of conservation. First, it shows how the Indian government uses tigers and rhinos as totems to unify its 'unity in diversity,' and conservation as an extension of state control. Second, it shows how violence in conservation spaces has shifted from direct to indirect forms while continuing to adopt fortress conservation as a rule and extending the fortress into the landscape, shaping new environmental subjects and new conservation narratives. Finally, the dissertation shows how various forms of resistance to the mainstream conservation model, driven by important actors for sustainability, are shaping new conservation narratives, becoming part of what is recognized as 'environmental justice movements,' and shaping alternative futures and convivial conservation imaginaries.

Resume

India es hogar de animales salvajes en peligro de extinción, como elefantes, tigres y rinocerontes. De acuerdo con los acuerdos internacionales para ampliar los espacios verdes para 2030 y proteger las especies en peligro de extinción en todo el mundo, el gobierno indio ha tomado medidas estrictas para garantizar la protección de la biodiversidad y la vida silvestre en nombre de la seguridad ambiental nacional y global. Bajo nuevos marcos legales para proteger a los rinocerontes y tigres contra el creciente comercio ilegal de vida silvestre y para garantizar su compromiso de "tolerancia cero" con la caza furtiva, el país ha reforzado las ideas de "los humanos como enemigos", justificando el control armado y el uso de diferentes formas de violencia en estas áreas de conservación.

En sintonía con estas características de la 'militarización verde' y el uso de la violencia para proteger la vida silvestre, esta disertación examina los diferentes mecanismos de control utilizados por el estado de la India para asegurar sus lugares ecológicos de vida silvestre. Esta tesis se basa en varios años de viajes y cooperación con organizaciones sociales en la India, en el análisis de los conflictos de conservación que surgen en 26 áreas protegidas en la India que he documentado directamente en el Atlas de Justicia Ambiental, y en una investigación de campo etnográfica de seis meses. con sede en el Parque Nacional Kaziranga en el estado nororiental de Assam. A través del análisis de los datos recopilados y la observación directa, muestro las crecientes injusticias socioambientales en los espacios de conservación en la India, especialmente en el estado de Assam.

Esta tesis describe diferentes procesos de titulización en la conservación, destacando el impacto que estos procesos tienen en las formas de vida, los derechos consuetudinarios y las subjetividades de las personas en la India. Reconoce formas de control tanto directas como indirectas utilizadas en estos espacios de conservación, reconociendo las formas de control indirecto como necesarias para reforzar la conservación de la fortaleza desplegada en estos paisajes. Analiza formas descentralizadas de conservación, como prácticas participativas y enfoques de coexistencia para la conservación, como mecanismos indirectos de control utilizados para gobernar las mentes, los territorios y la vida silvestre. Al hacerlo, reconoce la tiranía detrás de la descentralización, reconociendo un cambio de formas de violencia directa a formas indirectas.

Esta disertación ofrece tres contribuciones a la ecología política de la conservación. En primer lugar, muestra cómo el gobierno indio utiliza tigres y rinocerontes como tótems para unificar su 'unidad en la diversidad' y la conservación como una extensión del control estatal. En segundo lugar, muestra cómo la violencia en los espacios de conservación ha pasado de formas directas a indirectas mientras continúa adoptando la conservación de fortalezas como regla y extendiendo la fortaleza al paisaje, dando forma a nuevos sujetos ambientales y nuevas narrativas de conservación. Finalmente, la disertación muestra cómo diversas formas

de resistencia al modelo de conservación dominante, impulsadas por actores importantes para la sostenibilidad, están dando forma a nuevas narrativas de conservación, convirtiéndose en parte de lo que se reconoce como 'movimientos de justicia ambiental' y dando forma a futuros alternativos e imaginarios de conservación amigables.

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Dedicated to all the people resisting violent practices of conservation,
To the youth, women and men living in those protected forest areas
and dreaming of a better tomorrow.

Nature is not a physical place to which one
can go, nor a treasure to fence in or bank,
nor as essence to be saved or violated […].
Nature is, strictly, a commonplace.
(Haraway, 1992).

CHAPTER 1.

INTRODUCTION

Oh Kaziranga, Kaziranga oh
Oh rhino
There is no own or other for you

You are keeping the honor of the country
Your name is around the world

Oh Kaziranga, Kaziranga Oh

To see you
So many people, have come here from far.
(Song by local women, March 2022)

The Putoli village[1] is nestled at the edges of Kaziranga, a famous park of Assam, in the northeast state of India. I arrived there on a dark night, with relentless rain adding to the obscure atmosphere. Navigating the labyrinth of narrow, unpaved, and muddy roads proved to be a challenge. My driver and I, huddled on a scooter and clad in raincoats, were drenched by the time we reached our destination.

The village was dark, with no lighting except some scattered lanterns. The house was built with a mix of concrete and traditional mud, and inside there were some beds, plastic chairs, and hanged clothes. The family hosting me had five members, including three daughters. They gave me the eldest's daughter room, and they all happily slept on another bed set up on the floor.

Curious about my arrival, some neighbors came to visit, and we sat around the fire, drinking hot *chai* in the dim light. Purjib, Sanjib and Teo[2] started complaining about the foresters' behavior, arguing that things have tremendously changed in this area and that people don't have jobs anymore. Purjib, the father of the three daughters, who was previously working as a casual forest guard, is now working as a e-*riksha driver*[3]. Teo, a young man, is unemployed, carrying out casual work here and there when the foresters or the authorities call him. I learnt later that Sanjib, his father, had a respected position in the village, and was the president of an eco-development committee.

[1] The name is invented, real name of the village is anonymized.
[2] These names are invented in respect to people's identity, the real names have been anonymized.
[3] E-riksha are small 3-wheeled vehicles powered by an electric battery and motor, widely used in South Asia as a way of transport.

Before arriving to the village, I was introduced to some community members by my local contacts in Kaziranga, so the people hosting me already knew about my research on conservation. Without asking they started speaking. I listened to their stories. “We live in extreme poverty here, we have no jobs, before many used to work with the foresters, but now they do not call us anymore” started Purjib, the house owner, with a tired face. “Our youth would be perfect to work in the *jungle*[4], they know every patch of it, and if an animal enters the habitat spaces, they know how to deal with it. If they had been employed in the forest department now all these problems wouldn’t exist, and no poaching would happen” responded Sanjib while sipping his hot tea. “If we could at least enter with them to fish and collect some firewood, there would be less conflict with the forest guards and less harm to our community” continued Sanjib. The continuous sound of dripping water hitting the steel ceiling suddenly occupied the empty space of the room.

The daughters curiously asked me some questions. The mother scolded them, urging them not to disturb me. I stayed focused on the conversation among the men. I asked: “Why are the youth not employed in the forest department anymore?”. Sanjib informed me that since 2008, the law had changed. “Since the national park became a tiger reserve new forces got recruited to protect the rhino. The foresters, and the other rhino protection forces, they are now recruited directly from Guwahati, and most of us do not have the money to go there, or we do not have the money to bribe for a job, or the right connection”. And then Purjib looked at me and said: “You need at least 1 lakh[5] rupee to get a job, where do we get so much money!”.

The mother, listening to the conversation, started arguing that at least they should be able to live in peace. Then, angry and almost shouting, she said: “If this is their forest, they should take care of their animals, and we of our own fields and cattle. But they cannot come and pick up our boys like this from the village! We are not *sikhari* (poachers)”. Her sudden words sounded harsh to me, but the others calmly continued to sip their tea. Purjib, listening to her, responded: “If instead of harassing us, they would protect our field crops from the wild animals, we would at least be good neighbors.”

Teo, who had remained silent until that moment, jumped in saying that the foresters in these last years have harassed young people when returning late in the evening, and some of his friends got picked up and beaten up very badly. Some of them have received life-altering injuries, and now they are not even able to work in the field anymore. No compensation was received by the family. “They (the forest department) think that just because we live close to the park, we do the ‘*bad things*’” said Teo alluding to poaching activities.

[4] In India the term ‘jungle’ is used to speak about the pre-colonial forest. This in contrast to the term Forest, which identifies the forest category created by the administration.
[5] Lakh is a unit in Indian numbering system equal to 100.000

"*Yahaan bahut saaree samasyaen hain, agar ham sochen to bahut bhaat hain*"
"There are many problems here, if we think deeply about it, there are many issues" said Purjib in Hindi, looking at me.

The dripping of the rain seemed to have stopped, and the men bid their farewells before leaving the house. Ajay, who until that moment had been translating for me from Assamese to Hindi, left the house. I thought he would stay with me, but he tells me he will be back in the morning, as his mother lives alone and he needs to stay with her. In the house, everyone gets set up to go to sleep and I slowly take my notebook to write down what I just heard. Those words rumble in my ears during the night, and I wonder what to do with this sudden information. Should I interview harassed people? Should I ask for their contacts? Or should I just go on with my original interviews plan?

I wake up in the early morning to the sound of the rooster. The mother was preparing *chai*, the daughters getting ready to go to school, and Purjib setting up his brand new *riksha* to go and work in the close city of Bokakhat. I sit in a small table close to Purjib, and while we eat breakfast, I ask in my broken Hindi if he could share with me the contacts of people who have been victims of harassment in the village, as I thought this was important for my research. At this he became defensive, speaking loudly in Assamese with his wife. I felt embarrassed and confused.

I only learnt later that in Kaziranga certain topics can be approached only in the night. No one speaks of violence in the morning, and it is difficult to know who you can trust. Stories about harassment of local people have come out in the news, together with other more shocking stories of local youth killed as accused of poachers. I had myself already listened to some of them in other villages close to this one. And although I have never asked directly, these stories are only shared at night. They vanish on a bright and beautiful day when everyone is working in the fields, grazing, fishing, or traveling to the city for modest business purposes.

After finishing his breakfast, Purjib invited me for a walk on the recent embankment which demarcates the village from the forest and serves as the sole motorable road available in the village. By the embankment a dry river, some rice fields and newly electric fences had been recently installed. While slowly walking, he points to the electric fence: "They say it's to prevent animals from crossing, but we believe it's to keep us away from the crossing".

While standing, I see several kids playing in the area next to the electric fence and try to identify some animals from a distance. At the same time, a convoy of safari-style tourist jeeps drives by on the opposite side of the fence, also trying to identify wildlife. This image stayed with me, making me question whose animals these are, and who these landscapes belong to.

1.1 Conservation: the new security frontier

This story depicts the forms of violence, perpetuated in a village situated just at the fringe of the famous UNESCO protected Kaziranga National Park, in the state of Assam, India. The park is considered to be of the most successful conservation projects in the country. It hosts 2.613 one-horn rhinoceros (2022 census), the largest population in the world, which have been highly protected and secured by the Indian state (Barbora, 2017; Sarma, 2022). However, behind the fences, local communities are bearing the highest cost of conservation. Their rights deprived, their livelihood denied, their 'security' at stake. They are poor because they have little money, they are also poor because they are deprived of access to the park even to gather some wood, they are powerless in the face of accusations of trespassing and even of poaching.

This is not only the story of Kaziranga. Although conservation is often portrayed as a virtuous endeavor aimed at safeguarding the environment, the methods employed and their impact on marginalized communities raise significant ethical concerns. The injustices perpetuated to local communities living within and around protected areas have been documented both in India and the rest of the world, mostly in the Global South (Agrawal & Redford, 2009; Brockington & Igoe, 2006; Cernea & Schmidt-Soltau, 2003). These stories of injustices do not only tell stories of violence, internal colonialism and marginalization (Mbaria & Ogada, 2016), but delve into the important political ecology questions of whom conservation is for, and which (hidden) political and economic agendas area behind this model of conservation.

As highlighted by scholars, civil societies and social movements (Holmes 2007, Fanari 2021, Shah 1992), conservation can exacerbate existing inequalities (Clay, 2016a; Margulies, 2018; William & Hutton, 2005) dispossess local communities (Agrawal & Redford, 2009; Rangarajan & Shahabuddin, 2006; Kabra, 2022), and undermine social justice (Martin et al., 2016, West et al., 2006). These injustices have resulted from a conservation model based on exclusion, where the creation of inviolate protected areas serves as enclosed and exclusive spaces for wildlife and biodiversity protection. This model of conservation has its roots in the colonial idea of wilderness, and it is known as 'fortress' (Brockington, 2002). While fortress conservation could benefit the protection of biodiversity (Brockington, 2002; Mittermeier et al., 2003; Talukdar, 2002), ethical and injustice concerns need to be taken into consideration.

To respond to these critics, global institutions or forums such as the Convention on Biological Diversity (CBD) and the International Union for Conservation of Nature (IUCN) have pushed for a more participatory and co-existence conservation model (Brown et al., 2005, Kothari et al., 2013). This is to respond to and address both issues of social and environmental injustices and to ensure a conservation model based on sustainability practices (Srivathsa et al., 2023). Decentralized conservation governance such as community-based governance (Borrini-Feyerabend et al., 2007) and a landscape approach to conservation (Sayer et al., 2017;

Torralba et al., 2023) have been advocated to develop a conservation approach which takes into consideration human rights and development activities (Krishna et al., 2017; Sayer et al., 2013). This is to create a conservation approach which would respond both to the needs of the people and to the sustainability of global and local markets.

However, in a time of climate crisis and on the brink of the sixth mass extinction (Wilson, 2016), preservation of the earth's biodiversity has emerged as a matter of priority. For this reason, environmental degradation and resource scarcity have been incorporated in the security agenda of national and global governments (Deudney, 1999; Duffy & Brockington, 2022). Protected areas and landscape-scale conservation have been considered the main strategies to secure the environment in the last decades. This was made clear in the latest 2022 Kunming-Montreal Global Biodiversity Framework (GBF), in which Target 3 emphasizes the necessity of expanding protected spaces to cover at least 30% of our planet, including terrestrial, inland water, and coastal and marine areas, by 2030. Critics of this expansion are primarily driven by the fact that the responsibility for achieving these goals has been assigned to the same authorities who are currently engaged in acts of injustice[6]. As a result, it is difficult to see how, in some countries, this expansion will be carried out in way that also respects the livelihoods and needs of local dwellers.

Ever since environmental protection has been considered to be a matter of security (Homer-Dixon, 1994; Peoples & Vaughan-Williams, 2010), conservation practices have also changed. For example, in the last 20 years, the increased dispossession carried out in India from Tiger Reserve has been justified by the hegemonic ideology of the extinction of the tiger, a charismatic and endangered species (Kabra & Das, 2022). Moreover, critical scholars have highlighted how military practices and security narratives have been used to further surveille protected areas. They have described the multiple forms of violence perpetuated in the name of conservation, which particularly arise in places where poaching is considered an issue (Barbora, 2017; Kelly & Ybarra, 2016; Massé & Lunstrum, 2016, Duffy, 2022).

These practices have further increased the conflicts with local communities who have found themselves in what Duffy called a ‘war by conservation’ (Duffy, 2016). While these practices have used poaching as the primary justification for increasing military forces, the narrative of illegal wildlife trade being related to foreign terrorist organizations has increased the necessity to implement anti-poaching measures in the name of 'national security' (Duffy, 2014, Dutta 2020a, Mulidharan & Rai, 2022). As recognized by Duffy & Brockington (2022), the security narrative is changing the relationship between nature, capital and security logics, by fostering and shaping new actors, new subjectivities and new forms of injustices.

[6] Concerns arose during the 2021 ‘Our Land, Our Nature’ Conference held in Marseille.

While conservation became 'securitized', it also became neo-liberalized. The extensive literature on critical conservation is concerned that conservation is becoming more and more allied with neoliberal capitalist processes (Büscher & Fletcher, 2015; Brockington et al., 2008). While there is a tendency to believe that conservation as a practice can overcome capitalist destruction activities, literature tells us that this is not always true. In recent decades capitalism and conservation have become two sides of the same coin (Adams, 2017; Brockington et al., 2008a). Market-based solutions (such as Payment for Ecosystem Services), the normalization of public-private partnership, the role of the private sector in conservation and the increases focus on eco-tourism development are some of the mechanisms used today to ensure the conservation of nature (Apostolopoulou et al., 2021; Igoe & Brockington, 2007; Lansing et al., 2015). In other words, to be 'secured' nature needs to be given a monetary value, becoming therefore a commodity.

In India, the marketization of conservation has been studied by various authors (Shanker et al., 2017; Gosh, 2015; Verma et al., 2017), who show a growing tendency to prioritize market strategies to protect the environment while neglecting the needs of local people. Moreover, some have analyzed the security strategies implemented around protected areas, highlighting an increase in military practices and the rise of violence under the guise of conservation (Dutta, 2020a; Muralidharan & Rai, 2020). However, fewer studies explore the link between the processes of securitization, the commodification of nature, and the resistance movements and practices that are shaping conservation areas in the country.

In this context, the overarching goal of this thesis is to better understand how processes of securitization in conservation have been shaping policies, laws and interventions, affecting livelihood, forest spaces and the creation of new subjectivities in India. It wants to analyze how local communities react and respond to these processes, by making the symbolic and material experience of violence visible. This research particularly contributes to the body of literature that explores the connection between conservation, securitization, environmental injustice, political resistance and violence.

My research argues that conservation in a post-colonial country like India is not merely about saving biodiversity. Rather, it is the continuum of imperialism and colonial control, which use the green slogan to continue dominating people and spaces. For this reason, it is marked by economic, political, and social contestation. These spaces of conservation are often situated at the forefront of new frontiers (Peluso, 1995; Moore, 2000), in which conservation, not different from development interest, enters the realm of a neoliberal economy, by bringing market forces to protect the environment (Apostolopoulou et al., 2021; Igoe & Brockington, 2007). Security narratives and military guards support this process, while opening space for the market, to create what I call a 'conservation economic zone', that is, a conservation zone made for neoliberal conservation economic activities at the expenses of local economies.

Here, nature, including wildlife, becomes not only a matter of national security but also a valuable commodity and thus demands protection at all costs, even at the cost of human beings, as illustrated in the Kaziranga experience. This underlies the link between security and neoliberal conservation practices.

This thesis provides a critical analysis of the implementation of contemporary conservation policies in India, with a specific focus on the securitization and militarization of protected areas and their increasing commodification. It offers insights into the implications of *participatory* and *co-management* conservation policies in militarized environments, such as Kaziranga, which is situated at the edge of the commodity and wildlife frontiers in the northeastern state of Assam.

While building my critical thinking, this thesis wants to shed light on the need to reframe conservation policies both at the national and international level, and to reframe the need to protect the environment not as a security issue, but rather as a matter of livelihood and human wellbeing. It calls for a de-securitization and de-militarization of conservation, which I argue, can only be done under a de-colonial conservation framework. This means recognizing that power imbalances, injustice and forms of domination are rooted in colonial processes. Therefore, justice in conservation can be achieved only if these deeply rooted colonial processes are recognized and addressed.

1.2 Research questions and framing

The overall aim of this thesis is to better understand the link between processes of securitization in conservation and the rise of conservation conflicts. By securitization I mean the process of defining an issue as an existential threat (Buzan et al., 1998), which aim is to control people and spaces. Therefore, by securitization I do not mean the expansion of police forces (which is its consequence), but the social and territorial mechanisms developed to protect or 'secure' a space for conservation, using 'security' as a collective claim.

Considering this, the main question is: *How are processes of securitization in conservation impacting the lifeways of local communities, and how are these securitization processes contributing to shaping forest spaces, customary rights and subjectivities in India?*

To address this overarching question, three specific questions guide the analyses:

1. How are conservation policies impacting the life of local communities living within protected areas in India, and how are people mobilizing to defending their forest rights, especially in the absence of state support and in the face of government hostility?

2. How do participatory conservation practices, promoted under a security agenda by the state and environmental organizations, shape various forms of violence and subjectivities in a militarized space like Kaziranga National Park?

3. How do mechanisms of conservation and development promoted under a landscape conservation approach respond to the need of co-existence and shape forest spaces, and how do people respond to these initiatives in Kaziranga National Park?

These three queries, developed in the form of three articles, have guided my analysis of how conservation practices in India are shaped by securitization processes. The first question is addressed through a comparative analysis of 26 biodiversity conservation conflicts in India, which I documented in the Global Environmental Justice Atlas (EJAtlas). The other two questions are addressed through a case study research based on a mix of ethnography and other qualitative methods. The case study focuses on Kaziranga National Park, located in the northeastern state of Assam, which is a national park and tiger reserve known for its militarized conservation practices. It is an interesting case where security forces have been deployed under the guise of protecting the park from poaching threats.

I frame the three queries in terms of the different ways in which biodiversity has been secured by the state and the conservation NGO sector in India. The first practice I recognized is by exclusion, involving processes of enclosure and fortress conservation dynamics. The second method is by inclusion, which has developed into participatory practices. The third method is by co-existence, expanding conservation into zones of regulation through the landscape conservation approach.

Conservation Processes	**Specific research objective**
Processes of exclusion by enclosure and dispossession	To trace how different communities have been challenging and mobilizing against exclusion, using the language of right.
Processes of inclusion by participation practices	To analyze how participatory practices have been developed and how they have shaped people's subjectivities.
Processes of co-existence by landscape approach mechanisms	To investigate how landscape conservation mechanisms have been developed and how people respond to them.

These three conservation paradigms which are reflected in the conservation agenda are not just implemented in a vacuum. In the complexity of the ground, they are always interacting and interlinking with each other. While every chapter explores mainly one process over the other, the chapters also show how these three paradigms are interconnected. This analytical

framework aims to categorize the ideas emerging directly from the ground and the processes analyzed in the thesis.

1.3 Conceptual review and theoretical background

This thesis takes political ecology as its point of departure to understand conservation from a social and political critical perspective (Robbins, 2012). To better understand how conservation spaces get created as a continues processes, I use territorialization as a main concept (Vandergeest & Peluso, 1995), which allows me to better understand conservation as a mechanism of control over resources and people. To analyze how these mechanisms of control or forms of power shape subjectivities in environmental spaces, I turn to Foucault's theory of governmentality, mostly basing my understanding on Fletcher's multiple ideas of environmentality (Fletcher, 2010). This approach helps shed light on the power used by the state to govern these areas and to analyze how people are influenced by that power and how they respond to it. Overall, the thesis is guided by the concept of securitization (Buzan et al., 1998), to understand how the ideas of environment and conservation as a security threat influence the way conservation gets shaped, and how militarization as a first response to securitization is becoming a 'real' threat to local communities and (to a certain extent) biodiversity. I finally turn to environmental justice and resistance theories to better understand how people mobilize in their quest for justice (Scheidel et al., 2020). The vast literature on resistance and conflicts provides my theoretical framework for analyzing conservation mobilization and conflicts.

1.3.1 Political ecology of conservation

As the two words suggest, political ecology is about ecology and politics. It challenges, as Robbins suggests, an apolitical view of ecology (Robbins, 2012). Political ecology as a field of research traces its lineage to the 1970/80, when different scholars started to feel unsatisfied by the explanation of environmental problems, which were attributed to population growth, lack of technologies and poor management (Peluso, 1995; Martinez-Alier, 2002; Neumann, 2004; Watts, 1983). For all these authors the problem lies in better understanding the material system. It lies in investigating the impact of capitalist development on the environment; in investigating the social and political implications of environmental practices of conservation; and finally in the political economy of new ways of producing nature (Peet et al., 2010). Although various schools and authors define political ecology in different ways, a common pattern, according to Bryant and Bailey (1997), is that environmental change and ecological conditions are products of political and economic processes. Moreover, central to the argument of political ecologists is that the cost and benefit associated with environmental changes are not distributed equally. This reinforces or reduces existing social and economic inequalities (Bryant & Baley, 1997). Political ecology is therefore about power relations, and how they influence ecological decisions. As a result, and in the more defined case related to

conservation, political ecology answers to questions such as: Who benefits and who loses from wildlife conservation? What is the cause of this model of conservation? And what political movements have grown from these transitions?

However, another important premise that political ecologists share is the interest in shaping and influencing processes of development and conservation to create alternative, more just systems (Borras & Franco, 2023; Conde, 2014; Scheidel et al., 2018). This comes from a common understanding that "there are better, less coercive, less exploitative, and more sustainable ways of doing things" (Robbins 2012: 20). This means that political ecology is a field that encompasses not only academics but is born from the everyday struggle of people that expose their burdens in the context of ecological changes. Indeed, for Joan Martinez Alier, political ecology is the study of socio-environmental conflicts, which refers to conflicts arising from the unequal distribution of environmental benefits and burdens among different groups in society (Martinez-Alier, 2002). Peet et al. (2010) divide political ecologists into three groups. The first group centers their analyses around environmental degradation due to the capitalist logic of the economy. The second group analyses how the management of the environment and the conservation policies emerging from it are part of the same uneven capitalist system and economic growth. The third stream looks at the way nature is produced, considering the ongoing emergence of new ecologies developed from human creative production. The second stream is recognized as the political ecology of conservation, which is central to this thesis.

The political ecology of conservation examines the social, political, and economic factors that shape conservation efforts and outcomes (Jalais, 2010; Brockington, 2004; Li, 2007; Neumann, 1998; Rai et al., 2019). It recognizes that conservation initiatives are not solely about protecting ecosystems and biodiversity but are deeply intertwined with power relations, economic interests, and social dynamics (Brockington et al., 2008; Shanker et al., 2017). Particularly, political ecologists of conservation have observed how mechanisms used to create supposedly better ecological conditions are powerful mechanisms used by players to seize control of resources and landscape, and the value emerging from them. In this sense, conservation is perceived as a form of environmental control (Peluso & Lund, 2011). Enclosure, territorialization, legalization and violence are all mechanisms used to control land and people. The concept of territorialization has been used by many authors to describe the process of defining, delineating, and managing specific geographic areas for the purposes of conservation (Barua, 2024; Corson, 2011; Kabra & Das, 2022; Neumann, 2001; Vandergeest & Peluso, 1995; Woods, 2019).

Territorialization

According to Vandergeest and Peluso (1995: 388), "Territorialization is about excluding or including people within particular geographic boundaries, and about controlling what people

do and their access to natural resources within those boundaries". Following this definition, for a space to be territorialized, forms of mapping need to be used to define its boundaries. Territorialization also requires the classification of the area into categories, and therefore, as argued by Vandergeest and Peluso (1995), this process will eventually create an 'abstract space', or a space which is recognized only in maps, but not in reality. Such a space lacks the bodily experience of the territory, and for the case of forests, it creates what the authors later define as a 'Political Forest' (Peluso & Vandergeest, 2001). Political Forests are seen as "legislated, zoned, mapped, classified, and managed by professional, 'scientific' government agencies" (Peluso & Vandergeest, 2001: 256). However, and importantly for this thesis, Political Forests are spaces shaped by coercive control, counterinsurgency warfare, and by the 'everyday relations of power, claims to territory, and access to resources' (Devine & Baca, 2020: 912).

Many authors have described the creation of protected areas as a territorialization process, beginning with the enclosing of a forest area into protected private or state land (Bocarejo & Ojeda, 2016; Heatherington, 2012; Neumann, 1998; Vandergeest & Peluso, 2015, Rai et al. 2019, Kabra et al., 2022). This resulted in a conservation model centered on the exclusion of local people to produce pristine landscapes, known as the fortress conservation model (Brockington, 2002). Moreover, territorialization has also been described as a process that serves to reaffirm state power over rural spaces under the guise of conservation and as a way to control people's insurrections (Dongol & Neumann, 2021; Lunstrum, 2013). This process has mostly been created through forms of violence. Among these, dispossession is one of the most documented and violent ways to create exclusive conservation areas (Agrawal & Redford, 2009; Fanari, 2019; Kabra, 2009; Ojeda, 2012; Sawakar & Ronald, 2019; Shahabuddin & Bhamidipati, 2014). However, while in past territorialization was mostly seen as a state process, under neoliberal economy rules and regulations the process is determined not only by the state but also by transnational actors, who influence the creation of territory, social relations and rules (Devine & Baca, 2020; Lansing et al., 2015; Shanker et al., 2017)

According to Igoe and Brockington (2007) the neo-liberalization of conservation involves the reregulation of nature through forms of commodification, which entails the partitioning of resources and landscapes in ways that control, and often exclude, local people. Under this process state, business, NGOs and communities share the responsibility to protect the environment, creating new partnerships aiming to decentralize environmental governance. However, many authors have argued that with neo-liberalization, territorialization has increased rather than diminishing, becoming a process in which the state, in partnership with business or NGOs, defines borders, rules and regulations, profiting directly from these spaces (Adams et al., 2014; Büscher & Dressler, 2007; Corson, 2011; Devine & Baca, 2020). The processes described in this thesis need to be read as part of a neoliberal conservation era, or what Devine and Baca (2020) call 'green neoliberalism' – an era in which forests are becoming recruited to serve as a solution for environmental crises, and in which a plurality of actors

mobilize to solve environmental issues through different mechanisms. But in the complex neoliberal government, as demonstrated by Li (2007), these mechanisms to manage conservation and development issues are becoming more 'technical', meaning that only technical experts are believed capable of understanding and solving problems. This alienates people from the management of natural resources and possible solutions, generating conflicts over resource management and practice, which I mostly highlight in Chapter 6.

Governmentality

Another way to analyze conservation and mechanisms of control and government is through Foucault's governmentality theory. With government mechanisms becoming more sophisticated, the way to analyze them also becomes more complex. Therefore, I draw on Foucault's theory of governmentality to better shed light on these mechanisms, or what he calls 'technologies of power' used both by the state and non-state actors. Under Foucault's analytic of governmentality different forms of power, or biopolitics, regulate the 'conduct of conduct' of the communities, or how various forms of governance seek to shape, direct, and manage the behavior of individuals and population (Foucault, 1975).This concept involves understanding how power operates not just through laws and formal regulations, but through more subtle means of influencing people's actions and self-conduct (Häkli & Ruez, 1991). In the conservation literature, Foucault's theory of governmentality has been increasingly used in the last decade to better highlight how conservation practices as forms of government and power shape individual and collective behavior (Biermann & Anderson, 2017; Chambers et al., 2020; Fletcher, 2017; Menon & Borah, 2023; Montes et al., 2020; Poerting, 2023).

Foucault indicates three main ways of governing: through sovereignty power, meaning though coercion and rules; by using disciplinary power which operates through institutions like schools or workplaces by influencing people's beliefs and norms; and lastly through neoliberal power. According to Fletcher (2010), neoliberal power is related to the economic incentives used by the state, which aim to "create external incentive structures within which individuals, understood as self-interested rational actors, can be motivated to exhibit appropriate behaviors through manipulation of incentives" (Fletcher, 2010: 173). In the thesis (and mostly in Chapter 4) I use this approach to understand how mechanisms of government are implemented in conservation, both though sovereignty and disciplinary power, and how these mechanisms shape people's perspectives and practices on conservation. The practices described in the thesis, if understood as 'technologies of government', will be able to make us understand conservation as a biopolitical project, as Bluwstein (2018b) suggests. This means that conservation itself becomes a biopolitical project to exercise control over biological and social life.

1.3.2 Militarized conservation, poaching and securitization practices

In many instances, and mostly in the Global South, conservation practices produce and are produced by and through violence (Büscher, 2018; Dutta, 2020a). According to Peluso and Watts (2001), violence has been central to the process of territorialization and conservation. However, what differentiates conservation from other territorialization processes is the moral justification of violence used to protect biodiversity and wildlife (Duffy, 2014; Neumann, 2004) which allows stakeholders to accept ethically dubious policies such as shoot-on-sight (Barbora, 2017; Massé, 2020). Many authors have described this process of violence in conservation, which has been more evident and more direct in places where poaching has been considered an issue (Dutta & Simlai, 2022; Bocarejo & Ojeda, 2016; Duffy et al., 2019; Lunstrum, 2015; Margulies, 2018; Marijnen, 2018; Sahoo, 2012). In this thesis, the use of violence in conservation is a central element, particularly in the case study chapters (5 and 6) that describe poaching as a central element and an important threat which would put into discussion the national 'security' of the state and the country.

When violence becomes translated into the use of police forces and weapons to protect wildlife a new phenomenon emerges, conceptualized under the name of 'green militarization' (Lunstrum, 2014). Lunstrum uses the term to refer to "the use of military and paramilitary (military-like) actors, techniques, technologies, and partnerships in the pursuit of conservation" (ibid: 817). She argues that the use of the military in conservation spaces has deep roots but saw an intensification from the 1980s in response to increased wildlife poaching. Indeed, Peluso, in the 1993 article 'Coercing Conservation,' already discussed the use of violence through military means to control wildlife spaces. A large amount of literature on militarized conservation shows the legacy of the military in forest and marine areas, highlighting how historical conflicts play an important role in shaping these spaces (Büscher & Ramutsindela, 2015; Dutta, 2020a; Ellis, 1994; Lunstrum, 2015; Muralidharan & Rai, 2020; Ybarra, 2012). This means that in many instances protected areas were established in post-conflict regions, when people's resistance to the establishment of conservation nation-state institutions, as well as the state's counterinsurgency response to control local communities, defined these territories (Peluso & Lund, 2011).

Therefore, military practice in forest spaces is not new; what is rather new is the way militarization starts to be framed under what Duffy (2014) calls a new 'war for biodiversity', which started to be defined by the end of 1990. The author argues that the failure of the Community Based Natural Resource Management (CBNRM) provoked a revaluation of a fortress conservation models, but different from before, now it is more legitimized, more internationalized and with more military technology skills and practices. In India, these changes have been evident in the last decade as well, signing a new rise of militarized conservation in the country (Barbora, 2017; Dutta, 2020a; Margulies, 2018; Muralidharan & Rai, 2020; Simlai, 2015).

Poachers as terrorists and illegal wildlife trade as a crime

The use of arms in conservation efforts is deeply intertwined with the issue of poaching (Duffy et al., 2014). Historically, poaching has often been linked to poverty, portraying Indigenous communities or forest dwellers as perpetual rebels driven by financial necessity and positioned against wildlife conservation efforts (Duffy, 2014; 2022). This perspective has led conservation agencies to adopt a stance where they view impoverished communities as adversaries to conservation goals (Bocarejo & Ojeda, 2016; Duffy, 2014). However, Duffy (2014) explains that the narrative around poaching underwent a significant transformation after the 9/11 terrorist attacks. The discourse on poaching began to intersect with that of terrorism, resulting in the assumption that the fight against poaching and terrorism were part of the same struggle. This shift in narrative—from seeing poachers as impoverished individuals to viewing them as terrorists—has had profound implications on how the issue has been managed and addressed (Duffy, 2014; Duffy, 2015; Büscher & Ramutsindela 2015).

This transformation has had a direct impact on the material activities associated with conservation. It includes the formation of a global moral argument that emphasizes saving biodiversity as a matter of national and global security (Duffy, 2022; Duffy & Massé, 2021). In India, this has been clear in advancing new military techniques (Simlai, 2015) such as the deployment of a Special Tiger Protection Force and new Rhino Protection Forces in Assam, as I describe in chapters 4 and 5. Indeed, while before, the moral obligations to protect animals were largely based on the idea of preserving natural heritage, now the shift incorporates the notion of controlling wildlife for the sake of global security (Jayaram, 2016; Muralidharan & Rai, 2020). Consequently, conservation NGOs have begun to train military or paramilitary forces to combat poaching, increasingly relying on commercial agents for these efforts (Duffy, 2022). Moreover, as discussed by Massé et al. (2020), in the 2018 London Illegal Wildlife Trade Conference, the illegal wildlife trade was depicted as a 'serious organized crime', moving Illegal Wildlife Trade away from being a conservation issue, to rather become a criminal and security issue.

Securitization in conservation

Besides the direct link of securing poaching from terrorist and criminal attacks, a central argument for securing the environment is the alarm over wildlife extinction (Wilson, 2016). This narrative locates protected areas as localized sites to address the global climate crisis (Duffy & Brockington, 2022; Kelly & Ybarra, 2016). Critical security studies have analyzed how framing an issue such as the environment in terms of security can have significant repercussions on how these issues are addressed and managed (Deudney, 1999; Peoples & Vaughan-Williams, 2010). Securitization refers to the process by which an event becomes a security concern due to perceived existential threats (Buzan et al., 1998). Indeed, while moral obligations to protect animals were once largely based on the idea of preserving natural

heritage, there has been a shift toward incorporating the notion of controlling wildlife for the sake of global security (Jayaram, 2016; Muralidharan & Rai, 2020).

Scholars worldwide have documented this process, showing how conservation and security have become interconnected, and highlighting the social and environmental injustices emerging from such process (Dongol & Neumann, 2021; Dutta, 2020a; Loperena, 2016; Ybarra, 2016). In many areas, this violence has manifested in increasing organized and militarized anti-poaching activities (Duffy, 2015; 2022; Büscher & Fletcher, 2018), highlighting how conservation becomes an excuse or a greenwashing mechanism to employ security forces and legitimize control and violence in strategic territories (Lunstrum, 2015). This new phase of "war by conservation" is distinct in that it blends counterinsurgency (COIN) tactics with environmental concerns and worries about global security (Duffy, 2016). This phenomenon, which I describe in Chapter 4, is crucial for understanding the mechanisms used to deploy security forces in conservation.

Together with the increase in militarization, the narrative of security has also infiltrated spaces of decentralized conservation practices. For example, Duffy (2022) explains how community-based natural resource management (CBNRM) has been blended with militarized approaches. Local people are deployed as a local surveillance network, creating what she calls community-based militarized conservation (CBMC). Therefore, decentralization practices also involve processes of violence and have begun to be considered as counterinsurgency practices ---- (Dunlap, 2023). As explained by Dunlap, “Counterinsurgency combines civil and military action, employing the brute force of ‘hard’ conventional warfare and ‘soft’ civil-development strategies that form a larger mutually reinforcing governmental-corporate strategy, disciplining, enchanting and engineering the ‘hearts’ and ‘minds’ of target populations” (Ibid. pg. 139). Duffy (2022) and Massé (2018) recognize that in militarized and securitized spaces, participatory practices, as a top-down approach, become a new form of tyranny (Cooke & Kothari, 2001) and a means for the state to expand local surveillance networks (Duffy, 2022). The security narrative, therefore, influences decentralized conservation practices, embedding security concerns within participatory mechanisms and practices, which, as I argue in Chapter 4, also results in processes of violence.

Moreover, under the neoliberal state, securitization arguments are becoming a new way to extend control over larger areas of land (Barua, 2024; Massé & Lunstrum, 2016a). In fact, as Duffy argued, in the conservation war, "a proactive, interventionist militarized response that is spatially amorphous extends well beyond protected areas and into the land and communities surrounding them." (Duffy, 2016: 2). Therefore, securitization becomes an essential narrative for dispossession, violence, criminalization, and implementing new restrictions (as I show in Chapter 6). Moreover, it is under the security narrative that neoliberal practices of conservation are more easily implemented, both to secure the space and the wildlife.

The relationship between securitization in conservation and the accumulation of capital was first explained by Massé and Lund (2016), who highlight how capital accumulation, often related to practices of land enclosure, is enabled by the logic of security. Additionally, the privatization of security is enabling a whole set of new economic activities, establishing a new economy centered on securitization (Duffy, 2022), which has been conceptualized as "accumulation by securitization" (Massé, 2016). All these practices facilitate the process of alienating people from their habitat, which becomes 'excluded-included' under security reasons.

1.3.3 Environmental justice, resistance and conservation

The previously described processes frequently manifest on the ground through conflicts in which affected groups raise concerns over injustices. Such injustices are linked to the use and governance of the environment and have been conceptualized and described in detail in the environmental justice literature. The concept of 'environmental justice' originated in the United States during the struggle against waste dumping in North Carolina in 1982. During this time, a group of Black men and women protested the unequal and unjust pollution they were witnessing (Martinez-Alier et al., 2014). Conceptually, environmental justice has its roots in theories of social and political power, which explain environmental risks outside the class struggle (Byrne et al., 2009). According to Byrne et al. (2009), environmental justice is a social movement and an area of research that aims to guarantee that no group of people bears an excessive share of the negative environmental repercussions, especially those who are historically oppressed or economically disadvantaged.

An important aspect of environmental justice is understanding how injustice operates within the global economy, largely as a legacy of colonial practices. These forms of injustice emerged during the industrialization era and are perpetuated by capitalist processes, which exploit natural common resources for industrial and developmental gains. The resulting injustices have disproportionately affected vulnerable and colonized populations. In fact, the imperialism era brought ecological changes due to European exploration, devastating indigenous communities and their ecosystems (Byrne et al., 2009). Environmental justice literature in academia recognizes various types of injustices, which are frequently categorized into distributive, procedural, and recognitional justice dimensions (Martin et al., 2016; Schlosberg, 2004).

Distributive justice refers to the inequalities among stakeholders in terms of who is entitled to material rewards and who bears the costs and responsibilities. Procedural justice describes how decisions are made, who participates in the decision-making process, and under what circumstances. Recognitional justice involves respecting diverse cultures, values and identities and acknowledging different lifestyles, traditions, and beliefs as unique. As I describe in Chapters 5 and 6, I follow Martin et al. (2016), who emphasizes that recognitional justice in

conservation plays a crucial role. The injustices experienced by local conservation communities often stem from a lack of recognition, which is a continuation of historical colonial denial. These communities primarily mobilize not for the premise of sharing resource benefits but for being recognized as Indigenous, forest dwellers, citizens, and political agents (as I argue in Chapter 4). In India, the recognitional justice literature intersects with the language of forest rights, demanding recognition justice (Bijoy, 2017; Kothari & Pathak Broome, 2012; Tatpati & Pathak Broome, 2016).

Environmental justice conflicts

Environmental conflicts refer to social conflicts over the use of the environment and of natural resources (Robbins, 2012). They materialize as the mobilization of people or organizations against perceived environmental injustices and the negative socio-environmental effects of resource consumption (Scheidel et al., 2023). Joan Martínez-Alier (2016, 2020) poses the question: Is there a global movement for environmental justice? The Global Atlas of Environmental Justice (EJAtlas) aims to answer this question by documenting worldwide struggles initiated by local environmental justice actors—such as local communities, social movements, and organizations—who challenge the unfair and unjust use and distribution of natural resources (Temper et al., 2015). The conflicts that arise from these ecological injustices are termed Environmental Justice Conflicts or ecological distribution conflicts (EDCs), a term coined to describe social conflicts stemming from unfair access to natural resources and the unjust burdens of pollution (Martinez-Alier & O'Connor, 1996). EDCs highlight that, in addition to economic distribution struggles (such as labor struggles against economic inequality), there are also struggles over ecological distribution. I use this concept primarily in Chapter 4 to frame and analyze biodiversity conservation conflicts.

Biodiversity conservation conflicts are one of the categories of conflicts documented in the EJAtlas. Redpath et al. (2015: 4) define conservation conflicts as "situations that occur when two or more parties with strongly held opinions clash over conservation objectives and when one party is perceived to assert its interests at the expense of another". In the EJAtlas these conflicts are defined as "Conflicts involving terrestrial and aquatic nature conservation initiatives" (EJAtlas, n.d.). The actors in these conflicts are what Martinez-Alier (2002) calls "environmentalists of the poor," or what Gadgil & Guha (1995) refer to as "ecosystem people." These are people inhabiting natural spaces and fighting to save nature primarily because their livelihoods depend on natural resources (Escobar, 1998; Guha & Martinez Alier, 1997). This contrasts with the 'cult of wilderness,' an environmentalism promoted by urban/middle-class people who advocate for nature preservation by setting aside pristine areas and excluding people from them. The tension between these two perspectives on nature and its preservation gives rise to these conflicts. I argue that they are part of the environmental justice movement because, although they do not stem from economic costs and benefits, they result from the unfair distribution of environmental resources. They manifest as struggles over

valuation processes concerning livelihood values, Indigenous territorial rights, or ecological values in their own units of account (Martinez-Alier et al., 2010).

Resistance and conservation

Political ecologists have analyzed resistance as a field of study, documenting various forms of contention against ecological and development projects (Della Porta & Diani, 2006; Shah, 1992; Tilly, 1986). These resistance movements are considered significant for creating alternative approaches to mainstream development ideas and for acting as transformative agents (Scheidel et al., 2018; Villamayor-Tomas & García-López, 2018). However, resistance to conservation projects remains an emerging field of study. In India, although the struggle over conservation projects has existed for a long time (Dwivedi, 1997), these movements have mostly clustered under forest movements or peasants' movements (Baviskar, 2005; Gadgil & Guha, 1994; Shah, 1992). However, there is a necessity to recognize them as conservation movements, as the stakeholders involved are generally different. Moreover, these movements generally presume the presence of conservation organizations, known as Big International Non-Governmental Organization (BINGO), which set up conservation priorities and agendas (Brockington et al., 2008). The 'abstract' nature of the policy maker also affects the type of resistance. In fact, as Holmes (2007) argues, without a direct landlord or company to fight against, it is more complex to organize a political resistance (also addressed by Baviskar (1997).

Given the diverse nature of these conflicts and the prolonged struggles typically involving forest communities, everyday forms of resistance have been primarily used to understand these movements (Holmes, 2007; 2014; Neumann, 1998; Scott, 1985). However, when conflicts become more pronounced, the language of violence often emerges, and resistance is frequently portrayed as insurgent movements (Verweijen & Marijnen, 2018). Critical literature underscores the importance of contentious actions both as forms of territorial defense (Alonso-Fradejas, 2015) and as responses to colonial legacies and neoliberal domination (Rodríguez & Inturias, 2018; Watson & Davidsen, 2022). In India these movements started to be recognized under the struggle for recognition of their forest rights under the Forest Rights Act, 2006, which as I explain in Chapter 4 has played an important role in uniting people under the same flag (Bijoy, 2017; Debasree, 2019; Tatpati & Pathak Broome, 2016). In this thesis I analyze how in India conservation practices are not only opposed by everyday forms of resistance (Gupta, 2001; Scott, 1985) such as trespassing, wildlife crimes etc. (Holmes, 2007; 2014), but are rather opposed by more organized forms of resistance, which include protest, march, judicial activism and the development of a collective action network, to name a few. This is shown especially in Chapters 4 and 6, that illustrate how a social movement against conservation in India is starting to take shape.

1.4 Outline of the thesis

This thesis is split into seven chapters, including a Conclusion section that synthetizes the main results and draws lines for future research.

Chapter 1 has provided a general introduction to the work and the main theoretical framework, and concepts used throughout this thesis, which is rooted in Political Ecology. It also introduced the vast body of literature related to the militarization of conservation, neoliberal conservation, security studies and the large literature on environmental justice and resistance studies.

Chapter 2 briefly summarizes the most salient features of the recent conservation policies in India. It highlights some of the most important moments in the country's recent conservation history and the conflicts that have emerged from clashing conservation objectives. This brief chapter serves to familiarize the reader with the discourse on conservation in India before delving into the thesis and its detailed studies.

Chapter 3 illustrates the main methodology used for this research and discusses its primary limitations. It frames this work as part of a scholar-activist endeavor, emphasizing that the knowledge produced is not solely my own but a result of co-production with local activists and local engaged researchers. This chapter also provides an overview of my experiences conducting research in spaces shaped by structural violence, and how these experiences have influenced the research. In line with decolonial and feminist approaches to conservation, it highlights my positionality, underscoring my political stance, my motivation for conducting this study, and the main objectives beyond academic results.

Chapter 4, based on an article published in the Journal of *Political Ecology in 2021,* introduces the field of conservation conflicts and analyzes 26 conflicts arising in protected areas in India. These conflicts have been documented and analyzed through the EJAtlas and informed by field research conducted amidst social movements in the country. Specifically, it examines the interplay between conservation policies and the rights of the commons, as well as the socio-economic impact of these policies. The chapter demonstrates how the environmental security narrative influencing Indian conservation policies directly impacts local communities, leading to displacement, criminalization, and an increase in militarized policies, including the creation of new security forces to protect wildlife. While describing these impacts, it also analyzes the mobilization and movements emerging in response to these new conservation policies, articulated under the banner of forest rights. The chapter situates the movements of forest dwellers and Indigenous communities inhabiting protected areas, especially tiger reserves, within the larger environmental justice movement. It highlights the role of these movements in achieving and shaping a decolonial conservation model.

Chapter 5, based on an article published in *Conservation and Society* Journal in July 2024, delves into a critical case study to better understand and analyze how conservation policies are affecting local people and shaping subjectivities. It focuses on the critical case of Kaziranga National Park, which is particularly affected by the security agenda and the increasing phenomenon of militarized conservation. Kaziranga is renowned for its successful rhino conservation story. However, it is also (in)famous for the violence used to protect its wildlife, primarily through anti-poaching activities. Framing this case within the theoretical literature on the securitization and militarization of conservation, I illustrate the link between 'ecological success' and 'conservation violence,' evident from the narratives of local communities who live under constant fear and violence. In this Chapter I analyze the forms of participatory conservation that have arisen over the last decade among the local communities living at the fringe of the national park, to better understand how this violence permeates people's intimate lives. I demonstrate how these participatory measures, developed in response to international policies promoting a more participatory conservation model, have ambiguous objectives due to their implementation within a historically violent context. These measures are reshaping the structural violence of the area, resulting in subtle forms of control. The analysis emerging from this in-depth ethnographic research illustrates how participatory forms complement the militarization of conservation, indirectly controlling people and their lives. This demonstrates how participatory conservation forms in violent areas like Kaziranga are becoming forms of counterinsurgency. Additionally, this Chapter examines the creation of subjectivities using Foucault's concept of governmentality. By delving into the idea of environmentality by Agrawal (2005) and Fletcher's (2010) theories of multiple governmentalities in conservation, I use the concept of 'security mentality,' which helps me to explain the internal effects of these participatory mechanisms on communities and how different forms of power (disciplinary, sovereign, and neoliberal) shape people's minds and actions.

Chapter 6, based on a paper to be submitted to The Journal of Peasant Studies in 2024, expands on the policy of control described in the previous chapter, transitioning from structural to territorial mechanisms. In this Chapter, I describe the various mechanisms of control deployed in the Kaziranga landscape. I use the concept of a landscape approach to conservation to frame how different development and conservation initiatives in the area have been justified under the global idea of securitizing the place, both for poaching control and environmental protection. This chapter argues that new mechanisms of control now operate not within a fortress conservation model but within a landscape-scale conservation approach, highlighting the shift from fortress to landscape. I examine how the politics of expansion, connectivity, and water control, alongside the increased use of force, ensure the protection of the landscape. Using theories of neoliberal conservation, I analyze how the landscape approach to conservation enables neoliberal processes of land acquisition and economic transformation by disrupting socio-ecological relationships. Furthermore, I elucidate how conservation and development initiatives predominantly support a wildlife

economy rather than embracing a green, sustainable agenda. This, I argue, delineates the Kaziranga Landscape as a new wildlife frontier, driven by economic wildlife interests rather than purely by conservation initiatives. Additionally, this Chapter assesses the social and economic impacts on local communities affected by these initiatives, the resulting spatial injustices, and the contentious mobilization arising from them. It sheds light on the diverse and fluid movements shaping the Political Forest of Kaziranga within a rich and political scenario. This Chapter also serves as a tribute to the struggles of these diverse communities surviving in this violent arena.

Chapter 7: Finally, Chapter 7 concludes with my remarks on the securitization of conservation in India. This section summarizes the findings of each chapter, highlighting the lessons learned during my PhD journey and research, and introducing the new concepts that have emerged from the research study. It emphasizes the necessity of advancing a political ecology of security to better analyze the material impacts of securitization in conservation, calling for the de-securitization of conservation. It concludes by underscoring the need to analyze and support resistance movements as a means for sustainability and as spaces where alternatives to top-down conservation models can emerge. Lastly, it offers a reflection on the discipline of political ecology and what it has meant for me to conduct political ecology research, bringing up reflections on my journey as a researcher and as a human being during this time of ecological and political crisis.

CHAPTER 2.

BACKGROUND: A RECENT HISTORY OF FOREST AND CONSERVATION IN INDIA

The creation of the Forest Department renamed today as Indian Forest Service, dates to the British colonial period. In 1864, the British established the Imperial Forest Department to manage India's vast forest resources. During the late 19th century, the British introduced systematic forest policies and legislation, including the Indian Forest Act of 1878, which aimed to regulate the exploitation and conservation of forests (Guha, 1989; Rangarajan, 2015). Forest areas were therefore controlled directly by the British colonial forest department, which exploited the available resources, such as timber, and used these areas as plantation sites. Moreover, many of these areas became game reserved used by the elites to practice game hunting as a sport (ibid.).

After India's independence in 1947, forest management became a state subject, leading to the creation of state Indian Forest Service in 1966, under the All-India Services Act (Gadgil & Guha, 1995). Attention to forest conservation in India grew in those years with a focus on biodiversity and wildlife conservation. The 1969 IUCN conference in New Delhi marked a significant step, followed by the establishment of the Indian chapter of the World Wildlife Fund – WWF (Lewis, 2003). Prime Minister Indira Gandhi introduced in 1972 the Wildlife Protection Act (WLPA), which is considered a very strong law aiming to protect biodiversity and wildlife. Under this law, in 1973, the Tiger Project was established aiming to sustain tiger populations and preserve national heritage (Ramesh, 2017).

Under the WLPA and the Tiger Project, the management role of the Indian Forest Service in protected areas and national park changed, giving more responsibilities to the forest guards for the protection of endangered species (Shahabuddin & Rangarajan, 2007). The WLPA forbade villages living inside and near national parks and protected areas from using non-timber forest products, fodder, or grazing animals. Additionally, the law has made it easier to uproot entire towns from within or near national parks, which has resulted in multiple confrontations with local and indigenous populations (Guha et al., 2012; Shahabuddin et al., 2007).

In the past few decades, the increased attention on the protection of earth's biodiversity as a matter of global urgency became central to climate crisis discussions (Wilson, 2016). In response, expanding protected areas has been considered one of the main strategies to protect and secure biodiversity. Consequently, the India Union of governments has also responded to this urgency, reinforcing the existing conservation policies and expanding protected spaces. These new changes in conservation policies in India in the last two decades

have consequently brought to the surface new environmental conflicts over land, forests, and rights (Lele, 2019).

2.1 Reinforcing a Tiger Project and the making of a 'green India'.

A pivotal moment in the recent history of conservation in India was the 2005 report on the local extermination of tigers in Sariska, an important tiger reserve, which shocked the conservation community and the public (Shahabuddin et al., 2007). This 'crisis' was immediately addressed by setting up a Tiger Task Force, which was first of all created to give a strong message to the national community and to reinforce the conservation policies to secure the environment (Narain et al., 2005). One measure was to further reinforce the India Forest Service and increase armed protection around forest protected areas. These anti-poaching measures started to create lots of tensions with the forest communities dependent on forest resources, who were framed as enemies of conservation and as poachers (Shahabuddin & Rangarajan, 2007).

Just after the creation of the Tiger Task Force, in 2006, the 1972 WLPA was amended, and one of the most important changes in the law concerned the management of tiger reserves. Under section 38(V) a National Tiger Conservation Authority was set up by the Minister of Environment and Forest for better managing the tiger reserves, a project that was reinforced by international interest in protecting the endangered tiger (Bijoy, 2011; Karanth et al., 2008). Another significant addition was the creation of the 'critical tiger habitat' (CTH) category, which designated inviolate space within the reserves solely for tigers (Bijoy, 2011; Pathak Broome et al., 2014). The idea of creating an 'inviolate area' has been contested throughout the years, both by forest communities who have been directed impacted by these policies as many live in these areas, and by social organizations that challenged the idea of CTH, considered as a new tool to evict local communities in the name of tigers (Bijoy, 2011; Guha et al., 2012).

In addition to this, in 2008, the National Action Plan on Climate Change, outlined the country' s strategy to address climate change, focusing on eight national missions (Gosh, 2015; Lele, 2013; Rastogi, 2011). Under this, the Green India Mission aimed to improve other provisioning services like fuel, fodder, small timber, and non-timber forest products (NTFPs), as well as ecosystem services like carbon sequestration and storage (in forests and other ecosystems), hydrological services, and biodiversity. It also aimed to expand forest and tree cover by 5 million hectares and improve the quality of forest cover on another 5 hectares (MoEFCC, n.d.). The Green India Mission has been highly contested by some organizations like the Campaign for Survival and Dignity who considered GIM as a "formula for more land and resource grabbing" (Bawani, 2014).

2.2 Security and wildlife trade policies in India

As discussed above the WLPA of 1972 has been essential for the protection of flora and fauna and is considered to be one of the strongest acts for protection around the world. In addition to this, in 1990s, the international attention on the supposed escalation of illegal wildlife in India, pressurized the Minister of Forest and Environment to look at the issues related to illegal trade of wildlife products. In 2000, at the 11th Conference of the Parties of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), to which India is a signatory, India promised to open a Wildlife Crime Cell to tackle tiger poaching and the illegal trade in tiger parts and derivatives.

In 2001, as an aftermath, the Ministry of Environment, Forests and Climate Change (MoEFCC) approved the constitution of a Wildlife Crime Cell. Its role was to collect intelligence on wildlife poaching and illegal trade, and to gather, collate, analyze, and pass on this information to the most appropriate agency for enforcement action. When the tragedy of the tiger disappearance from Sariska struck in 2005, a new call for action and change was felt in the country. The MoEFCC, in collaboration with the Tiger Task Force, provided the idea of a National Wildlife Crime Control Bureau which became operational in 2008, named the Wildlife Crime Control Bureau (Wildlife Crime Control Bureau, n.d.).

Besides the creation of these legal bodies, the reinforcement of forest guards and police forces, especially trained in anti-poaching activities, has been significant. As describe in the NTCA website, the Special Tiger Protection Force comprises specially trained personnel, including forest guards and officers who are rigorously trained in wildlife law enforcement, anti-poaching techniques, and habitat management. The implementation of this body has been approved in 13 tiger reserves in the country (NTCA, n.d.). Moreover, Digital Surveillance Technology, such as camera traps, GPS collars, and drones, has also been introduced in India. The social implications of these technologies are now beginning to be documented (Sandbrook et al., 2021).

These legal changes on Illegal Wildlife Trade in India have also been guided by international recommendation. The United Nations defines the Illegal Wildlife Trade as a leading threat to global biodiversity, and therefore tangential to the climate debates (United Nations Office of Drugs and Crime, 2016; 2024). In response, a European Union resolution on wildlife trafficking (EU 2016/2076) called for ‘zero tolerance’ approach on poaching, and to upgrade financial and technical solutions to help developing countries to better deal with this problem (UN Environment Program, 2016).

2.3 Towards participatory conservation: the making of a Landmark Forest Policy

Parallel to these processes of strengthening and protecting wildlife through rules and regulations, in 2006, Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 was passed in the parliament (Bijoy, 2011). This law recognizes for the first time in the Indian history the individual and community forest rights of indigenous and forest dweller communities, as well as the rights to manage and conserve their traditional forest areas (Kalpavriksh & Vasundhara, 2013). The law came to be as a response to the struggle of millions of indigenous and forest dweller communities who since had been evicted from their forest areas since colonial times (Bijoy, 2011; Lele, 2019).

The call to move towards a participatory and inclusive mode of conservation has been highlighted from global institutions or forums such as the United Nations Convention on Biological Diversity (CBD) and the International Union for Conservation of Nature (IUCN), since the early 2000 (Kothari et al., 2013). The importance of centrally involving indigenous people and local communities in conservation was emphasized at two crucial conferences, the 5th World Park Congress in 2003 and the 7th Conference of Parties to the CBD in 2004. The CBD 2010 (art. 6 and 7) legally recognized the necessity of 'free prior informed' consent of indigenous communities before any decisions concerning their territory and livelihood.

The Forest Rights Act (FRA) therefore, responded both to the call of international institutions, and to the need and demands of local and indigenous people. Indeed, India has been one of the pioneer countries to shift from a fortress model of conservation to participation. The Joint Forest Management (JFM) program of 1990 was one of the first co-management approaches in India and the world (Lele, 2019). Unfortunately, JFM, which had a limited mandate of afforested degraded land, not only failed in addressing the livelihood needs of villagers, but also became a source of conflicts between villagers who were made responsible to protect forests at the disadvantages of other villagers (Sundar, in Guha et al., 2012). Furthermore, it was heavily criticized for its top-down approach to forest management, which denied communities the autonomy to manage the resource in accordance with local requirements and prevented true democratization of forest governance. (Sundar, 2002).

However, it is important to note that although the FRA was supposed to replace the JFM towards a more democratic India, the FRA has been less implemented especially in Protected Afreas (Fanari & Pathak Broome, 2019; Kothari & Pathak Broome, 2012). On the other hand, the JFM programs and the deployment of an eco-development committee (EDC) in forest villages has continued to be the only practices related to the co-management of forest conservation. In most of the cases, however, these committees do not ensure the de-facto participation of local communities in conservation practices. When created, they have mostly

served as local bodies to develop alternatives livelihood (Das & Chatterjee, 2015; Ghosh, 2018; Sundar, 2002).

2.3 Towards a landscape approach to conservation

Besides participatory practices, international institutions also started to advocate for a more holistic approach to conservation in which human activities coexist harmoniously alongside efforts to conserve biodiversity. This was considered important to support sustainable livelihoods and ecosystems while addressing economic needs (CBD, 2023). As they discussed the possibilities of preserving biodiversity outside of protected areas, conservation organizations started to discuss landscape conservation approaches (Brown et al., 2005). The idea became popular in the conservation community after 2013, especially with its incorporation into the Convention on Biological Diversity of the United Nations (Nielsen, 2016).

The idea first appeared in India in the early 1990s, when some regions were judged to be ecologically sensitive and deserving of preservation outside of protected areas. The Indian Board of Wildlife recommended renaming land outside of protected areas as eco-fragile zones—later to be called eco-sensitive zones—within a 10-kilometer radius when it approved a Wildlife Conservation Strategy in 2002. Geographic information systems (GIS) and satellite imagery became important to identify wildlife corridors throughout the country (Menon et al., 2005; Menon et al., 2017).

In 2020, India established a National Mission for Biodiversity and Human Well Being (NMBHWB), to respond to the 30x30 global target and to determine conservation priority zones using a 'landscape approach' to reach the target (Srivathsa et al., 2023). Indian protected areas represent the 5.43 % of Indian land mass, spanning for a total area of 17.864.069 sq km (Wildlife Institute of India, 2023). However, this network of protected areas seems to be far from being 'ecologically representatives', this because protected areas in India have mostly concentrated around ecological flagship species, moving attention away from other relevant metrics. Therefore the 85% of 'conservation priority zones' are found outside Protected Areas, giving much scope to demarcate other conservation areas outside the current one and reach the goal of protecting 30% of landmass in India (Srivathsa et al., 2023).

Considering target 3 envisions an inclusionary conservation model, a country as India, in which protected and conserved areas are inhabited by large number of communities, landscape-level models should be prioritized (Sengupta et al., 2024). At the legal level, this might need invoking what at the international level has been called 'Other Effective Area-based Conservation Measures' (OECMs), a geographical area "governed and managed in ways that achieve long term positive and sustained long-term outcomes for the in-situ conservation

of biodiversity, […] and where applicable with cultural, spiritual, socio-economic, and other locally relevant values" (CBD, 2018: 1). However, from a legal perspective this category is still unclear in India, and there are still not clear mechanisms for monitoring and reporting on the effectiveness of the OECMs (Sengupta et al., 2024).

2.4 A neoliberal conservation turn

The 2005 United Nations Framework Convention on Climate Change and the subsequent Paris Agreement of 2015 marked a significant shift towards the financialization of nature to address climate change. Since then, numerous initiatives and protocols have been implemented, mostly regulated by the CBD. In response, India has undertaken several initiatives aimed at transitioning towards a green economy and towards the financialization of nature conservation.

One of the first important initiatives (as already mentioned above) is the Green India Mission (Ghosh, 2015; Lele, 2013; Rastogi, 2011). The first significant attempt to quantify the economic values from protected areas in India was made in 2015 when the NTCA issued the first economic appraisal of tiger reserves (Verma et al., 2015: 2017). This evaluation of nature has been considered instrumental as an economic mechanism to save wildlife and biodiversity in India, as the estimation of 'natural capital' would help to secure ecosystem conservation and restoration (ibid.). Although in India specific plans to marketize these ecosystem services are still unclear, this evaluation language "enable state and private actors to territorialize, enclose, make propertied and control areas" (Menon & Rai, 2019: 260).

Carbon sequestration started to be traded since the implementation of the Clean Development Mechanism, as per the requirement of the Kyoto Protocol of the United Nations Framework Convention on Climate Change. India has been one of the few countries to actively respond to this carbon market mechanism, and currently it has the second highest number of projects registered under the Clean Development mechanism after China (MoEFCC, 2020). Moreover, India is ready to implement the plan of Reducing Emissions from Deforestation and Forest Degradation in developing countries (REDD+) (Chand et al., 2021). The Indian government has submitted the National Forest Reference Level (NFRL) and approved REDD+ at the national level (The Energy and Resource Institute, 2023).

Eco-tourism has also been one of the major focuses of the Indian politics in the last decade. In the NTCA website, it is written "eco-tourism harmonizes the conservation of biodiversity with responsible tourism practices, aiming to foster environmental awareness and local community engagement" (NTCA, n.d.). In 2011 the Government of India introduced a directive guideline to regulate eco-tourism in tiger reserves, both in buffer and core areas, specifying the role of the NTCA to direct tourism in these areas (NTCA, 2012). Tourism, even if regulated by states, has been considered a neoliberal conservation mechanism as it arises

from spontaneous markets that develop around the commodification of aesthetic nature conservation (Büscher & Fletcher, 2015).

Following this, and as clearly observed in this thesis, the increase of public-private partnership and the entry of international institutions into national environmental management programs are clear signs of a neoliberal conservation model. International conservation organization such as World Wildlife Funds for Nature (WWF) and the Wildlife Conservation Society (WCS) are the major Big International Non-Government Organizations (BINGO) behind conservation activities and strategies in India. Other financial institutions such as the International Fund for Animal Welfare (IFAW), the World Bank and lately the Asia Development Bank, are also ensuring financial investments in conservation. Nonetheless, financial investments are getting more and more technological to guarantee that the Forest Department has better technology to monitor operations in the reserves and that forest employees are properly compensated and outfitted (Menon & Rai, 2019).

2.5 Conservation and conflicts

The implementation of the FRA, 2006 and the strengthening of the WLPA are the legal faces of the new conservation conflicts in India. The new international and consequent national interest in further expanding and securing protected areas, as highlighted above, has brought a new wave of resistance and conflicts in the country.

In 2017, 31 Critical Tiger Habitats were set up, often including the previous buffer areas and therefore encompassing numerous villages living in the forestland, which strengthened the exclusionary character of conservation and intensified plans for resettlement. Considering the short time given for the notification, it is doubtful that a proper scientific study to notify the CTH was undertaken (Bijoy, 2011). In the last eighteen years the number of tiger reserves jumped from 28 in 2005 to 55 in 2023. While in the last five decades the national parks jumped from 5 to 106, and sanctuaries from 59 to 573[7]. These expansions, most of the time without recognizing people's rights exacerbated the conflicts with local communities historically inhabiting these areas, and for whom forest resources are sources of sustenance (Fanari & Pathak Broome, 2019).

While the implementation of the FRA could have changed the forest injustices and could have recognized peoples' rights to forest and resources, unfortunately this did not happen, as the FRA has been implemented in a limited way, and even less so within Protected Areas (Fanari & Pathak Broome, 2019). Moreover, the attempt to dilute the law in the last 15 years has been evident, and this has been criticized both from state agencies, conservationists, and

[7] Information from the Wildlife Institute of India, Ministry of Environment & Forests, retrieved on July 20, 2024, from https://wiienvis.nic.in/.

bureaucrats (Pathak et al., 2017). In this context, it is pertinent to bring up the ruling of the Supreme Court of India on February 13, 2019, concerning the 2006 FRA (Supreme Court of Inida, 2019a)[8] whose order of eviction for over a million forest inhabitants set off a chain of demonstrations that compelled the government to apply for a temporary stay of the order (Lele, 2019; Bisht, 2019). However, this shows the lack of will from the government to implement the FRA and decentralize forest governance.

Recently, the Wildlife Protection, 2022 Amendment Act and the Forest Conservation, 2023 Amendment Act have brought contestations in the country from social and environmental groups as well as local communities. First, the Wildlife Protection Act, 2022 is considered a regressive step for the protection of wildlife, as it facilitates the commercialization of elephants through the vague concept of 'religious or other purpose' (Viswanathan, 2022). Moreover, it continues to fail in reconciling the settlement of rights as per the FRA, 2006, in the WLPA (Kalpavrikhs, 2022a). Similarly, the Forest Conservation Amendment Act has been criticized for trying to dilute forest protection by undermining local consent on forest diversion and reducing the expansion of forest categories (Rawat, 2024; Kalpavriksh, 2022b).

2.6 Kaziranga National Park: a conflictive protected area

Kaziranga is one of many protected areas where conflicts arise due to conservation policies. Located in the northeastern state of Assam, Kaziranga National Park lies amidst the Karbi Anglong hills and the Brahmaputra River. It was designated a National Park in 1974 and later a Tiger Reserve in 2007. Over the past decade, the park has become a cornerstone of India's conservation efforts, notably for protecting the one-horned rhinoceros, which became a state emblem after Indian Independence in 1947 (Sarmah, 2023; Saikia, 2011).

Forest conservation in Assam began under British colonial rule. In 1889, the Assam chief commissioner prohibited hunting and shooting without a ranger's permission, adversely affecting numerous traditional hunting communities (Saikia, 2009). In 1901, Lord Curzon, the Viceroy of India, highlighted the danger of rhino extinction, and Kaziranga was notified as a game reserve in 1908, becoming one of the first in India (Saikia, 2009; 2011).

In 1950, the game reserve was renamed a Wildlife Sanctuary, and in 1954, the Assam Government introduced the Assam Rhinoceros Preservation Bill, strictly prohibiting the capture, injury, and killing of a rhinoceros. Under this bill, only the state government had the power to capture or kill a rhino. Moreover, the law empowered forest guards to arrest without warrants and seize weapons (The Assam Rhinoceros Preservation Act, 1954). However, trophy hunting, especially of rhinos, persisted, with Kaziranga considered a "heaven for the sport in rhino" (Saikia, 2011: 266).

[8] In the case of Wildlife First & Ors versus Union of India WP(Civil) 109/2008.

Conflicts between the forest department and local communities inhabiting these areas increased after the WLPA, 1972, was enacted and Kaziranga subsequently became a National Park. The restrictions imposed under the Act and the continued expansion of protected areas established a regime of control around the entire forest area of Kaziranga. The disputes have never ceased, and since the park became a Tiger Reserve, new rules and regulations have emerged.

Today, on the fringe of the park, there are 74 villages with a total population of 65,000 people, 85% of whom are classified as landless and marginalized (Report of the Rhino Task Force, 2015). When the forest became a National Park in 1974, its size nearly doubled from 430 km² to 843 km² by 1999 (Assam Gazette, August 3, 2007), creating conflicts with the numerous local communities inhabiting the forest fringes. As described in chapter 5, violence has escalated with increased efforts to protect the endangered rhinoceros. Moreover, conflicts have evolved, now related not only to park restrictions but also to the management of Kaziranga as a landscape (chapter 6).

CHAPTER 3.

METHODOLOGICAL APPROACHES AND LIMITATIONS

This thesis is based on my own reflection on the political discourses surrounding biodiversity conservation shaped by resistance movements, scholars, and activists. It builds upon my previous involvement with forest movements in India and international forest networks and is influenced by my personal experience in India, a country where I studied, lived, and worked for almost a decade before starting this PhD. My engagement with subaltern studies, decolonial studies, and social theories during my university years in India, combined with my personal experience with Indian society, shapes my understanding of the subject by providing me with the tools to observe the complex issues of conservation from the perspective of local communities. Due of my involvement with activists, social movements, and organizations in India as well as worldwide networks, I view this work as activist-scholar work that started prior to my official registration in the PhD program (Borras & Franco, 2023). I have had the opportunity to expand on this knowledge and work with its theoretical foundations throughout the PhD years (2020–2024), particularly in the political ecology of conservation and its subfields, which include governmentalities, militarized conservation, and neoliberal conservation.

Each chapter thoroughly details the specific data collection methods and analyses which I won't repeat here, this section will concentrate on the primary methodological approaches employed in this research, which underpin the co-production of knowledge. These approaches include comparative analyses and case study research. While acknowledging these as main methodological approaches used in this research, I also would like to embrace the 'messiness' on the use of mixed methods, which support me in avoiding oversimplification of a research design. Borrowing the word from Daft (1983), I use a 'craft attitude' to design this research in which structural methodologies served to accompany the fluidity of an unorganized method. This last point is better reflected at the end of this section, in which I focus on what it means to conduct fieldwork in conflictive and violent areas, while identifying how limits to data collection have shaped this research. Doing so, I offer some insights on how my positionality shapes this research, and how this sensitive topic of research has shaped and affected my emotions and by consequence this thesis.

3.1 Comparative analyses and the EJAtlas

Comparative data analysis is a method used in research to compare data from different sources, groups, or time periods to identify patterns, differences, and similarities. This approach is widely used in social sciences and in many other fields (George & Bennett, 2005; Ragin, 1987). It can be used both to compare quantitative and qualitative data. In this work I

used the approach to compare both qualitative and quantitative data, through a mixed methods approach (Bryman, 2012). In this thesis, and mostly in Chapter 4, I have used this methodology to compare different case studies, through a comparative political ecology lens. In order to move beyond a single case study, comparative political ecology compares the political, social, and environmental processes of various places, cultures, and time period. This approach aims to understand how various factors such as power relations, economic systems, and cultural practices influence environmental outcomes and resource management practices in diverse contexts (Watts, 2004; Robbins, 2012).

Chapter 4 is mostly based on the analyses of different cases which has been documented and analyzed through the Global Environmental Justice Atlas (EJAtlas). The EJAtlas is the largest data base of environmental conflicts around the world, and it is designed as a public platform where empirical cases about environmental conflicts and mobilizations are published after moderation (Martínez Alier, 2020; Temper, Walter, et al., 2018). It is a tool for knowledge co-production in which people worldwide can directly document their own cases and enter them in the platform. This collaborative production of knowledge is what also makes the EJAtlas an activist-scholar project (Temper & Del Bene, 2016). While the EJAtlas is used to analyze cases worldwide and use data documented by different authors, the cases studied and analyzed for this thesis, and especially in Chapter 4, were directly documented by me and later moderated by the EJAtlas coordinators team. However, the collection of data is based on a collaborative process with local communities, local organizations, small NGOs and activists all around India that have generously shared information and data about the cases. Therefore, the documentation of these cases has been based on a co-production of knowledge.

3.2 Case study selection

I identify with the notion of case study as defined by Stake (2003), who affirms that a case study is defined by interest in the individual cases. According to him, we choose a case study because we are intrinsically interested in it, and because this case comes to our life. In my case, the selection of Kaziranga as a case study came from my intrinsic interest in the site. Kaziranga as a case study came to my life because of my previous engagement with local communities of this space, that made me feel compelled to engage with this case. Having said this, I also acknowledge that the decision was guided by the 'representative' nature of the case, considering my interest in understanding the link between conservation, violence and resistance. I use here the definition of representative case study as used by Yin (2018) to refer to a case chosen because it provides a suitable context for certain research questions to be answered.

According to Yin (2018: 144) a case study is "a contemporary phenomenon within its real-life context" which is particularly relevant in situations where it is difficult to draw boundaries between a phenomenon and its context and the researcher has limited control over both. A

case study as a research methodology provides in-depth and holistic analyses of a phenomenon, and therefore, more than other research methodologies, it can produce and generate new theories or validate the existent ones (Bryman, 2012; Yazan, 2015). The overall complexities of studying a 'case' which is 'contemporary', makes "case study research 'hard,' although it has classically been considered a 'soft' form of research" (Yin, 2018: 33). The decision of taking up a case study for this thesis was born from the interest to understand and engage with the social complexities surrounding conservation spaces, to try to explain the same, to better understand the phenomena of conservation, the roles of the actors involved in this field, and the mechanisms used by different actors to manage environmental problems.

The case study research of this thesis is based on inductive principles and on a grounded theory approach (Glaser & Strauss, 1999). This means that theory and generalization are built up directly from the data collected from the case study and not the other way around (which would be deductive). According to Glaser & Strauss (1999), theory generated by this research methodology is built directly from the data. By this they mean that theory is discovered by the systematic analysis of the social research data, and it emerges from empirical evidence. Based on these arguments, my approach with the field has been inductive, and my research questions were continuously shaped by the field and the subjects of study, embracing the messiness of the field, the complexity of structural methods and the fluidity of the research as a process more than a method.

Epistemologically, I find myself affiliated with a constructivist approach, which involves examining how knowledge is constructed, interpreted, and validated through interactions between individuals and their experiences within a social context (Charman, 2006). Moreover, as constructivists argue, I believe that knowledge is not passively received but actively built by the cognitive processes of individuals. In this sense, I ally with a feminist political ecologist approach on epistemology, recognizing knowledge as a process of co-creation, that arises from encounters, or 'encounter-knowledge', emerging from specific, embodied experiences (Haraway, 2016; Harcourt & Nielson, 2015). With no aim of producing an objective piece of theoretical work, I acknowledge that this thesis is a result of my own positionality, which shapes the way I observe and analyze the data, as well as being a product of the encounter with other social spaces and bodies (Charman, 2006; Harcourt & Nielson, 2015). Moreover, I consider this work and the grounded theory emerging from it, a result of a collective efforts built by the numerous insights, ideas, knowledges and practices I have shared and learnt with activists, researchers and local people who I have met in this journey.

3.3 Positionality

Our positionality deeply influences and shapes our research (Harcourt & Nielson, 2015). That is why it is important for me to share who I am and the context behind this research. I was born in a village in Sardegna, an island belonging to Italy. I do not consider myself to be from

the Global North, but part of the South in the North. To explain this, I use de Souza Santos' definition (2016: 18-19) that the South is not a geographic space but "rather a metaphor for the human suffering caused by capitalism and colonialism on the global level [...] It is a South that also exists in the geographic North (Europe and North America), in the form of excluded, silenced, and marginalized populations." I was born in the '80s, when Sardegna, and especially the place I come from, were not considered (and are still forgotten) in the geography and history of Italy (Ghisu & Mongili, 2021). Coming from this 'margin' (Sultana, 2021) shaped the way I looked, interacted with and understood society.

At the age of 23, after earning my degree in Indology from L'Orientale in Napoli, I traveled to India to learn Hindi, a language I had studied during my bachelor's. Destiny led me to receive a scholarship to study social science at Jawaharlal Nehru University (JNU) in New Delhi, one of the most renowned socialist universities. My time at JNU was marked by rich cultural encounters. The university's cultural diversity introduced me not only to Delhi's culture but also to the many different cultures across India. I realized I wasn't the only foreigner from my very first day when a teacher asked the class what had surprised us most about the university. It became clear that everyone, not just international students like me, had their own cultural shocks and stories to share. JNU was a melting pot of cultures and a hub for critical thinking. There, I was exposed to the works of important thinkers such as Ramachandra Guha, Nandini Sundar, Amita Baviskar, Ashis Nandy, and Boaventura de Sousa Santos, and the rich field of subaltern studies, learning about the colonial influences shaping India. Every day brought new discoveries, shaping my perception of the world and transforming me into a critical thinker. My experiences taught me firsthand that values are socially constructed, beyond what any book could convey.

I later decided to stay in India to work. I started with various social organizations advocating and working for the rights of the most marginalized people, including the Dalit and indigenous communities. During this time, I became familiar with the complex realities of social movements in Delhi, the struggles of marginalized people, and the ongoing tensions between development, human rights, and justice. These were our everyday topics in Delhi. The culture of resistance against Western development was vibrant, and I engaged with different movements, volunteering with organizations such as the National Alliance of People's Movements, and the All India Union of Forest Working People. It was during this period of deep engagement that I became aware of conservation as an issue. On a trip to the Dudhwa National Park with the environmental activist Roma Malik, I attended my first forest rights meeting addressing conservation critically. I met brave women from the Tharu indigenous community who were fighting for their rights in their ancestral forest. Their courage profoundly influenced my understanding of conservation in India. This was not a new story, but a colonial story of deprivation that had resurfaced in the guise of conservation.

In a later stage, I was fortunate to collaborate with Kalpavriksh, an environmental and social

organization based in Pune, India. With them, I began deeply engaging with the FRA and its implementation in protected areas. I traveled across the country, documenting stories of forest rights violations, criminalization, and the increasing displacement caused by new conservation policies. My PhD journey began during those years, and it was thanks to the insights I gained during those years that my journey into my PhD fieldwork was smoother.

Before starting my PhD, I lived at my fieldwork site for about four months, engaging with the field as an independent researcher. The relationships I established during this time helped me connect with a segment of society, facilitating quicker trust-building. However, this pre-existing relationship also brought more difficulties when engaging with other groups, such as environmentalists, forest department authorities, and other powerful agencies, making interactions with them much more challenging. My identity as a woman and a white foreigner often worked in my favor, enabling me to access different spaces somewhat anonymously. In India, there is generally a degree of respect for white foreigners, and although I faced unwelcome reactions in many instances, my appearance prevented complete exclusion. Leveraging this advantage, I connected with various bureaucrats, engaging in informal conversations that, while not directly quoted in my work, provided valuable insights into the political landscape.

However, my identity as an outsider-insider, with a background in human rights organizations and familiarity with discourses on forest rights, made bureaucrats and conservation organizations uncomfortable. Therefore, while I tried to interact with all the stakeholders to ensure my research included everyone's voice, this was extremely difficult and, at times, risky. I tried to approach and listen to everyone’s voice without judging or taking any stance. However, personal connections with indigenous groups and resistance movements shaped the way other stakeholders perceived and reacted to my research. I therefore acknowledge here that my positionality, based on my own social beliefs and the relationships built along the way, obviously shapes this research, the collection of data, and its analysis (Harcourt & Nielson, 2015).

Having said this, I would like to acknowledge that this research has never aimed to be 'objective'. Instead, it aimed to listen to everyone and to conduct rigorous research based on social science methodologies and data collection (Bryman, 2012; Yin, 2018). Trusting in my own capacity and training as a sociologist and political ecologist to evaluate the social world I have studied; I believe this is the best result of my analyses. This research also adopts a 'political rigor' approach, meaning that it takes a position on the political processes researched, which in turn could risk compromising the academic rigor of the research (Borras and Franco, 2023). However, I trust in the importance of this thesis as a product of scholar-activism. I would like to state that this research is part of a resistance process; it supports oppressed and marginalized classes and, while it seeks to understand the complexities of the space, it takes a clear stance in solidarity with victims of violence (Abdelnour & Moghli, 2021;

Borras & Franco, 2023; Clarke et al., 2017). Violence is not normal, and this research stands firmly against it.

3.4 Conducting fieldwork in conflictive and violent spaces

I consider this research to be a critical political work, engaging with issues of injustice and violence. Violence is the result of a long-standing history of oppression and dispossession produced through colonial, capitalist and racist practices; it is often perpetuated by unjust states, corporates practices and police, who by design see certain lives as valuable, at the expenses of other less important lives (Kojola & Pellow, 2020; Roy & Martinez-Alier, 2019). My case study site is located on the margins of post-colonial India, a place oppressed during both colonial and post-colonial times (Saikia, 2011a). Its formation as a state is ongoing, and local tribal communities contest the violence used to impose a single narrative, knowledge, and idea of the space.

Conducting research in a violent area requires flexibility and a constant willingness to adjust to difficult circumstances. This research primarily relies on ethnographic methods, complemented by other qualitative techniques such as unstructured interviews and focus group discussions (Bryman, 2012). These methods allowed me to observe from within and engage in conversations with various stakeholders. However, doing ethnography in a violent space is challenging. It requires remaining constantly alert and understanding the local politics, which shape how people react to you and what they choose to share (Abdelnour & Moghli, 2021). In a conflict zone, people are in a constant state of fear and tension, affecting their perception of you—whether as a researcher, a friend, or a dubious person. Building trust is crucial for data collection, enabling people to honestly share their feelings and views. I would like to share some challenges and limitations of this research, as well as the decision to choose certain methodologies over others.

Coming from a European research institute, obtaining signed consent forms for interviews is preferred. However, this proved problematic and counterproductive. While it is crucial to protect local communities' knowledge and inform them about the research (Smith, 2012), formal consent can reproduce power dynamics that decolonial researchers (such as political ecologists) seek to avoid, damaging the trust essential for ethnographic research. In my experience, asking for signed consent might have affected the relationships with both local communities and authorities. Whenever I used it, I felt it had negative repercussions on my research. The sight of a blank paper filled with an unfamiliar text that needed to be signed often made people uncomfortable and hesitant to share information, giving the research a formal character that is not necessary in critical social research. Recognizing this during the research process, I decided to use oral consent instead. Most of my interactions took place in informal settings without using consent forms. Because the topic was so delicate, a lot of the interviews were conducted in remote locations or during dark hours. How could I ask

someone who barely wanted to reveal their name to sign a consent form? This approach allowed for more open and honest communication, fostering the trust needed for meaningful ethnographic research.

Moreover, accessing official data proved to be a real challenge, if not an impossible task. To collect some information, I used the Right to Information Act (RTI) and relied on previous RTI requests or documents already gathered by local organizations I was associated with. Gaining access to representatives of large NGOs and government authorities was particularly difficult. In Assam, accessing NGOs was more challenging than I had anticipated. The limited time I had to interact with them and the difficulties in managing these interactions caused significant emotional stress, resulting in a change to my original methodology. Initially, I had planned to interact with NGOs first and then conduct ethnographic research with local people. However, external constraints forced me to alter this plan, resulting in simultaneous data collection across different spaces. Doing this in a conflict-ridden area was particularly challenging, emotionally stressful, and extremely tiring.

The difficulty in obtaining permission to interact with bureaucrats also affected my data collection. According to the forest authorities, researchers needed additional permission to conduct research in protected areas. Although my research did not require entering within protected areas, but only required interactions with people and organizations outside the protected space, the forest department asked for this extra permission, while already having my research visa approved. Some forest officials therefore denied speaking with me. To avoid complications, I mostly interacted with retired officials who were willing to share their stories. To better understand political structures and the official discourse, I participated in open governmental meetings, workshops, and awareness campaigns, gaining insights from direct participation and observation.

Besides these challenges, the complexities of the space, due to continues state of fear, surveillance, and conflictual situations, stopped me from using certain types of participant methodologies, which I wished to use to challenge traditional power dynamics in knowledge production (Smith, 2012). While I was particularly enthusiastic about using participatory dynamics to explore feelings of injustice, marginalization, and violence within the community, this was not possible in such a short time and in that particular space. Conducting participatory research in a violent and surveilled space posed significant challenges. For example, it was unsafe to give people cameras or technologies I wished to use, but that could expose them to security forces. Additionally, not all communities are organized enough to engage in collective knowledge creation, as external power structures often disrupt local dynamics. The pervasive mistrust and fear of surveillance further hindered collective reflection and alternative actions, making the use of some participatory methodologies impractical. Informal surveillance network could be everywhere, impeding any alternative action to take place (this is further developed in Chapter 4). Using participatory

methodologies is therefore not always possible. Instead, I engaged in participant observation, daily interactions, deep conversations, and small focus groups to inform my research. This approach allowed me to consider the work as a co-production or knowledge encounter, heavily influenced by interactions with local activists, researchers, and youths who shared their insights and experiences. I also had the opportunity to share spaces with some of these people who have highly informed my research.

Moreover, conducting critical research in violent spaces and within undemocratic structures poses significant challenges. Revealing the purpose of such research to authorities can be dangerous and, as discussed above, may hinder obtaining permission, limiting research that challenges state power. However, I consider this type of research to be crucial. It can be a form of resistance and must persist in producing counter-knowledge and contributing to shaping a more just and livable world (Abdelnour & Moghli, 2021; Clarke et al., 2017). Therefore, it is extremely important to find ways to ensure the security of both researchers and local communities. There is a need to develop new methodologies for critical research that go beyond the idea of consent and permission to carry on research, allowing brave students to conduct deep and meaningful research with institutional support. Some authors discuss the concept of "covert" research which could help researchers to better navigate these challenging spaces (Lugosi, 2008). Additionally, students should be better prepared for fieldwork, and methodologies should be co-created to be more suitable for critical research (Temper & Del Bene, 2016).

Last but not least, conducting fieldwork in a space of violence and margin directly affects the researcher personally, influencing the research process itself (Smith, 2012). In my case, the violence which emerged from the stories and narratives did not only stay within my notebooks. I could perceive tensions during my interviews and depending on the space, I felt at time surveilled. It felt necessary to delete by Facebook account, and I did not share critical thoughts in my social networks. I was silent and felt compelled to do so. I was aware that there was attention on what I was doing and which kind of questions I was asking. The research required me to navigate different spaces, but this put a lot of tension on me, and I was extremely scared of how authorities would have reacted if they would have known that in my past, I was more engaged as a human rights advocates and activist. The most difficult question in every interview with conservation organizations and authorities was indeed when I asked about human rights, which was generally my last question, to avoid any suspicion. My close relationship with Indigenous leaders' activists was difficult to navigate as well, and I wasn't sure if it was correct to stay at their place or not. I tried to find an anonymous space to inhabit during my fieldwork. At the end of the day, I was just a PhD researcher trying to enquire on conservation and management policies. However, my political views and my support for the Indigenous struggle and resistance of shaped my way.

In the process I decided to give up on the idea that my research had to include everyone and

that it had to be ‘objective’. Rather, I decided to accept the limits of this research and my positionality, acknowledging the political stance of the research, also called ‘political rigor’ (Borras & Franco, 2023). I acknowledged that this research was driven by my political views which guided my ways of life and therefore my research topics. In doing so I embraced the messiness of the journey and I also tried to enjoy and occupy spaces and dimensions in which I could exist, I could breathe and I could relax. Violence entered my body and left it only when I physically left. Compared to those living in this area permanently, this extremely insignificant experience of violence just gave me a glimpse of what it really means to live, or better, survive in a violent environment, in which struggle is the only liberation. With this research, I therefore embrace this struggle, I support it, and I am part of it.

"When one hears the growl that "tigers and humans cannot coexist", it does not mean that tigers are a teleported species from another planet. Or that tigers are to be teleported from planet earth to another planet uninhabited by humans. Or that the forest officials, the wildlifers and the tourists who seek to "closely" coexist with tigers are not humans. Or that tigers and humans have not coexisted thus far. The irony is that Tigers and humans have to coexist now and in the foreseeable future. Then why this repeated frantic proclamation that "tigers and humans cannot coexist"?
It simply is a way of getting around to mean that the tigers, along with their habitats, are to be fully secured, enclosed and policed by gun-toting wirelessly wired forest officials"
(C.R.Bijoy, 2011: 1)

CHAPTER 4.

STRUGGLES FOR JUST CONSERVATION: AN ANALYSIS OF BIODIVERSITY CONSERVATION CONFLICTS, INDIA[9]



Picture 1. Women activists leaders in Achanakmar Tiger Reserve. Photo credit: Eleonora Fanari

"We won't leave this land. This land is our life".

4.1 Introduction

In recent decades, the international community has developed different policies and strategies to ensure that biodiversity is protected and to preserve the world's most endangered species (Brockington & Duffy, 2010; Murat & Büscher, 2012; Orlove & Brush, 2016). The creation of protected areas has traditionally been one of the main strategies used as a recognized model to effectively protect and conserve biological diversity (Wilson, 2016).

Following this international policy trend, the Union of Governments of India started a trajectory towards a "greener India", expanding its protected area network and strengthening its 'Project Tiger' program for the conservation of this species. These changes were part of the 2006 amendment of the Wildlife Protection Act (WLPA) of 1972, the first law codified for

[9] This chapter is based on an article published into the journal of Political Ecology, Vol. 28, 2021, DOI: https://doi.org/10.2458/jpe.5214

the protection of forest and wildlife, which prohibits the use of natural resources within a national park (Lewis, 2003). Moreover, in 2009, the country's National Action Plan on Climate Change (NAPCC)[10] introduced a series of measures to mitigate climate change (Gosh, 2015; Lele, 2013; Rastogi, 2011). These measures together with the continued expansion of protected areas and the increased restrictions on resource use have intensified the clashes between the affected local communities and the forest department (Baviskar, 2012; Gadgil & Guha, 1994; Kothari et al., 1995).

However, as a result of a long struggle for the recognition of forest rights, the Scheduled Tribes and Other Traditional Forest Dwellers (recognition of rights) Act, 2006 (hereafter Forest Rights Act), was passed to recognize and secure the rights of local and forest dweller communities to use, inhabit and conserve forest areas. This includes reserved forests and protected areas such as wildlife sanctuaries and national parks to which a community has had traditional access. This Act has empowered and strengthened the affected communities and united them in the struggle for environmental justice (Kothari & Pathak Broome, 2012).

This article aims to understand the struggle of the local and indigenous communities living within and around protected forest areas in India, to analyses the local resistances against fortress conservation measures such as relocation, criminalization and militarization. The article addresses two specific questions. First, how are communities defending their rights within protected areas in India and what challenges are they facing? Second, in the absence of state support and in the face of government hostility, how are these communities able to reclaim these rights? The study analyses the influences on recognition of community forest rights of these marginalized or often invisible conflicts, suggesting that the alliance between local communities and larger networks is one key for positive resolution. It also highlights the importance of this local resistance within the potential role of environmental justice movements to contribute to sustainability (Martinez-Alier et al., 2016; Scheidel et al., 2018).

So far, the literature has analyzed the legal issues related to the Forest Rights Act (Bijoy, 2017; Pathak et al., 2017) as well as the judicial and regulatory failures which are at the heart of these conflicts (Shanker et al., 2017). Violation of rights, abuses, and harassment by forest authorities and bureaucracy have also been highlighted in several case studies of protected areas (Fanari, 2018a, 2018b; Gooch, 2009; Rai et al., 2018; Sebastian & Azeez, 2014; Smadja, 2018). However, most of these investigations lack a national comparative analysis of these struggles. Comparative studies have the aim to analyze movements across regions and states to better examine the complexity of the phenomena and represent a step forward in the theoretical understanding of socio-political movements (Shah, 1992). The article is an attempt to analyze, from a comparative perspective, what I call 'conservation justice movements', to better highlight the nuances and complexities of these resistances.

[10] The National Action Plan on Climate Change (NAPCC) was set up on June 30, 2008, outlining eight primary objectives to ensure mitigation and climate change in India

I focus firstly on the emerging conservation justice movements and describe the articulation of the movements and alliances. Secondly, regarding their struggle for recognition of forest rights, I highlight the difficulties and the perseverance of the local communities and the political movements to fight for the recognition of their common resource rights despite state support. A third emphasis is on incidences of dispossession, violence and militarization, which I consider to be both the reasons and the outcomes of these conservation conflicts. Fourthly, I highlight the forms of mobilization used by analyzing social movements' forms of resistance. Lastly, I critically analyze successful movements and their significance, highlighting some of the variables that play an important role for 'success' in conservation conflicts (Scheidel et al., 2020).

4.2 Ecological distribution conflicts and environmental justice research

A growing body of literature from political ecologists and social scientists is concerned with the social impact of protected areas on local communities (Agrawal & Redford, 2009; Brockington, 2004; Dowie, 2010; Martin et al., 2018). In response to this, international policies have recognized the need to include communities in the management of common resources (Convention of Biological Diversity, COP7, IUCN) (Borrini-Feyerabend et al., 2007; Pathak Broome et al., 2014). However, in many instances, the state and official agencies have failed to recognize the presence of local communities in specific environments, and the possibilities for co-existence (Pathak et al., 2017; Saberwal et al., 2001). Conflicts over conservation projects have been documented in the literature worldwide, showing a lack of support for an alternative mode of conservation (Bocarejo & Ojeda, 2016; Dash & Kothari, 2012; Lele, 2017). Moreover, increasing attention given to wildlife protection as an international security affair has justified a process of militarization in conservation programs, a trend that has been observed particularly in the Global South (Duffy et al., 2019; Massé & Margulies, 2020; Simlai, 2015).

In India, as with other natural resource conflicts documented by Shah (1992) and Gadgil and Guha (1994), these conflicts emerged in defense of local communities' rights and management regimes. Protected area conflicts emerge as a clash between livelihoods and park conservation measures (Lewis, 2003). Moreover, they are characterized by the historical oppression of politically weak groups who practice everyday resistance to conservation edicts, and therefore are less visible and less studied (Mukherjee, 2009; Scott, 1985). Protected forest areas are often economically disadvantaged because of their isolation. This has a direct impact on the articulation of the movements associated with them because of a lack of material and non-material resources, as well as the dispersion of the community inhabiting the protected area (Holmes, 2007).

In this chapter, I analyze conservation conflicts around protected areas from the theoretical premises of political ecology, using the concept of Ecological Distribution Conflicts. The term

was coined by Martinez Alier and O'Connor (1996) to describe social conflicts arising over the unequal distribution of environmental benefits, as well as over unequal and unsustainable allocations of environmental burdens. Ecological Distribution Conflicts emerge from the unfair distribution of environmental resources, and they materialize as struggles over valuation processes in terms of livelihood values, indigenous territorial rights, and ecological values (Martinez-Alier et al., 2010). Ecological Distribution Conflicts have recently been considered an important subject of study in sustainability sciences because of their transformative aspects and the contributions they may bring for sustainable and just uses of the environment (Scheidel et al., 2018).

Acts of resistance against conflictive projects by local communities and civil society not only oppose the unsustainable or unjust use of natural resources, but frequently generate transformative social actions and alternative environmental debates and induce a re-negotiation of values around what is considered sustainable and just (Martinez-Alier, 2002; Temper, et al., 2018). The chapter is interested in this transformative aspect of conflicts, looking at resistance as an important variable for achieving success. 'Success' here is measured by the recognition of community forest resource rights and their legal distribution in India under the Forest Rights Act.

The chapter also draws on the idea of environmental justice, a concept born in the early 1980s among the Black and Latino communities in the United States to describe minority communities who were disproportionately exposed to higher levels of environmental pollution and harm, leading to the development of a grassroots campaign against environmental racism and for environmental justice (Bullard, 1990). Related literature tends to recognize three dimensions of environmental justice, including a) distribution, which refers to giving all members of society a fair share of the benefits and resources available; b) procedure, which focuses on ensuring that decisions made are based on fair processes that lead to fair treatment; and c) recognition, which concerns acknowledging and accommodating cultural differences in both procedure and distribution (Schlosberg, 2007). This chapter analyses these different dimensions of injustices, as these conservation conflicts around protected areas are typically characterized by a lack of recognition of local knowledge, identity and culture (Martin et al., 2016).

These 'conservation justice movements' are part of post-colonial struggles emerging against a conservation model based on the unequal distribution of common natural resources and the exclusion of local communities from their traditional means of livelihood. The uneven expansion of forest territories in the name of wildlife protection is further intensifying the vulnerability of these already marginalized communities by the continued denial of their land and forest rights. Their demands for justice, land rights and recognition are strictly linked to their opposition towards strict and exclusive conservation projects.

4.3 Studying biodiversity conservation conflicts in india

India is considered one of the world's mega-diverse countries that together support two-thirds of the world's biological resources (Karanth et al., 2008). It has 903 protected areas that cover a total of 165,159 km^2 and represent 5% of the Indian territory, legally protecting its biodiversity and wildlife (Envis, December 2019)[11]. Among the most endangered and protected species in India are tigers (Panthera Tigris) and rhinos (One- Horn Rhinoceros Unicornis), which are also included in the IUCN red list of threatened species. Besides wild animals, India's protected areas are also inhabited by several traditional communities, mostly belonging to the scheduled tribes, scheduled castes or other traditional forest dwellers, equaling more than 4.3 million people (Narain et al., 2005).

Wildlife management is under the control of the Indian Forest Service, a government body that has existed since colonial times. As discussed in chapter 2, the colonial legacy and the mechanisms used to gain control over natural resources remain a bulwark for forest governance even today (Bijoy, 2017; Gadgil & Guha, 1995). Since the implementation of the WLPA, conflicts over the use of natural resources have spread throughout the country. The long struggles by local communities demanding their rights and the need to find solutions for rapid forest degradation compelled the government to implement more inclusive and sustainable models of forest governance (Sundar, 2002). The Joint Forest Management program, launched in 1988, was one of the first attempts; however, this form of co-management transferred very limited power to the communities and did not really lead to any decentralization of power (Kumar et al., 2015; Sundar, 2002). More recently, the Forest Rights Act, has recognized the rights of the scheduled tribes and other forest-dwelling communities to inhabit, use and manage their traditional natural resources on which they were traditionally dependent, including in forest protected areas.

This chapter provides an overview of 26 biodiversity conservation conflicts in India taking place in forest protected areas, including national parks, tiger reserves and wildlife sanctuaries (EJAtlas, 2020). I have documented these conflicts in the EJAtlas, a global inventory of cases of socioenvironmental conflicts built through a collaborative process between academics and activist groups. It includes both qualitative and quantitative data on thousands of cases of conflict as well the social responses to them (Temper et al., 2018). As of September 2020, the EJAtlas has 3,271 cases, out of which 338 are registered in India[12].

Each case in the EJAtlas includes the following types of data: general characteristics (location, relevant background information, type of project or commodity being contested) and project details; companies, finance institutions and government actors involved; social and

[11] The current status of protected areas in India from 2000 can be found here: http://www.wiienvis.nic.in/Database/Protected_Area_854.aspx

[12] By July 2024, the EJAtlas has reached 4.132 cases, out of which 357 registered in India.

environmental impacts; actors and forms of mobilization, conflict outcomes; and references to relevant legislation, academic research, videos, and other media (Scheidel et al., 2020b). The database aims to develop a system whereby environmental conflicts can be described, analyzed, compared and interpreted (Gobby et al., 2021). Each case is moderated by a group based at the Universitat Autònoma de Barcelona who checks the reliability of the documented cases added to the platform (for more information cf. Temper et al., 2015).

In the EJAtlas, there are 30[13] cases classified as "biodiversity conservation" in India. Out of these 30, I have analyzed 26[14], and left out the other four, as I only took into consideration cases that correspond to the struggle over access and use of forest resources by local communities inhabiting protected areas. Each documented case is based on primary and secondary data. The primary data have been observed and reported from the field and were gathered through interviews, group discussions and documents collected in eleven protected areas visited from March 2017 to February 2018. In these protected areas I conducted interviews both with local communities, local organizations and forest departments (when possible). In-depth interviews based on two or three weeks of fieldwork were carried out for eight protected areas (Achanakmar, Simlipal, Nagarhole, Wayanand, Kaziranga, Jaldapara, Sundarban and Manas). Shorter interviews based on 2 to 3 days of fieldwork were conducted in Dudhwa, Corbett and Rajaji. The study areas were chosen based on four criteria: a) political sensitivity for the fieldwork case studies to ensure the smoothness of the work, b) geographical areas, which aim at including representative cases from the entire sub-continent, c) accessibility and contacts, and d) presence of forest dwellers and indigenous communities. Secondary data primarily comes from three sources: (i) English literature review; (ii) reports available on the Forest Rights Act website and other available reports; (iii) secondary information shared by the Community Forest Rights – Learning and Advocacy group as well as activists, reporters, journalists etc. (see Appendix 1 for details of every case).

The data collection on the implementation of the Forest Rights Act is mostly based on year-long research conducted in India while collaborating with Kalpavriksh[15], a non-profit organization working on environmental and social issues. Due to the lack of disaggregated data available on the management of protected areas, the data on the implementation of community forest resource rights comes mostly from interviews with local people and activists and documentation shared by local *sangathan* (organizations) and NGOs; other secondary data were collected online from the Ministry of Forest, Environment and climate change of India (http://moef.gov.in/), the official tiger project website

[13] By July 2024, in the EJAtlas there are 34 cases registered as biodiversity conservation conflicts.
[14] See as reference the Featured Map produced out of these analyses, titled “Losing ground: How are India’s conservation efforts putting the local communities in peril?” in https://ejatlas.org/featured/conflictprotectedareaindia accesed on July 10, 2024.
[15] The study was carried out with the support of Kalpavriksh in India as a National Report on the implementation of the Forest Rights Act within protected areas in India, funded by the Rights and Resources Initiative (RRI)

(https://projecttiger.nic.in/), and the State Research Centre on Wildlife and Protected Areas (http://www.wiienvis.nic.in/Database/Protected _Area_854.aspx).

I used the EJAtlas as a source for all the cases, conducting a descriptive analysis to understand the forms of resistance and the type of mobilization (e.g. street marches, blockade, boycott etc.) and the different actors involved (e.g. indigenous communities, farmers, environmental organizations etc.). I structured the analysis in three levels. First, I explored the association between the type of mobilization used by the communities and the success of the communities to get their community forest resource rights legally recognized under the Forest Rights Act. Subsequently, I analyzed the type of violence, using the data on criminalization, displacement and the degree of militarization. Finally, I analyzed the association between the cases considered successful and the external actors involved, such as national or local NGOs, or international conservation NGOs.

4.4 Social movements, land rights, and mobilization

The 26 cases of conflicts analyzed emerge from relatively different historical processes and are spread across India. The great majority of the cases studied (92%) involve movements made up of indigenous peoples' groups, suggesting that biodiversity conservation conflicts are mostly related to indigenous populations. In India, indigenous communities are recognized under the administrative category of scheduled tribes; however, a heterogeneous set of ethnic and tribal groups are accepted within the historical term of *Adivasi*[16] (Bijoy et al., 2010).

As shown in Figure 1, forest areas (represented in green) and the territories of indigenous populations (represented in pink) overlap in most of the territory (center, north-east and north-west), by indicating the high concentration of Adivasi around forest protected areas. These disputes are related to the larger struggle over the access and use of forestland and other natural resources, including fish, grassland and agricultural fields (Gooch, 2009; Hussain et al., 2016; Rastogi et al., 2010; Shah, 1992). However, all these activities are part of the daily disputes against the centralized conservation management by the forest department, which for decades have affected their life, marginalized them from their means of livelihood and failed to recognize their distinctive identities. Moreover, as documented in the EJAtlas, some of these studied areas are also inhabited by one of the most vulnerable people of India, the *dalits*[17] (evidence found in eight cases, but possible presence in more areas). The dalits,

[16] *Adivasi* refers to over 700 hundred different tribes (8.6% of India population). The 2011 census reports around 104 million Adivasi.

[17] The term *dalit* means 'oppressed' and has been politically adopted by the people otherwise referred as 'untouchables' in order to symbolize a movement for change and for the eradication of centuries-old oppression under the caste system.

treated as untouchables in many parts of India even today, are categorized by the Indian Constitution as a Scheduled Caste (SC).

Local and indigenous communities organize themselves under local *sangathan* (organizations), sociopolitical pressure groups mostly operating locally with a specific focus on rights and justice. In many cases these *sanghatan* are supported by local non-governmental organizations. The NGOs play an important role in translating into vernacular language the bureaucratic legal texts affecting rights and justice, also creating awareness of rights and duties among local people. In the study I documented ten organizations supporting conservation justice movements, such as the Northeastern Society for Protection of Nature and Wildlife. They have supported the struggle of the Rabha indigenous peoples in the Buxa Tiger Reserve in West Bengal for many years (Nishok et al., 2018). There are many other instances of local organizations actively supporting local and indigenous communities, whose assistance has been decisive in the process of rights recognition.

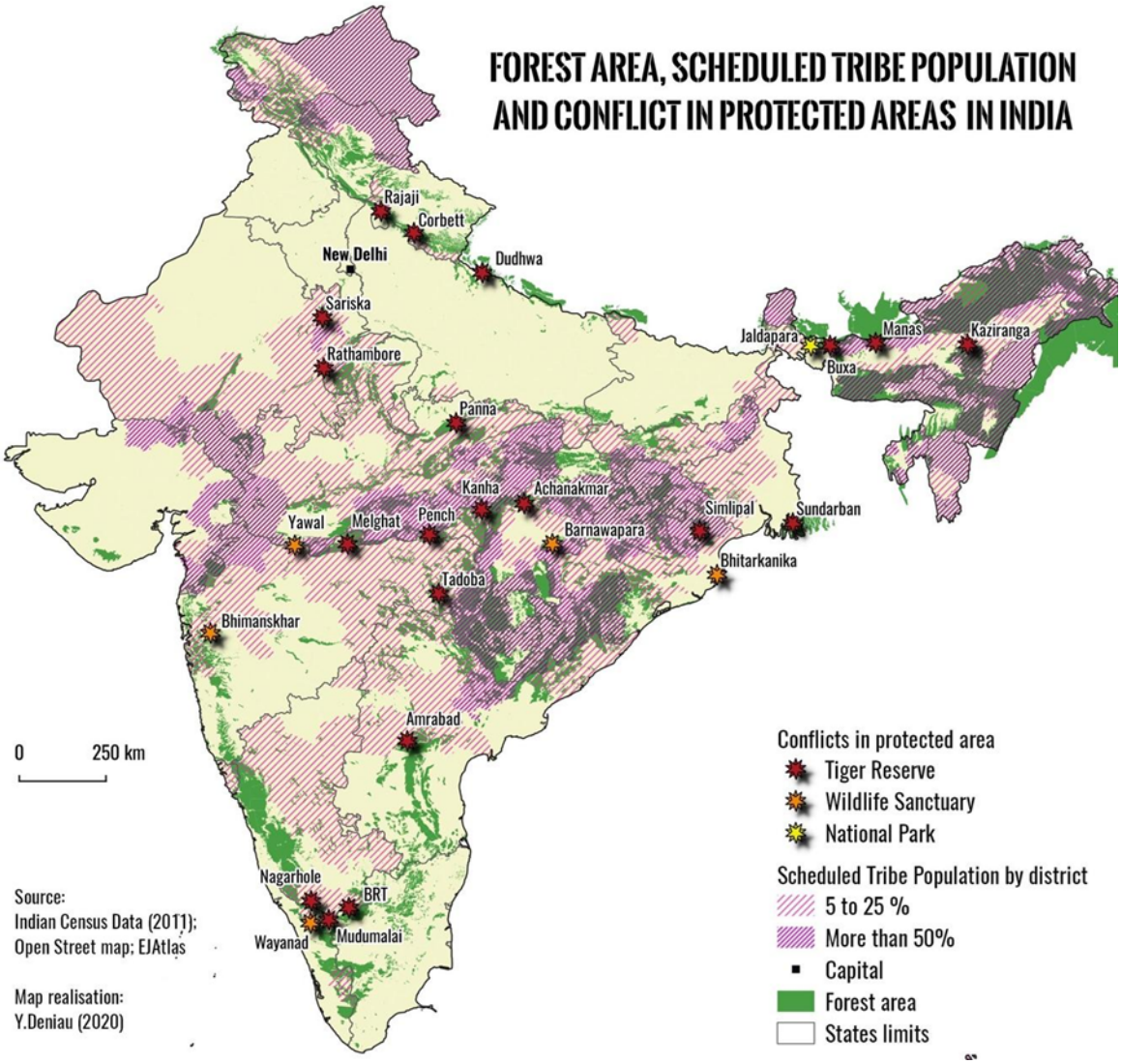


Figure 1. Forest area and scheduled tribe population. Source: own elaboration, based on Indian census data (2011); Open Street Map; EJAtlas. Map realization: Y. Deniau.

At a national level, national trade unions also support these *sangathan*. In the cases analyzed, I documented the presence of two unions, one called the 'All Indian Union of Forest Working People' which mostly work with forest dwellers in the northern part of India, and the other called the 'All India Forum of Forest Movements', mostly active in the Indian central region. The support of these unions has strengthened the localized movements in terms of articulating their political demands at the national level. Together with other national organizations, they have functioned as a bridge between local communities and the government authorities, raising awareness at the local level as well as exercising political pressure nationally. These agencies, working as umbrella organizations, have been essential in bringing together the localized struggles and translating their demands for inclusiveness, respect and dignity into a post-colonial and post-capitalist model of conservation based on systemic change and alternative development.

4.4.1 Struggle over the recognition of forest rights

An important aspect of these conservation conflicts in India is the legal means used by social movements to protest perceived environmental injustices. The Forest Rights Act has been used as a weapon in the hands of these communities to reclaim their rights that have been denied since colonial times. The Act has been considered a revolutionary and powerful law at the international level. Besides recognizing individual land rights of habitation and cultivation, it also acknowledges community forest rights and community forest resource rights. Community forest rights signify those user rights (*nistar*) which they have traditionally exercised (i.e. access, use and disposal of non-timber forest produce), and rights over water resources from water bodies and pastures. By contrast, community forest resource rights refer to "rights to protect, regenerate or conserve or manage any community forest resource which they have been traditionally protecting and conserving for sustainable use" (Forest Rights Act, 2006, 3.1 (i) see FRA, 2006, Report). These rights constitute the most revolutionary part of the Forest Rights Act, as they take into consideration the local knowledge of the communities in managing the forest areas and its natural resources and are therefore extremely important to support community conservation. These rights are crucial in changing top-down centralized forest governance towards more decentralized community-based conservation (Asher & Agarwal, 2006).

The study shows that the implementation of the Forest Rights Act in these 26 protected areas has been almost absent, when it comes to forest and forest resource rights, especially in critical tiger habitats. Neither community rights nor community forest resource rights were implemented in 18 cases, 69% of the sample. This includes both protected areas where local communities were not yet aware of the Act (10 cases, or 38%), as well as those areas where local communities have claimed those rights through the Forest Rights Act, but the bureaucratic machine has not yet responded (eight cases, or 31%). Evidence of community

forest resource rights being recognized and vested was found only in five cases, 19% (details in Appendix 1).

The lack of understanding the principles of the Act and the continued opposition by conservation groups could be one of the reasons for the lack of its implementation, especially in tiger reserves. Evidence of such opposition is the Supreme Court order issued on 13 February 2019 following a petition launched by a group of conservation organizations (Wildlife First, Nature Conservation Society and Tiger Research and Conservation Trust) ordering the eviction of alleged 'encroachers', which could have potentially evicted 10,000 people (WP no. 109/2008). Moreover, the lack of awareness of the Act by the functionaries of the Tribal Development Authority represents another important cause for the misrecognition of these rights. In addition to this, the forest department continues to exercise its power over the forest, completely ignoring the precepts of the Act and amplifying the clash with local communities (Menon, 2007; Nishok et al., 2018). An example is the struggle of the Rabhas indigenous community in Jaldapara and Buxa tiger reserves. Despite the long struggle to assert their rights, forest rights continue to be denied without any clear explanation. In addition to this, the forest guards continue to harass the communities using physical force, strict regulations and arbitrary arrests and detentions. These acts discourage people from fighting for their due rights. The criminalization of the community has affected their traditional practices such as grazing and foraging (Banerjee et al., 2010; Ghosh, 2018,EJAtlas 2019a; 2018b). This lack of interest reflects the continued opposition to the Forest Rights Act at the national level, which in many cases has been reinforced by Supreme Court judgements and by the National Tiger Conservation Authority (Bijoy, 2017; Pathak et al., 2017; Shahabuddin & Bhamidipati, 2014).

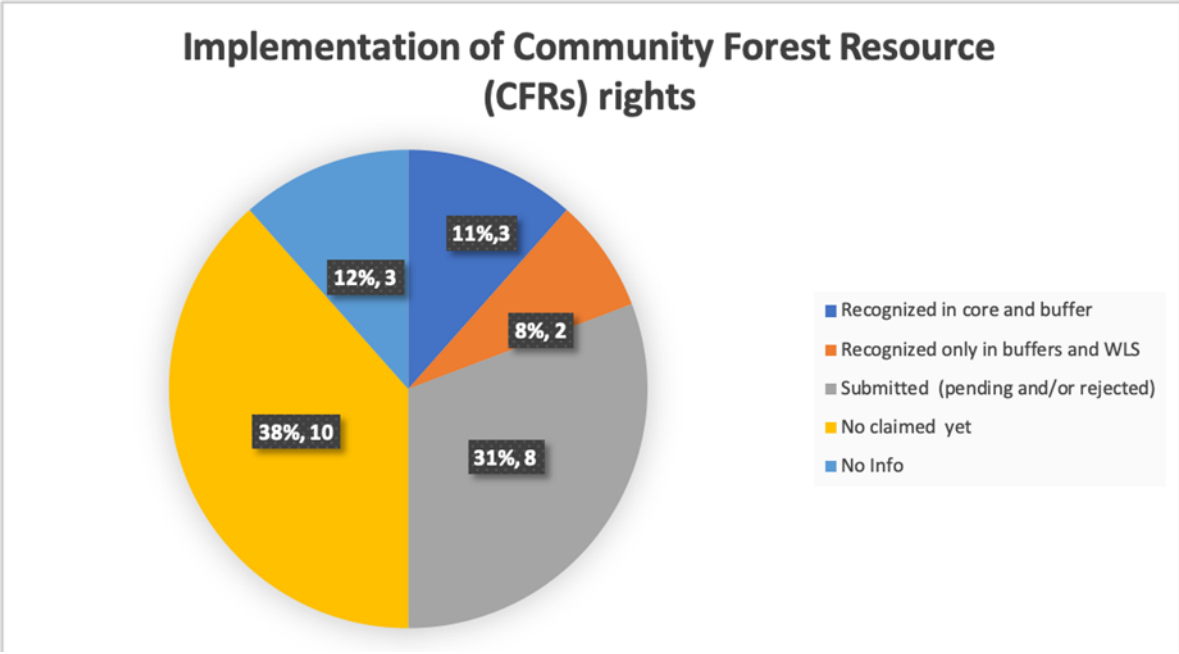


Figure 2: Implementation of community conservation resource rights in India Protected Areas from 2009 to 2019 (%, number of cases). Source: own elaboration.

On the other hand, as noted above, the recognition of community forest resource rights was observed only in five protected areas. Out of these, three protected areas had their rights recognized in those villages inhabiting the Critical Tiger Habitat, where restrictions and threats of relocation have been severe. These are Simlipal Tiger Reserve in Orissa (44 community forest resource rights recognized in 2015, both in core and buffer areas), Biligiri Ranganatha Swami Temple Tiger Reserve in Karnataka (25 community forest resource rights recognized in 2013 and 10 community forest resource rights in 2017, core and buffer areas), and Melghat Tiger Reserve in Maharastra (3 community forest resource rights recognized in the core in September 2019). Other community forest resource rights have been recognized in the buffer area of Tadoba Tiger Reserve, and in the Yawal Wildlife Sanctuary. In this last one, the support of the district administration together with the persistence of the local NGOs finally pushed the administration to legally recognize the community forest resource rights for the six villages located in the sanctuary that are currently co-managing sanctuary forest resources with the forest department (Pathak Broome & Kumar, 2017; see Appendix 1 for details).

In all these cases, the long struggle of the local communities, the support and facilitation of external organization as well as the local administration has played an important role in recognizing rights. For example, in Simlipal Tiger Reserve, in Mayurbhanj district, although the process to claim rights started in 2008, it was only later with the technical support of the Vasundhara organization in collaboration with the district administration that a first consultation was organized, shifting the attention from individual rights to community rights over forest resources. Indeed, in January 2013, the District Collector, Mr. Rajesh P. Patil, organized the first public consultation with the village communities, administrative officials, Tribal Department Agency, and a resource person from the Forest Rights Act (Bibhore et al., 2016). This is one of the rare cases where the support of the district administration has been essential in moving towards co-existence and collaboration. Studies show that while the banning of traditional practices had negative effects on wildlife and biodiversity, the exercise of common forest rights and the restoration of customary land management practices have been beneficial for the environment (Madegowda 2009, Madegowda & Rao, 2017; Nautiyal & Nidamanuri, 2012). For example, the restoration of shifting cultivation and slash and burn (jhum) practices have helped to improve degraded biodiversity in the Biligiri Ranganatha Tiger Reserve, regenerating local indigenous species and helping in controlling invasive species such as lantana (Madegowda, 2009).

However, although rights have been recognized, in many instances the communities must continue their struggle to assert these rights, which in certain cases continue to be de facto unrecognized. For example, in Simlipal Tiger Reserve, the same administration helping on the bureaucratic process also pushed the communities to accept the relocation package following the community forest resource right distribution, to legally free the people from the tiger

reserve (Debasree, 2019; Sahoo, 2012; Satpathy, 2010). Similarly, in Melghat Tiger Reserve, rights recognized on paper are not reflected on the ground.

4.4.2 Conservation violence

The struggle for the recognition of forest rights goes together with the struggle against criminalization, corruption and harassment, and is also known as 'green violence' (Büscher & Ramutsindela, 2015). These struggles are not new to protected areas and have been documented in the literature both in India as well as in other Southern countries (Brockington & Igoe, 2006; Büscher, 2016; Cernea & Schmidt-Soltau, 2003; Loperena, 2016; Mogomotsi & Madigele, 2017). Amidst the violations carried out in the name of conservation, I discuss here dispossession, criminalization of activists, militarization and violence that have even led to cases of murder in four of the studied cases. As described in Figure 3 below, cases of displacement from protected areas mostly come from the central region of India, also called the 'tribal belt' since majorly populated by Adivasi. Cases of criminalization of local people and activists are seen in areas where special police forces are deployed, such as the Special Tiger Protection Force, a force under the forest and police department deployed for the protection of the tigers. This suggests a correlation between increasing violence and higher securitization of conserved forests

Displacement and dispossession are some of the best-documented consequences. In this study, I analyzed the cases of displacement reported after the year 2000, and evidence shows that this has occurred in 18 out of the 26 cases, affecting about 13,445 families (for more details, see Appendix 1). In the observed cases, displacement has involved both relocation and/or eviction under the premise of encroachment into protected areas (Brockington et al., 2008; Menon & Karthik, 2019). This was evident in Kanha Tiger Reserve, where a French TV channel reported that 2,000 people were systematically resettled and evicted from their land (Mukherjee, 2009). Even when relocation was planned, free, prior and informed consent (FPIC) was denied or not well understood (Ghate & Beazley, 2007; Sekar, 2016). In various cases such as Ranthambore and Sariska Tiger Reserve, I also observed that the communities did not receive fair compensation or rehabilitation of their livelihoods. Indeed, as documented by Shubam Garg (the Executive Director of Gramin Shiksha Kendra, working in the area for many years), communities are still demanding school facilities and land titles in these two areas. Evictions were also ordered by state courts, as happened in 2017 for the Van Gujjars relating to Corbett Tiger Reserve in Uttarakhand, who were evicted as alleged illegal encroachers (Agrawal, 2014; Chettri et al., n.d.).

It is worrisome that international conservation organizations have occasionally supported the displacement of local and indigenous forest dwellers. In the Nagarhole Tiger Reserve, for example, the relocation of local communities has been highly promoted by a local organization called LIFT which is directly supported by the Wildlife Conservation Society

(Desai & Bhargav, 2010). Although several studies, mostly carried out by the Wildlife Conservation Society, show the positive impact of resettlements of people (Karanth et al., 2018; Karanth & Karanth, 2008) including access to housing, education, 'development' opportunities, jobs etc., research shows that the resettlements are far from 'voluntary' and 'satisfactory' (Ghate & Beazley, 2007). The Wildlife Conservation Society has also supported similar cases of displacement in Kanha and Melghat Tiger Reserves, and Wayanand Wildlife Sanctuary (Karanth et al., 2018; Mukherjee, 2011; Sekar, 2016).

More specifically, relocation has been accompanied by the criminalization of activists, i.e. the criminal prosecution of individuals and abuses of civil and human rights (Scheidel et al., 2020). I found evidence of illegal arrests and abuses of power by forest and police officials in 15 Protected Areas (see Appendix 1). In all these cases, local police illegally detained socio-environmental activists for being vocal against the current management of the PA, which included the denial of resources rights or a relocation plan. Women are doubly victimized, often physically abused and criminalized by the forest rangers, as in the cases of the Tharu in Dudhwa (EJAtlas, 2019e; Sawakar, 2017; Singh, 2007) Numerous people are incriminated on poaching charges (Dutta, 2020a; Simlai, 2015). Others are simply booked under 'offences' cases, which include trespassing on forest land, collecting firewood or honey, even though these activities are in fact their right enshrined under the Forest Rights Act, and ensure security and livelihoods for the communities (Kothari & Pathak, 2012). Moreover, it is important to understand that often these 'wildlife crimes' are not only based on economic needs, but on cultural needs to reaffirm places of belonging. This is the case for the Tharu women in Dudhwa, whose use of medicinal forest plants helps to reaffirm their identity as a community.

Criminalization has increased drastically after the approval of the National Wildlife Crime Control Bureau, 2006, and the subsequent creation of the Tiger and Other Endangered Species Crime Control Bureau in 2008. This suggests the increased interest of the Indian Government in punishing wildlife crimes by enhancing **militarization** and creating new militarized guards to ensure wildlife security (Margulies, 2018; Simlai, 2015). The idea of a military body to control biodiversity degradation goes back to the 1980s when the Ecological Task Force was established with the aim of instilling discipline and dedication in reforestation projects (Jayaram, 2016). Following the same logic, in 2009 the National Tiger Conservation Authority proposed a Special Tiger Protection Force to control the limits of tiger reserves and to respond to anti-poaching attacks. Special Tiger Protection Forces are currently active in eight tiger reserves and there is a proposal for their enforcement in 10 more areas (NTCA website, as per 27/04/2020)[18]. In the study, I found processes of militarization in fifteen cases,

[18] According to a Press Information Bureau dated 4 September 2012, a proposal to the army and to deploy a Special Tiger Protection Force was approved on 29 February 2008, for 13 Tiger Reserves. On 4 April 2020, the NTCA website raised this to 18 in 12 states. Detailed information on the NTCA website: https://projecttiger.nic.in/content/257_6_STPF.aspx

in which a Special Tiger Protection Force has been formed, militarized guards are active, or incidences of violence have occurred.

In Kaziranga National Park, in the name of combatting the illegal trade in Rhinoceros (Rhinoceros Unicornis), the government ratified a series of new policies together with the deployment of new armed battalions (Barbora, 2017; Yadava, 2014)). In 2010 a state order highlighted the necessity of forest guards with "immunity from prosecution without prior sanctions" (Notification 4072, 14 July 2010). International organizations such as the World Wildlife Fund for Nature (WWF) seem "to encourage a more aggressive approach towards the containment of Rhino poaching in India" (WWF, 2016). TRAFFIC, the wildlife monitoring network of WWF, is working with the state forces to bring the army and intelligence personnel together to combat the illegal wildlife trade. According to local reports, these measures significantly affect the life of the local and indigenous communities living at the edge of the park, who are often framed as the poachers (Doley, 2016). The adverse measures of the increasing militarization around Kaziranga were reported by the BBC who declared that in the year 2015 "Kaziranga killed more people in the park than poachers killed rhinos – 23 people lost their lives compared to just 17 rhinos poached" (Rowlatt, 2017).

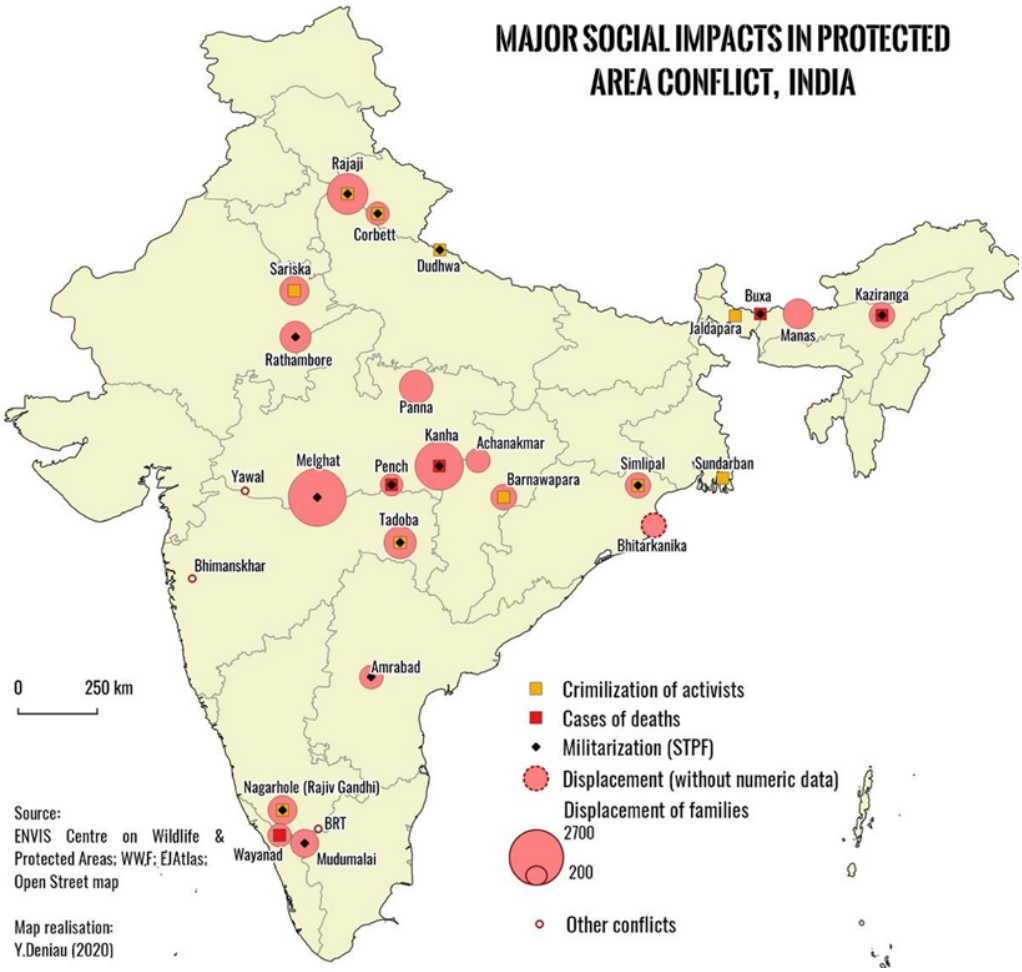


Figure 3. Major social impacts and conflict in protected areas, India. Sources: Own elaboration, based on ENVIS data; WWF; EJAtlas; Open Street Map. Map realization: Y. Deniau.

4.4.3 Forms of mobilization

Social movements are generally permeated by tfhe political culture of the system in which they develop, which influences the types of strategies advanced by the collective actors (Della Porta & Diani, 2006). In these case studies, the forms of resistance differ from place to place, with seven types being most recurrent. However, it is important to remind ourselves that in many cases, the resistance is articulated in day-to-day struggles, by residents asserting their rights to hunt and to use their resources, and by continuing to assert their cultural lifestyles and subverting official regulations and sanctions (Holmes, 2007; Scott, 1985).

As observed in Figure 4, the first three forms of resistance widely used by the communities are: 1) street marches/rallies and protests, 2) official complaint letters and petitions, 3) refusal or blockade of compensation. Street marches (or yatras) are the most used form of protest by the local communities, observed in 22 cases (85%). This traditional form of protest used customarily by local communities in India are called *pradarshan* (form of a procession, culminating in a meeting near a locus of official power) and are sometimes accompanied by a dharna (sit-in strike) (Gadgil and Guha, 1994). This form of protest shows the sense of collectivism, and the strength of the community gathered to protest a project. Use of an official complaint, letter and petitions were observed in 18 cases (69%), while the refusal of compensation has been found in 15 cases (58%). This symbolic form of protest, based on refusing land and/or money for relocation is easily performed by the communities without the necessity to get politically organized, and is considered implicit resistance (Holmes, 2007). This happened in places such as Achanakmar Tiger Reserves, showing the resilience of the Baiga communities in refusing to leave their traditional forestland even after a proposal of compensation. Among the numerous forms of protest, the most common ones include land occupation, lawsuits and use of the high court, the use or the development of a network, as well as the involvement of national and international NGOs.

The literature based on the EJAtlas suggests that the more diverse and numerous the forms of mobilization used by the movement, the higher is the chance for the movement to be successful (Scheidel et al., 2020). The EJAtlas categorizes 27 forms of mobilization. Although in these cases of biodiversity conflicts, the resistance might be less articulated than in other spaces, in total we have found that out of 26 cases, five movements have employed more than eight different forms of mobilization. One amidst these five is the Biligiri Ranganatha Tiger Reserve, which has been considered one of the most successful cases in achieving communitarian rights in forest protected areas. This might suggest that using numerous forms of mobilization plays an important role in achieving success in these cases of biodiversity conservation, and it confirms theories found in critical literature that recognizes how social movements contribute towards the recognition of community-based management of natural resources (Scheidel et al., 2020). However, other key factors, such as strengthening of communities, collective choices and economic autonomy have also been observed,

suggesting that we could consider success, as discussed below, as going beyond the mere recognition of community forest resource rights.

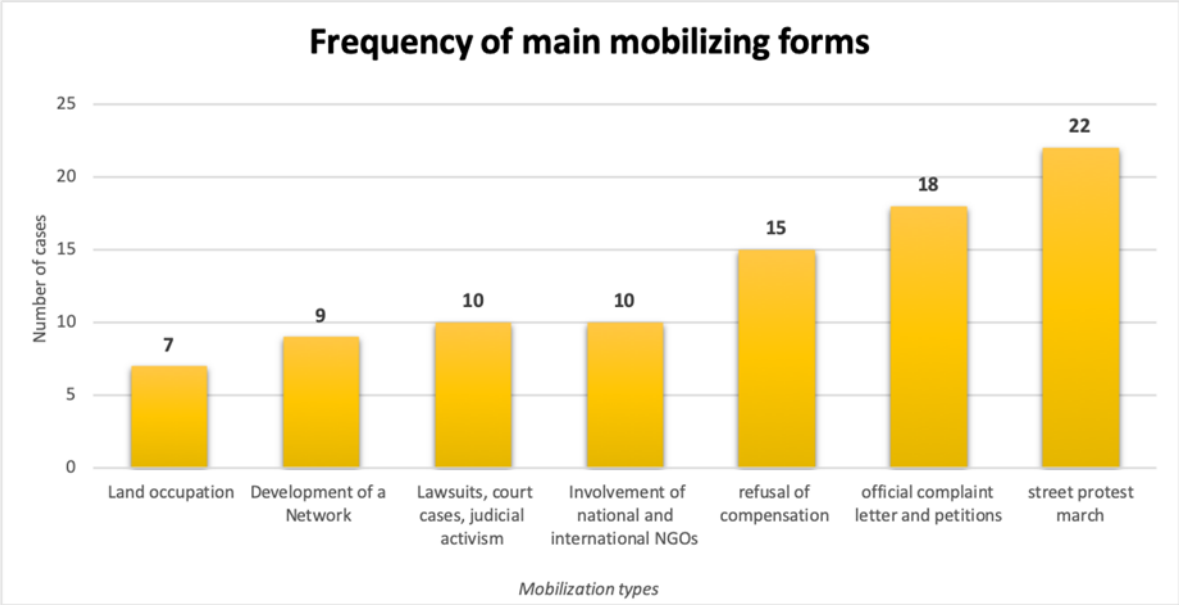


Figure 4: Frequency of forms of resistances, documented in the 26 cases studied. Source: EJAtlas.

4.5 Discussion: reflection around successful resistance

4.5.1 Challenges in resistance

Political ecologists have debated how to define the success of social resistance movements, and it is clear that success can manifest in many forms and with different meanings ((Gamboa et al., 2020; Hess & Satcher, 2019; Villamayor-Tomas & García-López, 2018). In this study, I have called 'success' those (few) cases where community forest resource rights have been legally recognized, allowing the indigenous and local communities to fully access their traditional forestland. However, analysis of the cases brings to light other types of victories that go beyond the recognition of these common rights and are associated with the strengthening of local communities (Villamayor-Tomas and García-López, 2018). This is observed in those cases where the types of resistance used are more numerous (more than 8), such as Nagarhole Tiger Reserve, Dudhwa Tiger Reserve, Buxa Tiger Reserve and Bhimashankar Wildlife Sanctuary. For example, in Buxa Tiger Reserve, all forest villages of the Rabha indigenous community applied for community forest resource rights, organizing activities to raise awareness on forest rights (Nishok et al., 2018: EJAtlas 2018b). These activities have fortified their leadership, asserting control over the community forests even without legal recognition. Their leadership has also played an important role in national-level struggles for forest rights. A similar case is Dudhwa, where despite continued physical abuses and repression, mobilization and resistance have contributed to the strengthening of the

movement, bringing up important gender reflections among the Tharu leadership (Singh, 2007).

One factor that might undermine the legal recognition of community forest resource rights is the level of repression played out in these spaces. My findings suggest that when repression and hostility are higher, the recognition of rights becomes tougher. This was examined in the high criminalization of local communities through the government's efforts to silence people contesting the 'fortress conservation' model, demonstrating how dangerous and insecure it has become to speak up against conservation projects in India. Conservation measures such as relocation and militarization are used as means to regain control by the forest officials rather than for ecological purposes (Peluso, 1993; Sah & Mallick, 2020). This ultimately denies legal recognition of forest rights, impeding social and ecological transformation. Moreover, it seemed that when such conservation measures are supported by conservation organizations, conflicts and violence intensify. This is not to suggest that these institutions directly produce violence, but it does show that the presence of international conservation organizations is not supporting or leading the communities towards a community management approach.

On the other hand, as observed in Section 4.4, community forest resource rights under the Forest Rights Act were recognized for five cases, despite government hostility. The 'successful' cases recognized in this study have been facilitated by local or national organizations that have functioned as bridges between local demands and official authorities. As explained by Sanghamitra Dubey, an independent researcher on forest rights, "In Simlipal Tiger Reserve, the organization Vasundhara's contribution was really important in terms of facilitation and awareness, also to facilitate the collaboration with the district collector. It would not have been possible without civil society support." As also recognized in the literature, being part of a national network and being supported by external organizations could play an important role in the development and strengthening of localized struggles (Dwivedi, 1997). However, this is not to discredit the strength of local communities and their historical political process as essential to successful outcomes of the movement.

4.5.2 Problematizing success

Detailed analysis of the successful cases studied reveals that legal recognition of rights without the involvement of local communities is not sufficient for communities to de facto enjoy those rights. This is evident in the case of Simlipal Tiger Reserve, where the lack of commitment by the administration and forest department is failing in recognition of a co-management plan with the local communities (Chatterjee, 2019). Indeed, the process of relocation continued from both core and buffer areas. In this case, the absence of a process to strengthen the communities might have undermined access to rights recognized under the Forest Rights Act, hence suggesting a lack of political transformation. As suggested by M. S. A. Rao (1979: 207), the real success comes from the de facto social transformation of the

collective: "a sufficient level of understanding and reflection is required on the part of the participants, and they must be able to observe and perceive the contrast between the social and cultural conditions of the privileged and those of the deprived, and must realize that it is possible to do something about it" (in Shah, 1992).

These reflections suggest that while union and external organization support are important, local resistance and community strength are essential for a real political transformation. However, on the other hand, strengthening the communities has its own limitations, which is often delimited by the strength of the opposition, the type of repression exercised by the state, and the power structure context within society. Indeed, as pointed out by Brockington (2004) and re-analyzed by Shanker et al. (2017: 37), in the Indian context, "conservation alliances have routinely marginalized the poor, displaced people from their native lands or excluded them in different ways". This leads towards two conclusions: first, that local communities and resistance alone are not always sufficient to produce 'success', and alliances between communities and external actors could play a pivotal role; second, that repression in these cases in the form of 'fortress conservation' is becoming detrimental to the legal recognition of community rights (Villamayor-Tomas et al., 2020).

The complexities of these conservation resistances lie also in the distance and abstract character of the policy maker, which influence the strength and the success of the same struggle. As Holmes (2007: 187) observes, "conservation's neighbors have to deal with decision makers they can rarely reach". Without a directly responsible landlord or company, it is more complex to organize political resistance. The responsibility generally falls on the forest guards, and in many instances, they have very limited decision-making power (Dutta, 2020b). Indeed, many conservation programs are framed by international or transnational organizations that, although far from the protected areas, can directly influence the local policy makers. Indeed, organizations such as the World Wildlife Fund for Nature are directly promoting anti-poaching militarization activities, as well as since 1973 supporting the government to finance the tiger project. Together with them, the Global Environmental Facility and the World Bank have supported tiger conservation through its Global Tiger Initiatives since 2008, raising £33 million (US$ 45 million) (Rai et al., 2018). This confers to these conflicts a complex character that could influence strategies and resistances of the movements and impact the outcome of the struggle.

Furthermore, prevailing perceptions have brought additional challenges to local communities in asserting their rights over these territories. The idea of environmental conservation based on scientific knowledge has acquired a positive connotation since colonial times, led by the debate between the heroic conservationists and the small-minded opponents, the villains or the encroachers (Brockington et al., 2008b; Duffy, 2016a). The protesters in these cases have often been framed as the 'villains' or the 'poachers', and because of this, their struggle for land resources and their opposition to conservation projects have been considered irrelevant.

These cultural perceptions have failed to recognize these movements as critically significant in the struggle for sustainability and for the achievement of social and environmental justice (Martin et al., 2016). As observed by Martin et al. (2016), recognition of different epistemological knowledge systems is, therefore, a needed step to ensure environmental justice in conservation. This will eventually influence the achievement of 'success' for these conservation justice movements.

4.6 Conclusion

At the heart of the struggle against conservation policies is the lack of equal distribution of common natural resources, and an indelible need for a just and fair distribution and participation in conservation policy and practice. These struggles are also driven by the unequal power relations between already marginalized communities, and elites represented by the Indian government authorities who manage state forest lands (Veuthey & Gerber, 2012). The Forest Rights Act, which has the potential to democratize forest management under the decision making of the *gram sabha* (elders council), has been largely ignored by official agencies in Protected Areas to date, thus failing to recognize co-existence and collective governance regimes as a possible and successful conservation approach.

The colonial and imperialistic idea of pristine landscape and virgin territory continues to influence the decision making of the state authorities which, in partnership with conservation organizations, support a fortress conservation model that displaces, criminalizes and represses local communities (Margulies, 2019; Rai et al., 2018). Moreover, the process of enforcing militarized control and calling for national security to protect wildlife, with armed guards and surveillance technology, echoes other green militarization trends ongoing in other parts of the world (Büscher & Ramutsindela, 2015; Duffy et al., 2019).

The struggles analyzed in this chapter make it evident that conservation in India needs to change. In this regard, the Forest Rights Act has become an opportunity to bring together struggles that were rather localized and isolated before. As Della Porta and Diani (2006: 18) argue, "for protests to emerge, activists might believe that an opportunity exists, that they have the power to bring about change". The legal recognition of these forest rights under Indian legislation has empowered communities to such a degree that one can observe a country-wide conservation justice movement emerging. This movement is part of the larger struggle for systemic change, bringing into light how a real and just conservation model can become an essential component for achieving a genuinely sustainable society.

To conclude, conservation struggles in India exemplify struggles over resource rights and, above all, recognition of justice (Martin et al., 2016). Those who challenge state-driven conservation discourses and policies demand the recognition of their culture, livelihoods and identity, and advocate for another conservation model where management rules can be fairly

negotiated and implemented based on co-management and conviviality principles (Büscher & Fletcher, 2020)). For all these reasons, I believe that this movement is playing a pivotal role in reframing priorities and contradictions and for the possible renegotiation of power structures (Veuthey and Gerber, 2012; Villamayor-Tomas and García-López, 2018). This movement is advancing alternatives to dominant ideas and contributing to shaping the idea that 'knowledge', in this case environmental knowledge, is based on a social construction that serves to legitimize and perpetuate social structures based on injustice.



Picture 2. Destruction of bamboo huts_Manas TR. The huts of Bodo indigenous communities destroyed by the forest department in February 2017, for the second time. Betbari village, Baksa District, Manas National Park, Assam. Photo credit: Eleonora Fanari.



Picture 3. Eviction_Simlipal TR. 47 Khadia primitive tribal families have been relocated in a violent way in April 2017 in Khonduador, from their ancestral Kejuri village, located in the buffer area of Simlipal Tiger Reserve. Photo credit: Eleonora Fanari.



Picture 4. Concrete House_Simlipal TR. A Munda tribal woman sitting on the newly built concrete house in the relocated Nowra colony. On 11 September 2014, 35 families have been relocated more than 200 km away from their ancestral village, Yamungarh, located inside the critical tiger habitat of Simlipal Tiger Reserve. Photo Credit: Eleonora Fanari



Picture 5. Relocation Camp_ Achanakmar TR. 249 families evicted from Bokrakachaar village in 2009 for the creation of the Achanakmar Critical Tiger Habitat. With only some barren land and no access to their forest products, many migrated to the city. Photo credit: Eleonora Fanari.



Picture 6. Memories of eviction_Achanakmar TR. A Baiga woman from Bahud relocated village, is crying remembering those days where she could enjoy her mango chutni from the tree of her garden. 'Now with no land and no trees, there is hardly any life' she said. Achanakmar National Park, Chattisgarh. Photo credit: Eleonora Fanari.



Picture 7. WCS Relocation Nagarhole TR. A Jenu Kuruba Tribal from Nagarhole Gaddi Haddi, Nagarhole TR, Karnataka, in a relocated camp directed by Wildlife Conservation Society. Photo credit: Eleonora Fanari.

We worship the river here, we worship the forest, we worship the animals, like the elephants, the tiger... they are considered sacred. It is a ritualistic practice where we are offering our eloigns to the river and the animals. It is like a conversation; we are bound to them telling them they take care of us the way we take care of them.

(Mati River documentary, 05/07/2020).

CHAPTER 5.

PARTICIPATORY SECURITY AS FORM OF CONTROL: KAZIRANGA NATIONAL PARK, INDIA[19]

5.1. Introduction

'We need everyone to conserve the park, and the community is essential to the project' argued the Park Director (Fieldnotes, March 2022).



Picture 8. Forest Guards patrolling in Kaziranga NP. Photo credit: Eleonora Fanari.

Kaziranga National Park in Assam, India, relies on an extensive network of military anti-poaching agents for its security (Yadav, 2014; Gogoi and Gogoi 2022). Approximately 642 military personnel (police and forest department staff) are deployed with the mandate to protect the endangered rhinoceros, the state's symbol (Yadava, 2014). However, the use of violent anti-poaching measures and shoot-on-sight protocols have sparked controversies (Barbora 2017; Fanari 2018). It became the subject of a BBC documentary supported by the campaign 'Stop the Con' of Survival International (Rowlatt, 2017). The documentary revealed security forces abusing power, coercing and violating community rights under conservation pretenses (Barbora, 2017; Rowlatt, 2017).

[19] This chapter is based on an article published in Conservation and Society Journal, on 23 July, 2024 DOI: 10.4103/cs.cs_44_23

Nevertheless, my research attests to the implementation of more participatory activities involving local communities in park protection. These measures are in response to a longstanding call to increase local support for conservation (West et al., 2006; Miller et al., 2011; Kothari et al., 2013). While community involvement may seem appealing at first, research has also shown how these policies can be used as a form of "co-option' by the state and a concession of power by the forest department" (Sundar, 2002: 256). Igoe and Croucher (2007) echo a chorus of voices arguing that 'participatory models' in conservation can be tokenistic and fail to recognize the needs and knowledge of local and Indigenous people. However, at Kaziranga, a new twist emerges, neatly alluded to by its director: this park advocates what I call a 'participatory security approach'. Specifically, park authorities, through the establishment of two institutions aimed at community development and local surveillance protection, have engaged local members in anti-poaching activities. As I will argue in this chapter, these changes in the park's management are associated with a transition from the direct to the indirect use of violence for conservation that engages a myriad of non-state agencies, as well as the creation of a new 'environmental mentality' (Agrawal, 2005).

The chapter asks how participatory conservation practices, promoted by various environmental organizations and the state, influence various forms of violence and subjectivities. To address this question, I analyze the initiatives within two community-state institutions: 1) the eco-development committee (EDC) to promote conservation and development in forest fringe villages; and 2) the village defense organization (VDO), a unique institution in the state of Assam for local community security. Using Fletcher's (2010) rendition of a Foucauldian lens, I argue that while the EDC manages the environment using forms of disciplinary power (social norms internalization), VDOs mostly operate through forms of sovereign power (compelling subject's obedience). Both rely on neoliberal forms of power (via the control of subjects through external market structures) to further ensure people's participation. My aim is to understand how these participatory approaches and these forms of power reinforce existing militarized systems in Kaziranga, shaping locals into new environmental subjects. Additionally, I highlight how these initiatives perpetuate environmental injustices (cf. Martin et al., 2013).

This chapter uses the new concept of a 'participatory security approach' to understand how the militarization of conservation works. In doing so, it combines writings from conservation studies, specifically those concerned with militarization and analyses of participation (Massé et al., 2018; Duffy, 2022). In addition to the surveillance that community-based conservation can entail (as Duffy (2022) has demonstrated), I show that the blending of militarization with community-based conservation management at Kaziranga is built upon a legally recognized participatory policing revived in the form of VDOs. These circumstances mean that the forms of participation here, based on security narratives, reshape the mindsets of park neighbors into securitized subjects. I call this mindset a 'security mentality'. Using a political ecology

lens, I argue that these participatory security approaches, operationalized through the VDOs and producing security mentalities, are mechanisms of soft control that exercise indirect violence against local communities (Vandergeest and Peluso, 2015; Massé et al., 2018; Duffy, 2022).

According to Johan Galtung (1969), violence hampers people's mental or physical development, manifesting as structural and cultural violence due to unjust societal organization. This chapter delves into the nuanced forms of indirect violence stemming from these dynamics. Utilizing the concept of 'political forest' (Peluso and Vandergeest, 2001), I illustrate how Kaziranga ultimately becomes a battleground for counterinsurgency warfare, which includes the indirect violence exercised through these two participatory institutions.

The research chapter has three sections. First, I examine Assam's history of violence, looking at insurgency and counterinsurgency, emphasizing the connection between nation-building and conservation (cf. Dutta, 2020a). Then, I describe participatory conservation practices in the park´s fringe villages, highlighting their role in reinforcing state control over local forest management. I argue that these participatory mechanisms function as 'counterinsurgency practices' (Dunlap, 2023) aiming to disempower local communities and prolong militarized control. In addition, I argue how these mechanisms produce new forms of mentality.

5.2. Connecting security practices with community conservation: counterinsurgency allies

A security state responds to internal threats, like narcotic crime, terrorism, and environmental degradation, with increased patrolling, control, and surveillance (Peoples and Vaughan, 2021). Participatory approaches empower people to actively engage in decision-making affecting their lives (Kothari et al., 2013). When I refer to participatory security approaches, I mean citizen participation in state-driven security strategies. This recalls the concept of a 'political forest' by Peluso and Vandergeest (2001). They argue that forests are shaped by violent practices of territorialization subject to unwelcome state governance. Political forests are "legislated, zoned, mapped, classified, and managed by professional, 'scientific' government agencies" (Peluso and Vandergeest, 2011: 256). Their making is "intertwined with the violent making of nation-state territories and political subjects through common repertoires of violent state practices" (ibid.: 589).

A growing body of literature acknowledges the 'political forest' as a space defined by processes of securitization (Massé and Lunstrum 2016; Duffy and Brockington 2022; Devine and Baca, 2020). Examples from Colombia (Bocarejo and Ojeda, 2016), Honduras (Loperena, 2016), Guatemala (Kelly and Ybarra 2016), Laos (Dwyer et al., 2016), Mozambique (Massé and Lunstrum, 2016), India (Dutta 2020a), and Nepal (Dongol and Neuman, 2021) demonstrate the connections between violence, security, and conservation. These studies examine how

security discourses use national and racial imaginaries to justify dispossession and violence. Critical security studies criticize using the term 'security' in a context such as the environmental crisis, as it can lead to the deployment of militarized forces as a solution (Booth, 2007 in Peoples and Vaughan-Williams, 2021). Peluso (1993) examines how global security concerns in conservation are leveraged to exert control over local populations, highlighting the role of international actors in shaping conservation policies. While violence in conservation is not new (Peluso 1993), recent decades have seen an escalation in sophisticated military actors, techniques and technologies (Lunstrum, 2014).

Many have observed how participatory practices shape 'political forests' (Mahanty, 2002; Massé et al., 2018). While participatory governance is seen as just and inclusive (Kothari et al. 2013; Borrini-Feyerabend et al., 2007), it can also "conceal and reinforce oppressions and injustices in their various manifestations" (Cooke and Kothari, 2001: 13). In the case of India, studies have observed that participatory activities have served as 'conduits of power' (Kothari, 2001; Sundar, 2002) and have fostered the "reassertion of control by dominant groups, [leading] to the ratification of social norms through self-surveillance and consensus building" (Kothari, 2001: 142). More generally, they have been criticized for being top-down (Büscher and Dressler, 2007; Levine, 2007) and ineffective for local development and biodiversity (Peluso and Lund, 2011). They extend 'soft forms of control' that employ "the strategic use of concessions, the promise of representation and access, the co-optation of leadership, and, comprising all of these, the institutionalization of dissent" (Williams, 2011: 101-102).

In 1990, community-based approaches were seen as a "means by which the state extends its network of surveillance and informal policing" (Duffy 2022: 63). Massé et al. (2018: 7) suggest that "softer development-based approaches as fitting quite comfortably within a green military framework". In their view, a softer strategy built on a counterinsurgency theory that encourages community involvement and development complements the hard approach rather than replaces it (Massé et al., 2018). As Dunlap (2023: 139) explains, "counterinsurgency combines civil and military action, employing the brute force of 'hard' conventional warfare and 'soft' civil-development strategies that form a larger mutually reinforcing governmental-corporate strategy, disciplining, enchanting and engineering the 'hearts' and 'minds' of target populations". Through a Foucauldian lens, disciplinary biopower, or power over life itself, becomes a means to govern people's subjectivities, or governmentalities. This disciplinary biopower can influence the way people relate to the environment, which Agrawal (2005) calls 'environmentality', or people that care for the environment. Fletcher (2010), following Foucault (1991), depicts different sorts of governmentality (neoliberal, disciplinary, sovereignty and liberatory), which shape the way people react to environmental governance.

Viewing Kaziranga as a political forest helps to situate the park in its historical context and demonstrate 1) how securitization practices in conservation are embedded in its historical structural violence (Galtung, 1969); and 2) how participatory forms of conservation shape people's subjectivities supporting fortress systems rather than opposing them (Vandergeest and Peluso, 2015; Massé et al., 2018; Duffy, 2022; Dunlap, 2023).

5.3 Kaziranga: conservation as structural violence

The Kaziranga National Park and Tiger Reserve, as described in chapter 2.6, is located in the state of Assam, at the heart of the North-East of India (Figure 5). After the notification of the WLPA 1972, local people were prohibiting from using natural resources, and relocation started to hampering local people as much as in other Indian Protected Areas (Lewis, 2003; Tatpati and Pathak Broome, 2016). These conservation policies started to impact the already precarious lifestyles of the local communities residing on the park's outskirts, including the scheduled tribes of Karbi and Mising, together with the Assamese, Nepalis, Rajasthanis, Bengali, Miya Muslim[20], and Tea tribes (Smadja, 2018). Some inhabit the shifting islands of the Brahmaputra, known as *chapori* in Assamese, engaging in herding during the dry season.

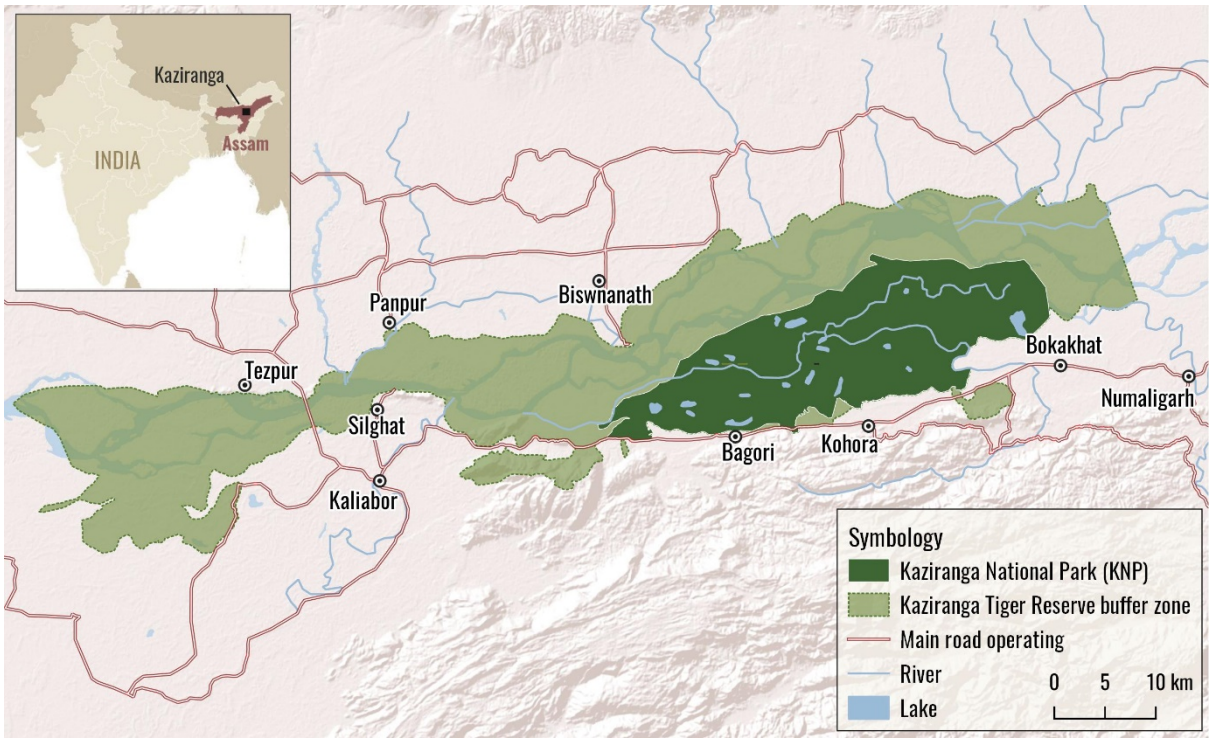


Figure 5. Map of Kaziranga National Park and Tiger Reserve. Sources: Birdlife International, Assam Gazette, OpenStreetMap, ESRI Shaded Relief, Assam Wildlife Division). Map realization: Y. Deniau.

[20] Miya Muslim refers to East Bengali Muslim people migrated from Bangladesh to Assam at the beginning of the twentieth century (Baruah, 2020).

5.3.1 Making the nation through violence

Police security and violence have characterized northeast states and Assam (Baruah, 2005; 2020). This region, bordering Tibet, Myanmar, and China, has always been geopolitically important (Baruah, 2020; Cederlöf, 2023). Residents have resented both British and Indian state controls as both are and have been intrusive and neglectful. After the partition between India and Pakistan in 1947, many people from East Pakistan (now Bangladesh) migrated to Assam in search of land (Baruah, 2020). These individuals were deemed ‘foreigners’, leading to security interventions in border forests (Baruah, 2020: 47-75). Amidst these migration waves, a local autonomy struggle emerged, causing regional disorder, declared as a 'state of insecurity' due to civilian insurgencies (Smadjia, 2018).

To curb these waves of unrest, the Indian state enacted the Armed Forces Special Power Act in 1958, granting special power to the military, such as the right to arrest, shoot to kill, and to occupy or destroy. In response, in the late 1970s, a militant sub-nationalist secessionist force, the United Liberation Front of Assam (ULFA), emerged with the aim of establishing an autonomous state (Baruah, 2020). Conflicts between these forces and the Indian state escalated, undermining the rule of law and normalizing killings and violence throughout the state. Waves of violence were partially quelled with the Assam Accord of 1985, which recognized all migrants prior to 1966 and set up an Indian security force to control the Bangladesh-Assam border (Lopes, 2014). In 1986, the Assam Forest Protection Force was instituted ‘for the better protection and security of the Forests’ (ASSAM ACT NO. XXII, 1987). The Act awards forest officers the power to arrest without a warrant and the power to use firearms (ibid.). This was one of the first military forces created in the state for the ‘protection’ of wildlife. In the 1990s, violence again emerged, resulting in a decade called 'the Bloody 90s’ (Das, 2012; Baruah, 2020).

Paramilitary forces stationed within the forest were intended for counterinsurgency operations (Dutta and Simlai, 2022). According to Lopes (2014), there has been a correlation between the extension of civil unrest and the increase of rhino poaching in Kaziranga. In the last decades, anti-poaching operations have been related to a security discourse, with conservation and security agendas overlapping, both citing the idea of ‘national good’ as justification. In 1991, the name of the rhino was used in a counterinsurgency operation against the ULFA, called 'Operation Rhino’. It was maybe the first time the rhino was used in a military campaign against civilians and rebels (Barbora. 2017). Subsequently, it was repeatedly invoked and utilized in campaigns targeting immigrants, tribals, and all individuals deemed by the state as ‘encroachers’ (Saikia, 2011). Saikia (2011) considers the making of the Kaziranga National Park as parallel to the national-building process in Assam. He describes Kaziranga as a site where the rationale for fauna preservation stems not only from ecological imperatives but also from the political exigencies of the region.

Forests in Assam continue to be arenas of violence, marked by secret killings and characterized by the government's ongoing impunity for its actions during encounters with armed insurgents (Barbora, 2017; Dutta, 2020a). Over the past decade, with the Bharatiya Janata Party in power championing a Hindu nation, and amidst international concerns surrounding Islam (Baruah, 2020), the promotion of anti-poaching operations as 'security for the nation' has been reinforced and utilized to strengthen the military (ibid).

5.3.2 Anti-poaching operations as security measures

In Kaziranga, poachers are generally depicted as criminals, often associated with ethnic tribal groups (Gogoi and Gogoi, 2022). The term 'poacher' is used to describe individuals who enter the park for wildlife harvesting or fishing, overlooking the colonial nature of the term and their traditional hunting rights (Duffy, 2014). These poaching activities are also described as linked to military insurgency (Lopes, 2014) and terrorist organizations (Guynup, 2017; Oxpeckers 2020). Conservation organizations operating on the ground endorse this perspective, influencing how authorities respond to poaching. Illegal acts are not viewed simply as a "prohibition to hunt", but as a "wildlife crime" tied to national security concerns (Duffy, 2016). Offences against nature and wildlife are constructed as crimes against society and the state, carrying severe punishments, including life imprisonment (Yadava, 2014).

The military and battalions deployed for anti-poaching operations constitute a significant component of wildlife security. "Here we have one objective: protect the rhino", stated the Director of the Kaziranga Tiger Reserve (Fieldnotes, March 2022), with anti-poaching efforts intensifying after the park was designated as a tiger reserve in 2007 (The Assam Gazette Notification, August 3, 2007). Alongside the 562 front-line staff, there are two Battalions of the Assam Forest Protection Force (AFPF), deploying 430 personnel (Yadava, 2014), and a Special Rhino Protection Force comprising 82 individuals (Agarwala, 2019). Plans are underway to establish a third AFPF Battalion (Yadava, 2014: 72). In 2014, an Anti-Rhino-Poaching Task Force was formed under the Assam Police, and a Rhino Task Force was established at the national level (Rhino Task Force Report, 2015). Together with the increase in military activities, one of the strategies to combat poaching in the area has been the involvement of local communities as vigilantes.

Communities residing on the fringes of the park, whose tradition, identity, and histories have never been fully acknowledged by the state, may engage in poaching activities both as guides for poachers and as hunters. Their involvement stems from economic necessity as well as political retaliation. While the rhino is considered the symbol of Assam, for some residing near Kaziranga, it embodies the oppressive authority of the National Park. Nonetheless, others have remarked, "Despite living in proximity to Kaziranga, and despite everyone coming to see the rhino, Kaziranga is merely destroying us" (Interview 92). The tight control over the use of

natural resources for livelihood, coupled with the restrictions imposed on civic spaces, directly impacts the inhabitants' lives.



Picture 9. Signboard in Kaziranga, bringing to the paramilitary camp of the AFPF. Photo credit: Eleonora Fanari

5.4. Methodology

This research is based on five months of ethnographic fieldwork from February to June 2022. The study relied on participant observation, focus group discussions, and semi-structured interviews (138) with various stakeholders, including members of local and Indigenous communities' representatives of the eco-development committee and voluntary defense organization, NGO representatives, forest rangers, guards, and officials from the forest department, regional experts, environmentalists, and government agencies.

Kaziranga is divided into its southern side, comprising four ranges[21]: the Agoratoli eastern range, the Kohora central range, and the western ranges of Bagori and Burapahar. Additionally, its northern side includes the recently established Biswanath range. My ethnographic fieldwork was conducted primarily in the south-eastern side of the park, among the villagers close to the Agoratoli range. In this area, I interacted with both the Mising tribals

[21] A Range in India is a term used to define administrative regions and to usually demarcate protected or resource-managed forests.

and Assamese general communities. I also engaged with villagers from the ranges of Kohora, Burapahar and Bagori.

My interactions were shaped by my positionality as a white southern European woman, fluent in Hindi language but not local Assamese. As described in chapter 3.3, I am familiar with many aspects of life in India because before undertaking this research, I lived in the country for almost a decade. This background provided me with a strong understanding of many of the issues encountered in the field. However, my interlocutors still encountered me as a foreigner. This is a common experience for researchers, especially in Kaziranga, where 'foreign' is a capacious category. Many visiting Indian citizens would also be considered foreign. I found I was able to establish good relations with people and explain the purposes of my research best through the friendship networks that I had established before the research began. In places where I did not have these networks, I had to work harder to overcome suspicion and communicate the purpose of my research.

I interviewed people in Hindi, English (with government officers) and Assamese. All the latter were translated to English by local field research assistants and transcribed both by me and by a research assistant. The semi-structured interviews were analyzed through the NVivo software, in which I coded all the interviews related to the eco-development committees, the village defense organization, poaching activities, and the perceived violence, fear, and notion of security expressed by the interviewee.

5.5 The local eyes: control, develop and surveil

"Kaziranga is fortress, nobody can go inside", stated the head of the research and conservation division of an Assamese organization (Interview 2). The fortress of Kaziranga is ensured by a complex network of actors, including the forest department, philanthropists, local and international organizations, police, local communities, and the soldiers involved in anti-poaching operations. One of the strategies implemented to stop poaching in the area has been the involvement of local communities, as vigilantes, patrollers, and allies through participatory activities (Yadava, 2014). We shall review several of these in turn.

5.5.1 The Village Defense Organization (VDO): social police

The VDO was established in 1949 to enhance village's security in the state of Assam. In 1966, it was formalized through the Village Defense Organization Act, with the primary objective to "assist the police in the maintenance of law and order"[22] . In 2015, the Assam Police, in

[22] Information collected from the website of Assam Police https://police.assam.gov.in/. Accessed on July 10, 2024.

collaboration with the forest department and various conservation organizations such as Aaranyak, Corbett Foundation, WWF, Wildlife Trade of India (WTI) and the local organization Bhumi, helped to revive the VDOs around Kaziranga (Rhino Task Force Report, 2015). In this context the main role of the VDO became one of surveillance, forest patrolling and anti-poaching activities. A conservation field officer explained,

"We motivate them about wildlife conservation. In every village, there is a VDO to mitigate some problems […] We provide support, such as torch lights, shoes, coats, etc. The police oversee them. There are 15 to 20 members, including women […] They patrol to reduce wildlife incidents and prevent poachers from entering the villages" (Interview 4).

NGOs and forest authorities influence the selection of committee members, determining the most suitable candidate for the role.

However, in the Kaziranga context, the village defense party (VDP), the party constituted in every village by the VDO primary committee, predominantly exists in those villages where poaching serves important functions. Some villagers attribute poaching to economic needs, unemployment and a sense of injustice, such as being excluded from permanent guards' positions in the forest department. As VDPs are seen as a form of 'social police', many villagers fear their presence, as stated by a VDP President, "In the past, VDPs were ineffective, but now they have become strict" (Interview 115). These sovereign forms of power exercised by the state through the VDPs have certain effects on the locals, who either accept or reject these rules.

Indeed, while regulations and anti-poaching activities have generally faced resistance from locals (Smadjia, 2018), there are emerging perspectives (we could call them 'mentalities') supporting these new security measures. A local woman argued: "Since VDPs have been established, things have improved slightly. Previously there was no peace, but now at least there is some order" (Interview 99). A local primary school teacher living at the fringe of the park added: "The restrictions have been beneficial. It will be advantageous for the next generation if Kaziranga remains safe" (Interview 96).

However, many villagers oppose the establishment of VDPs due to the social conflict they generate. A tribal Mising villager explained: "VDP means police, and people here prefer to resolve issues with the government headman rather than involving the police" (Interview 116). He added, "If I were made VDP president and someone got arrested, I would be held responsible for handling with the case, and the villagers would take action against me". VDP-members are pressured to identify poachers, particularly in the case of rhino poaching, often suspecting known or former poachers. To describe his involvement in catching poachers, a VDP President argued: "There was a time when I assisted [the police] to capture 20 poachers.

They were jailed, but they are unaware of my involvement. If they found out, they could shoot me." (Interview 115).

This demonstrates the types of contradictions that VDOs generate—on the one hand being in a position of authority, while on the other hand, feeling uncomfortable in the act of identifying poachers. Community leaders active in VDOs are co-opted by the government to work for them to maintain their position of power. This sovereign, yet participatory, way of governing, is for the state a means to gather information about people and poachers, while for the locals is a way to gain and maintain power. This dynamic allows authorities to directly exert control (sovereignty) over community members, potentially exacerbating internal conflicts.

5.5.2 Network of informants

Besides VDO members, there are also networks of informants. "There might be someone secretly involved with the police, but I don't know", argued a villager (Interview 67). During the study, I also experienced unease and apprehension because I felt people were watching or spying on me. This feeling was confirmed by a farmer's statement: "Here everyone knows which house you are stopping in, and which people you are talking to" (Interview 97). Networks of informers are prevalent in villages considered 'sensitive' due to the presence of alleged poachers. As reported by Jacobsen (2021), since 1990, a local journalist established an informant network: "If you give them USD400 or USD500, they'll help you trap a poacher. We give them extra money if their information leads to the killing of a poacher, up to USD1,000". A young man from Agoratoli said "NGOs target villagers to get information; for example, if I am a villager, you give me a pig, and then you can use me. Now I must work for the NGO, and in this way, they collect information", (Interview 66).

Informing can be deadly work, leading, I was told, to extrajudicial killings (see also Danish, 2015; Simlai and Raza, 2017; Simlai and Dutta, 2022). According to these stories, forest rangers, with the help of local informants, arrest or sometimes kill vulnerable or innocent people after a rhino is poached.

"They [foresters] do not catch the real poachers […] they pick up people from the villages who have minor cases or are suspected for something [...] they have informers in the villages and suppose my relationship with the informer is not good, so they may falsely implicate me in a case" (Interview 29).

"When we hear a rhino has been killed inside the forest, we do not sleep for weeks", stated a Mising woman (Interview 85). In a focus group, another woman said: "They [forest guards] come at night, and they take our boys and kill them! One boy was studying and doing great, and they killed him. Of course, we do not like them!" (Interview 85).

Informing can be so deadly due to the normalized violence in Kaziranga conservation. Local forest guards see a heavy hand as a means of gaining work or promotion. "You'll get a job if you kill a poacher", argued another widow (Interview 135). A forest guard recounted that if a poacher is found in the forest, the rule is to have a direct confrontation, which means shooting; "We have the order to shoot at them; we cannot arrest" (Interview 31). Ex-poachers can play the role of informers, as explained by this widow:

"On that evening, two to three men came to my house, they were my husband's friends. They told him to go for some drinks […] and then he went missing. These three people were involved in poaching incidents and were also imprisoned. The forest guards assured them that if they produced that guy, their sentence might be fixed or pardoned" (Interview 136).

These economic incentives, including money and job security, fuel an anti-poaching informer network, fostering insecurity and mistrust. However, some villagers support this system of informers, actively participating in the securitization of the park. While speaking with a group of men about anti-poaching patrolling, they argued: "Yes, it is good, now people have become more careful, they won't do mistake now" (Interview 112). When discussing with a local journalist about his relationship with alleged poachers, he said,

"There is still a good number of poachers in Kaziranga, and today, I am trying to give them a normal life. They are scared; they are roaming around because the forest department and the police always try to harass them, and so I try to bring them to the mainstream" (Interview 6).

5.5.3 Community conservation: the eco-development committees (EDCs)

Community conservation in Kaziranga is carried out through the EDCs, under the national Joint Forest Management (JFM) scheme. Currently, there are 54 EDCs in Kaziranga, whose activities mainly aim to provide "sustainable development to the villages, thereby reducing their dependency on forest resources" (Yadava, 2014: 79). The scheme, initiated in 1990, was highly contested for its top-down approach and failure to foster real participation of people in forest management (Sundar, 2002). Despite this and the implementation of other pro-people policies, such as the Forest Rights Act of 2006, JFM continues to prevail as a community conservation strategy. In Assam, this scheme is supported by the Assam Project on Forest and Biodiversity Conservation (APFBC), an organization mostly funded by the Agence Francaise de Développment (AFD) with an initial budget of 60 million euros, including a 10% contribution from the state (APFBC Report, 2018).

EDCs involve a mixture of coercion and persuasion through different forms of disciplinary power. The EDC microplanning includes a 'Protection Plan' requiring the forest department to constitute 'local protection squads' amidst the youth and develop an anti-poaching

information network linked with the VDOs. Persuasion is seen in the development activities designed to improve villagers' attitudes towards conservation. The deputy director of an NGO argued: "Villages where connections to poaching were found in the past, have been more difficult to interact with. But if we come and build an island[23] that is beneficial for the village, most of the villages won't really understand why they should oppose us" (Interview 1). Conservation NGOs support diverse development and awareness activities through the EDC, such as repairing schools, community halls, and roads, which are termed 'entry points' aimed at building trust with local populations (Yadava, 2014: 75). As highlighted by the deputy director of a conservation NGO: "Villagers have no trust with the forest department… but because of the EDCs there is a bit more of trust" (Interview 1).

Awareness programs organized through the EDC aim at educating youths living on the park's periphery on conservation policies. In one of these meetings called 'Nature Conservation' organized on March 15, 2022, the district divisional forest officer said to the youth: "No one can enter Kaziranga without permission and, if they enter, they will be punished; just like in your school, we have our laws". He added, "We are trying to build you as good citizens" (fieldnotes, March 15, 2022). According to a presentation during a youth meeting, one of the requirements to participate in these programs is living in a periphery hamlet, coming from a low-income family, performing well academically, and being the child of a former poacher. This last requirement suggests how educational activities are used to change people's behavior. Through development and awareness activities, both NGOs and foresters apply a 'disciplinary power' to control people's minds and actions' (Massé et al., 2018; Dunlap, 2023). This means these committees, rather than just enhancing wellness and development in the villages, are also used to shape people's ideas on conservation, to discipline them, and to secure a certain behavior and mode of acting.

Villages involved in poaching activities as known as 'poacher villages'. One of these is directly supported by the Agence Française de Développement. It is one of the most vulnerable villages of Kaziranga, affected by the yearly floods of the Brahmaputra River and wild animal depredation. Here, the EDC has quite a strong presence, and they actively collaborate with the foresters on poaching. An EDC member said: "Together with the foresters, we made [suspected poachers] surrender" (Interview 87). The 'surrender' ceremony is a social gathering where ex-poachers relinquish their weapons and publicly declare their commitment to stop poaching. In 2018, four poachers ´surrendered´ in the village, however, many complained they did not get anything in return. An EDC member said:

"The forest department is constantly searching for them, and if they are discovered, they may be killed. So, we discuss all of this with the 'poachers', warning them that if they are caught

[23] Mud 'islands' are built up in villages to save animals during flooding.

at night, they may be shot. We consult with the authorities, the director, and the range officer, set a date for surrender, and they leave their weapons in front of everyone" (Interview 76).

This informal criminalization of locals stigmatizes poachers who become criminals before the community (Duffy, 2016). These ceremonies create an alliance of actors, including officials, journalists, NGOs and villagers who together become defenders of wildlife.

However, building this alliance between developmental activities and conservation is challenging. One person complained "Despite helping in capturing poachers, the forest department does not employ local people. In 2010, we convinced 13 poachers to surrender, and we told them that surrendering would help arrange some loans. However, the loan was not granted" (Interview 65). Others resented their enduring poverty. "We live close to Kaziranga, we should have good facilities, but look at our condition, people come as tourists in Kaziranga, but look how we live, there are no roads no facilities in this area. Kaziranga is destroying us", said a villager (Interview 92). Despite the AFD support, most of the people continue working as farmers, casual workers in the construction industry, or as rickshaw pullers. In the absence of jobs, poaching remains an important alternative.

Overall, the EDC project In Kaziranga has many sceptics. As argued by a forest ranger: "We have problem with the EDC. When I came here in 2017/2018, the forest officers distributed pigs, then we tried with some unit of weaving, but the result was a failure" (Interview 42). A journalist suggested these committees contributed to "major problems with the fringe's villagers" (Interview 20). According to some villagers, the committees divide the villagers:

"EDC is a tactic. People from the community who have influence are purposefully placed under the EDC so they can no longer stand up for the people. They give minimum things like a community hall and some initiatives, but the one that is powerful stays with them [forest department] to get the benefit" (Interview 121).

5.6. Discussion: shaping new subjectivities through 'security mentality'

In 2016, a European Parliament resolution on wildlife trafficking called for a 'zero tolerance' approach to poaching and ordered the international community to "strengthen criminal investigation, prosecution and sentencing, and to enact stronger measures to combat illicit wildlife trafficking" (UN Environment Program, 2016). Trafficking is considered a 'serious crime', on par with other forms of transnational organized crime. In Kaziranga, the increased attention on protecting the rhino 'at any cost' emerges from framing poaching as a criminal issue related to national and global security (cf. Duffy and Brockington, 2022). However, to associate environmental issues—in our case wildlife—with security has a larger consequence on the measures adopted in the name of 'security' (Deudney, 1999 in Peoples and Vaughan, 2021). The description of the illicit wildlife trafficking as a criminal and security concern has

led to what Massé (2020) called the 'enforcement first' approach, which means the deployment of emergency responses, often including extra-legal and violent measures (cf. Lunstrum et al. 2021).
In this chapter, I describe how the enforcement-first approach in Kaziranga, including its direct forms of violence, is ensured and built up by and with 'participatory protection', resulting in an indirect form of violence facilitated by the reinforcement of the EDC and VDO. These two participatory bodies become strategic to enforce a local surveillance network and to influence people's mentalities on conservation. While VDOs mostly use sovereignty governmentality for local surveillance, the EDCs adopt development and education using disciplinary power (Fletcher, 2010). However, the rules and regulations are also enforced by a broader neoliberal governmentality enacted in the territory, which seeks to influence people through external incentives, such as job opportunities and market needs, to ensure compliance (ibid.). These participatory bodies strengthen the surveillance system in Kaziranga, becoming an extension of the police force and supporting the military of the park.

In Kaziranga, the 'green militarization' (Lunstrum, 2014) and its 'participatory securitization' counterpart emerge because of the violent historical background (Baruah, 2005; 2020). Assam, as a frontier territory and a land rich of natural resources, such as oil, timber, coal, and tea, has been a violent, contested space (Baruah, 2020). The way power has been exercised in these territories shapes people's engagement in participatory activities, enabling them to become part of a surveillance system, which emerges due to the way history has shaped subjectivities and narratives. This is illustrated, for instance, by the 'surrender' ceremony conducted with former local poachers. The idea of surrender was used during the ULFA insurgency in the 1990s to co-opt the militants who 'surrendered' to the state in exchange for money, houses, and privileges. This very system now informally operates under conservation rules, reproducing the same structure of power, with the difference of leaving the alleged 'poachers' in continued poverty and marginalization. Clearly, in Kaziranga, the act of securitizing an actor, in this case, the rhino, comes with enormous 'sacrifice', making the place a 'field of (in)security' (Peoples and Vaughan, 2021). I see these participatory activities as a way for the state to continue ruling in these contested spaces and as an extension of its political power (Ferguson, 1994). Conservation, far from being a practice to protect biodiversity, becomes a strategy for the state to consolidate its power. In other words, we can also consider these participatory mechanisms as 'counterinsurgency practices' (Dunlap and Fairhead, 2014).

The rhino, as a symbolic totem, connects civil societies, the general public, philanthropists, and environmentalists to the state and its power. Under the rhino, the state justifies eviction, violence and even killings. It is under the creation of these participatory activities that local, national, and international organizations are supporting the violence perpetrated by the state. The entry of these organizations in the management of the national park shapes the response of people towards conservation activities. The forest department, historically in

conflict with the local people (Guha et al., 2012), now operates through a network of NGOs. However, different from what Vandergeest and Peluso (2015) observe in the making of the fourth moment of a Political Forest, the international conservation organizations, and the neoliberal regime of conservation in Kaziranga, are not replacing the power of the state but are rather used as a localized mandate to de facto support the violent agenda of the state. The neoliberal yet authoritarian Indian regime does not allow international or national organizations to shape state policies but rather selectively interprets some international ideas of conservation to defend its neoliberal national agenda.

It is important to recognize how the changes I have documented in Kaziranga are part of a larger neoliberal conservation system. These committees, funded and supported by external organizations and agencies, ensure the emergence of a new conservation economic system. Tourism and the sale of traditional items shift self-sufficiency livelihoods to a service-based economy. Furthermore, the increased security measures in the park establish a new economy centered on securitization (cf. Duffy, 2022). Participatory conservation measures aid in the implementation of the authoritarian state as well as a neoliberal conservation economy, thereby creating a neoliberal-authoritarian-conservation nexus.

Finally, using Foucault's concept of governmentality to understand how subjectivities change in space governed by multiple actors, in Kaziranga, sovereignty, disciplinary and neoliberal governmentality (Fletcher, 2010) are shaping the space. The discursive change from environmental protection to environmental security implies a shift in the way the government intervenes and regulates its actions. Under a Foucauldian lens, I see these participatory activities as 'technologies of power' (Foucault, 1975: 1991), whose aim is to create what I call a 'security mentality', which means people characterized by the acceptance, enrolment, and support of environmental security. This is well illustrated by some of the interviewees' positive views about the securitization process, mostly by the EDC and VDO-members. Therefore, different from Agrawal's environmentality, in Kaziranga I observe a security mentality, which serves the interest of building an authoritarian nation-state.

The concept of security mentality suggests that people are willing to accept a new rule of government when they are themselves threatened and coerced to buy into the state's vision of conservation. This mentality also responds to the need for a more controlling state, such as the current Hinduism state of India (Dutta, 2021). It also helps to understand how NGOs are entering and enabling this violence by shaping people's beliefs and constructing a new narrative based on international security standards.

Lately, the model of fortress conservation observed in Kaziranga, as recognized already by Brockington (2002), is working to protect biodiversity. Poaching has reduced, and Kaziranga has been praised as one of the most successful conservation projects, protecting 2,613 rhinos according to the last 2022 census (Karmakar, 2022). However, the question is, at what social

cost? The direct and indirect violence used to repress people's contestation (people demanding their forest rights) has diminished the power of local people. Many poachers have been killed, and a new 'peace' based on strict control (carrot and stick, as a WTI officer argued) and new subjectivities based on a 'security mentality' are emerging in Kaziranga. But for how long?

5.7 Conclusion

Kaziranga conservation efforts could be deemed effective in terms of protecting wildlife, but they also come with diverse environmental injustices and violence. 'Participatory security' involves using locals as surveillance actors to ensure state securitization with local cooperation.

As demonstrated in this research, the activities developed through the two institutions serve as a crucial bridge to connect the forest department, NGOs, and local communities. Using Foucault insights on forms of government, I described how these committees use disciplinary, sovereignty and neoliberal forms of regulations to diffuse the idea of conservation and security. In the process, these forms of regulations perpetuate violence, by disregarding villagers' needs and alternative conservation visions, marginalizing their existence and knowledge. They become visible only as conservation subjects.

Through empirical data, I have demonstrated how participatory practices as a form of soft control shape, mold and ensure the fortress conservation model. This model continues to operate today but under international standards, which involve integrating local communities into the environmental management of the area and designating them as stakeholders in conservation efforts. What emerges is how these mechanisms co-opt people to collaborate with foresters and the police, often in exchange for prestige, money, and power. This leads to the creation of new institutions that produce and reproduce the hegemony of the dominant class through new social relations, ideas, and narratives.

Furthermore, the practices outlined and developed by members of conservation organizations and forest authorities illustrate how conservation becomes ingrained within a structurally violent society. Within this context, international measures grounded in 'zero tolerance against poaching' are leveraged to control the landscape of Kaziranga. These measures empower rangers and individuals to combat criminal poaching activities, justifying both direct and indirect violence. This violence arises in the socio-economic, historical context of the state, which normalizes violence as a *modus vivendi* (a way of life) and as the foundation of the state of Assam. Conservation, in this scenario, serves to bolster the authoritarian power of the state and to control and secure a frontier region like Assam.

By drawing on Foucault's insights into how power dynamics influence individual subjectivities, I have introduced the concept of ‘security mentality.’ This idea extends beyond the mere control of behavior through participatory security practices, delving into the realm of shaping individuals' minds and creating new subjectivities. These newly formed subjectivities may align with the requirements of an authoritarian and neoliberal state seeking to fully assert itself. Within these subjectivities, participatory practices evolve to fulfil the state's needs, not only for conservation, and ultimately neglect any responsibility to provide genuine security and ensure well-being.

Finally, note that this is an ongoing case. While writing this research chapter, in February 2024, the VDO Act was amended, incorporating changes in the terminology of crimes by introducing 'anti-national' and 'security' as pivotal terms and diminishing the independence of VDO as an entity. It remains to be analyzed how and if these alterations in the Act will affect the management of VDOs in the Kaziranga context.

While my analyses untie the hidden agenda of participatory practices which are supporting in shaping new subjectivities, it is imperative to further investigate how people are resisting these security mentalities and how ‘elements of disturbance’ (how a journalist called it) also shape the Kaziranga Political Forest and co-produce and contest narratives, limits, and space, moving towards a possible ‘liberation environmentality’—a post-conservation mentality concern with social and environmental justice (Fletcher, 2010). To truly address conservation in Kaziranga we must first listen to the people's voices, as well as their historical and present challenges. Saving the rhinos alone will not save Kaziranga.



Picture 10. A group of women forest guards in Kaziranga. Photo credit: local person (anonymized)



Picture 11. Signboard along the Kaziranga road. Photo credit: Eleonora Fanari

“Space is not a scientific object removed from ideology or politics.
It has always been political and strategic. There is an ideology of space.
Because space, which seems homogeneous, which appears as a whole in
its objectivity, in its pure form, such as we determine it, is a social product.”
(Henri Lefebvre, 1976)

CHAPTER 6.

SPATIAL INJUSTICE AND THE LANDSCAPE APPROACH TO[24] CONSERVATION IN KAZIRANGA NATIONAL PARK.

6.1 Introduction

A landscape approach to conservation seeks to reconcile the tension between development and conservation while respecting the needs and rights of local communities inhabiting these areas (Sayer et al., 2017). This means embracing a more holistic vision where various human activities coexist harmoniously alongside efforts to conserve biodiversity (ibid). Numerous conservation organizations embracing this approach recognize its importance in supporting sustainable livelihoods and ecosystems while addressing economic needs (CBD, 2023). Indeed, under target 3 of the Kunming-Montreal Global Biodiversity Framework (GBF), on protecting 30% of 'terrestrial, inland water, and of coastal and marine areas' by 2030, the idea of landscape as a well-connected system of protected areas assumed an important role (CBD, 2022; Srivathsa et al., 2023). However, this approach may homogenize practices within landscapes and perpetuate inequalities among stakeholders by favoring certain groups over others (Bluwstein, 2018b; Clay, 2016b). Indeed, a core question is whether the landscape approach can resolve long-standing unequal power relations and solve social justice issues embedded in the neoliberal conservation literature (Duffy, 2022a; Fletcher et al., 2019; Lansing et al., 2015).

Conservation organizations began to talk about landscape-scale to conservation in the 1990s, when they addressed the possibility of protecting biodiversity beyond protected areas by including ecosystem features and landscape models (Brown et al., 2005). In 1994, IUCN published its Guidelines for "Protected Area Management Categories, which put Category V areas – now formally known as Protected Landscapes and Seascapes – on an equal footing with other categories of protected areas" (Brown et al., 2005: pg. 11). It was only in 2003 at the 5th IUCN World Parks Congress in Durban, South Africa, that the World Commission on Protected Areas (WCPA) convened a workshop on Protected Landscapes and Seascapes, where the role of communities in sustaining the landscapes was a central part of the debate (Bennet, 2003). After 2013, the concept gained traction within the conservation community, notably through the establishment of the Global Landscape Forum and its integration into the United Nations Convention on Biological Diversity (Nielsen, 2016; IUCN, 2016).

As discussed in Chapter 2, the landscape concept in India emerged in the same years in which multiple directives and laws started to regulate the landscape (see chapter 2.3). This chapter

explores the India's landscape-scale approach to conservation, focusing on its application in military and fortress areas in India (Dutta, 2020a; Muralidharan & Rai, 2020; Simlai, 2015). Specifically, it examines the transition and the potential injustices it may cause. It does so by exploring the case of Kaziranga National Park, a militarized conservation park in the north-east state of Assam (Barbora, 2017; Fanari, 2018a), where the landscape approach gained traction from the early 2000, under the coordination of the WWF Asian Elephant and Rhino Action Strategy (AREAS) (WWF, 2007). This transformation involved restructuring the landscape through various development and conservation interventions to achieve a balanced approach. Alongside various interventions, the forest department advocates for the empowerment of a landscape authority, proposing the Kaziranga Landscape Conservation and Development Authority (KLCDA), to oversee regulation, promote sustainable land use, and foster alternative livelihoods (Yadava, 2014). This initiative aims to establish Kaziranga as a dual model for conservation and development.

Looking at Kaziranga from a landscape approach allows seeing it as a militarized, yet dynamic landscape shaped by the ongoing movement of the Brahmaputra River (Saikia, 2020), as well as by the increased contentious actions rising in the space (Cremin, 2011; Smadja, 2018). The chapter illustrates how various landscape interventions, such as park expansion, designation of wildlife corridors, and water management strategies, not only serve the state's aim to expand, connect and protect the habitat, but also engender forms of spatial injustice (Soja, 2010). Consequently, this leads to significant resistance manifested through diverse contentious actions (Alonso-Fradejas, 2015; Scheidel et al., 2018; Taylor, 1995). I use the concept of spatial (in)justice to emphasize the spatial and multidimensionality of the political struggle, the engineering creation of the landscape, as well as how injustice is both created and perpetuated through space (Dikeç, 2001; Soja, 2016). Moreover, the spatial dimension enables me to bring together different actors and emphasize their diversity while illustrating their interconnectedness through the landscape.

Expanding on my previous work concerning 'participatory security' in Kaziranga (Fanari, 2024), where I delineated participatory practices as soft forms of control for ensuring securitization and militarization in the region, this paper demonstrates how the landscape approach to conservation serves as a form of territorialization, exacerbating spatial injustices and violence (Rasmussen & Lund, 2018; Vandergeest & Peluso, 1995). I understand territorialization as the process by which state authorities and other powerful actors establish control over space and resources, often through legal mechanisms, property rights, or the imposition of norms and regulations (ibid). Drawing from the critical literature on landscape and connectivity, which raises issues of injustices, power inequality, models of control, and the production of contentious environments (Barua, 2024; Bluwstein, 2018b; Clay, 2016), I perceive these landscape interventions as 'spatial fixes' or as attempts to repair biodiversity damages and fix humans and non-humans within space (Thakholi & Büscher, 2021; Harvey 2001). However, fixing people and space in Kaziranga proves challenging, unfolding through

violent processes (Barbora, 2017; Fanari 2024; see also Bocarejo & Ojeda, 2016; Dutta, 2020a), wherein military anti-poaching units deployed to protect the park perpetuate violence and instil fear, compelling people to accept these new rules of governance (Fanari, 2024).

Finally, this work builds upon the extensive literature on neoliberal conservation, which emphasizes conservation as a violent process of territorial and biopolitical control (Corson, 2020; Devine & Baca, 2020; Massé & Lunstrum, 2016), at times shaped by militarized forms of conservation (Duffy, 2022). Within this literature, which emphasizes the increased economic value of protecting nature, I argue that landscape conservation in Kaziranga may evolve into a territorial strategy used to dominate and sustain human and non-human natures. This is done through the various interventions, or spatial fixes, aimed at safeguarding the landscape. In doing so, I argue how landscape conservation represents a new 'wildlife frontier' in which these spatial fixes, advanced through security logics and practices, are developed to ensure the space as a new 'conservation economic space'. By this I mean a place dominate by neoliberal conservation activities such as eco-tourisms, wildlife business etc. (Massé & Lunstrum, 2016). However, these interventions are constantly challenged by contentious mobilizations that shift and reframe according to the project, the space and the affected communities.

The next two sections provide an overview of existing literature and methodology before delving into two main sections. Section 6.4 discusses the political dynamics of conservation measures in Kaziranga, highlighting a transition from a fortress to a landscape-oriented model. Section 6.5 examines specific conservation efforts in Kaziranga, by showing the technical and spatial fixes used to solve environmental issues. Throughout, it analyses the various local forms of resistance and mobilizations, offering a comprehensive examination of these mobilizations within the broader framework of the landscape.

6.2 The creation of a landscape approach

The shift in policy focus from an enclosed to a landscape conservation approach was prompted by the polarized scientific debate surrounding the 'land sharing' versus 'land sparing' model (Loconto et al., 2020; Mertz & Mertens, 2017). While proponents of the latter argue that landscapes with distinct, intensive agricultural zones and untouched forests are optimal for biodiversity conservation, others have highlighted the advantages of shared landscapes comprising a diverse mix of forest types, agricultural fields, grasslands, and plantations (Fischer et al., 2014; Loconto et al., 2020; Mertz & Mertens, 2017; Phalan et al., 2011). At the 2013 United Nations Framework Convention on Climate Change (UNFCCC), policymakers agreed that a landscape or land sharing approach was a necessary step for just and inclusive conservation (Nielsen, 2016). This shift was considered important to respond to

the need to reconciliate the development-conservation tension by recognizing the rights of local communities in this space (Sayer et al., 2017).

For cultural and human geographers, the concept of landscape tends to be understood as a way of seeing the world, which depends upon our socialization, and it is informed by the ontological and epistemological outlook (Consgrove, 1998; Ingold, 1993). Ingold (1993) argued the landscape is not simply a passive backdrop or setting but rather an active and dynamic entity shaped by human and non-human interactions over time. McCall (2016) describes the process of landscape planning, using the definition of 'boundary object' to argue how the ´landscape' is not a space tightly defined, but rather based on a planning process with 'ambiguous' limits, still clear enough to bring together different stakeholders to act (with projects, mechanisms and rules) and to compete for it. He contends, therefore, that despite its ambiguity, there is a universal consensus not to define it in order to avoid creating a rift. Interestingly, Mitchell (2002) defines the landscape not for what it means, but for what it does, clearly describing a landscape not only as an instrument that symbolize power relations, but as an agent of power itself. Adding to the argument, for Lefebvre power and space operate in tandem, producing each other in a reciprocal manner. According to him, under capitalism, space gets free of social links, turning it into an empty and static surface (Lefebvre, 1985). In this context, the landscape conforms to the dynamics of power and control as acknowledged in the political ecology of conservation (Neumann, 2004; Robbins, 2012), manifesting both as territorialization practice (Peluso & Lund, 2011) and form of biopolitical governance (Bluwstein, 2018a)

As a form of territorialization, critical studies on landscape conservation argue how this approach leads to different forms of injustices. For example, some argue that the landscape approach to conservation, which has been built around scientific ecological categories, in many instances disregards the complex relationships between humans and their environment, overlooking the insights sociology can offer in understanding space (Clay, 2016; Goldman, 2009; Ingold, 1993; McCall, 2016). Studies on wildlife corridors in India and Tanzania highlighted how these projects produced through mapping and land use planning create ambiguity between the local people, generating conflict on the ground (Barua, 2014; Bluwstein, 2018a; Kashwan, 2016). Others observed how this approach could lead to the perpetuation of inequalities among stakeholders (Sayer et al., 2017), as was observed in the case of the Congo Basin, where the negotiations of user rights under the landscape approach have moulded to pre-existing inequal power relation (Clay, 2016). While in Cambodia, the zoning of conservation areas in the larger landscape led to mutual accommodation of extractive industries with conservation areas, at the expense of customary land users who were left out of the zoning (Work & Thuon, 2017).

Therefore, landscape approaches to conservation may reproduce the same logic of neoliberal conservation, with the emergence of new networks, new forms of reregulation of nature and

commodification, and new forms of conservation accumulation (Buscher et al., 2014; Igoe & Brockington, 2007; Kelly, 2011). Thakholi and Büscher, in their 2021 study in South Africa, highlight how control over local communities within conservation landscapes is strengthened by the advancement of development projects. These projects facilitate the establishment of a 'wildlife economy', based on economic activities and industries that are directly or indirectly related to wildlife and biodiversity. They argue that this economy in turn reinforces existing structural inequalities and perpetuates processes of spatial injustice. Massé and Lunstrum, 2016 analyze the process of expansion and dispossession in the creation of transboundary landscapes to protect the Krueger National Park, calling these areas 'wildlife frontier' or "tracts of land (that) have been enclosed and consolidated for the purposes of wildlife conservation, the expansion of tourism-related investment capital, and especially wildlife security'' (Massé & Lunstrum, 2016: 227). They argue that in transboundary landscapes, nation-states often use conservation legitimacies to control local communities, employing policing tactics to combat poaching and extending securitization policies beyond borders. This shows how landscapes can widen the scope of securitization policies beyond conservation reserves.

Bluwstein (2018a) advances the idea of a biopolitical ecology of landscape conservation, looking at conservation landscapes approaches as a governmentality project. According to him, in developing and post–colonial states conservation landscapes "are not only promoting particular (cultural) visions of land use, infrastructure, and development. Rather, are premised upon initiatives to sustain biological life itself" (Ibid.: 29). Using Foucault's theory of governmentality, he suggests that landscape interventions are an impulse to make certain life forms protected (made live), while other abandoned (let die) (Foucault, 2008). In a similar line, Barua (2024) examines the connectivity approach as a transition from the fortress model to a 'zonation model.' In this transition, he identifies biopower forms that move from influencing populations or shaping them to an attempt to regulate circulation. He describes how the landscape in Kaziranga is increasingly organized into conservation zones aiming at regulating human movements and channel non-human mobility (Barua, 2024). The zonation model proceeds through regulation and represents the way state governments manage a conservation landscape in which new infrastructure and rules regulate the flow of capital, the movements and activities of human and non-human-nature.

The creation of landscape conservation project occurs, however, not without social contestations. If states shape spaces and control people through rules and regulations (Peluso & Vandergeest, 2011; Scott, 1998) political ecologists have highlighted how local resistance influences, molds and creates territories (Devine, 2014; Gobby et al., 2022; Hall et al., 2015; Martinez-Alier et al., 2010; Scheidel et al., 2022). Different forms of contentions have been documented against ecological and conservation projects (Heatherington, 2001; Holmes, 2007; Lindenmayer et al., 2018; Spierenburg et al., 2007; Verweijen & Marijnen, 2018) bringing the language of land rights and environmental justice. Particularly, together with

distributive and procedural justice - which refers to the equitable and fair distribution of resources (Schlosberg, 2007), in conservation conflicts recognition justice has been considered as pivotal to ensure equality of status for local conservation stakeholders (Martin et al., 2016). The literature on conservation and resistance highlights the importance of contentious actions taking the forms of everyday resistance (Holmes 2007) or of socially overt mobilization (Matose, 2014). This literature also stresses how top-down conservation approaches create the same pattern observed in extractive territories, and these subsequent conflicts emerge as part of the larger environmental justice movements (Martinez-Alier et al., 2016).

Drawing on these critical contributions, I analyze landscape conservation in Kaziranga as a wildlife frontier shaped by an ever-present post-colonial process of territorialization, as well as a rich politics of contentious actions. Moreover, looking at the different process of nature commodification and regulation through a landscape framework, it allows to perceive the spatial impacts of multiple projects, which could create what Baird & Barney (2017) called 'cumulative impacts', meaning the combined effects of multiple actions, events, or processes on a particular environment, resource, community, or ecosystem, which over time could foster social conflicts (Hunsberger et al., 2017), and generate spatial injustice (Lefebvre, 1991; Soja, 2010).

6.3. Methodology

This chapter is also based on six months of ethnographic fieldwork conducted from February to July 2022. For writing this chapter, I employed a multifaceted approach, combining participant observation, focus group discussions, and semi-structured interviews (138 in total) with diverse actors. These include members of local and Indigenous communities, NGO representatives, forest rangers, guards, and officials from the forest department, regional experts, environmentalists, and government agencies. In addition to primary sources, the research draws upon a rich array of official documents such as court orders, petitions, memorandums, and right to information (RTI) documents, complemented by secondary data from government reports, NGO reports, investigative journalism, and grey literature.

Focusing on the multifaceted landscape of Kaziranga, the study encompasses its southern side, delineated into four ranges: the eastern ranges of Agoratoli, the central range of Kohora, and the western ranges of Bagori and Burapahar. Interviews conducted spanned across all these ranges, providing a comprehensive understanding of the region's dynamics.

The interactions with the space were intricately shaped by my positionality as discussed in chapter 3.4. As discussed for the previous chapter, the interviews were conducted in Hindi, English (with government officers), and Assamese. The analysis of semi-structured interviews

was facilitated by the NVivo software, enabling the coding of discussions pertaining to tiger reserve projects, eco-sensitive zones, wildlife corridors, and water management struggles.

6.4 From wildlife enclosure to landscape conservation

Kaziranga boundaries changed from being a national park to an expanded tiger reserve (Fig. 6). It now evolving into a broader landscape forest, by including reserves forests and wildlife sanctuaries. These changes in territorial designation, and the transition from a wildlife enclosure conservation approach to a more comprehensive landscape management model, have had far-reaching implications for the surrounding communities.

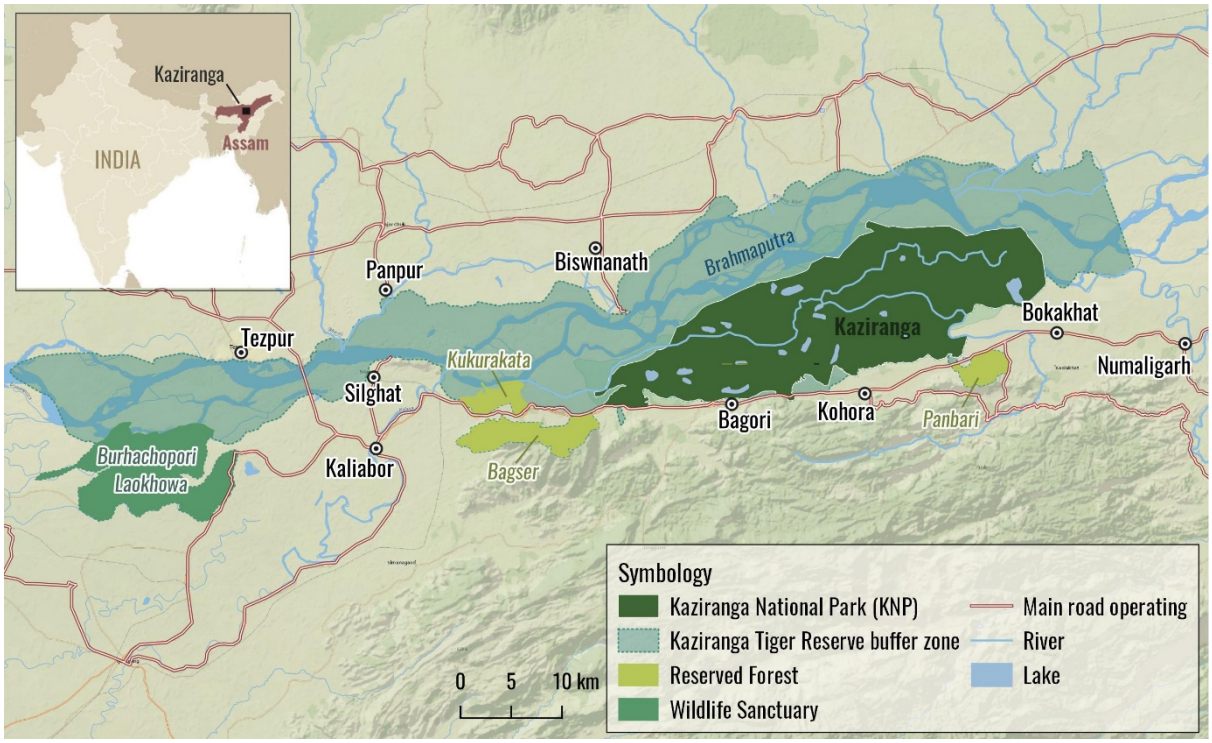


Figure 6. Map of the Kaziranga National Park and Tiger Reserve. Source: GoA official sources, Birdlife International, Assam Gazette, OpenStreetMap, ESRI Shaded Relief. Map realization: Y.Deniau.

6.4.1 The making of Kaziranga as a fortress forest

When the park was notified as a Wildlife Sanctuary in 1950, the tribal villages of Mising and Karbi were relocated outside, leading to the emergence of new settlements around the park (Sarmah 2023; Saikia 2009). Migrants from East Bengal and other peasants seeking new land settled in the available floodplain surrounding the park, leading to overpopulation within a few decades (Saikia, 2009; Smadja, 2018). The restriction on the use of natural resources in the park, like fodder and firewood, sparked disputes, especially among the Mising and Nepali tribes (Cremin, 2018). Despite imposed limits and restrictions locals continued to engage in traditional activities like grazing and fishing, tolerated for years (Saikia, 2009). The 1950 earthquake and the subsequent flooding of 1972 drastically changed the landscape and the

course of the river. Consequently, many Mising tribal villages lost land, prompting relocation to areas near the park, but their unresolved land rights left them in a vulnerable state of illegality (Saikia, 2011a; Sarmah, 2023). This later became a contentious issue, shaping the ongoing political landscape of Kaziranga (explained in chapter 6.4.2).

For middle class and urban elites, Kaziranga became defined as a heritage site and a famous reserve in the country (Saikia, 2011b). Tourism also increased and Kaziranga became important both as a state national symbol and as important economic resource (Hussain et al., 2012; Sarmah, 2021). However, the fluid nature of the landscape makes Kaziranga a tough and unique terrain to protect, and the lives of wildlife animals have been threatened both by the increased natural flooding and by an increase of poaching activities (Barbora, 2017; Gogoi & Gogoi, 2022). The latter is the major focus of attention in Kaziranga, where policies are mostly centered around the protection of this iconic animal (Fanari, 2024). Rhinos have been protected by military forces which have increased in the last decades, making of Kaziranga one of the most militarized parks in India (Barbora, 2017; Gogoi & Gogoi, 2022).

In the last decade, together with the increase of militaries and paramilitaries forces, new surveillance technology has been deployed in the park including camera traps and fishing eyes (Yadava, 2014). Moreover, to better manage the wildlife movement, electric fencing has been installed to define boundaries between civil and wildlife spaces. However, these measures face opposition from some local communities as expressed by a group of women from the Mising tribe in a focus group: "This fencing is meant to harm people. We've all been injured because of it. It's not to prevent animals; it's to harm people whose lives depend on the forest for sustenance." (Interview 59). They note that wildlife frequently breaches the fencing, rendering it ineffective, and instead, it restricts the movement of people who end up injured by the electrified barrier. Another added, "It's incredibly challenging for us because we can't rely on the market; we depend on the forest. The living space here is inadequate. We need food." (ibid). These statements illustrate their need and determination to access the forest for their livelihood despite the obstacles.

Furthermore, reflecting on the recent expansion of the forest and their social-ecological bond, the women asserted: "They [foresters] want to expand Kaziranga and drive us out. But before doing so, they must provide us with land. This is our way of life, and we require our crops and land to survive." (Interview 59) As one woman explained their struggle to access their land, another woman stood up, holding her axe, and demonstrated how they enter the forest together, prepared for encounters with rhinos or elephants. They climb trees if necessary, and if spotted by forest officials, they quickly flee. As I watched one woman run, the others chuckled, and then one turned to me and remarked, "We fear no authorities. We don't even fear elephants, so why should we fear authorities?" (Ibidem). In a forest where men are often labelled as poachers (Barbora, 2017), and with a shoot-on-sight order against them, women's bodies become crucial in asserting their rights. "They can't silence us," one woman declared,

"because we are not poachers." (Ibid). The everyday struggle of these women to access their rights aligns with the social resistance against dispossession and regulations described below, shaping the Kaziranga landscape into a space of contentious actions and politics.

6.4.2 Expanding a tiger reserve by dispossessing people

In 2022, 15 years after the notification of Kaziranga as a tiger reserve, the feelings of local inhabitants toward the tiger project are still of hostility, injustice and corruption. "We told them we did not want the tiger reserves. Kaziranga is famous for rhinos, not tigers" (Interview 129). Locals and authorities explained to me the various processes of the park's expansion especially since it got notified as a Tiger Reserve in 2007. This was due to a national initiative urging states to designate 'Critical Tiger Habitats' for the conservation of endangered tigers (Bijoy, 2011). The Kaziranga Tiger Reserve, comprising a core area of 482 km^2 and a new 548 km^2 buffer zone, has doubled the size of the original national park. Additionally, it has acquired contested 'additions' since 1985, and expanded into other recently added areas, resulting in the entire tiger reserve extending to 1,366 km^2.

The people inhabiting the 'additions' have been residing on the site since the flood of 1972, when they lost their land, while others have been used by grazers since the 1960s for pasture (Fanari & Doley 2018; Jairat, 2023). They have both paid revenue taxes under the term 'touji bahira' for the use of the land, since at least the 1980s, and they consider these lands as their own (Smadjia, 2018; Jairat, 2023). As per the locals, these additional lands were incorporated into the park without consultation, leading to contentious issues (Smadja, 2018). In a March 2022 interview, the Bokakhat revenue officer stated that these parcels were acquired initially under the 1964 Assam Land Acquisition Act (LAA), and later by The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Amendment) Ordinance, 2014, which mandates fair compensation when land is acquired for public purpose. Due to this acquisition process, land titles were never provided to the occupants as considered encroachers on that land. This leaves locals in a continue position of insecurity on their own territory.

The contentious issue over the 'additions' and the subsequent threat of eviction resurfaced when the park was designated as a tiger reserve. Two Public Interest Litigations (PILs)[25] were filed, first in 2002 and later in 2012. The first one was filed by a Hindu nationalist member of the Bharatiya Janata Party (BJP) who live in the surrounding areas and argued that population living in the areas are encroachers and many are coming illegal Bangladeshi (PIL 67/2012, Guwahati High Court 2015). The second one, which was concomitant with it, was a *suo moto*

[25] Public Interest Litigations permit any *bona fide* member of the "public" to seek intervention from the court when a matter of "public interest" is at stake. A PIL is directly filed by an individual or group of people (NGO, institution) with the Upper Courts. It may also be filed by the court itself (*suo motu*). PIL was introduced to protect the disadvantaged and to ensure prompt social justice with the help of the law.

PIL by the Guwahati government, also argued the illegality of the people, it considered locals as encroachers posing a threat to wildlife, suggesting their potential involvement in poaching (PIL 66/12 Guwahati High Court, 2015). Both PILs sleeked the removal of people from the 'additions'. Citizens, supported by the Krishak Mukti Sangram Samiti (KMSS), a peasant national organization led by Akhil Gogoi, started to protest fearing for eviction. In 2013 they appealed before the court 2013: WP(C)4860/2013 (Guwahati High Court, 2013), arguing that land acquisition was illegal and contested the idea of 'additions' and the concept of encroachers (Smadjia, 2018). They asked for recognition of their land rights under the Forest Rights Act, 2006.

However, the petitioners lost, and in a landmark judgment on 9 October 2015, the Guwahati High Court (Guwahati High Court, 2015) ordered the eviction of 666 families living in the 'additions' (2nd, 3rd, 4th, 5th, 6th). Additionally, the same High Court also ordered the eviction of three Bengali Muslim villages (Banderdubi, Palkhuwa, and Deusurchang**)** that were evicted in 2016, leaving two villagers dead in the conflict (Smadjia, 2018). As a result of this ruling, eviction notices are still being issued to residents of these additional areas (Fig. 7), who are resisting by asserting their rights to the land as traditional tribes and flood-affected people (Fanari, 2018b; Saikia, 2020; Chakravarti, 2020; Jairat, 2023).



PIcture 12. Village destroyed. A man from Banderdubi showing me where his village was. Photo creditr: Eleonora Fanari.

Besides these historical additions, the growing concerns about erosion and a heightened focus on environmental protection have paved the way for the notification in 2020 and 2021

of other four ‘additions’ areas (7th, 8th, 9th, 10th), bringing the park total area to 1,366 km^2 (Right to Information, 2022; Kotoki, 2020). Forest officials assert that these areas are crucial for safeguarding wildlife habitats and serve to offset the loss of parkland caused by floods and erosion. “There is need to expand the habitat for the rhino in Kaziranga. Much of the original area of the park has been lost due to erosion” (Yadava, 2014: 159).

However, these spatial interventions to remediate the loss of land, and the continuous additions of areas, were criticized by the Bokakhat Sub-Divisional Officer (SDO) who highlighted that the forest department is using the 1908 gazetteer definition of forest to expand Kaziranga, bypassing the 1947 cadastral mapping under which these areas was designated as civic space. "Saving the environment has become part of every policy in India, and the forest department is trying to add each and every patch of land," she commented during an interview (Interview 47). This politic of expansions serving as ‘spatial fixes’ to solve erosion, is based on principles of fortress conservation. Despite talk of co-existence, de facto its implementation is rarely practiced in Kaziranga. In fact, conservationists like Wildlife Trust of India (WTI), one of the big NGOs (BINGOs) present in the area, clearly rejected co-existence. One WTI person argued: “Co-management and co-existence is not possible. How can I share a bed with a tiger? These are all nice words given by some stupid intellectual of co-existence" and “Humans should live outside wildlife areas” (interview 5).

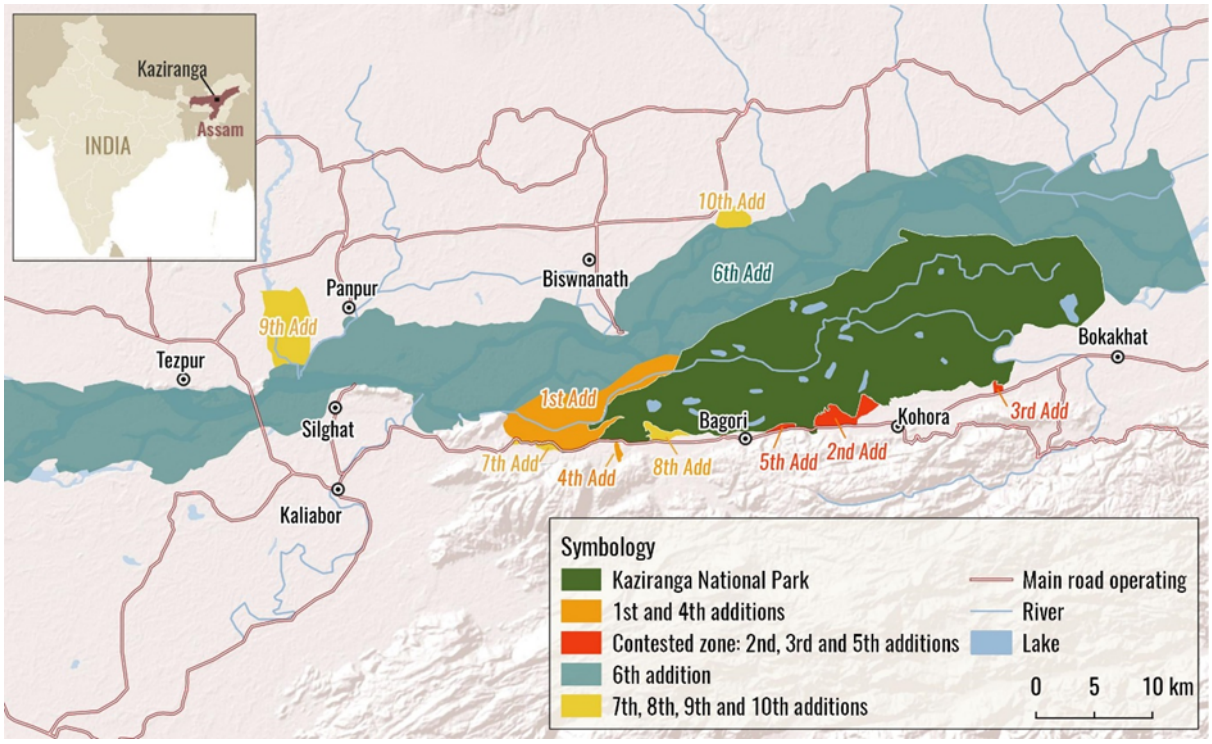


Figure 7. Kaziranga National Park and Tiger Reserve additions. Sources: Assam Gazette, OpenStreetMap, ESRI Shaded Relief. Map realization: Y. Deniau.

But these forms of ‘dispossession in the name of conservation’ (West et al., 2006), carried out through violent practices, have been highly disputed by locals, who have been protesting the

expansion, and advocating for a more co-existence form of conservation (Kotoki, 2020; Chakravarti, 2020). In 2023, an activist of Jeepal Krishna Sangam Sanghiti (JKSS), a local farmer organization lead by Mising tribals declared: "These lands are contiguous parts of the Mising communities; these people live symbiotically with nature and contribute to its survival; they have never caused harm to the forest." "What justifies their eviction?" (North East Now Video, 2023). As local organizations support social protests and engage in judicial activism, individuals persist in resisting eviction notification orders through physical resilience and unwavering determination. The normalization of dispossessing people for conservation has been questioned by many, and in regards a woman pointed out "how can we leave our lands? Are we birds that we can move so easily?" (Interview 59). While another suggesting their intimate relation with the environment said: "If they want to relocate us, they need to give us same land, as we require our crops and land to survive, how could we otherwise perform our cultural duties?" (ibid).

Reasserting the significance of this connection, protests have extended to the capital of New Delhi, garnering national attention. In February 2021, a delegation from the National Alliance of People's Movements (NAPM) and the Delhi Solidarity Group (DSG) visited Kaziranga to denounce the park's expansion in the guise of a tiger reserve (Counterview, 2021). This resistance has also attracted international scrutiny, with organizations such as Survival International repeatedly condemning the conservation model in Kaziranga. They advocate against the militarization of the area and the ongoing expansion (Survival, 2017). The emergence of youth leadership in the struggle, represented by the 'Youth for Bokakhat[26]', has facilitated the exchange of information, transforming Kaziranga into a focal point not only for rhino protection but also for the controversies stemming from conservation policies.

6.4.3 Regulating lives through the eco-sensitive zone (ESZ)

After years of negotiations and followed by the 2011 Eco Sensitize Zone (ESZ) National Guidelines (Government of India, 2011), in 2015 the government of Assam issued a first ESZ notification around Kaziranga. This was soon protested at the time of the public hearing on June 18, 2015 (Smadjia, 2018: 45). The guidelines forbid commercial mining, sawmills, and other polluting businesses, as well as the commercial use of firewood and large hydroelectric projects. However, they also regulate touristic and agriculture activities, such as tree felling etc. (Government of Assam, 2015).

While the ESZ notification does not mandate relocation, locals fear it may compel them to either depart their homes or live under regulations, possibly becoming wage laborers or part of a 'need economy' which involves producing a small surplus to ensure a certain level of consumption (Barua, 2024). This image was reassumed by different farmers "We do not want

[26] See facebook page: https://www.facebook.com/youthfrbokakhat. Accessed on July 10, 2024.

these areas to become an ESZ because under this program we cannot do any large construction, and the land cannot be sold" (Interview 76), argues a farmer from Agoratoli range. Another farmer from the Haldhibari village on the Burahapar range argued "Even if they won't evict us, not noise can be done in this area, so in these circumstances we will be forced to leave the place, as how can we leave without performing our cultural and religious life?" (Interview 107). These quotes reveal the concerns of park border residents, who feel the impact of conservation rules and the control over their lives and bodies, reflecting forms of biopower which attempt to govern circulations and mobility (Foucault, 2008).

This spatial expansion represents a strategy to legally expand the landscape, by creating new forms of regulation outside the park boundary, effectively 'fixing' people within a regulated space. Indeed, decades of restrictions have alienated people from the national parks, leading them to assert ownership over the surrounding land wherein grazing and fishing are traditional activities.

However, the increasing presence of police security in civic spaces has begun to make people feel uncomfortable and anxious about these changes, as expressed by a local person: "Now the forest department does not allow us to switch on the lights of our house. Sometimes they cut off the electricity. They harass us a lot in this way. We always fight against them. The government does not take any steps to protect us. And the relationship with the foresters is deteriorating" (Interview, 129). The lack of consultation and transparency regarding rules and land management is a major concern for local communities. Complaints about regulations were clearly expressed in a 2015 memorandum where political leaders recognized ESZ as imposing a 'political regime of control' likening it to living in a zoo under strict state regulation (Memorandum, 2015). In 2022, the local community, led by protests organized by the Communist Party of India (CPI) and the All-Indian Kisan Sabha (AIKS), opposed the notification order. However, the Assam Cabinet on March 23, 2022, approved the creation of the Kaziranga ESZ, including Kaziranga Park, and seven other protected areas, eleven reserved forests, and the nine wildlife corridors (Sentinel, 2022). Fig. 8 shows a tentative map of what the ESZ would look like as per given coordinates[27].

The feeling of marginalization and disempowerment is further aggravating the disregard for conservation laws since the area's designation as a tiger reserve. A resident of Kohora said: "Before, when it was not a Tiger reserve, foresters and people had a good relation but now the relationship is strained, resulting in increased rhino killings inside the park. Had there been a better rapport with neighboring communities, such incidents could have been

[27] "The seven protected areas in addition to Kaziranga National Park which the eco-sensitive zone will cover include KNP Tiger Reserve, Bura-Chapori Wildlife Sanctuary, Laokhowa Wildlife Sanctuary, Garampani Wildlife Sanctuary, Nambor-Doigrong Wildlife Sanctuary, and East and North Karbi Anglong Wildlife Sanctuary. The eleven reserve forests which will be covered under the eco-sensitive zone are – Hatipahar DC RF, Kolioni RF, Bagser RF, Kamakhya Hill RF, Kukurakata RF, Bhomoraguri RF, South Diju RF, North Diju RF, Panbari RF, Kachumara RF and Deopahar RF" (Sentinel, 2022).

prevented" (Interview 132). This suggests that rhino killings could potentially be a form of protest against stringent conservation measures that could adversely affect both the environment and society.

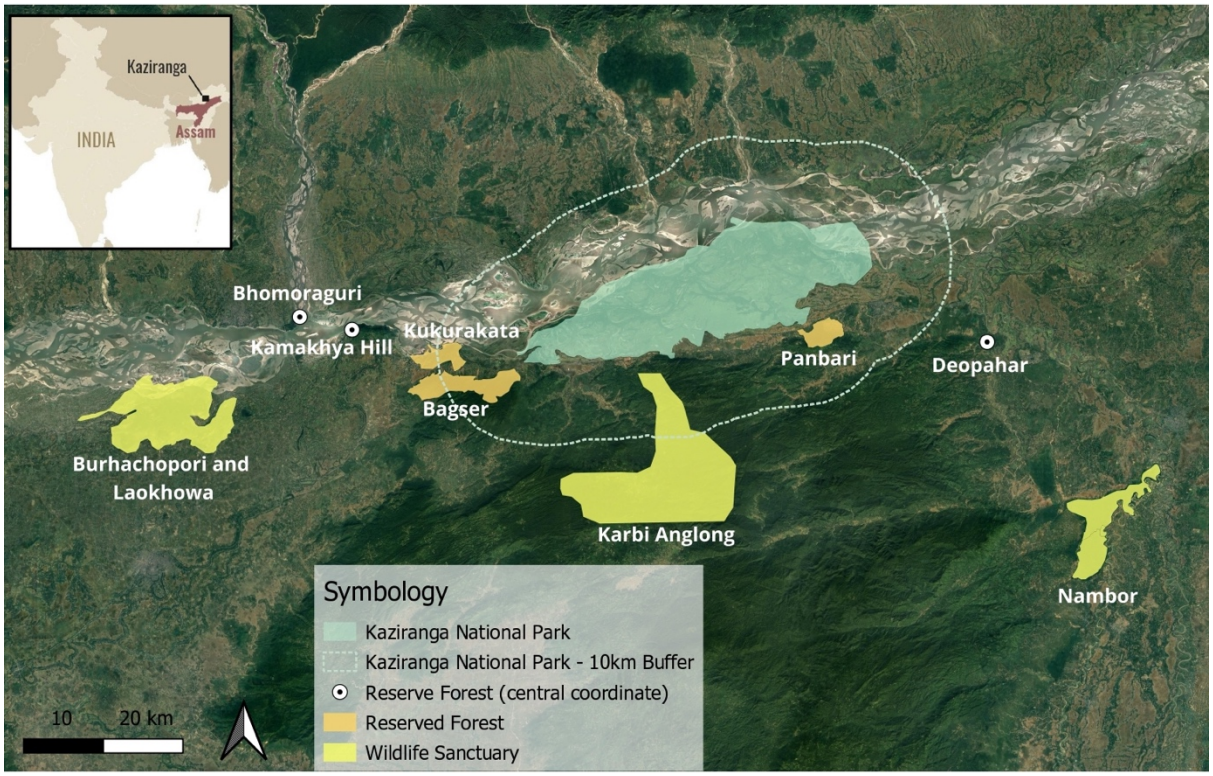


Figure 8. Kaziranga NP, WLS and Reserved Forests included in the announcement of the Kaziranga ESZ. Sources: Assam Gazette, OpenStreetMap, ESRI Shaded Relief, Sentinel, 2022. Map realization: D. Camacho.

Moreover, locals, including journalists, wildlife enthusiasts, educators, and young individuals, believe that the entry of foreigner NGOs such as WWF in the space has changed landscape management and express frustration over the lack of consideration for local communities. Many questioned the dominance of these organizations, asking, "Why is the forest department giving so much space to these NGOs? Who are they? And if there is funding coming for conservation, why is nothing coming to us?" (Interview 130).

6.5 Reorganize space and resources through green measures and infrastructures

In Kaziranga, river flooding poses challenges for both humans and wildlife. Animals seek refuge in the Karbi Anglong hills during floods, while submerged agricultural lands create recurrent crises for local communities. Addressing these issues, two infrastructural projects proposed by the government and conservation NGOs offer solutions: wildlife corridors along the highway ensure safe animal passage, while embankments made with geo bags and

porcupine structures[28] control river flooding. The introduction of a 'green flyover' emphasizes animal movement management, while water management measures address drought and support flood-affected communities. Additionally, the government is taking steps to manage water bodies, addressing drought and supporting flood-affected communities.

6.5.1 Connecting landscapes, destroying livelihoods

The Karbi Anglong forest hills are recognized as integral to the Kaziranga landscape, and vital for wildlife survival, especially during floods, when animals seek shelter there. Wildlife corridors are crucial to bridge the fragmented landscapes divided by National Highway 37. Since 2004, studies carried on first by Wildlife Trade of India (Menon et al. 2005; Menon et al. 2017) and later by WWF (Areendran et al., 2020; Borah et al., 2010), advocate for designated corridors to manage anthropogenic pressures (Areendran et al., 2020). While in past the corridors were just three, these new studies identify a total of nine corridors to connect Kaziranga with the Karbi Anglong Hills (Fig. 4). In 2016, the National Green Tribunal (NGT), directed the Assam government to demarcate elephant corridors and designate them as inviolable (National Green Tribunal, 2015), and ordered for the cleaning of these areas (Barua, 2022). As a response, in 2019, a Committee for Delineation of Wildlife Corridors constituted by Assam Government identified the nine wildlife corridors, dividing them into functional and structural, with the functional ones covering those areas where there is a recorded movement of species, and the structural ones those areas with "varied forest cover and habitat quality that connect the otherwise fragmented blocks of landscape" (Central Empowered Committee, 2019: 6). According to the Central Empowered Committee (CEC) report such structural corridors should be "made free of all human induced disturbances except for the forestry and wildlife management practices" (ibid.: 6).

Following this notification, in 2019 a Supreme Court judgment prohibited new construction within these corridors (Supreme Court of India, 2019b)[29]. This was followed by the creation of a Central Empowered Committee (CEC) of the Supreme Court in 2022, to identify people and structures within these lands. According to the Committee the corridors, which span for 47 km^2, accommodate a total population of 35,488 individuals, including villages, hamlets, schools, tea gardens, health centers, eateries, and guest houses (Central Empowered Committee, 2019). Most of these clusters are inhabited by Bengali Muslims, who primarily reside along the roadside and operate small *dhabas* and restaurants. In 2022, the Supreme Court issued a mandate for immediate action to remove illegal constructions (Central Empowered Committee, 2022), leading to a sudden and forceful removal of houses and hotels considered illegal, often carried out using bulldozers. For conservation organizations, clearing these lands is imperative, as emphasized by a Wildlife Trade of India officer, "If the land is

[28] A porcupine structure for flooding is a porous barrier system designed to slow and disperse floodwaters, reducing their impact on vulnerable areas by absorbing and redirecting the flow.
[29] In T.N. Godavarman Thirumulpad vs Union of India and Ors., on April 12, 2019. I.A No. 42944/2019 on W.P (C) 202/1995

occupied illegally, it should be cleared up, and we need to understand and prioritize the need of the elephant as they are nomadic animals" (Interview 7).

However, these interventions to regulate non-human movement are generating protests all over the Kaziranga space, by those who see their land threaten by conservation policies that do not take into consideration their life and their needs. An affected resident expressed: "This corridors notification is a problem for us. We cannot build or improve our houses. We do not want to live under forest department rules. This is a revenue village, but it seems that the revenue department is working under the forest department" (Interview 121). Locals have also raised concerns about the definition of wildlife corridors, arguing that animals traverse various areas and that their passage through agricultural fields is primarily due to their preference for consuming crops as they migrate to the hills (Barua, 2014). "The animal come here, but there is no problem, as the animal come everywhere, they cannot just think of making new corridors in our own land" argued a local (Interview 121). Certainly, the politics surrounding the demarcation of corridors raises questions, particularly as locals argue that while it impacts them, it appears to exempt private land belonging to wealthy tea garden owners and politicians (Fieldnotes, April 2022).

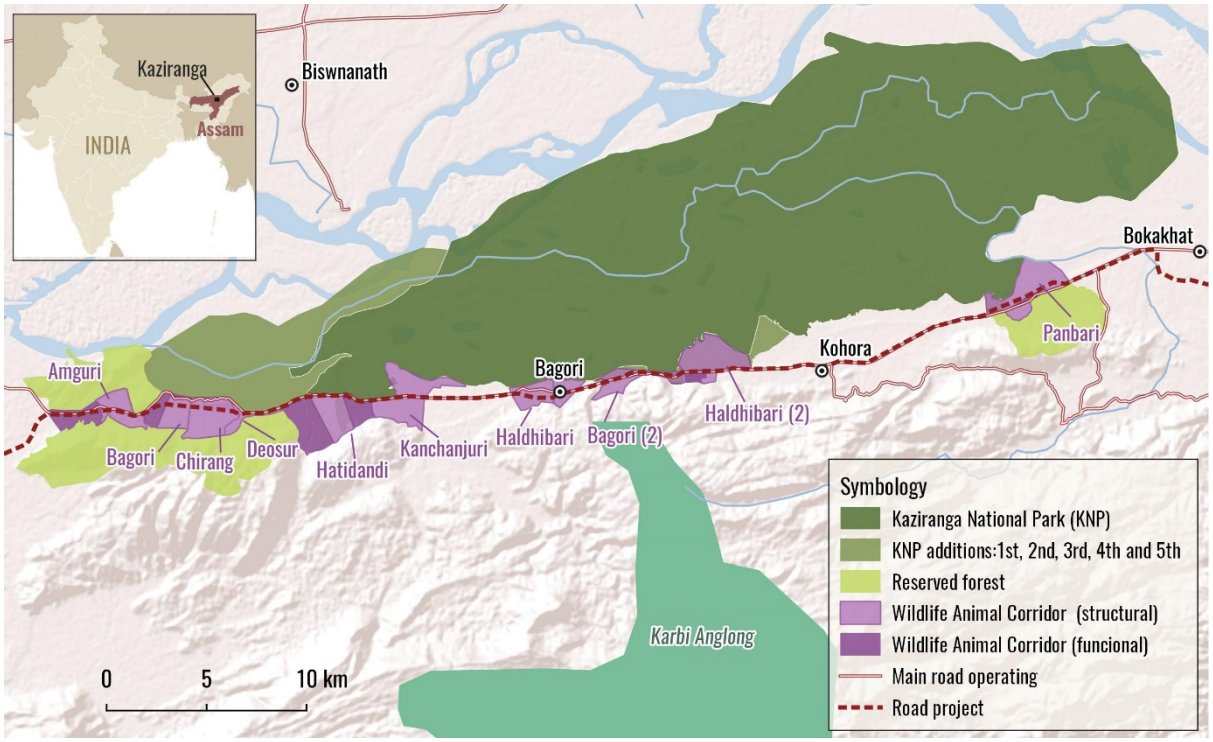


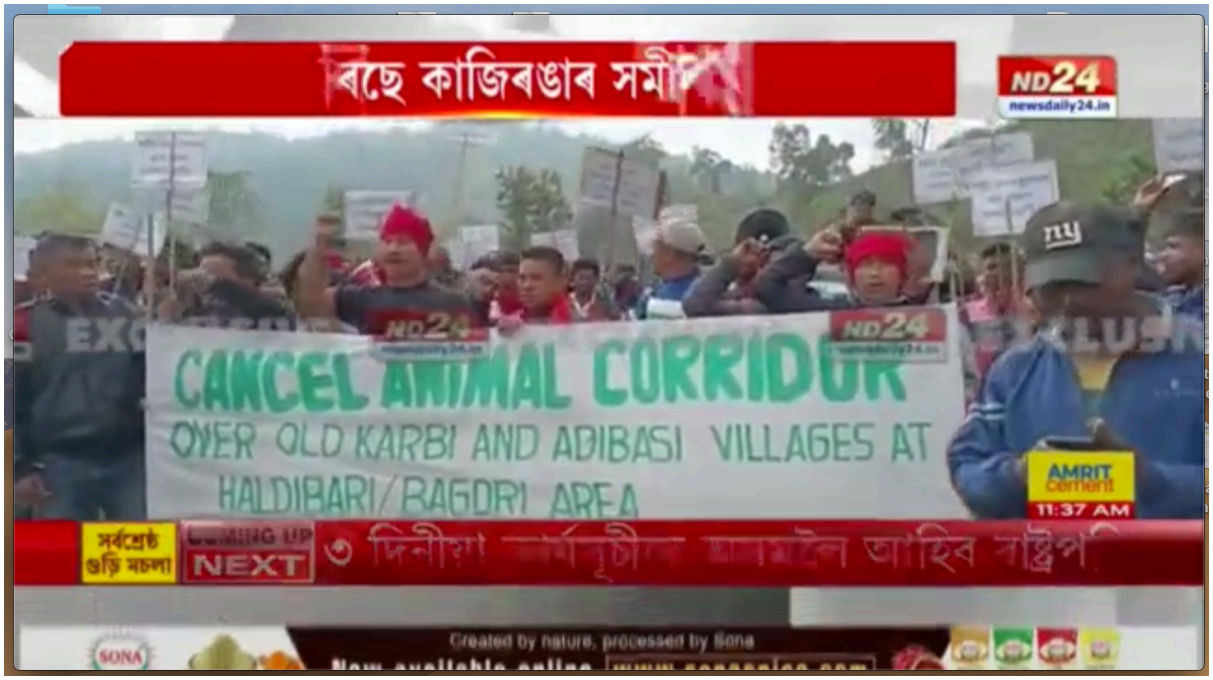
Figure 9. Kaziranga Wildlife Corridors. Sources: GoA official data, Assam Gazette, CEC Report, OpenStreetMap, ESRI Shaded Relief. Map realization: Y. Deniau.

Moreover, on 22 February 2022, following the demolition of houses and restaurants, 7000 people protested the corridor notification and the four-lane elevated road (Das, 2022). According to an interview conducted by Das: "nearly 6000 families have been living in the areas for nearly 100 years. The families have already given up several bighas of land to the park. The state government has again started eviction citing a Supreme Court order. The

eviction is a violation of human rights and has made people jobless. They will die of starvation" (Ibid). Following this protest, villagers formed a committee called 'Bhumi Uraka Committee' (Land Safety Committee), comprising seven villages residing in the corridors on the east side of Kaziranga. They filed two petitions against the 2019 Supreme Court order, one in the name of restaurant owners and the other in the name of the public, seeking a stay order on the demolition of places identified by the Central Empowered Committee of the Supreme court in the 2021 inspection.

To 'solve' the issue, the government recommended constructing a four-lane elevated road with flyovers and bridges between the fragmented territory as a long-term measure to safeguard wildlife movement and ensure human connectivity. This infrastructural project, aiming to fix, control and regulate human and non-human movement, is estimated to cost approximately 5,500 crore rupees (about 500 million euros), and it is primarily funded by the National Highway Authority of India (NHAI), covering 80% of the expenses, with the remaining 20% financed by the Defense Ministry due to its utilization by the armed forces. This last point raises questions on whom the road is for, and for what purposes. According to the Assam Minister, this 'wildlife-friendly' initiative is expected to enhance tourism potential, generate revenue, and foster community development (Newsonproject, 2023).

However, this 'wildlife friendly' project does not seem to solve people's demands for rights and recognition, neither does it resolve their livelihood concerns. In fact, besides the demolition order, the locals believe that the four-lane elevated road will significantly impact the small tourist businesses run by locals, potentially leading to their closure. "If trucks won't stop here anymore our small business of *dhaba* and restaurant will die out, so without land and without tourism, what we will live off?" said a local.



Picture 13. People protesting the corridors notification. Photo retrieved from ND 24 news, on February 21, 2022.

While the majority in Kaziranga acknowledge the importance of wildlife corridors, there's a unified opposition to the infringement on people's rights. A lawyer remarked, "I'm not against corridors, but I disagree with the government's handling. This area also houses restaurants, hotels, and structures that need consideration" (Interview 17). Concerns also exist regarding arbitrary and politically driven decisions on corridor placement. Many argue that animals traverse various areas, often crossing cultivated fields for food (Barua, 2014). A resident of Haldhibari voiced, "We haven't encroached on animal land; now they're encroaching on ours" (Interview 121).

6.5.2 Controlling floods

The Brahmaputra River flows on the northern side of the park. Since the 1950 earthquake, floods have plagued Assam, prompting demands for embankment structures. Efforts to build embankments have been made, but they often fail, worsening poverty for locals. Nevertheless, authorities continue to see embankments as a solution. In 2019, a new project operating under the Flood and River Erosion Management Agency of Assam (FREMAA) with the financial assistance of the Asian Development Bank (ADB) (150 $ million), aims again to control floods and riverbank erosion (FREEMA, 2020).

Again, this 'spatial fix' which aims to control and shape land, people and the river, generated controversy. First of all, it faced a major hurdle: acquiring land from numerous Mising families living on the east side of Kaziranga. In a memorandum addressed to FREMAA, The Jeepal farmer organization expressed concern about exclusion from decision-making and lack of vernacular language. They emphasized the indigenous status of the Mising people, stating they are "one of the oldest inhabitants of the region [...] who have symbiotically lived with the shifting nature of the river Brahmaputra and the forest of Kaziranga" (JKSS, 2019). Transparency issues, inaccurate survey data, and unfair compensation measures also sparked concern. A notable protest on January 27, 2019, united 30 villages, coming from the Mariahola and Dhansirimukh areas, mostly comprising of Mising tribal, Adivasis community and general Assamese class. Despite efforts by an independent body of the Asian Development Bank to address concerns, the Assam government abruptly took over management, disregarding demands and proceeding with house demolitions to expedite project development. This shows the authoritarian policy of the government and the unwillingness to understand people's concern.

Besides acquisitions issues, the movement also questioned the efficacy of the employed flood control measures. According to locals, the embankment structures not only fail in preventing flooding, but they also disrupt the natural water flow, leading to waterlogging on the plain. A member of the Mising community emphasized "They tried convincing everyone by saying that the embankment is going to be beneficial to us, but we were fine even without this. Nature has its own rules. If water enters this area, there is a way for it to go out" (In Chakravartty & Mendes, 2020), claiming that the interference with natural water pathways could lead to

disaster. Critically, a local activist viewed embankments as political ventures benefiting planners and politicians, rather than addressing community needs "This *mathaori* (embankment) is a political activity, as it only serves the planners and the politicians that every year make money out of these endless and useless projects" (ibid.). Locals argue that such technological interventions exacerbate disasters instead of mitigating them. A Mishing activist living at the fringe of Agoratoli Kaziranga, just close to the embankment argued that the river needs to be understood, and that policies are often made without really understanding the nature of this places, and it is for this reason that every year everything fails.



Picture 14. Geo bags structure along the embankment. Agoratoli Range, Kaziranga. Photo credit: Eleonora Fanari.

In the documentary by Chakravarty and Mendes, 2020, a Mising woman asserting their local knowledge and expertise in dealing with nature, emphasized, "Mising share a very intimate relationship with the river, coexisting with it and the floods." (Ibid.). Indeed, this resilient community has adapted by constructing stilted bamboo houses, allowing water to flow beneath them during floods. With boats and adept swimming skills, they navigate and cope with annual flood challenges. Another local questioned why their insights aren't heeded, pointing out, "We understand the river's flow; while it erodes one area each year, it also replenishes with new land. This is our way of life here." (Ibid.).

In the western Baguri range of the park, similar dikes were erected during the same period, leading to waterlogging on the agricultural lands they now occupy. Contemplating the evolving landscape, a local resident remarked, "If we seek to reclaim the lands lost to eviction,

these areas are no longer suitable for agriculture. Forestry officials propose that the embankments will transform these spaces into new lakes, offering potential employment opportunities as boatmen for tourists" (Interview 124). This observation hints at a broader agenda behind the embankment construction, suggesting a shift towards creating a more tourism-centric economy, potentially impacting traditional livelihoods deeply rooted in this territory.

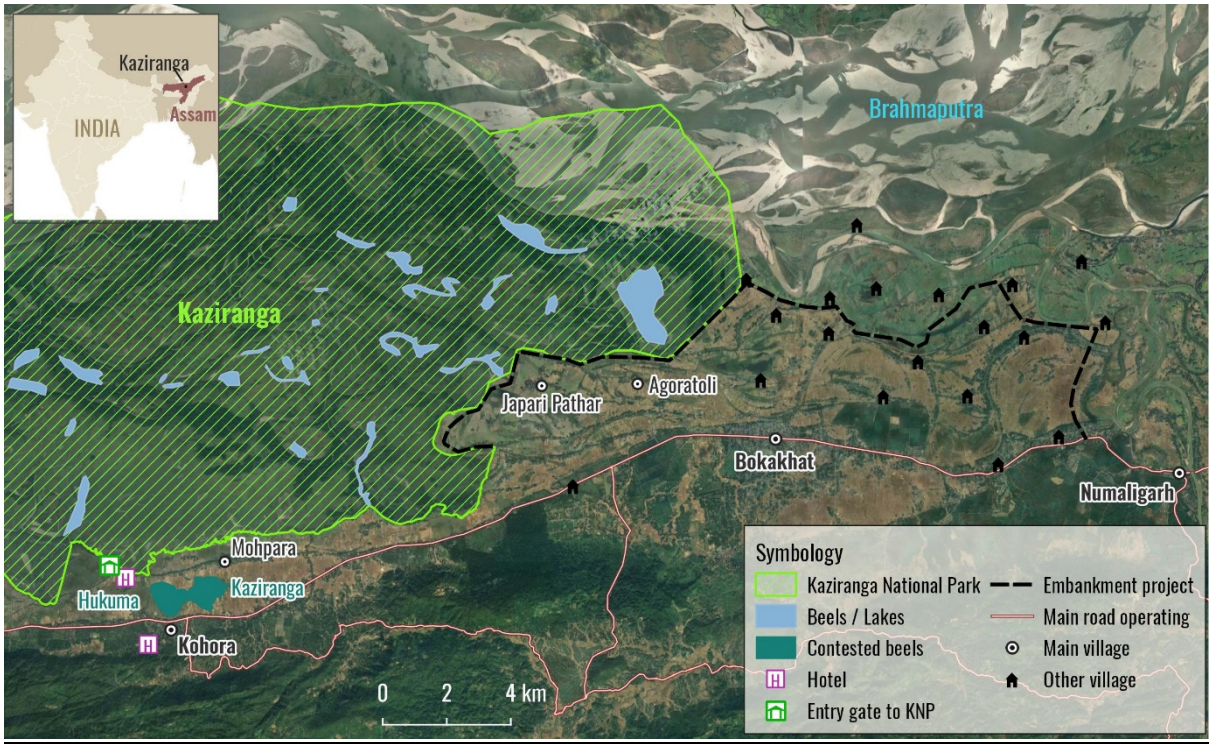


Figure 10. Kaziranga Brahmaputra Embankment project and the contested *beels* in Kaziranga Kohora range. Sources: Assam Gazette, OpenStreetMap, ESRI Shaded Relief, FREEMA, 2020, NABARD, 2016. Map realization: Y. Deniau.

6.5.3 Controlling water bodies

In central Kohora and western Baguri range, waterbodies traditionally used for grazing and fishing are now under new water management control. Six different waterbodies, chosen as project sites based on a 2016 National Detailed Project report submitted to the National Fund for Climate Change (NAFCC), aim to develop organic farming and pond-based pisciculture. These projects, facilitated by the India National Bank for Agriculture and Rural Development (NABARD), promise to increase livelihood options for flood-prone communities while also addressing flood intensity and drought conditions.

Two of these water bodies, locally known as *beels*, Kaziranga and Hukuma, situated in the central Kohora range, were once cherished habitats for wildlife, including migratory avifauna, making them significant tourist attractions in the past (NAFCC, 2016: pg. 35). Managed by local communities of Ahoms, they are considered part of their customary rights. Concerned

about losing their rights over these waters and lands, crucial for their livelihoods through grazing and fishing, the communities have swiftly protested the project's implementation. Asserting their customary rights and fearing acquisition of these lands and waters by the forest department, a local from the Kohora range stated: "The forest department now wants to occupy the 'Kaziranga lake,' but we will not give it to them. It is our lake, named after Kazi, an old woman who lived here. Besides, it is where we graze our buffalo" (Interview 131).

The fear stems from past experiences. While the management of these lakes is now contested, other fishing areas traditionally used by these communities are completely controlled by forest guards. Although these restrictions are collectively challenged, local people express unease about protesting individually against armed guards: "We cannot do much as they have the guns. Earlier we brought fisher people from other villages to support us in the struggle, but now we have stopped that, and we are doing the fishing. But the forest department comes with their guns and villagers get scared. However, when we go in group, there is no problem, and it is easier to confront them". (ibid). As a strategy, local people fish during big festivals, such as *Bihu* when foresters cannot effectively control the fishermen who assert their rights in large numbers.

United against the new project, a group of fishermen submitted a memorandum to government and forest authorities asserting their refusal to relinquish their *beels*. Backed by four villages in the Kohora range, they collectively signed a document to contest this lake management policy. Local narratives suggest that the forest authorities are considering enhancing the new landscape measures, with a focus on beautifying the waterbodies. Notably, the selected waterbodies for this project are situated within the Kohora range, a central hub within the Kaziranga landscape where infrastructure for transportation, tourism, and major attractions is steadily growing. These waterbodies, renowned for attracting diverse avian species, have the potential to emerge as a captivating new tourist attraction.

6.6 Conservation landscape as a new wildlife frontier and a socially contested space of spatial injustice

This shift from enclosure to landscape conservation marks a significant change in the way Kaziranga is managed. To achieve this, Kaziranga authorities adopted a series of interventions or green 'spatial fixes' to improve both development and conservation practices. The three main interventions, vis. expansion of the areas, the connectivity plan, and the water management, are grounded on the idea of a land-sharing approach based on co-existence between human activities and wildlife conservation. However, this model extends the securitization of the fortress outside the park, using the mode of regulation to extend the control of the state and NGOs from the reserve park into the larger landscape. The question therefore is: Sharing for whom? And for what?

This chapter shows the shift of conservation model in Kaziranga from fortress to landscape, showing, as argued by Barua (2024), a governance based on regulation. However, it goes further in describing not only how these interventions are technologies of governing human and non-human life, but how they are techniques which are molding and exacerbating the already unequal power dynamics. These technical interventions are akin to what Tania Li terms the 'practice of government', in which technical solutions are applied to problematized issues, in which only the technical experts are the one deemed to understand and address the problem. Similar as what described by Li (2009), the planification of the landscape into conservation zones wants to regulate people's life and activities without taking their knowledge into account, but just dictating rules, which in turn do not benefit community and impede their possibility of engagement as political actors. These different techniques of government, rather than improving lives, result in having various disadvantages and negative impact on community livelihood.

Examining these impacts through a landscape lens reveals the 'cumulative' impacts of these projects (Baird & Barney, 2017), where communities are symbolically and physically dispossessed from their land and means of production, due to expansion, connectivity and water resource management. As a result, (and linking it back to Baird and Barney), wildlife and some groups are integrated in the sharing of cumulative benefits, while others are exposed to cumulative burdens, putting their livelihoods on a fringe. An example are the marginalized groups of Mising tribals and Bengali communities who have been particularly damaged by these projects, generating a process of spatial injustices and revealing communal biases. In fact, discrimination against Bengali Muslim communities has intensified under the current Hindu-dominated government (Baruah, 2020). This bias appears to be reflected in the conservation policies where entire Muslim communities have been displaced even when holding land titles.

But while the Kaziranga landscape excludes local economies and local lives, the engineering behind the landscape is deemed to create a space managed through and for a 'wildlife economy'. In fact, by disregarding the intricate social-environmental relationships cherished by local communities in their ongoing struggles, I would like to argue that Kaziranga landscape is re-shaped as a new wildlife 'frontier,' in which wildlife and biodiversity are the new commodities to be secured and used for the accumulation of capital. Similar to what Massé and Lunstrum (2016) argue, I see this wildlife frontier as a space to re-consolidate sovereignty, carried out through processes of dispossession, spatial control and the creation of new institutional orders. Moreover, different from other 'frontiers' it is not the resources that create new spaces (Rasmussen & Lund, 2018), but in this case it is the creation of the space or 'landscape' that creates opportunities for resources to emerge (nature-based resources). Furthermore, while enclosure and territorialization have been considered as crucial in the expansion of a new frontier (Peluso & Lund, 2011), in the chapter, we observed that the landscape is shaped not only by precise mapping and cartography, but by the

normative vision of a landscape identity created by state, development partners, BINGOs, surveillances actors, and by the imaginary creation of a new landscape authority. This indicates a transition from a livelihood-based economy to one centered around industrial eco-tourism, by defining a new social and economic order.

In their discussion of a wildlife economy, Thakoli and Büscher (2021) characterize the partnership between private conservation and real estate developers as essential. In Kaziranga this coalition can be observed between the public forest department and the myriads of private (i.e. ADB, WWF, WCS) and public entities (i.e. NHAI, NABARD) that invest in creating a conservation landscape more suitable for tourism and business travel, and that responds to western environmental imaginaries of nature. In fact, as discussed, rather than enhancing local well-being, these landscape interventions primarily cater to tourist demands, focusing on beautification and tourism development. These developments, facilitated by 'green infrastructure' and 'eco-friendly' measures, land acquisition practices, and regulatory frameworks, underscore the transformation of Kaziranga into what I call a 'conservation economic zone' or conservation zones made for neoliberal conservation economic activities at the expenses of local economies. While this chapter and my analyses only show tourisms as the main economic activity in the area, the new processes of dispossession and regulation point to the potential use of the landscape for other neoliberal accumulation activities (Kelly, 2011).

However, various contentious mobilizations advocate for alternative conservation models, united by demands for the recognition of their lives, economies, and livelihoods. These diverse yet interconnected movements blend everyday forms of dissent with more overt public actions (Matose, 2014). Local organizations have been instrumental in shaping resistance, but the struggle remains dispersed and quite messy rather than united. Similar to what Fradejas (2015) described in resistances to agrarian movements in Guatemala, the complexity of the politics in Kaziranga shape the messiness of the resistance. However, despite this messiness and differences in space, class, and ethnicity, these movements share common vision of *defending their territory*, emphasizing exclusion from planning and management, grievances against external organizations and institutions, and inadequate economic and livelihood development.

Resistance alone has not been sufficient to challenge the mainstream conservation model of protected areas. As Brockington (2004) and Holmes (2014) argue, resistance is often insufficient to challenge mainstream conservation models, and Kaziranga is still considered a successful conservation space despite lacking local support. This is mostly because of the violence and authoritarian power given to foresters to manage the area. However, the chapter also highlights local communities' concerns about the sustainability of conservation projects, suggesting their knowledge could be crucial for future conservation success (Escobar, 2020), and that on the long term the protected areas could be deemed to become

unsuccessful without their expertise. Interestingly, in Kaziranga resistance against conservation is becoming a political agenda for local leaders. Therefore, although for indigenous communities like the Mising, recognition justice is particularly prominent to assert their customary rights and indigeneity, they seek recognition not just as indigenous communities, but as political actors.

Moreover, the widespread utilization of India's legal system to seek justice reflects the growing political consciousness within local communities and underscores the resilient leadership of the Mising people. This assertiveness marks a significant departure from everyday acts of resistance (Holmes, 2007), towards navigating the complexities of legal proceedings, standing before authorities with a newfound confidence in their pursuit of justice. While this empowerment signifies a crucial step in the fight for rights, the article also highlights its limitations within a legal framework that appears to constrain rather than protect these rights. Indeed, as noted by other scholars (Brinks & Gauri, 2014), recent legal measures have often favored conservation efforts at the expense of indigenous rights, revealing the role of law and legal processes in perpetuating hegemonic structures (Nilsen et al., 2022). Public Interest Litigation, once a beacon of hope for social movements (Bhuwania, 2014) now paradoxically exacerbates the marginalization of vulnerable communities, further underscoring the inequities they face within the legal system (Conde et al., 2023).

Speaking about justice, territory and space, and looking at the tensions emerging from these stories which mostly imply the restriction on the use of the space, we believe that the use of ‘spatial injustice’ is well suited to grasp the multidimensional aspects of injustices emerging form the creation of a landscape conservation. The local communities who are experiencing the cut off their dialectic social spatial relations are forced to inhabit unjust geographical spaces, because of the new neoliberal economic relationship. Indeed, while this terminology has been mostly used in urban studies, the engineering behind the landscape and its infrastructural development recalls the urban spatial scenario in which the social production of space shape new forms of injustices. Similar to the processes described by Dikeç (2001) in urban spaces, in the Kaziranga landscape the ‘suburbs’ are represented by the most marginalized groups like Mising tribals and Bengali communities who are disproportionately affected by the restructuring of the space. This suggests how the creation of a conservation landscape not only leaves some local groups and their economy behind, but also supports a social cleaning process.

Finally, applying the notion of spatial justice to conservation helps not only to reveal processes of environmental justice driven by the restructuring of space, but also to recognize how the rights, lives, and livelihoods of diverse and sometimes disconnected social groups dispersed across a common landscape are interlinked, offering ultimately new avenues for alliances and resistance (Scheidel et al., 2023; Sekine, 2021). Interestingly, in the struggles of Kaziranga, both natural phenomena like floods and cultural practices like Bihu serve as

avenues for contentious actions, uniting human and non-human forces in a fragmented struggle for recognition and justice (ibid). These vibrant contentious practices underscore the communities' demand not just for addressing the socioeconomic impacts of projects but also for being acknowledged as political citizens of Kaziranga, advocating for a decolonial process of recognition and justice within conservation.

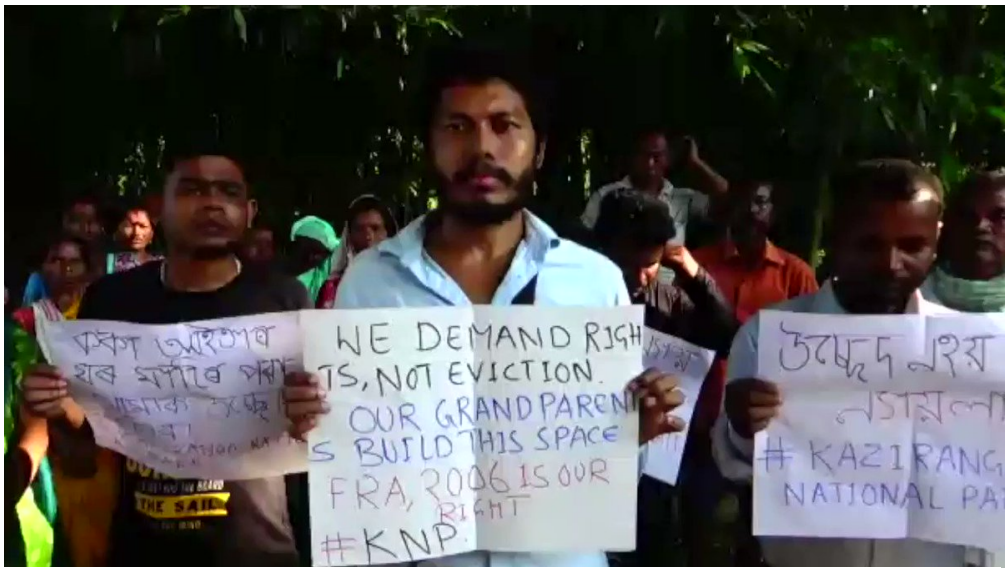
6.7 Conclusion

This article explores the consequences of conservation efforts in Kaziranga through the lens of landscape approach, which serves as a legitimizing framework for political ecological interventions. It discusses how these efforts are strategies to advance a conservation neoliberal agenda. While landscape ideally aims to reconcile development and conservation, it is often co-opted to support development initiatives aligned with the state neoliberal agendas, functioning as a new spatial form of power and governance.

The landscape approach should foster co-existence, achieving a harmonious balance among different socio-ecological elements. However, in Kaziranga, conservation strategies seem to follow a wildlife economy model which relegate some of the most marginalized local groups to the side-lines, prioritizing a tourism economy. These projects exacerbate inequalities among marginalized groups, exclude locals from decision-making processes, and contribute to the emergence of an economy that prioritizes certain livelihoods over others, perpetuating spatial injustices (Soja, 2010). I argue that infrastructure developments, promoted as green and sustainable, mainly serves to support a wildlife economy in the new frontier, shaping the space into an economic conservation zone.

However, as the government plans these changes, local communities are protesting vigorously, by employing different means of contention such as everyday acts of resistance, legal action, and organized social movements. Ecological and cultural events often accompany and bolster this resistance, highlighting Kaziranga as a "contentious ecological zone." Despite these efforts, resistance alone often proves inadequate in changing established patterns (Holmes, 2014; Brockington, 2004), given the authoritarian nature of the government and its alignment with international neoliberal forces in the militarized landscape of Kaziranga. Nevertheless, these acts of resistance demonstrate resilience, indicating that current conservation interventions under the landscape approach model are far from just. The current landscape approach in Kaziranga is not enabling a just conservation model, in which multifunctional planning can co-exist (Hunsberger et al., 2015), but it has served to expand militarized security measures beyond the park's boundaries.
The potential of what a landscape approach to conservation can offer remains to be seen. This case shows the way these technical fixes are used to re-assert power and control over territory, humans, and wildlife. However, a landscape approach to conservation based on justice, co-existence and sharing habitats is desirable, as local communities express. While

the language of co-existence enters the conservation arena, its value is underestimated both by the forest services and by the wildlife conservationists. What this case shows is that conservation, similar to other development activities in a post-colonial country, needs to first deal with process of internal discrimination and inequalities that continue to see local communities, and especially tribals, as enemies, poachers and encroachers. Until this is not addressed, no conservation strategy, not even participatory ones, can claim to be just and equal. A decolonial conservation is equal to any other social decolonial process, asking us to rethink and readdress issues of racism, hegemony, care and justice.



Picture 15. Locals from Kaziranga demanding forest rights and no eviction. Photo credit: local person (anonymized).

CHAPTER 7.

CONCLUSIONS AND FUTURE RESEARCH

This thesis has investigated the environmental injustices due to conservation policies in protected conservation areas in India. Through analyses conducted at both national and local levels, it illustrated how the heightened focus on securitizing the environment to protect biodiversity has exacerbated the existing unjust dimensions of mainstream conservation in India (Guha et al., 2012; Kothari et al., 1995; Sekar, 2016). This trend is particularly notable in cases where poaching is identified as a concern, leading to the implementation of security-based conservation measures that legitimize the use of force and violence as primary methods for protecting biodiversity and wildlife.

So, how has this process of securitization of the environment influenced the conservation agenda in India, and what impacts has this had on people's lifeways, conservation narratives, and subjectivities? This question initially arose from my inquiry into the violence observed in conservation practices, specifically with an interest in understanding the role of military forces in conservation in India. It then developed further to understand that militarization is just one of the many mechanisms implemented by state and non-state agencies to ensure control over territories, people, and environments. Building on my first article, which analyses conservation conflicts and violence throughout India, I then delve into the critical case study of Kaziranga, a National Park and Tiger Reserve famous for the protection of the one-horn rhinoceros and for the increase of anti-poaching security forces. It is in the Kaziranga territory that I analyze and better identify how different stakeholders have been influencing the securitization of conservation.

This thesis has argued that the processes of securitization in biodiversity conservation in India goes far beyond the deployment of security forces, and that the military are only one side of the much broader securitization mechanisms used in conservation. I use the term securitization taking a critical approach towards it, seeing how this concept, born from racial and colonial ideas, reproduces racialized and inequal worlds (Howell & Richter-Montpetit, 2020). While I recognize the increased use of military strategies (security forces, surveillance technologies, military training etc.) to secure the control of territories and people, other mechanisms of control have been developed to ensure and secure these conservation spaces.

These mechanisms of control have been responding to an international agenda to secure the environment because of the climate change emergency and biodiversity crisis, as well as to the need of developing decentralized forms of conservation based on the recognition of the interconnectedness of ecosystems and of human activities, and on the importance of local involvement in environmental governance (Diaw, 2009; Riggs et al., 2021). The different

measures which resulted from these ideas aimed to develop a more just, inclusive and equal conservation model. This resulted in a blending of securitization and decentralization modes of conservation, presenting new perspectives on the dimension of social, environmental, and spatial justice in conservation in India.

This dissertation started with a national-scale analysis of conservation projects in India and the resulting conflicts, highlighting emerging social and environmental injustices and violence. Chapter 4 analyzed twenty-six conflicts in protected areas, revealing a growing resistance movement against conservation projects and the importance of external alliances (Hall et al., 2015) to support these "conservation justice movements." This comparative analysis highlights various forms of violence (Galtung, 1969; Navas et al., 2018) and injustices taking place in conservation spaces all throughout India, which get further justified under the securitization discourse, despite the Forest Rights Act's recognition of common resource rights. This illustrates a worrying scenario in which 'fortress conservation' undermines legal rights, with increasing repression against resistance. However, it also showed the empowerment of communities through the Forest Rights Act, which has been crucial in strengthening their ability to resist (Della Porta & Diani, 2006).

The in-depth case study of Kaziranga National Park, developed in both Chapter 5 and 6, has served to analyze the mechanisms of control used under a securitization discourse to ensure conservation in an area where poaching is considered an issue. The results have brought to light a shift from direct to indirect forms of control, which manifest in community engagement, education practices, land use planning, and environmental legislation. This shift indicates a turn from fortress conservation to decentralization practices. However, these decentralization measures have not proven sufficient to ensure just conservation. Moreover, and most importantly, they have not been sufficient to replace militarized conservation methods.

This thesis demonstrates, on the contrary, that in already militarized conservation areas such as Kaziranga National Park, decentralized conservation models serve as a legitimizing mechanism for the expansion of security forces and to facilitate neoliberal conservation processes (Buscher et al., 2014). Such models, this thesis argues, enable governments to ensure control over resources and people, co-opting the language of community conservation and co-existence into a new authoritarian-neoliberal conservation approach. The 'tyranny' of participation, characterized by the illegitimate or unjust exercise of power and the political co-option of participation discourse (Cooke & Kothari, 2001), has expanded into the 'tyranny' of decentralization, suggesting a conservation tyrannical biopolitical project that exerts oppressive control over the biological and social lives of individuals and populations (Bluwstein, 2018a).

Throughout the three main chapters (4, 5, 6), this thesis highlights three ways conservation has been "secured." First, through exclusion, where local communities are dispossessed of their territories, resources, and livelihoods to create "inviolate" areas for wildlife (Lasgorceix & Kothari 2009, Brockington & Igoe 2006). This often involves violent relocation or forced evictions, aligning with the "fortress model" of conservation that fences off forest spaces for wildlife protection. Second, through inclusion via participatory forms that encourage alternative livelihoods, such as eco-tourism, marketization of traditional practices such as weaving etc., aligning with neoliberal economic processes rather than integrating community practices within conservation (Kothari, 2001; Sundar, 2002). These practices shape people's mentalities to adopt new economic livelihoods outside the forest instead of involving them in co-managing natural resources. Finally, through practices of co-existence, where regulations ensure the securitization of conservation space, creating zones where human activities and conservation co-exist (Barua, 2022; Bluwstein, 2018a). While this does not directly exclude people, it regulates activities and defines rules within these spaces, continuing the fortress model into the landscape rather than truly shifting to landscape conservation.

These three processes serve as analytical lenses for me to highlight what is happening on the ground. In reality, they interact with each other, demonstrating how these conservation models have been integrated into a single space, shaping and influencing socio-ecological relations on the ground. Considering the above analysis, these findings question the 2022 Kunming-Montreal Global Biodiversity Framework, especially the approach to Target 3, which aims to expand conservation areas worldwide by up to 30%. If the responsibility for implementing these new targets to achieve conservation goals remains with the same agencies that have been supporting these violent and unjust practices, how can these practices be implemented in a meaningful, just, and equitable manner?

7.1 ‘Securing’ green landscapes generates ‘insecure’ territories

As it becomes clear from this thesis, mainstream conservation initiatives, like many other development projects, continue to be synonymous with dispossession, injustice, and violence (Del Bene et al., 2018; Scheidel et al., 2023; West et al., 2006; Li, 2009). In India, the expansion of protected areas from 2000 to 2019 has displaced about 13,445 families (Chapter 4). While previously the evictions were legitimized for the sake of development and the making of India as a modern state (Guha & Gadgil, 1994), these same evictions are now legitimized under green conservation discourses and the need to secure the country and the world from environmental disasters and degradation. The exclusion of people from conservation zones continues to be a practice in India (Agrawal, 2014; Kabra, 2009; Menon & Karthik, 2019). And the existence of relocation and compensation packages have not made any meaningful difference in people's bodies and livelihoods, which continue to be victims of violence and injustices under conservation practices.

Environmental protection seems to have surpassed concerns over livelihoods, resulting in an increase of state law enforcement to ‘secure’ the environment. In fact, while the passing of forest laws such as the Forest Rights Act, 2006 gave hope for the democratization of forest governance, the lack of its implementation and the continuous dilution of the law over the last decade (Chapter 4) have clearly shown the lack of interest in including local communities in conservation governance (Guha et al., 2012). These false hopes have generated resistance, which continues to be oppressed in brutal and violent ways by the state and its affiliates. Indeed, as analyzed in this thesis, different forms of violence, such as dispossession, criminalization, and militarization around conservation areas, are leaving Indigenous and forest-dwelling communities living in 'insecure' territories. These forms of direct violence have been integrated with more indirect ones, which, as discussed in the thesis (Chapters 5 and 6), have entered the everyday lives of people, shaped their socio-ecological relations and modified their territories.

The securitization argument has permeated various institutions in India. As discussed in Chapter 6, the High Court and Supreme Court have prioritized environmental security over human rights, ordering the eviction of communities and the implementation of conservation projects in areas inhabited by local people. These mechanisms of green grabbing, where lands are appropriated for 'environmental ends' (Fairhead et al., 2012: 238), allow legal conservation grabbing. This was evident in the creation of new 'addition areas' and the eviction orders for people from those areas. Moreover, these legal mechanisms also allow the transfer of control from local communities to other state or non-state institutions, even without evictions. Therefore, as other scholars suggest, land grabbing in this context relates not only to land ownership but also to who controls and benefits from its resources (Margulis et al., 2013; Peluso & Lund, 2011). This was evident in the control over land identified as wildlife corridors in Kaziranga National Park, where land use is restricted to wildlife purposes, prioritizing wildlife over the lives and livelihoods of local communities. This trend in India demonstrates how environmental securitization has become central to many institutions, legislation, and policies, with livelihood security concerns taking a secondary position.

Therefore, while the environment is getting ‘secured’ by different mechanisms supported by national and international allies, the local people inhabiting these spaces are increasingly alienated from the environmental governance of their territory. They become ‘insecure’ citizens, as their rights over their land is questioned, their means of livelihood curtailed and their identity as forest dwellers and Indigenous people often interrogated. In these areas, local people become poor and exploited, recreating the same violence and injustices typical of extractive territories (Kikon, 2019; Scheidel et al., 2020a; Svampa, 2016).

But is the environment (at least) secured from degradation?

While environmental protection is advocated as extremely important, the environment is not truly being protected. According to a UK based Utility Bidder 2023 report, from 2015 to 2020, India lost 668,400 hectares, marking the highest rate of deforestation in the last 30 years (Jha, 2023). At the same time, according to the Indian Brand Equity Foundation (IBEF), mining and development projects continue to be prioritized by the government (Indian Brand Equity Foundation, n.d.). Furthermore, the most recent changes to environmental regulations appear to lack substantial revisions to address industrial and commercial influences, as well as a reluctance to decentralize decision-making power. The 2022 amendments to the WLPA will have significant negative impact on the forest ecology, and at the same time impacting the rights of the Forest Rights Act (Kalpavrikhs, 2022a). Conversely, the recent 2023 amendment to the Forest Conservation Act has been criticized for attempting to dilute forest protection and facilitate forest diversion for development, while also undermining local consent (Rawat, 2024, Kalpavriksh, 2022b). This indicates that forests are effectively not secured when development interests outweigh conservation efforts. This highlights the hidden side of environmental securitization, revealing how both conservation and development are becoming mechanisms to control and appropriate land from common people, bringing it under state control.

7.2 Beyond environmental security: violence over territories to reaffirm state power

This thesis confirms that conservation continues to be a form of control (Peluso and Lund, 2011), achieved by employing violence as a primary means to enforce conservation mechanisms. What is new and what emerges from this thesis are the more subtle forms of violence tied to the national and global environmental security discourses. Forms of violence in conservation are generally related to the criminalization of forest dwellers for trespassing conservation spaces, and to the dispossession of people from their land and resources (Kabra, 2009; Kothari & Langerscoix, 2009). This thesis shows how violence also encompasses the creation of new environmental subjectivities and the imposition of neoliberal economies upon local economies. These changes that directly affect the structure of society in terms of social and economic organization are allowing the re-assertion of state power over such territories. This is done by using biopolitical ways of governance (Foucault, 2008) under the hegemonic discourse of biodiversity conservation and environmental security.

Moreover, while previously the violence caused by conservation in India was directly associated with the forest department, now a myriad of new actors, both national and transnational, are recognized as responsible for these forms of injustice and violence (Lunstrum, 2013; Marijnen, 2018). In line with Devine & Baca, (2020), the emergence of various political actors in forest conservation marks a new phase in the formation of the Political Forest, which they call 'green neoliberalism' or the fourth moment (Vandergeest &

Peluso, 2015). Under the hegemonic discourse of environmental security, new actors in India are being called to protect the environment through various technical mechanisms, funding, and projects. This 'technical' approach to governing the landscape, as Li (2009) describes, empowers transnational agencies to govern these spaces, recognizing conservation in India as a new frontier of land control (Rasmussen & Lund, 2018). Technicalities in managing the environment and space alienate local people from environmental management, shifting their role from active to passive environmental subjects. Through these alienating mechanisms, this research analyses how structural forms of violence re-emerge under the guise of conservation. The myriads of new actors engaged in conservation spaces in India, particularly in Kaziranga, contribute to a more 'decentralized' type of violence. Through conservation discourses, they become integral to shaping national state-building efforts, becoming responsible for the violence generated by the state.

However, these non-state agencies do not overpass the authoritarian power of the state. As discussed by Kelly & Ybarra (2016), the global security discourse has not put into discussion the nation state primacy, but rather reinforced the territorialization of conservation space under security ideologies. As observed for the case of Kaziranga, securitization of conservation spaces and its consequent violence are contingent on the historical and political context. As describe in detail in Chapter 5, the violence emerging in the Kaziranga space is not new (Baruah, 2020), but it re-emerges and is justified under the green security discourse. Its geopolitical location close to the India-China border make this space a frontier in which militaries seems to be deployed not only to secure the wildlife, but to secure and reinforce nation state power (Barbora, 2017). The use of the rhino as a national symbol of Assam has contributed to unifying the people of the state under a conservation flag, giving moral consent to the state to use whatever kind of violence to secure the space. In Assam, national security discourses coincide with an authoritarian and neoliberal government, showing the link between capitalism, conservation, violence and security.

Therefore, while in the past state-driven conservation was secured primarily through a fortress model, this thesis demonstrates how the fortress model has been integrated with new mechanisms of control, which have been reaffirmed and managed both by state and non-state actors. These more decentralized mechanisms of control have not replaced the fortress models, but they have been integrated into them, embracing a rhetoric of co-existence and participatory conservation which has not served any justice on the ground. I will summarize the mechanisms through which this has occurred below, underlying some concepts which have emerged and developed throughout the thesis.

7.2.1 The making of security subjects through violent participatory practices

Building on the literature of community conservation and participation practices (Cooke & Kothari, 2001; Kothari et al., 2013; Sundar, 2002), especially in militarized conservation zones

(Duffy, 2022), in this thesis I analyzed how participatory activities in Kaziranga have become a way for state and non-state agencies to enter and control local territories. I recognized participatory practices, which are deployed through the creation of new committees (identified in Chapter 5, as EDC and VDP), as a mean to disseminate and implement the government's security agenda. This is why I refer to these community conservation activities as 'participatory security practices.' By doing so, I identify them as a soft form of control, shaping, influencing, and molding people's minds and actions.

As a form of control and tyranny (Cooke & Kothari. 2001), they reinforce oppression and domination by hegemonic actors and through practices of self-surveillance. Therefore, as Dunlap (2023) would call it, I have also recognized these participatory security practices in this thesis as state forms of counterinsurgency, aimed at controlling an increasingly vibrant resistance, which on different occasions has challenged the violent conservation approach in Kaziranga. Somehow, they have been able to control or weaken those everyday acts of resistance, which included trespassing the forest, fishing, grazing, and in some cases, killing rhinos (as stated in Chapter 6).

It is through these committees and because of them that, in the field, I could perceive a new form of subjectivity emerging, which in this thesis I have been calling a 'security mentality'. Using Foucault's theories of governmentality (Foucault, 1991), I point to the emergence of a new way of perceiving conservation. Conservation, I observed, was perceived as a security practice in which police forces and different systems of control were deployed to make Kaziranga an impenetrable place, or a securitized zone. This concept aims to highlight the shift from Agrawal's 'environmentality,' meaning people who have become subjects caring for the environment, to people characterized by the acceptance, enrolment, and support of an environmental security practice. This new mentality perceives conservation spaces not as areas to be managed to ensure its protection, but rather spaces to be safeguarded, both through security forces, participatory surveillance practices or other means aiming to protect the environment from some 'enemy' (Duffy, 2014).

The creation of these 'participatory security practices' operating through a security mentality is creating an environment of fear, tension and internal disputes, directly impacting the everyday life of local people and contributing to further alienating people from their surroundings. For example, youth are scared to now live in the villages, as they are afraid to be framed as poachers, or be unfairly accused of illicit activities. This system of internal control, in which police directly enter these spaces through the VDP surveillance network, goes beyond the repercussion of framing wildlife activities as a crime, because people could be accused of crime without any proof. This system therefore breaks the sense of collaboration, solidarity and harmony which is needed for the co-management of resources. In a certain way it impedes community conservation practices based on the co-management

of resources to flourish, hampering the possibility for democratization of the forest resources and for just conservation practices to emerge.

7.2.2 Making the landscape a 'conservation economic zone'

Landscape approaches to conservation, as well as community conservation practices, have been considered decentralized modes of conservation, based on collaborative governance structures (Sayer et al., 2017; Nielsen, 2016). In this thesis, I have described the making of the Kaziranga landscape to show how the creation of a landscape-scale approach to conservation in different zones or scientific categories denies the social-ecological dimensions inherent to a landscape (Ingold, 2009). As a result, the creation of a 'landscape' reproduces other forms of fortress conservation based on a dichotomy between nature and society, failing to establish the landscape approach as a co-existence approach to conservation. The landscape approach to conservation becomes a new form of power, in which different mechanisms to control the territory are directly implemented or supported by the forest department in the name of landscape protection.

Building on the critical literature on landscape and connectivity (McCall, 2016; Bluwstein, 2018a; Barua, 2024), I describe how in India, and more precisely in Kaziranga, this landscape-scale approach allows a myriad of different actors to enter and modify the space. In most cases, as I described in Chapter 6, this is done without the consent of the local communities, who suddenly see and perceive their space as being modified and subjected to new rules and regulations that do not always respond to their needs and desires. New regulations have been aggressively and violently imposed on these conservation zones, and new rules of governance and resource management have been imposed on people's lives and lands. Unlike exclusion, regulation does not evict people from their physical spaces; however, while some groups of people are included in conservation management, others are excluded from decision-making, environmental governance, and economic development. Therefore, this landscape approach shapes territories in which only certain lives can exist at the expense of others (Foucault, 1991).

This thesis showed that the various activities developed in the Kaziranga landscape are primarily aimed at ensuring the emergence of a new economy centered around wildlife activities. These wildlife activities are mostly visible through the expansion of the tourism industry promoted by the private sector or private entities, but they could soon expand into other neoliberal conservation activities, such as REDD or PES, which could potentially develop in the securitized area (Kelly, 2011). Therefore, the landscape wildlife economy develops at the expense of the local sustainable economy, making the idea of co-existence in the space just another discourse that effectively excludes the local people. While Bluwstein (2018b) recognizes the landscape as a biopolitical project, I further see the landscape approach to conservation as a new way to support the state in creating what I call a 'conservation

economic zone.' This means a space based on different zones and regulations, open to developing a new economy based on the marketization of nature, whether tourism industry or nature-based solutions, which are more beneficial in securing economic growth rather than securing human and non-human lives.

This transformation of the territory towards the creation of a landscape-scale model is having real repercussions on local communities, directly affecting their economy and their relationship with their surroundings. The continuous conflicts emerging from these territorial changes are leaving local communities extremely vulnerable (as described in Chapter 6). Moreover, the continuous lack of consent and meaningful involvement of people in these land use changes is worsening people's perception of conservation. This would probably make it more difficult to bring these communities on board to be partners in other conservation measures which could benefit them and the environment. It could also worsen their relationship with their surroundings and alienate them from their traditional conservation practices, such as grazing or fishing. This prevents their sustainable practices and knowledge from forming part of a possible change towards sustainable and alternative practices. As discussed by McCall (2016) the landscape concept has polished the meaning of territory, 'making maps without history' (ibid: pg. 12). There is a need to speak about territory as a social communal space, inhabited, shaped, and influenced by people's histories and struggles.

7.3 For whom do we secure? Towards a political ecology of security

So, what are we securing? Are we securing lives or economic growth? Are we securing the environment for exploitation, or are we simply securing the protection of charismatic animals to ensure the flourishing of wildlife eco-tourism activities?

To better understand the implications of the global security discourse on environmental change, Duffy and Brockington (2022) call for the need to create a political ecology of security. This involves understanding the intersection between nature, capital, and security, and comprehending how environmental conditions are shaped by security logics and the global industry. Secondly, it entails better understanding how dynamic intersectionality co-produces the discourses of conservation and security. Thirdly, it involves analyzing the injustices generated by this security discourse on both people and wildlife.

Consistent with this framework, this thesis recognizes how the security agenda in India is shaped by capitalist interests, using the discourse of securitization to shape the environment for capitalist activities and create territories conducive to capitalist economies. Moreover, it has shown how the security discourse produces new forms of injustice and shapes new subjectivities co-created by the discourses of conservation and security. The thesis also acknowledges the impacts of these policies on wildlife; for example, it highlights how rhino

killings have been a means of resisting the securitization of the space, illustrating the contradictions of securing at all costs.

Therefore, it is important to realize that the security discourse can have material effects that significantly impact the lives of both people and wildlife in these spaces. Conversely, this can create insecure environments that are unsustainable for both. A political ecology of security must demonstrate and analyze the impacts of these security policies (e.g., security enforcement, surveillance strategies, etc.) and the direct effects of security narratives (such as participatory security approaches and the creation of a security mentality discussed in this thesis). This analysis shows how this political ecology framework is important to better grasp how the security approach to conservation can be detrimental to both people and wildlife. The analysis also suggests that this framework needs to move beyond theory, advocating for the de-securitization of conservation.

De-securitizing conservation would entail locating wellbeing at the center of the discourse, ensuring security for people, livelihoods, wildlife, and the entire biosphere. It would need to adopt a feminist political ecology of care to emphasize the importance of our socio-ecological relationships as the primary practice for creating a world where environmental conservation becomes a daily reality and not merely a policy or law (Clement et al., 2019). This would mean having an idea of conservation that does not only include people, but that is for and with people; and that does not create projects of co-existence, but that recognizes co-existence as a concept which goes beyond the nature-culture dichotomy, including the wellbeing of both. Rather than co-opting existing words and discourses, this entails reimagining these concepts outside of conventional constraints (Escobar, 2020; Haraway, 2016; Kothari et al., 2019).

7.4 Making resistance to conservation a possible decentralized tool for conservation

These changes require embracing the ‘pluriverse’, which means recognizing the diverse ways of doing and knowing, in contrast to the singular worldview imposed by capitalism (de la Cadena & Blaser, 2018; Escobar, 2020). It is important to recognize the myriads of community conservation alternatives that already exist and support them (ICCA Consortium, 2021). For example, it would mean giving support to community conservation practice as developed by the Soliga tribe in the BRT tiger reserves (as discussed in Chapter 4), instead of continuing hampering their forest rights (Madegowda & Rao, 2013).

Resistance movements to mainstream conservation are important as they have the potential to transform into sustainable alternatives (Villamayor-Tomas, 2020; Scheidel et al., 2018). As articulated in this thesis, this top-down conservation model has faced resistance from various groups, movements, and individuals across India. Building on numerous case studies highlighting conservation controversies in India (Jha, 1999; Margulies, 2018; Ramesh & Rai,

2017), this thesis analyzed a new wave of resistance against the authoritarian conservation paradigm. In this context, local communities, sometimes supported by national and international alliances, play a role in shaping conservation from below and within. While some studies on resistance to conservation have mostly focused on covert forms of resistance (Holmes, 2007; Matose, 2014) highlighting them as "the weapons of the weak" (Scott, 1985), this research emphasized how conservation practices are being challenged more overtly by different communities across the country (Chapter 4). Especially in Kaziranga, the 'Political Forest' (Peluso & Vandergeest, 2015) is continually challenged and questioned by various scattered movements. Although these movements are not always united, they contribute to shaping conservation narratives and influencing decisions on the ground.

The emergence of various scattered resistance movements in Kaziranga results from both the increasing violence in the area, which has deteriorated relationships between local people and foresters (as discussed in Chapter 6), and the higher level of education among some group members. These educated members have been able to articulate the struggle and influence the main conservation narrative at the local level. As described by Kabra (2009), knowledge, resources, and connections are crucial for lobbying the state and affecting outcomes. However, as this thesis highlights, although resistance is organized, the high level of authority, violence, and repression often prevents it from changing conservation patterns (Brockington, 2004; Holmes, 2014). Nonetheless, resistance has significantly influenced the process, such as halting relocation drives, increasing compensation practices, and reducing the level of violent killings in recent years. This new struggle has been primarily driven by youth movements, which emerge from fresh reflections on conservation and an awareness of the complexities of green policies, market-based solutions, and the green funding scenario.

While writing this thesis, in India, the second national meeting of the Community Network against Protected Areas (CNAPA) has just taken place, bringing together local representatives from various protected areas (including Kaziranga) to challenge and oppose a conservation model that local people perceive as another form of colonial governance. These resistance movements are calling for conservation practices that recognize them as political subjects and active participants. Although this thesis does not delve deeply into the analysis of these movements, it acknowledges them as agents for sustainability and highlights the conflicting values surrounding the use of natural resources (Scheidel et al., 2018).

Collectively, they advocate for a conservation model that acknowledges existing co-existence practices and incorporates local knowledge and customs on the ground. Co-existence should not only be seen as external policies imposed on 'landscapes' but as territorial practices rediscovered from within and formally recognized by the state and law (Hunsberger et al., 2017). Similarly, these movements advocate for participation in conservation that goes beyond being mere subjects of participation plans, but actively involves them in shaping participation practices, in co-management with existing structures of the forest department,

something like what Lele calls ‘multilayered governance’ (Lele, 2017). Only through such genuine participation can conservation efforts truly impact people's livelihoods and biodiversity.

Therefore, this thesis calls for further investigation into conservation resistance movements as pathways to sustainability and sources of alternative approaches (Scheidel et al., 2018). Understanding these movements better can help redefine conservation agendas, fostering socially acceptable and environmentally sustainable conservation strategies. It is crucial to recognize these diverse ontologies as valuable resources that need to be cherished and nurtured. Resistance to conservation also prompts a revaluation of 'security', aiming to make conservation a holistic practice that secures lives and livelihoods. These conservation resistance movements are generating alternative ways of thinking, living, and being, positioning themselves as integral components of the broader environmental justice movement and advocating for a convivial conservation model (Fletcher & Büscher, 2020).

7.5 Ways forward

The empirical data presented in this dissertation present valuable insights into the different mechanisms used by conservation in India, offering an analysis to understand the instruments used by state and non-state agencies to manage what they call ‘the environment’, especially in places where poaching is considered an issue. It offers a framework to understand social and environmental injustices in conservation as products of three processes which I recognized as *exclusion*, *inclusion* and *co-existence*. While this framework has helped me to structure the thesis in a coherent body of research, I recognize it is to simplify the complexities embedded in these territories.

While this thesis has mostly delved into understanding the indirect ‘mechanisms of control’ which have been developed outside the military structure but as part of the security system, I think it is also very important to carry on a critical study which delves into the ‘militarization structure’ of Kaziranga. This was one of my first interests, but my positionality did not allow me to go towards that direction. Such a study would entail directly observing and analyzing the militarization tactics, training and new technologies used in conservation in the Kaziranga space (see Massé, 2020; Simlai & Sandbrook, 2021). It would be important to critically analyze how the system of surveillance is developed, for whom and for what, and how this differs or not from the green militarization of South Africa (Lunstrum, 2014), from a political ecology of security (Duffy & Brockington, 2022).

While studying militarization structures, it would be important to take a gender perspective to analyze the creation of women forest rangers’ bodies. Building on existing literature on forest rangers (Runacres, 2021; Simlai et al., 2023; Singh et al., 2020), it would be important to analyze the current women frontline bodies. Similar to Africa (Barbee, 2017), in India, and

precisely also in Kaziranga, new forest frontline woman personnel have been formed, named Van Durgas (Government of Assam, n.d.). What does it mean for a woman to be a frontline forest ranger? How can the idea of a 'powerful woman' affect her body and mind? And how can women in frontline conservation activities shape the way military practices are carried on? This important research would help not only to understand what it means for women themselves to be part of these forest bodies, but also why and how women have been entering these spaces, and what that would entail in turn for the state and its governmentality.

Additionally, addressing the call of Apostolou et al. (2021), a gender dimension on the neoliberal conservation literature should be developed. This would involve recognizing and addressing the different roles, needs, and impacts that conservation policies and practices have on men, women, and non-binary individuals (Harcourt & Nielson, 2015). Moreover, using a political ecology lens and a gender perspective it would be important to analyze how forms of injustices and violence impact different genders (Tran & Hanaček, 2023), and how gender also influences the way resistance is shaped (Carter, 2019; Tyagi & Das, 2020). In this thesis (Chapter 6), I have briefly mentioned some acts of resistances directly performed by women, illustrating how their bodies and their material social-ecological relationship with the space shapes their forms of interacting, resisting and perceiving conservation. I think it would be important to further expand this study and to better analyze how gender shapes resistance, alternatives and narratives. This type of analysis would be important in shaping an intersectional ecofeminism literature (Nightingale, 2011) as a suitable model for future sustainability.

Moreover, going beyond the case study, further research would be needed to continue analyzing the same structures and mechanisms of control I analyzed in Kaziranga, in other conservation places in India and at the global level. A comparative political ecology analysis (Bennet & George, 2005; Temper et al., 2018; Fanari, 2019) would serve to better understand how conservation participatory mechanisms and co-existence projects are developed in other spaces, especially characterized by violence and poaching (Marijnen, 2017; Muralidharan & Rai, 2020; Ybarra, 2016). It would be important to understand, for example, if in other conservation spaces a security mentality is also emerging, and what that implies in the process of militarization of conservation (Lunstrum, 2014). Do these mentalities support security forces? Are these mentalities beneficial for the security of the environment, and how? It would be interesting, rather than Foucault, to use Mbembe (2003) and his notion of necropolitics to better analyze the relationship of power in violent arenas, and to highlight how the different activities taking place around conservation spaces such as Kaziranga are more driven by 'making death' rather than 'making lives'.

In the case of the landscape approach to conservation, it would be necessary to further observe how this approach has been developed in other areas, and if, for example, the idea

of a landscape authority is observed in other conservation landscapes, and how connectivity has been affecting other biospaces and/or how people are responding to it. Theoretically, I think it would be important to continue employing the concept of spatial injustice (Soja, 2010) as it gives the opportunity to engage with the injustices emerging from the construction of space itself. In this regard, it would be interesting to further engage with work such as Lefebvre (1991) on the creation of space, which this thesis only touches upon. This would be to better analyze how capitalist activities are reshaping these spaces and therefore changing the relationship of power in these areas. What would it mean to employ social theories of urban spatial production in conservation spaces? Would that help us understand conservation mechanisms and design these spaces better? Or could it help us better understand the opposition of people to the creation of these new spaces?

Furthermore, I believe that the field of political ecology of conservation needs to give more weight to practices of resistance. While the current literature has focused more extensively on the impacts of conservation (Brockington & Igoe, 2006; Martin et al., 2018; William & Hutton, 2005), and on the mechanisms of conservation politics (Brockington et al., 2008; Margulies, 2018; Peluso & Lund, 2011), with a growing literature to better understand neoliberal processes (Apostolopoulou et al., 2021; Buscher et al., 2014; Fletcher, 2023), the literature on the political ecology of conservation and resistance is still growing (Asiyanbi et al., 2019; Holmes, 2007; Matose, 2014; Ray, 2014). It is therefore important to find a framework to better understand how resistances are shaping these spaces, and how these movements are framing their conservation narratives. An example of this is the framework proposed by Fradejas (2015) to analyze the multiple politics of resistance. Considering that conservation spaces are complex territories with different politics, perspectives and desires, it would be beneficial to use such a framework to better analyze the politics between, within and across different actors and spaces. It would also be important to better analyze their pluriverse and their ontologies, to understand how alternatives can emerge from resistance (Escobar, 2020; Scheidel et al., 2020). Focus should also be given to how youth have been involved in these conservation resistance movements (Jagadeesh, 2024), asking what their aspirations before modernity are, and what conservation means for them.

Finally, I think it is also very important to start engaging more with the political ecology of conservation in the Global North. Here, here are fewer studies on conservation and justice than in the Global South, and there is a need to better enquire into these spaces to understand how processes of biodiversity conservation differ from the ones of the Global South. Although in the Global North conservation practices might be less problematic in terms of human rights concerns, they might still impose rules which are not always attuned to the lives and needs of locals (Heatherington, 2012; Marino et al., 2016; Salvatori et al., 2021). Moreover, it would also be interesting to understand how in Europe, and especially in Southern Europe, certain spaces continue to be colonized by conservation discourses

(Ferretti, 2023), finding similarities on how conservation is used for the construction of space, narratives and identities.

Epilogue: What does it mean to conduct political ecology research?

I started this doctoral research project with the hope that my work could help visualize and denounce the forms of injustice and violence I have witnessed, and to better understand the complexities beyond conservation mechanisms. I aimed for my research to support the processes of struggle and eco-social transformation, reflecting one of the roles of political ecology research (Robbins, 2012). However, what does it truly mean, and what has it meant for me to conduct political ecology research?

In a world where violence, war, and injustices have become our everyday realities, how do we respond to our daily contradictions? Even in Europe, the violence broadcasted daily on the news is just in the next room. We must decide whether to look at it or ignore it, to engage in those struggles or observe them as if we were somehow immune. However, as COVID-19 taught us, we are not immune to viruses, climate change, or any catastrophic event. We are living through a crisis that is not "out there" but experienced in our daily lives, struggles, and realities.

I started this PhD during the COVID-19 pandemic, which has somehow impacted my research deadlines. Like many, I hoped the pandemic would be a turning point, or a 'portal' as Arundhati Roy described it, because "there would be nothing worse than returning to 'normality'"(Roy, 2020). Unfortunately, as I finish this PhD, I find myself in a world that has not only returned to normality but to a worse normality. We have witnessed the Ukrainian war, the nearly ignored Ethiopian war, and the ongoing genocide in occupied Palestinian territories. In the last decade, India has shifted from being a democratic country to one where freedom of speech has significantly deteriorated (IFJ, 2023-2024), with numerous journalists and activists jailed, if not murdered.

So, how can we view our research as meaningful? How do we position ourselves as political ecologists? Should we ensure more engagement with the field? But how can we do this while maintaining high-quality work and keeping pace with a neoliberal academia that demands constant productivity just to exist? How do we position our own struggles as young adults trying to find a place in this complex world, where there is little space for genuine practices of care, dignified work, and contentment? How do we construct a world of transformation while living in a world of ruins? Or perhaps, as Tsing (2015) beautifully expresses in her book 'The Mushroom at the End of the World,' it is in the ruins of capitalist landscapes and their collapse that we find the force for transformation.

As a political ecologist, I have had to confront my own contradictions of living in a privileged space where I can read and write without major external pressures. I live in a house with amenities such as flowing water, electricity, and gas (I even have a car!), fully aware that my CO_2 footprint is much higher than those of the communities displaced by conservation, as

described in this thesis. How can I write this dissertation from a position of privilege? Are we allowed to do so?

Still, I recognize that privilege is not the same for everyone. As a woman from a marginalized area in Southern Italy, I still experience insecurities and the fear of not being enough, of not being correct, of not being allowed to speak because my voice might not seem important. With this new awareness, I understand how privileged I am to come from a marginal space, as this has allowed me to relate more easily with the marginalized, to engage with their pain, their sense of abandonment, and the meaning of having a colonial mindset. As Antonio Gramsci suggested, understanding the oppressed helps us better understand and challenge existing power structures. My real privilege, therefore, is coming from a marginal place (Sultana, 2021). Acknowledging my privileges and positionality is an essential part of the internal research on what it means to be a political ecology researcher.

As a political ecologist, I also embrace the messiness of studying the social realities we engage with and inhabit. I 'stay with the trouble' (Haraway, 2016) of not fully understanding these complexities and finding peace in not being able to explain it all. I stay with the trouble of finishing a thesis without certainty about the correctness of the methodology used and wondering what methodology I would use if starting anew. How would I deal again with issues of violence, positionality, gender, and class? This is a crucial question to engage with as political ecology researchers. How do we ensure high-quality research and strong commitment to studying conflicts? Should we create a framework for studying conflict, or should we embrace the messiness?

Although this is a vital topic of discussion, I believe there is no single answer or methodology. We navigate difficult terrains and spaces; this is not just a discipline but a way of viewing the world and translating it into words. So how do we conduct political ecology research? I am still seeking an answer, and I think this lack of clarity is precisely what political ecology teaches us. It teaches us to embrace the pluriverse of knowledge, the multiplicity of ontologies, and the different ways of knowing and being, recognizing knowledge as a collective experience situated in a specific space and time (Aedo & Cabaña, 2020; Haraway, 1988). Perhaps the process of an unclear methodology for political ecology shows us the way to decolonize science. Whatever it is, I hope to continue doing ‘this’ political ecology with the same passion, resilience, and courage I had when I started this journey.

To conclude, as I write these words and reflect on my research and my engagements in these struggles, I sometimes feel overwhelmed. But as Macy & Johnston (2009) teach us in their work on deep ecology, it is important to foster gratitude towards ourselves, understand the interconnectedness and systemic nature of problems, and empower ourselves through care to contribute to the healing of the planet. Finally, I use the words of Maria Paz Aedo, a brilliant young academic, whose reflections recently inspired me. She describes how we are all

'affected' and 'affectant' as part of an interconnected world; the usurpation of land affects me as much as my pain affects the earth. So, it does not matter where we reach, and how far we reach, what is important is that we do. Because our actions will eventually shape, affect, and impact others. As I share my story, others around the world are doing the same, and it is this collective effort that gives me the strength and hope to continue this work.

While I would love to continue working in South Asia and exploring those fascinating and complex worlds that have attracted me since my young age, I now also feel a desire to return to my homeland and understand what has happened there: how we have we been alienated from our surroundings, how capitalist processes have shaped our relationships with nature, and what creating a national park has meant there. What does a park mean, and what mechanisms of alienation have occurred there? I believe that in this critical moment, it is in Europe that we need to find our own answers and from here begin changing how we relate to what we call the ‘environment’ (or 'medio ambiente' in Spanish). If part of the change lies in creating new imaginaries and ways of relating to our surroundings, then it is here that we need to decolonize our minds, change the narrative, and consequently our practices.

Perhaps by rediscovering myself here, I will find the courage to venture far away again, with a new consciousness and understanding, able to see other worlds not as 'others,' but as part of my own whole.

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Appendix 1: Cases cited. CFR refers to Community Forest Resource Right. NP refers to National Park. TR refers to Tiger Reserve. WLS refers to Wildlife Sanctuary.

Cases EJAtlas*	Protected Areas	Forest Rights Act (FRA) process	Displacement from 1999 to 2019	Examples of documented criminalization	Militarization and employment of STPF**	Related Literature Review	EJAtlas Link
2017	Achanakmar WLS & TR	CFRs not filed within the core of TR. Fulwaripara village submitted 1 CFR claim in 2017 (EJAtlas 2017).	3 villages, equal to 347 families relocated.	On 6 January 2017, a group of 26 local people were detained and some of them tortured for collecting Bamboo from the forest (interview, 2017)		Shahabuddin & Bhamidipati, 2014; Sebastian & Azeez, 2014; Fanari 2019a.	https://ejatlas.org/conflict/displacement-for-conservation-in-achanakmar-tiger-reserve-cg-india
2019v	Barnawapara WLS	22 CFRs submitted but not recognized (as per 2017 report).	A total of 374 families from three villages relocated between 2010 and 2014. No consent. Rehabilitation has not been successful (EJAtlas, 2019v).	On Jan 15, 2018, police physically assaulted people in Rampur village; a local activist R. was arrested, while trying to file a First Information Report (FIR) (shared by local activist, Dec. 2017).		Fanari 2019, 2019a.	https://ejatlas.org/conflict/barnawapara-wls
2019c	Bhimashankar WLS	Villagers started the process of filing forest rights claim; no reply from the District Collector (EJAtlas 2019c)	No relocation	No info		Lakhanpal,2019.	https://ejatlas.org/conflict/bhimashankar-wildlife-sanctuary-conflict-between-dependence-on-resources-versus-its-conservation
2018c	Bhitarnika NP &TR	No information.	90 families relocated (EJAtlas 2018c).	No info	Das & Chatterjee, 2015.		https://ejatlas.org/conflict/land-and-livelihood-conflicts-in-bhitarkanika-wildlife-sanctuary-odisha-india

2019	Biligiri Ranga Swamy Temple WLS & TR	In 2011, the *Soligas* received 42 CFRs titles covering 60% of the Tiger Reserve, both in core and buffer area (Madegowda, 2009; 2013; 2017; Rai *et al,* 2018; EJAtlas 2019).	No relocation	*Soligas* harassed for using common resources such as honey and NTPF (interview with local activist; Kalpavriksh, 2013, pg. 50).	Madegowda, 2009; 2013; 2017; Rai *et al*, 2018 ; Kalpavriksh 2013.		https://ejatlas.org/conflict/struggle-for-community-rights-in-the-protected-areas-of-biligiri-ranganatha-temple-brt-india
2018b	Buxa NP & TR	36 *gram sabhas* (from core and buffer area) filed CFR claims. Claims remain pending as on June 2020 (GU *et al*, 2018).	Bhutia Basti relocated in 1993 without prior informed consent. In 2008 another attempt at relocation without success.	Many villagers have pending legal charges against them (documents collected in the field, 2017; GU *et a*l, 2018).	In Buxa there have been many incidents of violence by the FD against the local people (fact finding report, 2011)**.	Das, 2008; Nishok et al. 2018; Banerjee et al., 2010.	https://ejatlas.org/conflict/buxa-tiger-reserve-west-bengal-india
2019d	Corbett NP & TR	Awareness of Forest Rights Act but claims not filed. Support of local NGO to stop threats of relocation (Chettri. *et al,* 2021, in draft; EJAtlas 2019d).	From 1994 to 2001, 4 villages were relocated from the core area, namely Laldangh (83 families), Kothiraw (300 families), Jhirna (70 families), and Dhara (50 families) (as per information collected by an activist living in Ramnagar). Since 2014, 57 Gujjar families have been threatened with relocation.	*Van Gujjars* are constantly harassed even outside the tiger reserve, including tearing apart their homes, legal false cases of forest offences *etc.* (interviews, Gooch, 2009).	Special Tiger Protection Force (STPF) deployed in August 2019. The force will have 85 posts including a deputy forest conservation, and 81 special forest guards.	Rastogi et al. 2010; Kumar et al., 2019; Hussain et al., 2016; Gooch, 2009; Fanari, 2019a; Chettri *et al*., n. d.	https://ejatlas.org/conflict/jim-corbett-national-park
2019e	Dudhwa NP & TR	In 2013, the *Tharu* community of Dudhwa TR filed the CFRs claim, however the file of the claims went missing from the administration; the *Tharu* filed again the claims in 2016. In July 2019 the claims were rejected, declaring the *Tharu* living in the park as 'encroachers' (Agarwal, 2018).	In the '70, 44 *Tharu* villages were relocated from inside the forest area. No recent relocation happened (EJAtlas 2019e: Singh, 2007).	In 2016, a local 75 years old *Tharu* man was arrested on false charges of poaching. *Tharu* women were assaulted several times, last event in June 2020 (Singh, 2007).	Special Tiger Protection Force (STPF) set up in 2016. In 2018 the SSB (Sashastra Seema Bal) the Central arm police Force has joined with the STFP and the Dudhwa Forest Department.	Agarwal, 2018; Singh, 2007, Fanari, 2019a.	https://ejatlas.org/conflict/struggle-for-forest-rights-into-the-core-of-dudhwa-national-park-uttar-pradesh
2019a	Jaldapara NP	12 *gram sabhas* submitted their CFRs claims in 2009. Steady and slow process.	No relocation carried out (EJAtlas, 2019a)	In 2014, a strong protest led to the registration of cases against five members of the		Ghosh 2018; NIshok et al.	https://ejatlas.org/conflict/jaldapara-national-park-west-bengal-india

		Claims are still pending (GU, N., Guha, T.L., &, Tatpati, M. 2018; EJAtlas 2019a).		North Khairbari GS. In 2019, Sundar Rabha, a local HR activist, was illegally arrested 3 times (Interview, 2017).		2018; Ghosh, 2016.	
2019a	Jaldapara NP	12 *gram sabhas* submitted their CFRs claims in 2009. Steady and slow process. Claims are still pending (Nishok et al. 2018, Ejtals, 2019a)	No relocation carried out (EJAtlas, 2019a)	In 2014, a strong protest led to the registration of cases against five members of the North Khairbari GS. In 2019, Sundar Rabha, a local HR activist, was illegaly arrested 3 times (interview, 2017)	.	Ghosh 2018; Nishok et al. 2018; Ghosh, 2015	https://ejatlas.org/conflict/jaldapara-national-park-west-bengal-india
2019f	Kanha NP & TR	Uncertain process of CFR claims. Identified as submitted and pending.	When the park was created about 27 villages were relocated from the core area (Mukherjee, 2009). In 2014, 450 families were reported to be violently evicted (EJAtlas,2019f). According to *Lok Sabha*, 12/07/2019 reply 1,870 families have been relocated from the CTH.	No evidence.	Special Tiger Protection Force (STPF) recognized for deployment.	Mukherjee 2009, 2011, Fanari, 2019a.	https://ejatlas.org/conflict/kanha-tiger-reserve
2017a	Kaziranga NP & TR	Forest rights not recognized under FRA. *Mising* indigenous communities are looking for an alternative autonomous form of governance (EJAtlas, 2017a; Cremin, 2012; Smadja, 2018; Saikia, 2011).	In 1908 villages relocation started for the creation of the National Park (Langerscoix & Kothari, 2009); 2 villages evicted in 2016 with violence and confrontation, leading to the death of two people; scattered evictions happened in the 6th additional areas (Barbora, 2017; EJAtlas, 2017a)	In 2017, P. Doley and S. Narah, local *Mising* activists, were falsely charged under 'attempt to murder' after contesting an EIA for a development project. On June 2020, 5 youths charged with 'forest offence' after protesting against FD harassment.	In 2007, 430 persons deployed in forest protection force; 2010 shoot-at-sight policy; 2014, Rhino Task Force & Special Rhino Protection Force with 88 personnel; 2016 STPF with 112 personnel. Electronic eye as	Cremin, 2012; Smadjia, 2018; Barbora, 2017; Fanari, 2019a.	https://ejatlas.org/conflict/kaziranga-conflict-rhinos-and-poachers-assam-india

					surveillance system and drones**.		
2019g	Mudumalai NP & TR	No clear awareness of the Act ((EJAtlas, 2019g; Menon & Karthik, 2016; 2019). CFRs not claimed.	As per newspaper reports a number of about 700 families relocated from the park (EJAtlas, 2019g). As per official records, 19 families relocated from CTH (*Lok sabha*, 12/07/2019)	No info or evidence.	Special Tiger Protection Force (STPF) already deployed.	Menon & Karthik, 2019.	https://ejatlas.org/conflict/eviction-from-manas-national-park
2019h	Manas NP & TR	Community forest rights mapping is still at the early stage. General confusion on the potential of the Act (Ejatlas, 2019h). CFR not claimed.	100 people displaced in 2014 (Dutta, 2020) and 70 families evicted in 2017 (EJAtlas, 2019h).	No info.	Special Tiger Protection Force (STPF) already deployed from 2018/19, with 88 forest guards and watcher.	Dutta, 2020; Soud et al, 2013, Fanari, 2019.	https://ejatlas.org/conflict/melghat-tiger-reserve
2019i	Melghat NP & TR	From 2012 about 12 CFR recognized from the buffer area; in 2020, 3 CFRs recognized in the core area (information from Khojmelghat).	16 villages (2,952 families) evicted from the core area between 2003 to 2015. There are 3,100 families remaining in the core area (EJAtlas, 2019i; Lok Sabha, 12/07/2019)	On 1st September 2020, two people were arrested by police and charged under WLPA, 1972, alleged for destroying wildlife.	Special Tiger protection force recognized for deployment. Drones and other surveillance techniques employed.	Sekar, 2016; Sawakar, 2017; Fanari, 2019a	https://ejatlas.org/conflict/mudumalai-tiger-reserve-and-disputes-over-land-tamil-nadu-india
2019l	Nagarhole NP & TR	Since 2009, 54 villages submitted their CFRs claims. CFRs not recognized and still pending. In Mysore district, in the HD Cote Taluk, in 2010/11, 14 CRs were distributed (EJAtlas 2019l)	From 1999/2000 to 2010, about 487 tribal families relocated from CTH (Lok Sabha, 12/07/2019). Initially, 280 families were relocated in Nagapura and Sollepura between 2000 and 2007, for a compensation of 1 lakh rupees and 5 acres of land	In 2013 a case of land encroachment was registered against a local *Jenu Kuruba* activist, while asserting his rights to build a house in his traditional land.	Telangana state decided to set up a Special Tiger Protection Force (STPF) in Jan 2019. They are in Principle of Approval.	Mahanti, 2003; Nautiyal & Nidamanuri 2012; Desai & Bhargav, 2010: Assadi, 2014; EjAtlas 2019l	https://ejatlas.org/conflict/forced-eviction-from-nagarhole-national-park-karnataka-india

2019m	Nagarjuna Naga/ Amrabad TR	FRA process slow with lack of awareness. Mostly filed for Individual rights (Reddy *et al,* 2011; Rau & Kumar, 2016). 54 CRs claimed by the villagers residing in the core area. 5 CRs distributed (personal interview).	Some 200 families have been resettled in Shanti Nagar and Gandhi Nagar near Yerragondapalem in Prakasam district. There is a plan to relocate about 1,100 families from the tiger core area (EJAtlas 2019m).	Many false cases were registered against the *Chenchus* people living within the forest protected park (information from the field, Dec. 2017).		Reddy et al., 2011; Rao & Kumar, 2016; Fanari, 2019a.	https://ejatlas.org/conflict/uranium-mining-proposed-within-the-amrabad-tiger-reserve-telangana
2019n	Panna NP & TR	No information.	12 villages relocated from 2008 to 2012 for a total of 983 families; the last one, Umravan, was relocated in 2015. They mostly belong to *Gond Adivasis*.	No info	Special Tiger Protection Force (STPF) already deployed.	Runacres, 2021; Fanari, 2019a.	https://ejatlas.org/conflict/panna-tiger-reserve-india
2019o	Pench NP & TR	Fishing rights (Community Rights) claimed but rejected in 2017 (EJAtlas, 2019o). CFRs not claimed.	Between 1973 and 1990 about 10,000 families evicted. In 2017 the last villages in the core area with about 100 fishers' families were relocated (EJAtlas, 2019o).	After 2007 numerous false cases against the 700 fishermen asking for their fishing rights.	Special Tiger Protection Force (STPF) deployed. Women trained (https://www.youtube.com/watch?v=-FlGqPkCbE4&t=416s)	Chatterjee, 2019; Fanari, 2019a.	https://ejatlas.org/conflict/struggle-for-fishing-right-within-the-pench-tiger-reserve-maharastra
2019p	Rajaji NP & TR	Forest Dwellers have submitted their CFRs at the Sub Divisional level committed (SDLCs) but all claims were rejected (Agrawal, 2014).	A total of 1,593 Van Gujjars families were relocated from 2002-2019. Attempt to evict other families in June 2020 (Sah & Mallik 2020; Agrawal, 2014; EJAtlas, 2019p).	On 28 June 2011, a movement leader was arrested on false charges; on June 16 2020 a Van Gujjar of Rajaji and his family were arrested (4 women and 2 young boys) (Down to Earth report, 30 June 2020).	Karnataka became the first state to set a special commando unit of 54 trained person in Nagarhole and Bandipur in 2009.	Agrawal, 2014: Gooch, 2009; Sah & Mallick, 2020; Fanari, 2019a.	https://ejatlas.org/conflict/rajaji-national-park

2019q	Ranthambhore NP & TR	Forest rights not claimed (EJAtlas, 2019q).	In 1976, 12 villages relocated. Five more villages (1,238 families) were relocated from the core area between 2002-2015 (Lok Sabha, question No 3405, 12/07/2019).	No info.	Special Tiger Protection Force (STPF) already deployed.	Fanari, 2019a.	https://ejatlas.org/conflict/ranthambore-tiger-reserve-rajasthan-india
2019r	Sariska NP & TR	No information.	Initial phase of planning to relocate 11 villages from CTH. 3 villages were documented to be relocated between 2008-2014, for 650 families.	A community leader commented: "the forest department is torturing villagers and registering false cases against them, as a result, the future of many youngsters will be ruined" (TOI, May 24, 2018).		Shahabuddin et al, 2007; Rangarajan & Shahabuddin, 2006; Fanari, 2019a.	https://ejatlas.org/conflict/sariska-tr
2018a	Simlipal NP & TR	44 CFRs recognized in April 2015 in core and buffer with collaboration of District administration and support of external NGOs (Bibhore *et al*., 2016; EJAtlas 2018a).	4 villages relocated from the core and 2 from the buffer zone, for a total of 453 families. The last village was relocated on 24 January 2020.	The local indigenous movement leader has been facing threats from the FD to campaign against relocation measures (interview, 2017).	A Special Tiger Protection Force (STPF) has been approved as per parliamentary assurance.	Sahoo, 2012; Bibhore *et al*, 2016; Satpathy & Gunjan, 2010; Chatterjee, 2019; Fanari, 2019, 2019a.	https://ejatlas.org/conflict/simlipal-national-park-conflict-over-conservation-project
2019s	Sundarban WLS, NP & TR	The Forest Rights Act is not recognized in the area. Fisher communities are starting the process to claim their forest rights in the mangrove forest. Until today, no claims filed and no implementing agencies formed at the District level.	No relocation.	False cases filed against fishermen and honey collectors living around the TR (fieldwork, 2017).		Chacraverti, 2014; Ghosh, 2015: Sen, 2017.	https://ejatlas.org/conflict/sundarban-tiger-reserve

2019t	Tadoba NP & TR	In 2013, the process of claiming forest rights started with the submission of 26 CFRs. 5 CFRs were recognized in buffer villages in 2016 and other 4 in 2020 (EJAtlas, 2019t).	From 2007 to 2014 6 villages with 992 families were relocated (Ghate 2005; EJAtlas, 2019t).	An activist of the *Gurudev Sewa Mandal* organization was arrested in 2015 after protesting relocation under the accusation of threatening police officers (and see *Down to Earth*, Dec. 23, 2011).	Special Tiger Protection Force (STPF) already created and deployed. Women trained.	Ghate, 2005; Ghate & Beazley, 2007; Fanari, 2019, 2019a.	https://ejatlas.org/conflict/tadoba-andhari-tiger-reserve
2019u	Wayanad WLS	An indefinite number of Individual Forest Rights granted to villagers by the Forest Department. CFRs not claimed (EJAtlas, 2019u).	4 villages have been relocated between 2015-2019. There is a plan to relocate 14 villages, 800 families (EJAtlas, 2019u).	False cases filed by police against indigenous leaders.		Margulies, 2018; Bijoy & Raman, 2003; Fanari, 2019.	https://ejatlas.org/conflict/wayanand-kerala
2019b	Yawal WLS	1,350 hectares mapped under CFRs. Six villages living in the sanctuary got CFRs recognized. They are co-managing their forest area together with Forest Department (Pathak B., *et al* 2017, Pathak & Kumar, 2017)	A press release informed that 5 village had to be relocated from within the sanctuary. No relocation happened (Pathak Broome et al, 2017; EJAtlas, 2019b).	On 6 January 2017, a group of 26 local people were detained and some of them tortured because of collecting Bamboo from the forest.		Pathak Broome, et al. 2017.	https://ejatlas.org/conflict/yawal-wildlife-sanctuary-maharastra-india

*All the information is systematically documented in the Environmental Justice Atlas. All cases have been recounted under a form of a Featured Map, called *Losing grounds: How are India's conservation efforts putting the local communities in peril*. Available here: https://ejatlas.org/featured/conflictprotectedareaindia
**Data retrieved from the NTCA Website on the Special Tiger Protection Force (Accessed May 2020); other secondary data collected from news reports.