# The gap between policy and practice for human rights in conservation: a case study in Papua Province, Indonesia

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**Abstract** The adverse effects that conservation can have on Indigenous Peoples and local communities have been known for decades. In recognition, governments and conservation organizations have adopted joint statements of intent and rolled out various individual measures to safeguard human rights. Nevertheless, a gap remains between policy and practice, as evidenced by numerous recent examples of human rights infringements because of the (in)actions of conservation. We present ethnographic research with people living adjacent to Pegunungan Cyclops, an IUCN category I(a) strict protected area in Papua Province, Indonesia, aiming to understand their experiences of conservation and provide some nuance regarding the gap between policy and practice in human rights and conservation. We uncovered feelings of injustice, discontent, confusion, an overall lack of consultation between local inhabitants and park managers and decades of contradictory policies and projects characterized by implementation problems stemming from scant resources. We also show how national struggles over rights and recognition are conflated and intertwined with local ones and how national and provincial policies can alter governance regimes, tenure arrangements and power relations locally. Despite the issues, our informants also recalled favourably instances in which partnerships between local inhabitants and other actors were well received because they were implemented through detailed consultation, producing management actions that better aligned with traditional

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Received 28 March 2022. Revision requested 4 July 2022. Accepted 11 January 2023. First published online 9 May 2023. practices. For people in the Cyclops Mountains today, the emerging avenues provided by the social forestry programme in Indonesia could be the most beneficial way to secure greater access to their lands, and conservationists can play a role in supporting this process.

**Keywords** Biodiversity conservation, Cyclops Mountains, human rights, Indigenous Peoples and local communities, Indigenous rights, Indonesia, Papua Province, Pegunungan Cyclops, protected areas

#### Introduction

ubstantial evidence has emerged to show that securing the rights of Indigenous Peoples and local communities to control their lands is advantageous for conservation (Garnett et al., 2018; Fa et al., 2020; Dawson et al., 2021). Moreover, many Indigenous Peoples and local communities successfully monitor and manage their lands de facto, without external support and in ways not well understood by conservationists (Glaser et al., 2010; Sheil et al., 2015). Conservation often affects Indigenous Peoples and local communities negatively through its principal policy of protected areas (e.g. West et al., 2006). It is their direct dependence on natural resources that makes Indigenous Peoples and local communities simultaneously conservation sentinels for the benefit of the global populace whilst also rendering them disproportionately vulnerable to the curtailment of their rights for exclusionary conservation policies, land and resource grabs and global issues such as climate change and biodiversity loss.

Conservationists have known about the impacts of their work on Indigenous Peoples and local communities for decades. Amongst these impacts are displacement and green grabs in the name of the environment (Brockington & Igoe, 2006; Fairhead et al., 2012), policies or projects that alter, undermine or contest existing property relations, livelihoods, governance and traditions (Thorburn, 2000; Chiaravalloti et al., 2017; Wright, 2021) and direct impacts from biodiversity itself and its sometimes militarized protection (Duffy, 2014; Chowdhury et al., 2016). Although Indigenous Peoples and local communities can benefit from conservation actions, there is a skewed distribution of costs towards local inhabitants, whereas benefits typically accrue elsewhere at national or international scales

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(Bell, 1987; Green et al., 2018; Poudyal et al., 2018). Because Indigenous Peoples and local communities often lack power relative to other actors, their rights are frequently reduced, repressed, unrealized or ignored.

In realizing the negative impacts that conservation can have on Indigenous Peoples and local communities, the 1982 World Parks Congress in Bali represented a shift in discourse when it was acknowledged that the needs of local people should be integrated systematically into protected area planning (Phillips, 2003). Later, numerous conservation organizations adopted joint statements such as the Durban Accord, developed at the 2003 World Parks Congress, and they further rolled out various individual measures such as organizational codes of conduct and sets of governing principles to curtail the negative impacts on Indigenous Peoples and local communities resulting from conservation (Roe et al., 2010). Additionally, the Convention on Biological Diversity and its signatories recognize the rights of Indigenous Peoples, local communities and vulnerable social groups in their establishment and management of protected areas (CBD, 2010). However, despite such long-standing commitments by states and conservation organizations there remain numerous recent allegations of human rights infringements resulting from the (in)actions of conservation (Siegele et al., 2009; Tauli-Corpuz et al., 2018; US House, 2021; Project Expedite Justice, 2022).

Although human rights and rights-based approaches to conservation have progressed in international conservation politics, there remains a gap between policy and how conservation is implemented in practice (Morgera, 2018; Corson et al., 2020). This gap has been attributed to several factors; here we consider two of them. Firstly, there is a misallocation of resources and insufficient effort from states, donors and conservation organizations to engage with rights. Despite much rhetoric, the resources directed towards grievance mechanisms and accountability by NGOs remain significantly less than the investment directed towards conventional conservation measures and protected area expansion (Corson et al., 2020; Tauli-Corpuz et al., 2020). Furthermore, the reluctance or inability of NGOs to direct more resources towards rights-based approaches is compounded by many countries not having the capacity or inclination to do so. Countries may lack an effective judiciary and their security apparatus might be ineffective against or even complicit in abuses of Indigenous Peoples and local communities (Brundige et al., 2004).

Secondly, a lack of appreciation for local and regional history and broader socio-political concerns hinders implementation. Locally, governance regimes, tenure arrangements and power relations can have profound effects on the implementation of rights-based approaches (Ayers et al., 2018). At the national scale, promoting the rights of Indigenous Peoples and local communities is often at

odds with professed national development interests, where resource concessions frequently overlap or elide the lands of Indigenous Peoples and local communities (Tauli-Corpuz et al., 2020). Based on reports from First Peoples Worldwide (2014) and The Munden Project (2014), Tauli-Corpuz et al. (2020) emphasized that 40% of global oil and gas production and 80% of mining concessions fall either on or adjacent to the lands of Indigenous Peoples. A similar story is seen in Indonesia, where 96–100% of palm oil, logging and wood fibre concessions are inhabited (The Munden Project, 2014).

Here we explore the gap between human rights policy in conservation and how conservation is implemented in practice using a case study of the Cyclops Mountains in the Indonesian province of Papua. Although no conservation organization, government department or partnership has aimed expressly to implement a rights-based approach to conservation at this site, these actors all operate under agreements that protect the rights of Indigenous Peoples and local communities, and our in-depth case study draws out many such relevant issues. We centre our analysis on the inhabitants of the Cyclops Mountains and their relationship with an IUCN category I(a) strict protected area called Pegunungan Cyclops, national laws and policies, and conservationists.

# Study area

Western New Guinea encompasses the Indonesian provinces of Papua and West Papua. The Cyclops Mountains are in the far north-east of Papua Province, adjacent to the north coast and bordering Papua New Guinea (Fig. 1). They comprise a series of summits stretching c. 40 km west to east and 10 km north to south, crossing the administrative divisions of Jayapura Regency and Jayapura City. The highest peak is 1,880 m, and steep-sided ridges and deeply incised valleys characterize the mountain terrain. The mountains are immediately adjacent to the provincial capital of Jayapura and the national airport connection in Sentani, forming a critical watershed for these towns and other smaller settlements. The climate is humid and tropical, with a monsoon-driven rainy season (October-April) and a drier season (May-September).

The mountains are home to an Indigenous population that has existed in the area for thousands of years. Prehistoric ceremonial axes found at Lake Sentani date from 2,000 BCE (Swadling, 1996). Historical trade items have also been found in this area, providing evidence of a long trade history with foreigners (Swadling, 1996; Upton, 2009). In 1940, the population of Hollandia (now Jayapura) was only 400 people. This increased dramatically during the Second World War when the Japanese stationed

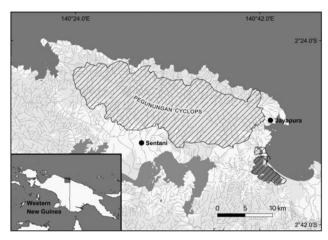


Fig. 1 The Cyclops Mountains in Papua Province, Indonesia, indicating the location of the Pegunungan Cyclops Nature Reserve.

55,000 troops in northern Papua, many of whom were stationed in Jayapura. Later in the War, the Americans gained control of the region. Jayapura became the headquarters of the American Pacific campaign, bringing with it simple road infrastructure, some of which remains in place today. Since Indonesia took control of the region in 1963, hundreds of thousands of people have migrated to Papua and West Papua from elsewhere in Indonesia, mainly through controversial World Bank-sponsored migration programmes known as transmigration. By the turn of the millennium, over one-third of the population of the Papuan provinces were non-Papuan, the vast majority of whom lived near urbanized and coastal areas (Upton, 2009). The Cyclops Mountains are a prime example of this national and provincial in-migration characterized by high cultural diversity. Seven Indigenous groups, each with a distinct language, now live alongside many settlers from elsewhere in Papua and Indonesia. The north and west coasts of the Cyclops Mountains are inhabited predominantly by Indigenous Peoples, whereas all other areas in this region are home to a mixture of Indigenous Peoples and settlers from elsewhere.

# Methods

This study draws on primary ethnographic research and secondary data sources. We collected primary data during 2015–2018 over five visits to the Cyclops Mountains, each lasting c. 2 months. The main sources of data that we obtained during these visits were participant observation and interviews. We compiled secondary data during 2015–2021 from peer-reviewed articles, publicly available interviews, media sources, NGO reports, and legal and policy framework documents acquired from databases of peer-reviewed literature, internet searches, bibliographical searches, personal contacts and the library at the WWF office in Papua.

In 2015 we conducted 22 semi-structured interviews across 17 villages purposefully selected based on their proximity to the protected area. Informants were selected opportunistically and most interviews were carried out concurrent with or soon after the first meeting of the research team with each community. It was during these initial meetings that we made introductions, described the intentions of the research and requested permission to stay and work in the villages. Following local convention, all of the initial interviews included at least one man in a prominent social position, either a kepala kampung (village chief), an ondoafi (traditional or customary leader) or the sekretaris kampung (village secretary). These individuals had the authority to grant permission for the work and make the necessary introductions to the rest of the community. The initial interviews were opportunistic and the numbers of informants in each interview varied. Twelve interviews were with individual men. Nine were group interviews (six with just men and three with mixed groups of men and women) in which there were 5-16 participants, and one was with an official from the government department Balai Besar Konservasi Sumber Daya Alam (The Centre for Conservation of Natural Resources; BBKSDA-Papua). In these interviews we aimed to gather information about each village, the surrounding areas and the interactions of people with the forest, conservation and the protected area. We asked questions to understand local history and how things had changed during the lives of the informants. The exception was the interview with the official from BBKSDA-Papua, during which we asked about their role, the work of BBKSDA-Papua with the protected area and the significant barriers and needs in the work of the department.

In the subsequent four visits up to 2018 we carried out participant observation, a method whereby the researcher observes and participates in the lives of the people being visited (Bernard, 2011). During these periods of participant observation, we carried out an additional 41 semi-structured interviews, with 39 men and two women aged 18-82 years. We identified these informants through chain-referral sampling in which we asked to be introduced to people who are knowledgeable about the forest. Throughout this time, we also carried out ad hoc informal and unstructured interviews with men and women of various ages alongside other structured data collection irrelevant to this article and not presented here. We observed village gatherings and meetings between local political leaders and spoke to staff from conservation organizations active in the area and academic staff from University Cenderawasih in Jayapura. All informants spoke Bahasa Indonesia and we conducted all interviews in that language. Where possible and permitted we recorded interviews using a handheld voice recorder, later transcribing and translating them into English. We wrote detailed field notes when documenting observations or conducting informal interviews and when recording was not permitted

or appropriate. We also contacted key informants by telephone, asking follow-up questions and checking details or interpretations between visits up to 2021.

We analysed all primary and secondary data using *NVivo* (NVivo, 2011). We used a grounded theory approach for analysis in which we reviewed field notes and interview transcripts to identify analytical categories, allowing themes to emerge from the data that we could compare, contrast and relate to one another (Bernard, 2011). We complemented this analysis through a synthesis of secondary data to provide additional context and tie our observations in with social and political issues at broader scales.

# The shifting boundaries of conservation

The size of the protected area in the Cyclops Mountains and its boundaries have changed significantly since it was first established in 1954 (Fig. 2). These changes have caused resentment and confusion amongst local inhabitants, many of whom have had their access to resources curtailed and livelihoods imperilled or who might have been unaware of these changes and found their long-standing actions deemed illegal. We found numerous instances of people being confused, misinformed or unaware about the boundaries of the protected area and what rules applied to them and why. In 2015, one man told us:

The boundaries have been pushed and encroached onto the best land for growing sago. The people are pleased to protect the forest and animals, but the protected area is too big, and people don't know what exactly is meant by the protected area. What is it that's protected? Animals? Water? What? Now villages only have 250 m back from the coastline where they can farm and collect things from the forest. This was extended to the current boundary 2 or 3 years ago. It is fine here, we have enough land, but for the villages along the north coast it is difficult, they don't have enough land. The forest was managed fine before by the Indigenous People but now the young and the migrants do not respect the old ways. The protected area is OK, but the people don't understand the rules and procedures that the government enforce. There is no consultation with the people and the government contradict the rules themselves.

Compounding uncertainty and discontent are the contradictory actions of government authorities who evict people for farming inside an indiscernible protected area but at the same time extract sand and gravel from rivers and grant mining concessions immediately adjacent to villages (e.g. Bolt Metals, 2021). One man recounted to us how he was told that his house, where he had been living for more than 30 years, was now inside the protected area and deemed illegal. He said:

I am confused by the actions of the government. They are restricting the use of the forest by creating the protected area but at the same time allowing businesses to mine the river. The river used to be much higher . . . I care for the forest. Whatever the government say to you about the forest is nonsense. This house never had trees before I moved here. I planted all the trees around that you can see.

Discontent at the government's management of the Cyclops Mountains was apparent in most conversations regarding the protected area. Central to this was the almost ubiquitous absence of consultation between government authorities and our informants concerning the formation, alteration and management of the protected area. A comment from a retired community forestry officer revealed this lack of consultation and the confusion it causes. He told us:

Conservation in the Cyclops Mountains is heavily underfunded by the government. The mountains have been a nature reserve since 1974. The [Indigenous] people didn't know it was going to happen or how, it just happened. The boundary has changed three times but none of the markers have been changed and so the people are confused. I have been trying to tell the government this for a long time, but nothing is done . . . Since the boundary changed last time, I don't know if it has gotten bigger or smaller. There is no sensitization from the government. The government will regret not talking to the mountain people [Papuan settlers from the central cordillera] about the protected area and not asking them to stop opening new land by burning and planting more trees. The government needs to involve the people more and up to now they have not been involved at all in the management of the protected area.

His comments also highlighted the scant resources available to park managers, which matched the comments of an official at BBKSDA-Papua who told us in 2015 that they were managing 4.4 million ha of forest across the province with just 126 staff.

Aside from the expansion of the protected area, the paradigm of conservation has also changed over the 67 years during which the Cyclops Mountains have been under an area-based conservation policy (Mace, 2014; Barnes, 2021, pp. 22-28). As time has progressed, conservation projects, goals, actors and activities have all transformed in the Cyclops Mountains. Policies range from the eviction of people from the protected area to community-based conservation and integrated conservation and development programmes. More recently, there have also been neoliberal approaches to conservation, including an international pilot scheme for reducing emissions from deforestation and degradation, payments for ecosystem services and approaches to engage with the private sector through green enterprise. Contradictory physical and ideological relics from 67 years of conservation activities persist to this day, contributing to the opaque notion of conservation and who or what it stands for.

Despite the confusion, an important event recalled to us favourably on numerous occasions was when WWF-Papua and the local organization Yayasan Pembangunan Masyarakat Desa (YPMD) implemented the Cyclops Reserve Management Project spanning 15 years during 1983–1997. Wells et al. (1999, pp. 112–113) described how the protected area at the time was officially managed by only four staff from what is now BBKSDA-Papua and that the project sought initially to reconcile traditional land ownership with conservation and community development before implementing some of the first and longest-running integrated conservation and development programmes in Indonesia. The accompanying 1984 management plan was significant not only because it was the first protected area management plan in Papua, but also because it was one of

the first attempts to establish some form of official community-managed forest zone in and adjacent to any Indonesian nature reserve (Mitchell et al., 1990). Although the management plan made recommendations to extend the protected area, it also implemented a simplified system of zonation based on the traditional management practices of the resident Indigenous groups, produced through a thorough consultation process. The cooperative project between WWF-Papua and YPMD featured repeatedly in discussions about the protected area, presumably because this event marked a significant act of consultation and an opportunity for meaningful participation for these communities that has seldom been achieved to the same degree since. This collaborative effort was largely in vain, however, as the Ministry of Forestry never formally recognized this pragmatic boundary-making and zonation (Wells et al., 1999). Nevertheless, people still recounted the process of delimiting boundaries by planting gayang (Inocarpus sp.), puring (Codiaeum sp.) and ti (Cordyline sp.), all of which are used across the region to demarcate boundaries. One man described this zonation, despite it being decades old and never having been formally recognized by the Ministry of Forestry:

The forest is divided into three areas. Parcels A, B and C. These areas were made with WWF and are still used today. They are divided by distance up the mountain. Parcel A is for hunting pigs and begins at my old house. You need a permit to hunt pigs. The government restrict all hunting, but anyone can hunt pigs with a permit. It is easy to ask people not to hunt in some areas because they are sacred.

Despite these welcomed, although in the eyes of Indonesian authorities ultimately illegitimate, efforts, the protected area in the Cyclops Mountains has always been and remains a state-owned and managed strict nature reserve. Jepson & Whittaker (2002) described how the ideology and terminology of the strict nature reserve were coined during the 1933 London Conference on African Wildlife, attended by only 60 individuals representing the colonial powers of Africa. During this conference, it was agreed that protected areas would form the primary strategy for wildlife protection and that a strict nature reserve would constitute an area immune to any sort of human exploitation or alteration, where entry was permitted by special permit only (Caldwell, 1934; Hayden, 1942). The values underpinning these decisions might have been noble (Jepson & Whittaker, 2002), but this categorization arose from the desire of colonial rulers to exclude people from areas to maintain a natural state whilst permitting access to state officials, scientists or others with a permit. Nearly a century after the London Conference on African Wildlife and 67 years after establishing the protected area in the Cyclops Mountains, this categorization and its restrictions are largely unchanged.

Although the biological diversity of the Cyclops Mountains is undisputed, this status is used to justify strict

protection and exclusionary conservation that separates people from nature, disregarding these mountains as a biocultural landscape and the homes of people who inhabited the area long before the protected area designation (Collier, 1985a,b; Swadling, 1996; Ngutra et al., 2017; Hijjang et al., 2018; Rumbiak & Wambrauw, 2018). From the outset, the protected area overlapped with the lands of Indigenous Peoples and local communities and denied them access to large swaths of their territory, including residences, sacred forests, community gardens and areas used to gather resources (Giay; Harwell & Lynch, 2002). Throughout its history, the protected area has enclosed increasingly more land, writing out of existence the residences, livelihoods and cultures of local inhabitants through enforcement and sanctions for those unaware of the expansion of the reserve or who refused to comply with the consequential restrictions. Now only those with a permit can legally gain access, whereas others are forced to either break the rules or position themselves in roles that align with recent management actions, as one community forestry officer explained:

I have lived here all my life, but I used to live further in the forest where it is restricted. I go into the forest to make shelters and patrol. Nobody goes in without me. Everywhere is restricted. You must go into the forest with someone from the forestry department. A patrol officer like me.

In other cases, people described their uneasy relationship and discontent with the government and outside elites who can move freely in the reserve whilst their access rights have long been removed:

There is a government post here, but the village is disappointed with it and the programme. People come from the government, sleep in the house, go into the forest occasionally but never talk to the people in the village. The government think they own the forest, but they don't. There is no respect from the government who we consider to be our guests when they visit and go into the forest.

# National socio-political issues are conflated with local struggles for rights

The Indonesian provinces of Papua and West Papua have experienced dramatic socio-political change throughout the 20th and 21st centuries. These changes resulted from the successive imposition of colonial and neo-colonial political authority. The transition from Dutch to Indonesian control over western New Guinea is particularly controversial and remains contested by many native Papuans (Drooglever, 2011; Yoman, 2011). It would be remiss to ignore the civil unrest, political tensions and claims of human rights abuses that have arisen because of the incorporation of the region into the Republic of Indonesia in any discussion of rights and conservation in the region (Brundige et al., 2004; Documentation Working Group on Violence and Human Rights Violations against Papuan Women, 2010; Antonopoulos & Cottle, 2019).

Arguably, the right to self-determination precedes discussions over conservation and human rights locally. Although outside the immediate remit of conservationists, it is essential to consider this backdrop when forming partnerships between state departments, conservation organizations and Indigenous Peoples and local communities. Kashwan (2013) highlighted that conservation organizations should assist in holding states (and themselves) to account regarding claims of abuse and injustice, by developing partnerships with Indigenous Peoples and local communities and the organizations representing their rights. This is difficult for conservationists as it potentially weakens relationships between conservation organizations and the state. This is especially problematic for conservation organizations that work internationally, as their operations are often contingent on well-defined and potentially restrictive agreements on their activities. Nonetheless, this must be achieved if commitments such as the Durban Accord are to be honoured.

Yoman (2011), a Papuan activist, believes that the injustice of denying native Papuans the right to selfdetermination is at the root of a series of issues identified in the Indonesian Institute of Sciences development plan, the Papua Road Map (LIPI, 2008). These issues include the political status of the region, state violence and human rights violations, marginalization and discrimination. Coincidentally, the transition to Indonesian control through a referendum known as the Act of Free Choice and several of the issues identified in the development plan were raised during the UN Working Group on Indigenous Populations meetings in the 1980s. Papuan representatives expressed their concerns regarding the legitimacy of the Act of Free Choice and the support of the UN for Papuan integration into Indonesia. Additional concerns were raised over alleged disappearances and killings of Papuan people by the Indonesian security apparatus, the suppression of Papuan culture and widespread seizures of the land of Papuan people for extractive industries and settling Javanese transmigrants (Bertrand, 2011). After asking, 'what is it you want from the government?' regarding conservation in the Cyclops Mountains, we were told:

Acknowledgement, we do not get a share of what the government is getting. The government gives us materials to build houses, but the people do not know how to use them [concrete, blocks, sand, etc.], we are used to using plants to build houses. The government does not ask what our needs are, and so we do not get what we need...The people have asked for permission to build a village community building for cultural events and to host guests, tourists, researchers, people like you. But the government refuses. The government permits churches and mosques, but for anything cultural, it is very difficult...Papua and Papuans are still trying to find their identity. There has been education, but we have still not seen any real benefits from this. Papuans feel marginalized. They are not getting any benefits from things like Freeport [Freeport operates the Grasberg Mine, which is the largest gold mine and second-largest copper mine in the world]. There is a separatist movement, you know, by Papuans who feel marginalized like this.

Provincial issues such as Freeport and the special autonomy status of Papua within Indonesia were cited regularly when discussing seemingly unrelated local issues concerning conservation and the protected area. It was apparent that broader struggles for recognition and rights are mirrored and conflated with local struggles for recognition and rights. Struggles in the Cyclops Mountains against the state, the protected area, extractive industries and in-migration are framed unavoidably by similar issues seen throughout Papua that are at the forefront of popular discourse. This discourse is particularly incendiary around the Cyclops Mountains because of their proximity to the provincial capital, where the regular protests concerning these provincial and national issues are matched only by the military responses that they provoke.

Although national struggles are entwined with local struggles, several national policies have had more direct, profound and differentiated effects on the rights and power of people at the local level. These are described in detail by Barnes (2021), but here we briefly cover one effect of particular significance. Traditional forms of customary natural resource management deriving from traditional village governance systems were invalidated by Indonesian structural changes in the 1970s. In particular, the 1974 Law on Principles of Regional Government Administration and the Village Government Law of 1979 standardized village governance across Indonesia based on a Javanese system originating in the Dutch colonial era. This standardization removed heterogeneous governance structures, part of which usually included locally adapted natural resource management.

In the Cyclops Mountains there was a shift in power and legitimacy away from community roles such as the ondoafi (customary leader) towards official political positions such as the kepala kampung (village chief). This is significant because an often-cited goal of conservation and rightsbased approaches involves formalizing tenure arrangements (Larson & Springer, 2016; Woodhouse et al., 2022). However, attempts to secure tenure arrangements are vulnerable to hijacking by people in roles such as village chiefs who might operate outside collective natural resource management institutions and yet be in powerful positions that increase their likelihood of interacting with outside parties looking to secure tenure rights for the community. This can effectively legitimize the transfer of collective rights to an individual and their network who may or may not act in the best interests of the community. Simplistic notions of a community must be rejected by conservationists wishing to implement rights-based approaches. Instead, individual communities should be understood as complex and heterogeneous, with multiple individual interests and desires mediated by power.

More recently, at the national level, Indonesia has begun a social forestry programme implemented through numerous court decisions, legal amendments and decrees. The programme is promoted on the basis that it will provide people

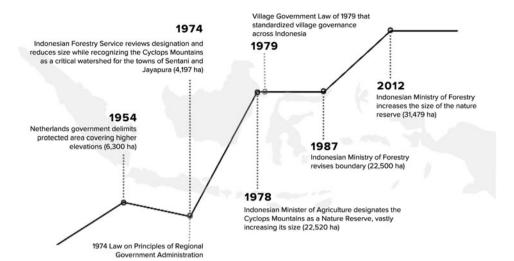


Fig. 2 Timeline of the changes to the Pegunungan Cyclops Nature Reserve in the Indonesian province of Papua (Fig. 1). The timeline also reflects changes in the area allocated to the Reserve during 1954–2012.

with rights to land through local participation in forest governance. It is heralded as fulfilling the multiple goals of various actors, including fair environmental governance, forest conservation, climate change mitigation, and the recognition of Indigenous lands and the rights of Indigenous Peoples to manage them (Li, 2020). However, progress has been slow and has been marred by barriers to participation and issues with implementation mechanisms, with the programme only covering 4.2 million ha of the targeted 12.7 million ha before 2019 (Fisher et al., 2018; ZSL, 2020). Nevertheless, this programme represents a unique opportunity for Indigenous Peoples and local communities to take ownership of the management of their lands. Conservationists should support such opportunities by facilitating the bureaucratic processes that are not always readily accessible to Indigenous Peoples and local communities.

In the Cyclops Mountains there have been moves by the bupati (local mayor) to officially recognize several communities as adat (customary) villages in alignment with the national social forestry programme. Recognizing these communities as legal subjects does not automatically bestow rights on them to own or manage their lands but is nevertheless an essential first step in a long and convoluted process. For many of these villages, the actions of the bupati, combined with disappointment regarding the disinterest or inability of the authorities to act on the reporting of transgressions by outsiders in the protected area, have revitalized the role of traditional leaders and customary forms of natural resource management (Mongabay, 2017). In some villages, roles such as the ondoafi as the guardian of the village and its traditions are finding renewed meaning. In such cases there has been an increase in and greater acceptance of natural resource monitoring by the ondoafi alongside a revival of taboos, locally relevant sanctions and mechanisms of cultural internalization such as rituals, ceremonies and offerings. We encountered a variety of situations and opinions regarding this issue ranging from villages where individuals claimed that 'people here listen more to the *ondoafi* than the government' to others who continued to lament the breakdown of such roles, as one man described to us:

Here the land is managed through the local *ondoafi* with strong connections between the *ondoafi* and pastor. The modern people do not understand this system. If someone wants to open land, they must first speak to the *ondoafi* and the village. The *ondoafi* then decides based on the local trees if this permission should be given and how much should be opened. Modern people no longer listen to or even consult the *ondoafi*.

The degree to which natural resource management and the rights of people to access resources have been affected by the changing power of village political positions depends significantly on village particularities. We found that the political history of the village, its proximity to urban centres and position within imposed government boundaries, its family genealogy and history of inter-village marriage, the number of *ondoafi* and the amount of in-migration can all have an effect at the village level.

# **Conclusions**

We have here illustrated the gap between the human rights agreements and frameworks endorsed widely by states and conservation organizations and how, in contrast, conservation is implemented practically. We found that the rights of people have been reduced, repressed, unrealized or ignored across multiple generations, both before and after watershed moments in conservation policy such as the Durban Accord in 2003. We uncovered feelings of injustice and discontent at protected area establishment, expansion and exclusionary government management, confusion from decades of contradictory policies and projects, implementation problems stemming from insufficient resources and an overall dearth of consultation between local inhabitants and park managers. Nevertheless, there were also instances in which

consultation with local inhabitants and their participation in protected area management were foremost policies that were esteemed highly amongst our informants. These favourable policies materialized in a vacuum of state conservation resources, whereby partnerships between the locally-led regional offices of international conservation organizations, local community development organizations and Indigenous Peoples and local communities had greater space to develop. Additionally, broader struggles over rights and recognition are conflated and intertwined with those at the local level, and national and provincial policies can alter formal and informal governance regimes, tenure arrangements and power relations locally. Although broader structural changes influence local issues, it would be mistaken to assume that this influence is uniform across different communities. We found that the degree to which these issues had an effect depended on numerous village particularities not explored fully in this research.

Conservationists often talk about the need to gain the trust of the Indigenous Peoples and local communities with whom they interact. We contend that first, conservationists must understand and acknowledge the history of the protected areas and places in which they operate by using tools such as situation analyses, but ideally by obtaining a more detailed understanding through establishing multidisciplinary teams of local partners and social and natural scientists. Anecdote, experience and theory show that trust is earned and requires time. We believe there is significant value in the recommendations from Tauli-Corpuz et al. (2020) that truth and reconciliation initiatives for protected areas could begin to address the past injustices and the damaging legacies of exclusionary conservation for the Indigenous Peoples and local communities involved in multigenerational struggles for rights over their lands. Furthermore, conservationists must endeavour to direct a greater proportion of their resources towards such truth and reconciliation initiatives and improve their social safeguards and grievance and accountability mechanisms. Moreover, any ongoing or future conservation initiatives must acknowledge broader and past issues regarding justice and equity whilst addressing them explicitly in their activities. Only through such actions will conservationists be able to reconcile the past injustices of conservation and remove operational risk from future targets on protected areas and other area-based conservation measures, such as protecting 30% of the land and ocean of the planet by 2030 (CBD, 2022). For people in the Cyclops Mountains today, promoting the emerging avenues in Indonesia to realize the rights of customary adat communities may be the most fruitful way to gain greater control over their lands. Avenues such as these exist for Indigenous Peoples and local communities throughout the world but they are often bureaucratic and unknown or inaccessible to Indigenous Peoples and local communities. Conservationists can and should facilitate access to such processes, aiming to form meaningful partnerships so that these Indigenous Peoples and local communities understand how to implement the activities that encompass equity and justice and ultimately lead to more favourable social and ecological outcomes.

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# **Conflicts of interest** None.

**Ethical standards** This research abided by the *Oryx* guidelines on ethical standards, followed the standards of the Social Research Association and adhered to ethical standards for research with human subjects. A departmental ethical review for social data collection was approved by the Department of Anthropology, University College London.

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