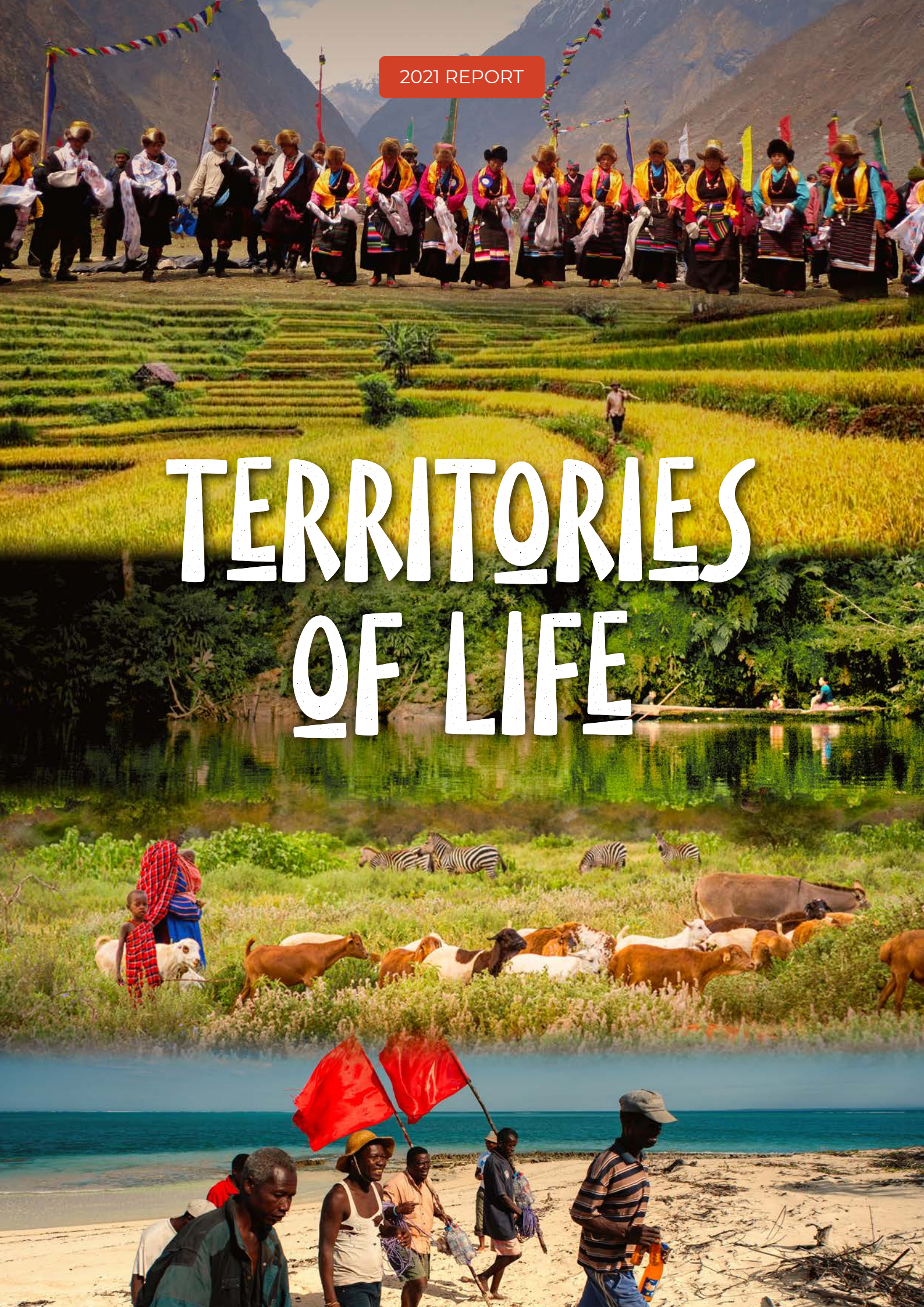


2021 REPORT

TERRITORIES OF LIFE





Dedication

Territories of Life: 2021 Report is dedicated to **Ghanimat Azhdari** (1983-2020), a young and passionate leader from the Qashqai tribal confederacy in Iran. Ghanimat was a specialist in Geographic Information Systems (GIS) and community mapping, working tirelessly to support the participatory documentation of territories of life with the national federations and unions of nomadic tribes in Iran (UNINOMAD and UNICAMEL). She was contributing her deep knowledge, skills and passion to the development of this report when her life was unjustly cut short on 8 January 2020. Ghanimat played important roles in the Centre for Sustainable Development and Environment (CENESTA) in Iran and the ICCA Consortium globally and was pursuing her PhD at the University of Guelph at the time of her passing. She is dearly missed. Her legacy will continue through the work of the many people whose lives she touched during her short time on Earth.



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Disclaimer

The contents of this report do not necessarily represent the views of the ICCA Consortium in its entirety or of its funding partners. Any errors or omissions remain the responsibility of the authors.

About this report

Territories of Life: 2021 Report is a multimedia report composed of local, national, regional and global analyses of territories and areas conserved by Indigenous peoples and local communities (sometimes abbreviated as "ICCAs" or "territories of life"). The present document summarises the key findings of all these components and sets out overall recommendations. This report is part of an ongoing process to develop the knowledge base on territories of life in support of Indigenous peoples' and local communities' self-determined priorities. It is produced by the ICCA Consortium with the support of several partners and is available online at: report.territoriesoflife.org.

About the ICCA Consortium

The ICCA Consortium is a global non-profit association dedicated to supporting Indigenous peoples and local communities who are governing and conserving their collective lands, waters and territories. Its organisational Members and individual Honorary members in more than 80 countries are undertaking collective actions at the local, national, regional and international levels across several thematic streams, including documenting, sustaining and defending territories of life, as well as youth and intergenerational relations.

Learn more about the ICCA Consortium at:

www.iccaconsortium.org.

The ICCA
Consortium





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Executive **summary**

Traditional farming system of Kasepuhan Community in Indonesia. Photo: Ajat Sudrajat



Prologue



“There is no Dayak community without forest.”

Saying of the Dayak Kenyah people (Indonesia)



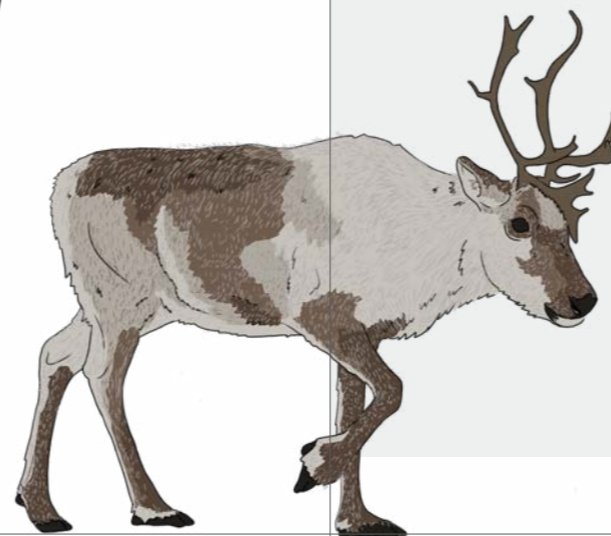
“The Adaval Oran is the driving force of our livelihoods. We are all aware that if we need anything, we take it from there. Our animals graze there. We understand that if we destroy the Oran, our lives will be compromised, and that is why we organise ... We consider it our duty to protect and conserve the Oran.”

Deenaram Meena, Adawal ki Devbani Oran (India)



“I hunt for other people. I go out and get a caribou ... It keeps me close to the men I hunt with. I make my parents, kids, relatives and friends happy because they don’t have caribou sometimes, and we all come together and share the meat. Caribou is more important than seal to keep my family and community together ... What is a community feast without caribou?”

Pauloosie Kilabuk of Iqaluit (Canada)



“Initiation in the sacred forest is the most exciting part of our existence, and the most vibrant element of our community. In the initiation forests, we find and strengthen our values. And the Yoglobou Pond is where we find solutions through prayers and offerings.”

Pé Gbilimy, community member of Gampa (Guinea)



“Our living territory is, and will continue to be, free of extractive activities ... We propose a way of life based on our culture’s criteria for wealth, such as the existence of unpolluted rivers abundant with fish in our territory, life within our ayllu (family) and the strength of our organisation.”

Kawsak Sacha Declaration of the Kichwa people of Sarayaku (Ecuador)



When you read these quotes, what stands out to you? How do they make you feel?

These are the words of Indigenous peoples and local communities who are sustaining the lands and territories that in turn sustain them. They may be from different parts of the world, and they may not speak the same language, but they share a deep connection with each other that transcends the spoken word.

The ICCA Consortium is grateful to be able to hold space for these five and 12 other Indigenous peoples and local communities to share their experiences with the world in Territories of Life: 2021 Report. During such a challenging time, these privileged glimpses into others’ lives remind us that humanity’s strength

lies in our diversity and that there is more that connects us than divides us.

The ICCA Consortium began conceptualising this report in 2019 but it builds on many preceding years of work by Indigenous peoples and local communities and supporting organisations and individuals. It evolved several times over as it was shaped by many hands, hearts and minds until its publication on 20 May 2021 at: <https://report.territoriesoflife.org>. It is intended to be the first in a new series of engaging and nuanced publications and communications materials on territories and areas conserved by Indigenous peoples and local communities, with an emphasis on supporting peoples and communities to tell their own stories.



Introduction

The COVID-19 pandemic has brought to light the close links between human and planetary health and laid bare the global crisis of inequality. At the same time, there is a groundswell of evidence that Indigenous peoples and local communities are critical to sustaining the diversity of life on Earth (e.g., IPBES, 2019; FAO and FILAC, 2021; FPP et al., 2020). As nation-states prepare for major summits of the UN Convention on Biological Diversity and Framework Convention on Climate Change in late 2021, a key question is whether they will take this opportunity to do something truly transformational to address the broader planetary crises from which the pandemic arose and to ensure a safe, healthy and sustainable planet for all.

Indigenous peoples and local communities are estimated to hold at least 50 per cent of the world's land under customary systems, but their rights have only been formally recognised in a small fraction of the claimed lands (RRI, 2015). In Latin America and the Caribbean, Indigenous and tribal peoples manage between 330 and 380 million hectares of forest (Fa et al., 2020). Those forests store more than one-eighth of all the carbon in the world's tropical forests and house a large portion of the world's endangered animal and plant species. Almost half (45 per cent) of the large 'wilderness' areas in the Amazon Basin are in Indigenous territories and several studies have found that Indigenous peoples' territories have lower rates of deforestation and lower risk of wildfires than state protected areas (FAO and FILAC, 2021).

However, Indigenous peoples and local communities often face overlapping political and economic interests seeking to either protect nature or exploit nature within their lands and territories. Public and private conservation actors have not adequately implemented existing rights-based commitments, and genuine recognition of and tangible support for Indigenous peoples' and local communities' rights and roles in conservation is still relatively marginal (Tauli-Corpuz et al., 2020). Indigenous peoples and local communities not only face growing threats from harmful industries in their lands and territories, but also face growing threats for defending themselves against such industries. In 2019, 212 people were killed for taking a stand against environmental destruction, 40 per cent of whom were Indigenous (Global Witness,



2020). Indigenous peoples and local communities are at further risk where there is inadequate recognition of their rights and governance systems and a lack of political and legal support (IPBES, 2019).

One of the biggest opportunities to catalyse transformative changes from local to global levels is to support Indigenous peoples and local communities to secure their human rights in general and particularly their rights to self-determined governance systems, cultures and collective lands and territories¹. Although there are no panaceas, this is arguably a key "missing link" in efforts to address the biodiversity and climate crises that would also contribute to social justice and sustainable development priorities. Specifically, it would be a feasible, cost-effective and equitable way to meet nature conservation commitments, including under the forthcoming post-2020 global biodiversity framework (RRI, 2020). These issues are currently severely underfunded, with scarce funds going directly to Indigenous peoples and local communities. Over the past 10 years, less than 1 per cent of financial assistance for climate change issues supports tenure and Indigenous and local forest management; furthermore, only a small share of this is likely to reach Indigenous peoples and local communities themselves, as most of the money is channelled through multilateral development banks and as part of large projects (Rainforest Foundation Norway, 2021).

¹ Although Indigenous peoples and local communities are often considered together in the context of their close relationships between their cultures and territories and areas, there are clear differences between them under international law. Refer to Annex 3 ("The legal distinction between Indigenous peoples' rights and local communities' rights") of the global spatial analysis of this report. Available online at: <https://report.territoriesoflife.org/global-analysis/>.

Overview of Territories of Life: 2021 Report

Territories of Life: 2021 Report is a local-to-global analysis of territories and areas conserved by Indigenous peoples and local communities (sometimes abbreviated as “ICCAs” or “territories of life”). This multi-scale approach weaves together diverse perspectives, insights and new findings about the grassroots global phenomenon of territories of life while also creating space for nuance and complexity. Overall, the report adds to a growing body of literature on the incontrovertible role of Indigenous peoples and local communities in ensuring a healthy planet for all, and the urgent actions required to support them.

At the first level of analysis, this report showcases 17 territories of life from five continents, focusing on how Indigenous peoples and local communities contribute to the diversity of life on Earth through their unique governance systems and cultural practices. Many of these case studies are co-authored by Indigenous or community leaders or their organisations and reflect many years of collective work by and with the featured peoples and communities.

Next, the report scales out to five national analyses and one subregional analysis of some of the leading examples of country-wide grassroots initiatives and national policy and legal recognition of Indigenous

peoples’ rights and community conservation. They include the countries of six of the case studies of specific territories of life to build upon and connect the local and global analyses.

Finally, the report broadens its lens even further to the most up-to-date global spatial analysis of how much of the planet is likely conserved by Indigenous peoples and local communities, co-produced with the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC). This spatial analysis incorporates data from several sources, which are described in more detail in that report. In effect, this analysis focuses on a ‘subset’ of the overall extent of Indigenous peoples’ and local communities’ collective lands and territories that they are likely to be actively conserving.

The present document summarises key findings from all of these components across the three levels of analysis, all of which were produced specifically for this 2021 report. It does not provide a comprehensive review of other literature and initiatives outside of the components produced for this report. This executive summary then presents overall recommendations and specific recommendations for the post-2020 global biodiversity framework being negotiated under the UN Convention on Biological Diversity.



Rice fields alongside the road to the main entry of the Manjakatempo-Ankaratra Protected Area in Madagascar. Photo: JRR

What constitutes the full report?

- 17** Geographically, ecologically and culturally diverse case studies featuring Indigenous peoples’ and local communities’ territories of life
- 6** National and regional analyses of leading examples of grassroots initiatives and forms of policy and legal recognition
- 1** Up-to-date global spatial analysis of how much of the planet is likely conserved by Indigenous peoples and local communities
- An executive summary of key findings of all three level of analysis
- Content was collaboratively written by 72 authors, including many Indigenous and community leaders
- Methodology included consultations to seek free, prior informed consent
- Available in downloadable and web versions via dedicated website
- Translations into multiple languages for greater accessibility



Overview of case studies and national and regional analyses in the report

○ Case studies

○ National and regional level analyses



Key Findings of Territories of Life: 2021 Report

1

Indigenous peoples and local communities play an outsized role in the governance, conservation and sustainable use of the world's biodiversity and nature. They actively protect and conserve an astounding diversity of globally relevant species, habitats and ecosystems, providing the basis for clean water and air, healthy food and livelihoods for people far beyond their boundaries.

2

Indigenous peoples' and local communities' extensive contributions to a healthy planet are rooted in their cultures and collective lands and territories – in essence, the deep relationships between their identities, governance systems and the other species and spiritual beings with whom they co-exist. Thus, they are also contributing significantly to the world's cultural, linguistic and tangible and intangible heritage.

3

The global spatial analysis shows that Indigenous peoples and local communities are the *de facto* custodians of many state and privately governed protected and conserved areas, and they are also conserving a significant proportion of lands and nature outside of such areas. However, the mainstream conservation sector has a historical and continuing legacy of contestation for Indigenous peoples and local communities, depending on the extent to which their rights, governance systems and ways of life are recognised and respected. This poses both a challenge and an opportunity for future directions of local-to-global conservation efforts.

4

Indigenous peoples and local communities are on the frontlines of resisting the main industrial drivers of global biodiversity loss and climate breakdown, and they often face retribution and violence for doing so. Along with other challenges, these multiple stressors can have cumulative and compounded effects on Indigenous peoples and local communities, which in turn pose longer-term threats to their lives, cultures and resilience. However, they continue to resist and respond to these threats in diverse ways.

5

Even in the face of immense threats, Indigenous peoples and local communities have extraordinary resilience and determination to maintain their dignity and the integrity of their territories and areas. They are adapting to rapidly changing contexts and using diverse strategies to secure their rights and collective lands and territories of life. Although not without setbacks, they have made key advances and continue to persist in pursuit of self-determination, self-governance, peace and sustainability.

In the following pages, each of these key findings is backed up with relevant evidence from: (a) the case studies of specific territories of life; (b) the national and regional analyses; and (c) the global spatial analysis co-produced with UNEP-WCMC.

Key Finding 1

Indigenous peoples and local communities play an outsized role in the governance, conservation and sustainable use of the world's biodiversity and nature. They actively protect and conserve an astounding diversity of globally relevant species, habitats and ecosystems, providing the basis for clean water and air, healthy food and livelihoods for people far beyond their boundaries.

Select evidence from the case studies: Indigenous peoples' and local communities' collective lands and territories of life in the 17 case studies are strongholds of endemic, vulnerable, threatened and endangered species. For example, Tsum Valley in Nepal is home to the elusive snow leopard, the Qunan community in China is coaxing the white-headed langur back from the brink of extinction in their Fengshui forest, and Lake Natron in Tanzania is the world's most critical breeding site for lesser flamingos. Some of the territories and areas have been recognised internationally for their contributions to conservation, including as Important Bird Areas (Pangasananan, Philippines) and Zero Extinction Alliance Sites (Fokonolona of Tsiafajavona, Madagascar) and recipients of the prestigious Equator Prize (Kawawana, Senegal, and the Salween Peace Park, Myanmar).

The case studies give a snapshot of how Indigenous peoples and local communities contribute to ecological integrity, connectivity and restoration in diverse contexts around the world, ranging from small sacred groves in Guinea and community commons in Romania to hundreds of thousands of hectares of tropical rainforest and watersheds in the Amazon, Congo Basin and Southeast Asia.

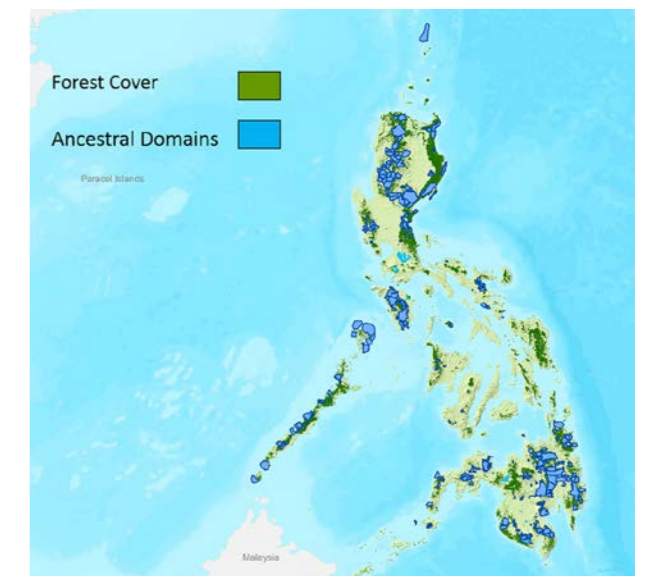
Together, these 17 territories and areas are conserving and sustaining an estimated 21,034,743 hectares, ranging from a 50-hectare sacred grove in Rajasthan, India, to the estimated 18 million hectares that Inuit have proposed for protection in their customary territory of Qikiqtaaluk (Baffin Island), Canada.

Select evidence from the national and regional analyses: In Iran, Indigenous nomadic peoples' territories cover nearly 60 per cent of the country's land, including 34 million hectares of rangelands and 660,000 hectares of agricultural land.

In the Philippines, an estimated 75 per cent of remaining forests overlap with Indigenous peoples' territories and 29 per cent of Key Biodiversity Areas are within Indigenous peoples' legally recognised territories.



Oldonyo Lengai watching over giraffes in the lowlands of Engaresero village, Tanzania. Photo: Lodrick Mika, 2020



Overlap of ancestral domains and the remaining forest cover in the Philippines. Map: Philippine Association for Inter-Cultural Development



In Indonesia, over 11 million hectares of Indigenous territories have been mapped across the country. So far, 102 territories and areas conserved by Indigenous peoples and local communities amounting to over 460,000 hectares have been registered and uploaded to a national land rights portal. At least an additional 2.9 million hectares of the country are estimated to be conserved by Indigenous peoples and local communities.

In Ecuador, it is estimated that territories of Indigenous, Afro-Ecuadorian and Montubio peoples and nationalities cover at least 40 per cent of the country (more than 104 million hectares). An estimated 73 per cent of their territories are in the Ecuadorian Amazon. Just five Indigenous territories registered in the global ICCA Registry (hosted by UNEP-WCMC) cover more than 1.79 million hectares of tropical rainforest, dry forest and shrub vegetation, all under Indigenous peoples' governance systems.

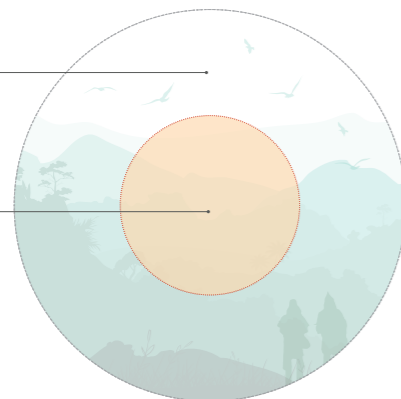
In Madagascar, a national network of nearly 600 communities (TAFO MIHAAVO) supports the customary governance of around 3 million hectares of forests across all 22 of the country's regions. More than 200 Locally Managed Marine Areas have been self-identified or established since 1998, covering approximately 17 per cent (1.75 million hectares) of the country's coastal and marine areas.

Total global land area

(134.9 million km²)

21%

Potential ICCAs
28 million km²
(approximately the size of Africa)

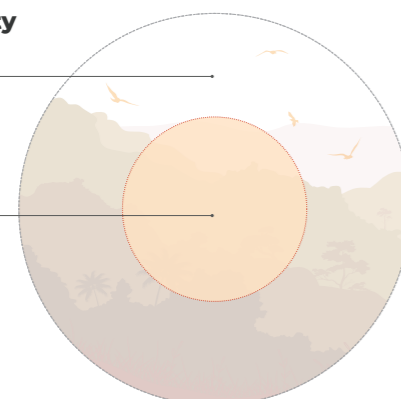


Total extent of Key Biodiversity Areas on land

Approximately 11.6 million km²

22%

Potential ICCAs
2.6 million km²



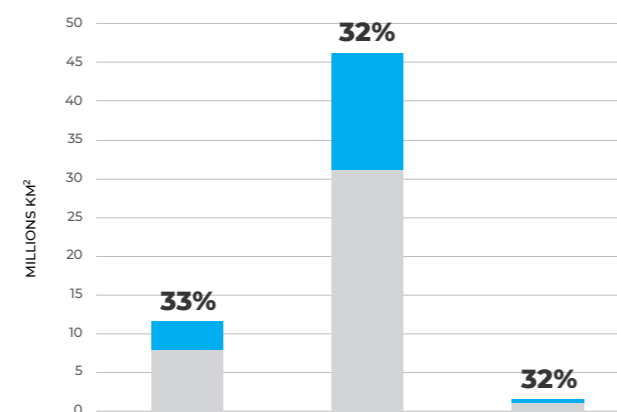
Select evidence from the global spatial analysis:

It is estimated that Indigenous peoples and local communities are actively conserving at least 22 per cent of the extent of the world's Key Biodiversity Areas and at least 21 per cent of the world's lands (approximately the size of Africa). This exceeds the extent of terrestrial protected areas governed by states, which cover less than 14 per cent of the world's land. They overlap to some extent with at least 113 countries and territories, and all of the world's 14 biomes.

Indigenous peoples' and local communities' collective lands and territories of life also cover at least one-third (33 per cent) of intact forest landscapes globally and nearly one-third (32 per cent) of areas that are considered key to reversing biodiversity loss, preventing CO₂ emissions from land conversion and enhancing natural carbon sinks.

In terms of ecological representation, territories and areas conserved by Indigenous peoples and local communities are estimated to overlap to some extent with two-thirds (66 per cent) of the 847 existing global terrestrial ecoregions. Ten per cent of these ecoregions are only found within territories and areas conserved by Indigenous peoples and local communities and not in any other protected or conserved area.

Extent covered by potential ICCAs



● Extent covered by potential ICCAs

- A:** Intact forest landscapes
- B:** Areas that are considered key to reversing biodiversity loss, preventing CO₂ emissions from land conversion and enhancing natural carbon sinks*
- C:** Terrestrial UNESCO World Heritage sites

*outside the state and privately governed protected and conserved area network

Key Finding 2

Indigenous peoples' and local communities' extensive contributions to a healthy planet are rooted in their cultures and collective lands and territories – in essence, the deep relationships between their identities, governance systems and the other species and spiritual beings with whom they co-exist. Thus, they are also contributing significantly to the world's cultural, linguistic and tangible and intangible heritage.

Select evidence from the case studies: Across all 17 case studies, the Indigenous peoples' and local communities' ways of life and cultural practices are as diverse as the nature they sustain, from pastoralists in the drylands of India and Iran, to fishers in the coasts of East and West Africa to Inuit hunters in the Canadian Arctic. Their very identities are tied to their territories and areas and often intertwined with spirituality and belief systems, underscoring how culture and nature are mutually dependent and inseparable.

Indigenous peoples' territories and local communities' areas are under complex systems of customary or

communal laws, governance and collective tenure. In many cases, they have adapted their governance systems to contemporary contexts. They also have extensive place-based knowledge systems and sophisticated forms of monitoring, management and adaptation that are interdependent with the species, habitats and ecosystems. For example, the Indigenous knowledge system of Inuit Qaujimatungit in Canada teaches that the caribou's life cycle lasts that of an elder, and they can predict phases of the population's abundance through on-going monitoring by Inuit hunters. Several of the case studies detail some form of self-determined zoning system whereby specific parts of the territories or areas are designated for different purposes to meet their social, cultural, spiritual and livelihood needs; many include areas specifically for conservation or strict protection.

As just a few examples of the diversity of cultural practices across these case studies, festivals of the Tsumba people in Nepal and Szekler community in Romania strengthen social cohesion, pass on knowledge to younger generations and reinforce values and norms such as respect, reciprocity and



The Wampis Nation's statutes define their territory as "integral and unified", comprised of intimate relationships between people and the different beings that inhabit the interconnected levels of Nayaim, Nunka, Nunka Init, and Entsa (i.e., aquatic, earth, subsoil and space). Only this integral vision is capable of securing their people's good living, or Tarimat Pujut. These ancestral relationships, intricately regulated between all beings, both visible and invisible to human eyes, are the foundation for their present-day autonomous governance.
Photo: Candy Lopez

responsibility. The Manon and Karen peoples use taboos to protect totem animals in Guinea and Myanmar. Sacred water sources are at the heart of centuries-old traditions of the Maya K'iché in Guatemala and of the Bambuti-Babuluko in the Democratic Republic of the Congo. The Kichwa people of Sarayaku and Wampis Nation in the Amazon sustain their multidimensional territories in accordance with their cosmovisions. Powerful forms of collective care and mutual support ensure equitable sharing of resources among many Indigenous peoples and communities, including the Dayak Kenyah of Bahau Hulu and Pujungan in Indonesia and the Inuit of Qikiqtaaluk (Baffin Island), Canada.

Select evidence from the global spatial analysis:

Cultural and linguistic diversity are intertwined with the diversity of nature, even in areas recognised primarily for their natural features. The global spatial analysis finds that almost one-third (32 per cent) of the extent of UNESCO's Natural and Mixed World Heritage sites (on land) overlaps to some extent with the estimated extent of territories and areas conserved by Indigenous peoples and local communities. Other studies have found that 80 per cent of all Natural and Mixed UNESCO World Heritage sites (designated for their natural features) intersect with at least one Indigenous language (Romaine and Gorenflo, 2020); in Africa alone, 147 Indigenous languages share at least part of their geographic extent with Natural and Mixed UNESCO World Heritage sites (Gorenflo and Romaine, 2021).



In the Christmas Village in Romania, community members planted a sweet chestnut grove at the beginning of the 20th century. It is a beloved communal space and used by the community school to teach lessons about biology and ecology. The community organises the Chestnut Festival using the commons' budget and reunites members to celebrate their commons on the first Saturday of every October. This festival represents a true expression of community values. Photo: Orbán Csaba



Bactrian Camel (two-humped) in Shahsevan territories (Northwest of Iran). Photo: Fatma Zolfaghari

Key Finding 3

The global spatial analysis shows that Indigenous peoples and local communities are the de facto custodians of many state and privately governed protected and conserved areas, and they are also conserving a significant proportion of lands and nature outside of such areas. However, the mainstream conservation sector has a historical and continuing legacy of contestation for Indigenous peoples and local communities, depending on the extent to which their rights, governance systems and ways of life are respected and upheld. This poses both a challenge and an opportunity for future directions of local-to-global conservation efforts.

Select evidence from the case studies: Indigenous peoples' and local communities' collective lands and territories are often deemed desirable or well-suited for protection or conservation by others precisely because they have protected and conserved them for generations. In most of the case studies, Indigenous peoples and local communities have complicated and contested relationships with 'official' protected and conserved area systems. Particularly in the case studies from the Philippines, India, Nepal, Madagascar, Tanzania, Guatemala and Peru, nation-state governments have established or are proposing

protected areas that overlap with significant portions of Indigenous peoples' territories and community lands without their free, prior and informed consent. These overlapping and conflicting jurisdictions have excluded Indigenous peoples and local communities from decision-making and undermined customary and local governance systems and livelihoods and sometimes their capacities to continue conserving their lands and territories. In some cases, protected area laws have criminalised the very cultural practices that sustained the conservation values of the areas they seek to protect. In other cases, supportive provisions exist in some capacity, but insufficient access to information and legal literacy mean that Indigenous peoples and local communities are often not aware of them. Peoples and communities are responding to these situations in different ways, for example, by opposing state interference in stewardship of their territory (Wampis Nation, Peru), finding ways to coordinate to some extent with the protected area authority (Maya K'iché people of Totonicapán, Guatemala) and seeking to have a state protected area recognised instead as a Community Protected Area (Fokonolona of Tsiafajavona, Madagascar).

In other contexts, Indigenous peoples are seeking to use protected area and conservation laws as a strategic opportunity to secure rights and legal protection

The Board for Natural Goods and Resources of 48 Cantons of Totonicapán, Guatemala. Photo: German García





Official handover of the legal title to secure the Kisimbosa forest. Photo: Joseph Itongwa

against other threats. For example, in the Democratic Republic of the Congo, the Bambuti-Babuluko Indigenous peoples have sought and secured the status of a 'forest concession' for their customary territory of Kisimbosa, but they are seeking even stronger legal status to protect themselves against mining. In this case, recognition as a protected area – if done in a certain way – could potentially be a beneficial layering of legal protection for the community. In Qikiqtaaluk (Baffin Island), Canada, Inuit organisations are actively seeking legal protection of an estimated 18 million hectares of their territory for their cultural and food sovereignty, including to protect caribou habitat and calving grounds against several mining interests.

The case studies also include positive examples of collaboration between Indigenous peoples and local communities, non-governmental organisations and governmental agencies, including in the context of protecting the habitat of a critically endangered species in the Fengshui forests of Qunan, China, and supporting the Dayak Kenyah of Bahau Hulu (Indonesia) to secure formal recognition of their territory.

Select evidence from the national and regional analyses: State protected areas overlapping with Indigenous peoples' territories is a significant issue to be addressed in Ecuador, Indonesia and the Philippines. In Ecuador, more than 16 per cent of the national protected areas system overlaps with the territories of Indigenous peoples and nationalities, several of whom are demanding recognition of their own governance and

conservation systems. In Indonesia, of the more than 460,000 hectares that have been registered nationally as territories and areas conserved by Indigenous peoples and local communities, 60 per cent are overlapped by state-recognised protected areas.

In the Philippines, 1.44 million hectares of legally recognised protected areas overlap with Indigenous peoples' ancestral domains. Indigenous peoples' sacred sanctuaries and forests are often overlapped by 'core zones' or 'strict protection zones' of state protected areas, where all activities are prohibited. Implementation rules of the 2018 national protected areas law are likely to exacerbate these conflicts between customary laws and nation-state laws and further criminalise Indigenous peoples' access to and use of these parts of their territories that are overlapped by state protected areas. However, a new bill currently being considered in the Philippines' Congress at the time of publication aims to clarify provisions in the key national laws on Indigenous peoples' rights and protected areas and recognise and support Indigenous peoples' and community conserved territories and areas as on par with protected areas.

In Sub-Saharan Africa, the legacy of colonialism and post-colonial state development has led to highly centralised ownership and control over land, forests, wildlife and other natural resources and there are notable examples of human rights issues in protected areas (e.g., Pyhälä et al., 2016). At the same time, there have been some important advances in recognising

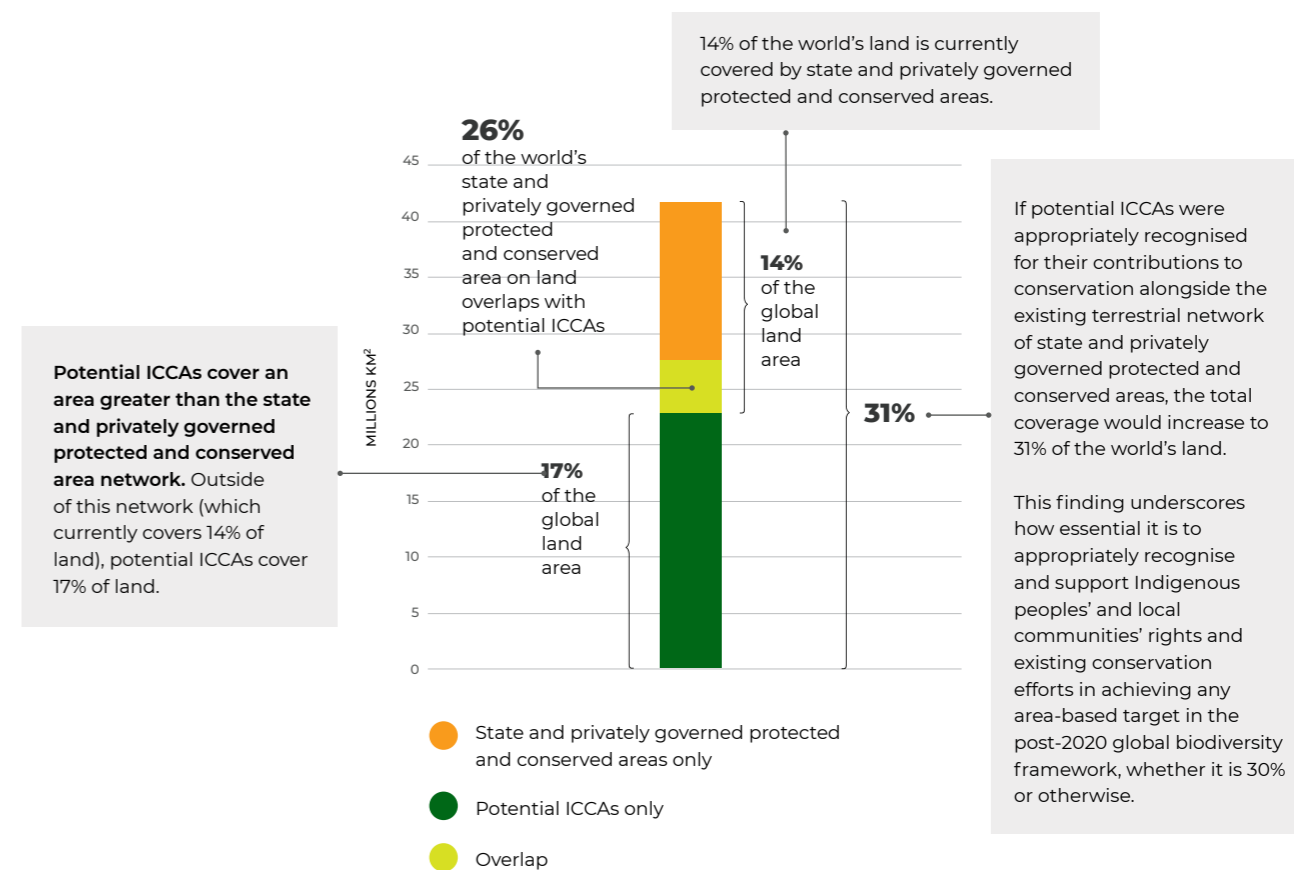
community management and use rights in national conservation frameworks. For example, Namibia and Kenya are often considered leaders in developing policy and legal approaches for community conservancies. In Namibia, community conservancies cover over 16 million hectares (roughly 20 per cent of the country's land area). This exceeds the extent of the country's national parks, and wildlife numbers have widely recovered across the conservancies. These experiences highlight the importance of enabling national policy and legislation (among other factors), while also acknowledging the need to continue strengthening recognition and realisation of community governance (not just management) and communal and customary rights to land, forests and marine resources more broadly.

Select evidence from the global spatial analysis: At least one-fourth (26 per cent) of the world's state and privately governed protected and conserved area (on land) overlaps with territories and areas conserved by Indigenous peoples and local communities. This spatial estimate raises questions about how these areas were established and how they are governed, managed and financed. Better understanding of situations of overlap could create opportunities for Indigenous peoples and local communities to seek redress for past or ongoing

issues and to advocate for recognition of their rights, governance systems and collective lands and territories.

As stated in Key Finding 1, the global spatial analysis estimates that territories and areas conserved by Indigenous peoples and local communities cover at least one-fifth of the world's land surface (at least 28 million km²). Of this area, 83 per cent (23 million km²) lies outside of protected and conserved areas that are governed by nation-states or private actors. This means that at least 17 per cent of the world's land is conserved uniquely by Indigenous peoples and local communities (i.e., outside of state and privately governed protected and conserved areas).

Furthermore, the global spatial analysis estimates that over half (52 per cent) of the extent of terrestrial Key Biodiversity Areas lies outside of state and privately governed protected and conserved areas. Of this area, an estimated one-fifth (20 per cent) is within territories and areas conserved by Indigenous peoples and local communities. These findings underscore the global significance of Indigenous peoples' and local communities' contributions to conserving the world's lands and Key Biodiversity Areas outside of the existing network of state and privately governed protected and conserved areas.



Key Finding 4

Indigenous peoples and local communities are on the frontlines of resisting the main industrial drivers of global biodiversity loss and climate breakdown, and they often face retribution and violence for doing so. Along with other challenges, these multiple stressors can have cumulative and compounded effects on Indigenous peoples and local communities, which in turn pose longer-term threats to their lives, cultures and resilience. However, they continue to resist and respond to these threats in diverse ways.

Select evidence from the case studies: In all but one of the case studies, Indigenous peoples and local communities are facing direct threats from harmful industries such as mining, oil and gas, logging, monoculture plantations, illegal and unregulated fisheries, road infrastructure and dams, and sometimes multiple overlapping claims.

In seeking to defend their lands and territories against these industries and other illegal activities they often beget (such as poaching), Indigenous peoples and local communities in several countries (the Philippines, Myanmar, Guatemala, Ecuador and the Democratic Republic of the Congo, among others) have faced violent threats to their lives and wellbeing, including harassment, physical attacks, criminalisation and even murder.

Together with exclusionary conservation measures (as considered in Key Finding 3), these industrial threats do not exist in a vacuum: they are rooted in complex histories and current realities of how Indigenous peoples and local communities interact with dominant political, legal and economic systems. In all of the case studies concerning Indigenous peoples, they face structural violence from nation-state policies, laws and institutions and prevailing societal attitudes (such as racial, ethnic or religious supremacy) that undermine their rights and cultures over time. Armed conflict and militarisation of Indigenous territories are major concerns in Myanmar, the Philippines, the Democratic Republic of the Congo, Guatemala and Ecuador.

In many of the case studies, the pervasiveness of the market economy is enticing youth to urban areas,



“The community and the company have diametrically opposed objectives: we seek to protect our resources through our customary rules, they are the opposite. What interests them is the extension of palm tree plantations. Ultimately, this would mean for us to lose our farmland, our sacred sites and our cultural identity.”

Gnan Sanko, youth of Gampa, Guinea

undermining Indigenous economies and subsistence livelihoods and disrupting intergenerational knowledge systems. Indigenous peoples and local communities are also drawing on their deep knowledge systems to cope with the effects of ecological and climate breakdown, including sandstorms (Iran), droughts (Tanzania), floods (Ecuador), melting glaciers and invasive species (Nepal) and receding bodies of water (Guinea). However, they may not be able to continue to adapt if global tipping points are passed due to ever-rising emissions and over-consumption.

Select evidence from the national and regional analyses:

In Ecuador, approximately 37.5 per cent of its continental territory and more than 60 per cent of the territories of Indigenous peoples and nationalities are slated for mining and oil activities. Extractive industries are concentrated in areas of high biodiversity, in the headwaters of river basins and in areas that will have transboundary impacts. In addition, protected areas are treated as ‘reserve zones for future extractivism’ and the state government modifies the boundaries of national parks to allow for oil exploitation in the name of ‘national interest’ (for example, in the Yasuni National Park, which overlaps with the territories of the Waorani, Tagaeri and Taromenane peoples). Furthermore, there is a clear contradiction between government policies that favour environmental issues and those that favour industrial exploitation of natural resources, with the latter trumping the former. Some of the same areas that the national government compensates for conservation under the Socio Bosque incentive programme (which reached 1.616 million hectares by 2018) are also subject to industrial oil and mining concessions (for example, in the territory of the Shuar Arutam people).

In the Philippines, conflicts between governmental agencies responsible for environmental matters and those responsible for economic growth and extractive industries such as mining generally fall in favour of the latter as well. Human rights violations are all too common in industrial projects such as large-scale mining and dams, with a culture of impunity in the current administration. Indigenous peoples face criminalisation of their rights and dozens have been killed extrajudicially; systematic weaponisation of the law (e.g., in the form of red-tagging) is a threat to Indigenous peoples and broader civil society as well as democracy itself.

Select evidence from the global spatial analysis:

Based on a cumulative index, at least 16 per cent of the estimated extent of territories and areas conserved by

Indigenous peoples and local communities faces high exposure to potential future ‘development’ pressure from industrial, commodity and extractive-based sectors (the other 84 per cent of the extent should not be considered free from such pressure). As a minimum protection against these pressures, it is important to proactively and urgently support Indigenous peoples and local communities to secure their rights to their collective lands and territories and governance systems.



“Over the last 40 years, dealing with change has become an inevitable part of our life; however, the rich biodiversity of our territory of life has strengthened our resilience to cope with critical situations on our own.”

Sardar Ali Reza of Shahiki tribe, Iran



An Uba (smallest social unit in Shahsavan tribal structure) in their summering ground in Iran. Photo: CENESTA



Key Finding 5

Even in the face of immense threats, Indigenous peoples and local communities have extraordinary resilience and determination to maintain their dignity and the integrity of their territories and areas. They are adapting to rapidly changing contexts and using diverse strategies to secure their rights and collective lands and territories of life. Although not without setbacks, they have made key advances and continue to persist in pursuit of self-determination, self-governance, peace and sustainability.

Select evidence from the case studies: Indigenous peoples and local communities have been affected by and adapted to the COVID-19 pandemic in very different ways. In some of the case studies, communities that had strong food sovereignty systems before the pandemic and cultural protocols to manage infectious diseases were able to cope relatively well; harsh lockdown measures imposed by nation-state governments had more impact on their lives and livelihoods than the virus itself. For example, lockdown measures affected income-generating activities and compromised peoples' safety in many parts of the Philippines. The Manobo's customary territory (Pangasananan) provided a safe space away from the virus and enabled people to have healthy food from their farms and forest and clean water from the creeks.



Photo: Kim Reina Toyongan

Several case studies shine a spotlight on how Indigenous peoples are asserting their rights to self-determination and self-governance in powerful and inspiring ways. In 2015, the Wampis Nation self-declared their autonomous territorial government with the aim of governing and protecting their ancestral territory of more than 1.3 million hectares in the northern Peruvian Amazon. As the first autonomous Indigenous government in Peru, the Wampis set a remarkable precedent for the region, as they place the defense of their well-conserved territory firmly within global efforts for biodiversity conservation and the fight against climate breakdown.



“This is what we gain from protecting our territory and its forests. All the difficulties paid off – the virus cannot harm us here. We survived the Japanese [during World War II], the logging company and armed rebels. We will surely survive this pandemic.”

Hawudon Sungkuan Nemesio Domogoy, Pangasananan, Philippines



“The Kawsak Sacha provides us with energy and gives us the air that we breathe; it is fundamental to our worldview. The Living Forest is a being with whom the Yachakkuna (Shamans) communicate in order to receive and transmit knowledge. This learning directs and guides us towards Sumak Kawsay (life in harmony). Kawsak Sacha is the primary source of Sumak Kawsay: it provides a space for living and for emotional, psychological, physical and spiritual revitalisation. The land, or Allpa mama, is our mother, the origin of life and of existence. Breaking any element of this holistic structure would mean cutting the vital links between the protective beings and human beings.” Excerpt from the case study of the Kichwa people of Sarayaku. Photo: Wachachik

In 2018, the Kichwa people of Sarayaku (Ecuador) exercised their autonomy and self-determination by declaring their 135,000-hectare territory as Kawsak Sacha (Living Forest), a living and conscious being and subject of rights.

The Indigenous Karen people of Mutraw District, Kawthoolei (Burma/Myanmar) formally declared the 548,500-hectare Salween Peace Park (Hkolo Tamutaku K'rer in the Karen language) in December 2018. The Peace Park is a result of grassroots efforts by the 348 Karen villages within it to practice democracy and self-determination, protect themselves and the environment from destructive investment and develop their own vision for a just, peaceful and sustainable future. They founded it to protect and bring peace to this bastion of biodiversity and Karen culture after over 70 years of conflict - one of the world's longest running civil wars. (After the military junta illegally seized power on 1 February 2021, they began bombing Karen villages in the Park on 27 March 2021, showing how tenuous peace can be.)

Select evidence from the national and regional

analyses: Indigenous peoples in the Philippines, Indonesia, Iran and Ecuador and local communities in Madagascar have self-organised powerful networks and alliances to advocate for legal recognition of their rights overall or in specific sectors such as land, forests and fisheries through nation-state policies and laws. However, even where they have secured positive advances in legislation and precedent-setting court rulings, they continue to face many challenges with practical implementation, including insufficient access to information and to remedy and justice for rights violations. This underscores the continuous nature of long-term struggles for rights and justice in nation-state systems, where Indigenous peoples and local communities are already at a significant disadvantage; sometimes a significant leap forward creates opportunities for other advances, and at other times, progress might stall altogether or even move backwards.

For example, Tanzania has been a leader within Africa in community-based forest management since the early 1990s. The country's village-based local governance system, combined with land and forest law reforms in the late 1990s and early 2000s, led to the creation of over



2.5 million hectares of Village Land Forest Reserves and new economic opportunities for communities. However, the spread of these areas has stalled in recent years and government support for community-based approaches seems to have retrenched, but could pick up again with the new President.

In Indonesia, the landmark Constitutional Court ruling (no. 35) in 2013 declared that forests traditionally conserved by Indigenous peoples and local communities have a different status and are distinct from state forests. This led to the documentation and registration of 10 million hectares of hutan adat (customary forests) by 2020. This ruling has been complemented by an important growth in district-level legislation that recognises and protects Indigenous peoples' rights as well as village level regulations prepared by communities themselves. However, the national law on Indigenous peoples is still pending in Parliament at the time of publication.

In the Philippines, the Indigenous Peoples Rights Act (1997) expressly guarantees the rights of Indigenous peoples to their ancestral domains (customary territories), cultural integrity, self-governance and empowerment, and social justice and human rights.

Although this Act is one of the strongest laws in the world in support of Indigenous peoples' rights, implementation has been patchy and the process to legally secure an ancestral domain (Certificate of Ancestral Domain Title) has become so complicated and bureaucratic that it actually counters the original intention of the law. Even with these challenges, the 221 Certificates of Ancestral Domain Titles currently issued cover 16 per cent of the country's total land area. If combined with all areas that are seeking such Certificates and under Native Title claims, they would cover an estimated 25 per cent of the Philippines' territory. Given the significant overlap between ancestral domains and the Philippines' remaining forests as well as Key Biodiversity Areas outside state protected areas, supporting Indigenous peoples to secure their legal titles to their ancestral domains should be a priority for Indigenous and environmental advocates together.



“We, the Indigenous Karen people of Mutraw... in order to create and sustain a lasting peace in our lands, protect and maintain the environmental integrity of the Salween River basin, preserve our unique cultural heritage, and further the self-determination of our people; do enact and establish the Salween Peace Park.”

Declaration of the establishment of the Salween Peace Park



Photo: KESAN

Conclusions and Recommendations

As negotiations intensify ahead of the UN biodiversity and climate conferences in late 2021, the time is now to recognise Indigenous peoples and local communities as the true agents of transformative change. They are so central to sustaining the diversity of life on Earth that it would be impossible to address the biodiversity and climate crises without them. Supporting Indigenous peoples and local communities to secure their collective lands and territories of life and a minimum bundle of rights is arguably a key 'missing link' in global commitments and national-level implementation. Of particular importance are the rights to self-determination, governance systems, cultures and ways of life, and rights to access

information, access justice and participate in relevant decision-making processes.

In practical terms, pursuing this agenda requires a massive increase in social, political, legal, institutional and financial support for Indigenous peoples and local communities, primarily from nation-state governments, but also from public and private financial institutions. It is time for social movements and civil society organisations working on human rights, conservation, climate justice and land issues to come together in this collective effort. Lawyers and legal advocates, researchers, journalists, communicators and others with specialised skill sets also have critical roles to play.

The overall recommendations of *Territories of Life: 2021 Report* are to:

- 1 **Recognise and respect the central role of Indigenous peoples and local communities in sustaining a healthy planet**, and the deep cultural and spiritual relationships and governance systems through which they do so.
- 2 **Support Indigenous peoples and local communities to secure their collective lands and territories, strengthen their self-determined governance systems, and sustain their cultures and ways of life on their own terms.** This requires significant reforms in national political and legal systems as well as international financial and economic systems.
- 3 **Embed and uphold human rights** (including Indigenous peoples' rights and other group-specific rights, where relevant) in all policies, laws, institutions, programmes and decision-making processes that affect Indigenous peoples and local communities, both internationally and domestically.
- 4 **Halt the drivers of biodiversity loss and climate breakdown, and halt threats and violence against the peoples and communities who are defending our planet.**
- 5 **Develop human rights-based financing as a key lever for equitable and effective implementation of global commitments**, including on biodiversity, climate and sustainable development.

In the short-term, there are several **opportunities for dialogue, leadership and convergence** in the negotiation and early-stage implementation of the **post-2020 global biodiversity framework**. The updated zero draft of the post-2020 framework states that it must “galvanise urgent and transformative action”. However, the early draft falls far short of this. Much higher ambition and stronger commitments are needed, in four areas in particular:

- 1 Explicitly recognise Indigenous peoples and local communities for their outsized roles in protecting and conserving nature. There is not yet agreement as to whether this should be the focus of a completely new target, or incorporated into an existing target (such as Targets 1, 2 and/or 20).
- 2 Place human rights at the heart of the post-2020 framework, including by:
 - Recognising and protecting human rights in general;
 - Recognising and protecting the specific rights of particular groups such as Indigenous peoples, peasants, women, youth, and people who are defending human rights and the environment;
 - Integrating minimum safeguards to prevent human rights violations and ensure accountability in certain targets of particular concern to Indigenous peoples and local communities (including Target 2);
 - Including human rights-related indicators in the monitoring framework, with disaggregated data for Indigenous peoples, local communities and women; and
 - Using a human rights-based approach to develop and implement National Biodiversity Strategies and Action Plans and related laws, policies and programmes at the national and sub-national levels.
- 3 Increase ambition in the targets intended to halt drivers of biodiversity loss, for example, by explicitly identifying the industries that are most harmful for biodiversity and committing to divesting from these industries as soon as possible, including by eliminating 100 per cent of perverse incentives by 2025 (Target 17). These issues are an opportunity for mobilisation of several interlinked movements, including for Indigenous peoples, human rights, a healthy planet, climate justice and alternative economies.
- 4 Increase political and financial support for Indigenous-led philanthropy and appropriate funding mechanisms that go directly to Indigenous peoples and local communities and their organisations. Require human rights safeguards and accountability mechanisms in funding for conservation initiatives implemented by governmental and non-governmental entities.

References

The executive summary refers extensively to the case studies and national, regional and global analyses that comprise **Territories of Life: 2021 Report**, all of which are hosted at: <https://report.territoriesoflife.org>. Additional references outside of the report components are listed below.

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Territories (case studies)





Photo: Joseph Itongwa



Kisimbosa

The Bambuti-Babuluko indigenous guardians of the “fertile forests”, Democratic Republic of Congo

Author(s):¹ Joseph Itongwa Mukumo and Christian Chatelain

Kisimbosa, the “fertile ancestral land”, is the territory of life of the Bambuti-Babuluko Indigenous peoples of Walikale, one of the administrative units of North Kivu province, in the east of the Democratic Republic of Congo.

This “fertile ancestral land” extends over 5,572 hectares of a mountainous tropical forest ecosystem, criss-crossed by several freshwater rivers. The isolated Kisimbosa area forces them to live off local resources; their food, medicines and building materials mainly come from the forest. Their forest contains one of the last areas of primary tropical forest cover in a region that has otherwise been plagued by numerous conflicts, including armed conflict, for more than 20 years. Kisimbosa is part of the Walikale forests, still spared by the intensification of agro-pastoral activities and by the significant degradation and deforestation that the rest of North Kivu province is experiencing.

Armed conflict has pushed refugees (especially Rwandan Hutu populations) into the Walikale forests, thus creating new and increased pressure on natural resources. To counter this, the indigenous people of Kisimbosa have used their traditional management system to strengthen restoration of extinct species, particularly the great apes. Several groups of chimpanzees have been re-established in the Kisimbosa forest, which is habitat to other plant and animal species (including endemic species) such as Congolese peacocks, leopards, monkeys, and green pigeons.

The Bambuti-Babuluko community of Kisimbosa (made up of four sub-communities or “families”) is generally recognised as Indigenous – and thus the oldest community in the area. Their own dialect has been slowly diluted so they now speak Kirega and Swahili, the languages of local, non-indigenous groups. The



Bambuti-Babuluko Peoples today lead a sedentary lifestyle on their ancestral territory, which provides them with their livelihoods, thanks to its healthy conservation status.

Traditional activities of the Bambuti-Babuluko community include gathering food and medicine, hunting, fishing, and the collection of materials needed for housing. Their cultural and spiritual activities take place in specific geographical locations such as sacred sites dedicated to the memory of ancestors, leopard caves, water points for green pigeons, and areas reserved for initiation ceremonies of the eldest members of the family, traditional circumcision practices, and learning about life in the forest.

Management bodies and an institution of governance derived from original Pygmy families

Four families (the Mwarambu Mbula, Bamwisho Shemitamba, Bamwisho Mutima and Ekamenga Mbula) are descended from the first ancestors who arrived on the site: Malonga, Mukumo and Mabaka. Very proud of their territory of life, these four families have historically divided it into subsections according to the links that each family maintains with a specific part of the territory. It is the unity and formal mapping of all these lands, however, that allows for their effective management and governance. A community assembly

“The forest is considered by the Indigenous Bambuti-Babuluko Pygmies not as a simple geographical space covered with trees but as a living being in its own right that interacts with them.”

Joseph Itongwa Mukumo

¹ **Joseph Itongwa Mukumo** is an Indigenous Bambuti-Babuluko Pygmy from his father's side. He has been working for 20 years to defend the rights of Indigenous peoples and local populations in the Congo Basin. As the ICCA Consortium's Regional Coordinator for Central Africa, he supports the network of ICCAs—territories of life in the DRC and throughout the region, as part of the Alliance Nationale d'Appui et de Promotion des Aires du Patrimoine Autochtone et Communautaire en RD Congo, **ANAPAC**.

Christian Chatelain is the ICCA Consortium's Co-Coordinator for Africa. He has directed several films on ICCAs in the DRC and on community governance more generally.

Translated from French by George Smith; revised by Claire Vittaz and Katharine Abbott. Edited in English by Colleen Corrigan.

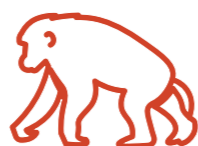




The “fertile ancestral land”
5,572 hectares of tropical forest



Indigenous Bambuti-Babuluko peoples of Eastern DRC, 6,100 persons



Emblematic species:
chimpanzees

is held annually and reviews the state of the forest, and identifies threats to the territory, possible causes of degradation and the responses to be made.

Kisimbosa has always had its own custodians or guardians of tradition. They are traditional leaders who, like Mr. Paul Aluta and Mukumbwa Nkango, maintain the customs and traditional rules involved in the governance and management of their environment. They are the bearers of their land’s history; they have an intimate knowledge of the land and can communicate its values and their understanding of how best to prevent its degradation. To this end, they lead traditional and cultural ceremonies related to the sacred sites, they lead initiations for young people, and they monitor expeditions in the forest. This traditional ancestral authority is today structured around two main bodies officially re-established in Kisimbosa: a Council of Elders, made up of elders from each of the four original families,

and a committee of customary leaders, made up of the first born of each family lineage (Malonga family, Mukumo family, and Mabaka family).

The Council of Elders is the decision-making body of Kisimbosa. It is the guardian of tradition and its role is to revitalise cultural practices and traditional rules required for the sustainable use and maintenance of Kisimbosa’s ecosystems. It also deals with conflict resolution on a daily basis and, at annual community assembly meetings, discusses the various problems of the territory of life and its future.

A community monitoring and zoning system

The committee of customary leaders is the management body of Kisimbosa. It supervises the day-to-day management of the community forest, which includes



The caves are among the privileged sacred places of the Bambuti-Babuluko Pygmy Indigenous peoples to honour their ancestors. Photo: Christian Chatelain

the application of conservation rules, sustainable use of its resources, and surveillance. It is based on a division of the territory into three types of zones:

1. Strict protection zones in which the strong values of the community are made sacred, such as the tops of the Mashugho and Chankuba mountains, where traditional ceremonies are regularly organised. These areas are prohibited from any agricultural activity.
2. Areas of ongoing and permanent activities for the life of the community, where agriculture is allowed.
3. Areas of temporary or seasonal activities, such as certain portions of rivers used for communal fishing (Choko), or some forest areas used periodically for hunting.

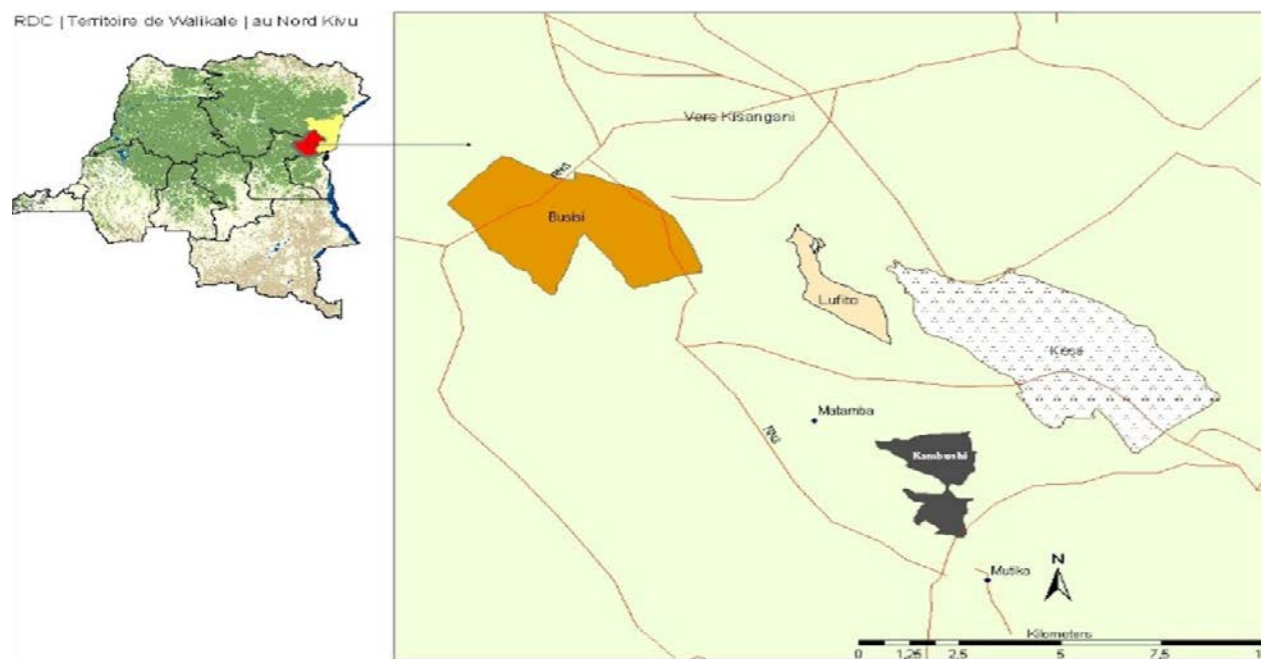
This zoning system is coupled with sustainable management customs that have been passed down from generation to generation, for example, fishing (collective and seasonal fishing practices without metal objects), agriculture (prohibited zones), and gathering or hunting (hunting of certain animal species authorised only for ceremonies and rites, hunting with nets and not with wire ropes, prohibition of hunting in the rainy season in certain places because the animals find refuge there, and so forth). A monitoring committee called “Bansonji” has also been set up to codify and enforce the regulations known as “Kanuniyapori”. Sixteen volunteers

(four people per village), including three women, patrol the entire area of Kisimbosa once a month.

While the Kisimbosa territory has its own institution of governance based on this customary system, it has also obtained the status of a “Forest Concession” from the Congolese administration. This status gives the community the possibility to decide for itself how the forest is managed and, based on this status, the Kisimbosa community has chosen to make the forest a conservation area. This does not, however, give Kisimbosa the status of Congolese Protected Area (which would then be referenced in the list of official Congolese protected areas). It is nevertheless an important step towards the legal recognition of other types of conservation and governance systems for conserved areas, in addition to existing state-regulated areas.

Living forests are a highly respected source of sustenance for the communities

The Kisimbosa territory provides high-yielding agricultural production, medicinal products, sustainable hunting and fishing, timber and woods for making tools and furniture, various tree saps with elastic, sticky, flammable, and lighting properties. Other useful forest products such as lianas, bamboos, and marantaceae leaves in which cassava, a major food staple for the



The four forests of Kisimbosa represent more than 5,572 hectares mapped and managed individually by their riparian communities; map: ANAPAC



whole of Central Africa, is wrapped. The population also depends on the forest for cultural and spiritual reasons, including honoring ancestors, seeking leniency from the spirits, maintaining initiation rites, cultural dances, and ceremonies for conflict resolution and for coming of age. The forest is considered by the indigenous Bambuti-Babuluko Pygmies not as a simple geographical space covered with trees but as a living being in its own right that interacts with them. It is a source of pride and a vital necessity with which every indigenous Bambuti person strongly identifies.

The extreme isolation of this territory creates some particularly challenging living conditions for the community. The distance from markets makes it difficult to easily exchange harvested produce and essential manufactured products. However, this isolation also helps to maintain the area's rich biodiversity and the high quality of its forest products. The "stability" offered by this territory has enabled the community to be protected from total economic poverty, unlike other indigenous communities in similar contexts whose land has been despoiled and can no longer practice their agricultural activities, hunting or cultural rites.

Forests threatened from outside by poaching and mining and inside by discouraged communities

Kisimbosa is threatened by several converging phenomena. The first and perhaps oldest is poaching,

a clear and growing threat. Bantu hunters from other parts of the country carry out disorderly and unsustainable hunting practices. They hunt everything, at all times, with all types of weapons (firearms, weapons of war, wire ropes, etc.), mainly for commercial reasons, and sometimes benefiting from alliances with local government leaders.

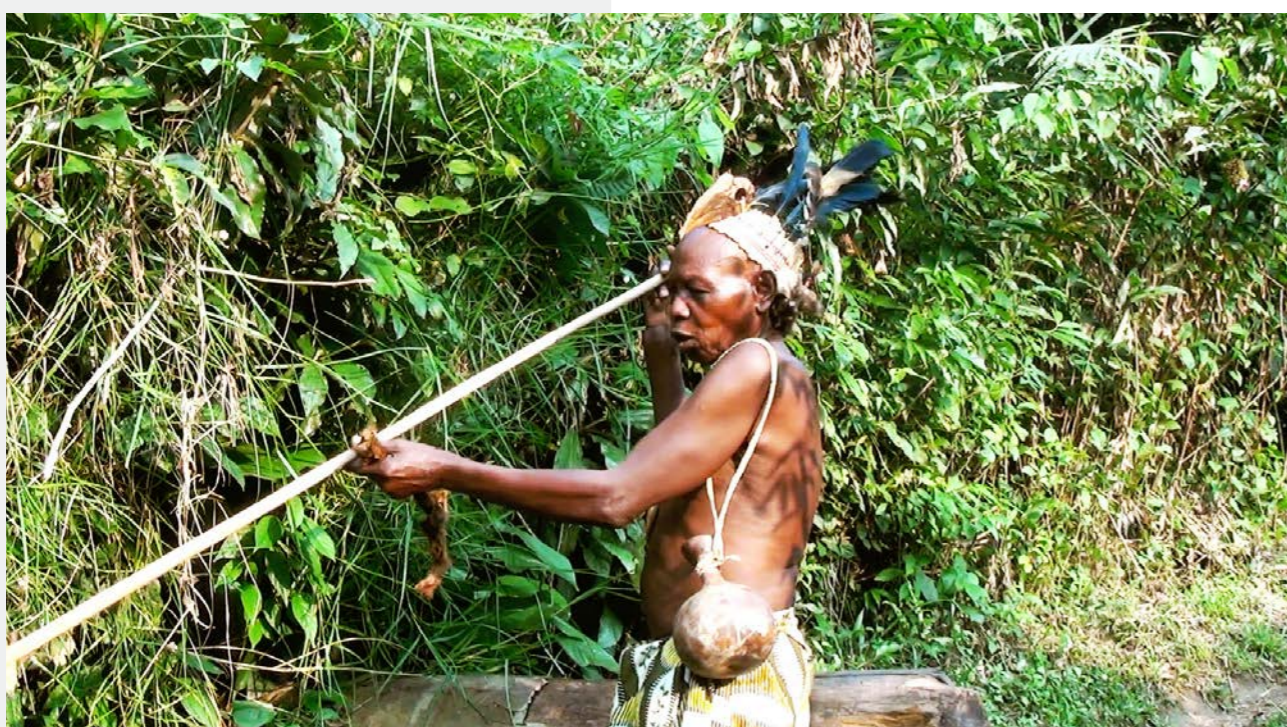
The community of Kisimbosa has been aware of the need to preserve its culture and environment against this type of threat for more than 30 years. Since 2008, it has been fully committed to this goal, as illustrated its self-recognition as an ICCA in 2013 (with technical support from the ICCA Consortium). The recognition of their territory of life by the community itself, as well as its legal recognition as a Forest Concession by the State, has revitalized and strengthened its governance structure. As a result, the committee of customary leaders has been mobilized and a forest watch has been organized. In addition, members of the community, depending on their own capacity and availability, would now no longer hesitate to resort to state services in cases of poaching and other environmental abuses.

Nevertheless, while the new regulations were successful in limiting illegal hunting by "outsiders", they have not all been universally accepted by neighboring communities. Indeed, since the recognition of the forest as an ICCA by the community of Kisimbosa, it is prohibited to everyone to access it for hunting and setting traps in quantity. Neighboring communities therefore question regulations and the forest monitors of Kisimbosa face sometimes violent threats.

A third threat to Kisimbosa is more internal to the community. Some members of the community are becoming impatient and would like to see their forests contribute more quickly to meeting their economic and social needs, such as getting children into school, improving the health system, and meeting the various needs that require household income.

Young people are at the forefront of this threat because they have high expectations about the long-awaited benefits that come with the conservation of their forest; they find that they are not reaping those benefits quickly enough. Disappointed, they may no longer be willing to commit to the cultural codes of conduct dictated to them by their elders. The abandonment of certain cultural values that are needed to maintain Kisimbosa's ecosystems is a threat in its own right, especially if their system of transmitting

Chief Aluta, traditional indigenous leader.
Photo: Christian Chatelain



This woman goes to the market with at least 20 kg of bananas, cassava and marantaceae leaves on her back. She will carry this load for more than three hours and will come back with an equally heavy load of rice, sugar, salt and other products necessary for her whole family. Photo: Christian Chatelain

intergenerational traditional knowledge is not sufficiently strengthened.

Another widespread threat is mining exploration and extraction. The territory of Kisimbosa is one of the regions in which some miners have bought community land in collusion with provincial and national deputies. This represents a significant threat of eviction for certain groups from the community of Kisimbosa who, without sufficiently strong recognition and security mechanisms in place, risk losing their forests.

Lastly, even though the Congolese state has granted Kisimbosa a Forest Concession, and recognizes the community rights of the Bambuti Indigenous peoples "in perpetuity", nothing guarantees that this same state will not retake control of this title, downgrade it or reclassify it, thus endangering the relative security these communities have acquired in their territory.

In Kisimbosa, the Bambuti-Babuluko Pygmies are proud to have saved their environment and their culture

In addition to its Forest Concession status, the main source of hope for the Bambuti community

is the pride they feel in successfully preserving and securing their territory, which is in turn their source of life. They are aware they have saved their territory from loggers and locally elected officials who try to buy the communities' land as well as from the loss of certain animal species they have managed to reintroduce. Despite initial difficulties, a lack of information, latent discouragement, and a feeling of powerlessness in the face of multiple external aggressions, the community has been able to respond effectively and now realizes, especially considering the arrival of surrounding communities fleeing their own forests which are being cleared, that their efforts have paid off.

The main objectives of the Kisimbosa community include ensuring their territory is intact for future generations, preserving its cultural, ecological and socioeconomic functions that contribute to the well-being of its inhabitants, and anticipating the alterations of seasons caused by climate change. To fully achieve their ambitions for the Kisimbosa territory of life, the community have put in place: (1) a sustained and secure traditional governance structure; (2) a land use plan; (3) a monitoring plan defined and regularly re-evaluated by community assemblies; and (4) a system of intergenerational transmission of knowledge to sustain

Pygmy culture. The Kisimbosa forest is the *raison d'être* of the Bambuti-Babuluko Pygmy Indigenous peoples and they are proud not only to have succeeded in conserving it, but also to have their accomplishments recognized on a larger scale.

Thanks to the community's struggle for the legal recognition of their conservation efforts, they are truly preserving the Kisimbosa forest, and the plant and animal diversity that lives therein. The Kisimbosa forest is a powerful example of how communities are conserving forests and their ecosystem processes on their own terms. It also highlights the crucial role community forests can play in carbon sequestration and fighting deforestation and degradation – all part of the Congolese government's wider strategy to combat climate change.

Following the example of Kisimbosa, many other communities have declared their ICCAs and have formed the National Alliance for Support and Promotion of Indigenous and Community Heritage Areas in DR Congo (ANAPAC).² Let us hope that the Congolese state and many other rural communities, in the DRC and in the sub-region, indigenous or not, learn from this experience.



“You children have to keep your pygmy culture but also go to the white school so that you will never be neglected by anyone again.”

Mukelenga, community elder

² Alliance Nationale d'Appui et de Promotion des Aires du Patrimoine Autochtone et Communautaire en RDCongo, ANAPAC.

Women play a crucial role in intra-community awareness and intergenerational transmission of indigenous Pygmy cultural values. Photo: Christian Chatelain

Official handover of the legal title to secure the Kisimbosa forest. Photo: Joseph Itongwa





Photo: Jean Baptiste Koulemou



Yogbouo

A sacred pond protects the community in Gampa, Guinea

Author(s):¹ Cécé Noël Kpoghomou, Mamadou Diawara

The Manon peoples of the forest and mountainous region of the Republic of Guinea proudly practice their customs, preserving their local ancestral memory and traditions that have been passed down from generation to generation. Manon society considers this their cultural and environmental heritage, linking the past, present and future.

The Yogbouo Pond of Gampa is a living example of this culture. This sacred site and its surroundings are home to a remarkable flora and fauna consisting of woody vegetation, with large trees, and various endangered species including the hippopotamus and chimpanzee. In addition, several mysteries, tales and legends, told over thousands of years, have contributed to this environment's rich cultural heritage.

The Gampa territory of life has a surface area of 176 hectares (located 07°15 N / 08°50 W). The Yogbouo

sacred pond is located in the extreme south-east of Guinea, on the edge of the village of Gampa, and 22 km from Diécké, headquarters for the Guinean Society of Oil Palms and Heveas (SOGUIPAH), as well as the sub-prefecture. It is bordered to the south-east by the Mani River, which marks the border between the Republic of Guinea and the Republic of Liberia, to the west by the industrial plantation of SOGUIPAH (which borders the territory of life), and further north by the Diécké protected forest, located 10 km from the territory of life.

This territory of life is composed of a sacred pond of 9.8 ha, a men's initiation forest (37 ha) and a women's initiation forest (4.6 ha), an area dedicated to subsistence farming (food crops, fallow land, livestock, fish cultivation, gathering, and hunting) of 118 ha, and a habitation area (6 ha).

The sacred pond Yogbouo is an "invisible entity", a place



176 hectares



Community of Gampa
1,800 inhabitants

where individual and collective misfortunes are resolved. It ensures the protection of approximately 1,800 inhabitants of the villages of Gampa against harmful forces and is involved in many therapeutic rituals where the officials in charge of the site also welcome visitors from other neighbouring or distant communities.

Endowed with rich biodiversity, this ecosystem offers a peaceful and safe habitat for wildlife. This highly humid environment near the **Diécké protected forest** (64,000 ha, classified as a State Protected Area) represents a space of significant ecological value, favourable to the development of diverse forms of life. The region is an

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Collaborators: Domou KPAMOU (logistics); Jean Baptiste KOULEMOU (photography); Pépé Ouro KPOGHOMOU (cartography); Amara KOUROUMA (cartography).

Translation from French: George Smith

“Initiation in the sacred forest is the most exciting part of our existence, and the most vibrant element of our community. In the initiation forests, we find and strengthen our values. And the Yogbouo Pond is where we find solutions through prayers and offerings.”

Pé Gbilimy, community member of Gampa



important area for birds, home to large endangered mammals such as pygmy hippopotamus, several species of fish, crab and reptile – in particular, pythons and crocodiles – and also forms a refuge for various large mammals coming from neighbouring Liberia.

The guardians of the sacred pond

The story of the Yogbouou Pond, with its biodiversity, ecological benefits and cultural values, willingly conserved by the local community, is truly compelling. According to patriarch Nyan Mizi Simmy, the pond became sacred following the decision of women from Gampa to fish in the pond without any authorization. When the women entered the water, they all disappeared and were never found again. The villagers then began to cry and lament their cruel loss, hence the pond's local name, "Yogbouou", which means "too much crying" in Manon. Now, offerings are made to the genies during various ceremonies.

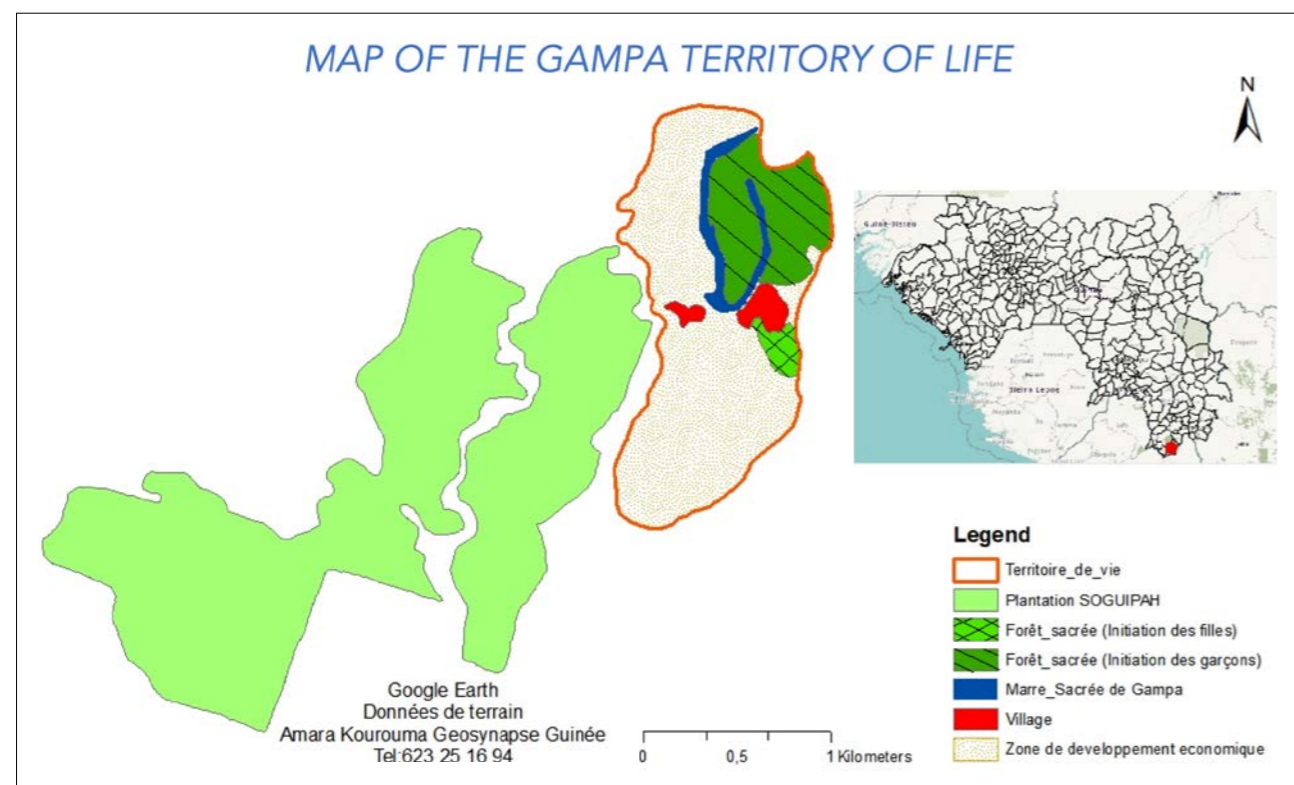
In this region, sacred sites, which include the pond and the surrounding forest, are the exclusive property of a clan or a tribe (Maomy, Sandy, Mamy, etc.) and are where these groups make sacrifices in homage to their ancestors,

asking for their help to satisfy a specific need or overcome a particular problem. These forests also symbolize the origins of totemism where an event experienced by an ancestor achieved success or defeat in war.

Totemism

Among the Manon, families are patriarchal and organized in patrilineal clans. A clan designates all the descendants of a mythical ancestor associated with one or more species, animal or plant, which is then forbidden to be eaten or killed by that clan. For example, the Maomy do not eat the meat of the panther and the Sandy do not eat the flesh of the boa constrictor. The Manon refer to these proscriptions as "totem". Other prohibitions also exist in different clans, such as sitting on a mat made of a certain grass or, for the Loua clan, wearing boubous and striped loincloths. For most forest peoples, breaking the ban results in swelling or scabies or other skin diseases, which are signs of contamination.

In general, there is no single divine or supra-terrestrial understanding of the origin of these different proscriptions, with each prohibition having its own



Map of the Gampa territory of life (red outline) and the adjacent SOGUIPAH oil palm plantation.
Map: Amara Kourouma



Family photo of the guardians and managers of the Yogbouou Pond. Photo: Jean Baptiste Koulemou

origin story. However, amongst the forest dwelling communities of Guinea, there are various ideas and traditions, unique to each community, which help explain the origins of totemism. The four main reasons for adopting these proscriptions are: familiarity or resemblance with the person; indications given by the diviner; services provided; and fear. Amongst the Manon, the sacred forest also constitutes a temple of fetishism and a sanctuary where secret rites and ceremonies take place.

For the Manon of Gampa, the relationship with this aquatic environment, and the forest island that surrounds it, is one of dependence for survival. Each individual (man or woman) of this clan has their corresponding pairing in the forest or pond, among its wild and aquatic animals and fish. And it is they alone who know the secret of metamorphosing into their own species (man-antelope, man-panther, man-boa, woman-wing, etc.). This is the reason why the Manon Indigenous populations are resolutely attached to the ecosystem in their territory, regarding it as a fundamental source of life.

The council of elders

In Gampa, traditional authority plays an important role in the management of the territory and structures the

governance of the village community. This community is headed by a customary chief, and follows two basic structures of governance, one vertical and one horizontal: (1) the household family, extended family, lineage and clan constitute the vertical structure; and (2) the brotherhood of officials responsible for sacred worship constitutes the horizontal structure. There is an intimate relationship between these two structures, which complement each other in the processes of managing community affairs and the use of resources from the pond and elsewhere in the territory of life.

A council of elders ensures the governance of local resources; it is responsible for making decisions about the management of all the village's natural resources. This council also makes decisions on all social issues, including conflict and dispute management. The council acts as the community's voice and expresses their concerns or needs to the state. The state, for its part, respects the existence of the pond as part of the community's cultural and environmental heritage. **Article 19 of the Constitution of Guinea** states: "The people of Guinea have an inalienable right to their wealth. [And] to the preservation of their heritage, culture and environment."

Customary management rules are dictated and applied by the council of elders, who then propose them to the village council. These rules include, for instance, the



allocated periods of fishing, harvesting of wild fruits, or setting the dates of ritual ceremonies and initiations. Here the local rules are established to better protect the environment, prohibiting the exploitation and consumption of certain species of plants and animals at certain times of the year. Outside of rituals and/or annual collective fisheries, the access to the sacred sites is strictly limited: only a select category of persons, who carry a specific tattoo, are allowed to go there.

Customary systems of resource management are dominant in rural areas where land and resources are inalienable, and access to land is secured by social identity and belonging to the lineage group. In Gampa, customary law is under the control of families and lineages that have the historical and social status of “first occupants”: they have rights of access to and control over resource use and management.

Conservation and biodiversity

The primary forest surrounding the sacred pond is home to large tree species such as the irokos (*Milicia excelsa*),



Nyan Mizi Simmy (member of the council of elders) on the rules and sanctions around the sacred pond.

the African locust bean (*Parkia biglobosa*), and the *bombax costatum*. The territory's fauna include several species of fish and mammals such as buffalo, harnessed bushbuck, several species of duikers, primates such as chimpanzees, the black and white colobus, the bay colobus, and the diana monkey, as well as the pygmy hippopotamus and panther. The entomological fauna is also very rich.

In Manon country, the plant and animal world constitute cultural and environmental heritage carefully nurtured over several millennia, which provides important treatments for several human and animal diseases, as well as offering key nutritional benefits. One key resource is natural palm oil (*Elaeis guineensis*), the main source of edible oil in the forest region. Its branches are also used to cover huts and huts. Another key resource is raffia (*Raphia sudanica*), which produces wine of the same name and is a major element of identity and pride. It is used as an alcoholic beverage and generally consumed in groups to stimulate the completion of agricultural work, wedding ceremonies, baptisms and other occasions and festivities. Its sap, raw or processed, is also used in the treatment of measles.

The people of Gampa also derive several economic and environmental benefits such as production of fish and timber for construction and energy, and protection of houses against strong winds and climatic hazards. The surrounding forest is thus considered by the community as a “green lung” that allows them to live.



Pond-keepers in a meeting. Photo: Jean Baptiste Koulemou

Threats and responses

Pressures from development, religion and climate all have impacts on the territory, its resources and culture. In the face of growing land pressure from oil palm and rubber plantations – established by the “SOGUIPAH” industrial company, which has been present in the region since 1987 – several animal and plant species of the sacred pond and its associated ecosystems are currently under threat, which is leading to progressive loss of resources. For example, Iroko timber is being excessively exploited in the surrounding area.

Monotheistic religions (Islam and Christianity) also have a strong disruptive influence, capable of causing major transformations in human-nature relations, and in the value and belief systems they induce. The increasing influence of these religions, together with formal education, has seen a significant reduction in sacred forest areas and a gradual abandonment of the community's traditional practices and customs. For example, rituals in sacred forests that generally used to last seven years have now been reduced to only three months.

Another threat is the year-on-year decrease in the amount of water contained in the pond, probably due to nearby deforestation and the effects of climate change. This is a major concern for the community, which is relatively powerless to cope with it.

However, the main conflict around the Gampa Pond continues to be related to the SOGUIPAH company. According to the inhabitants of Gampa, in the 1990s, this company had asked the state for a portion of the forest island in the middle of the pond to extend its palm plantations. This request was rejected by the community of Gampa, thus avoiding the expropriation of part of the territory. The rejection of this company's request comes from the local customary structure which, until now, has remained resolutely opposed to the influence of the central state structure.

Today, the nature of the relationship between SOGUIPAH and the neighbouring communities remains deeply conflicting because of the opacity in its management and the failure to implement various collaboration agreements; one that was drawn up on 19 June 1986 protects places of worship and land reserved for field work and village plantations.

In a memorandum addressed to the President of the Republic published in the local newspaper “Ziama Info” on 30 January 2014 under the title “**SOGUIPAH: The**



“The community and the SOGUIPAH company have diametrically opposed objectives: we seek to protect our resources through our customary rules, they are the opposite, what interests them is the extension of palm tree plantations; ultimately, this would mean for us to lose our farmland, our sacred sites and our cultural identity.”

Gnan Sanko, youth responsible of Gampa



anger of the local communities", Michael Sonomy, spokesperson for the youth, writes: *"The various collaboration agreements signed between SOGUIPAH and the population of the two communities are concealed by the company's managers to such an extent that no one in Diécké and Bignamou [the two neighbouring rural communes whose territories are occupied by SOGUIPAH] can clearly define the company's social and environmental responsibility towards these communities... The populations of the two localities are confronted with enormous difficulties, including the inadequacy of environmental protection measures..."*

Despite these various threats, however, there are opportunities for the sustainable and community-driven development of territories of life in Guinea. Local communities show willingness to preserve their natural and cultural heritage and there is high value of the goods and services generated by their collectively conserved territories and areas. In addition, the local government legislation considers the views of customary authorities and international cooperation supports community-based initiatives.



François Saoromy talks about the conflict with the company SOGUIPAH.

Gampa: A vision for the future

According to a retired former civil servant, Ouo Sangbalamou, in order to bring about the required changes and raise the issue of the Gampa Pond to the top of the national agenda, *"it will be necessary to foster synergies with other national projects and programs working in the same direction or for similar causes, and mobilizing other institutions accordingly. Furthermore, it will also be necessary to increase awareness among the youth of the importance of endogenous ancestral knowledge and practices, for example on the subject of sacred forests and the transmission of traditional knowledge, two of the most important subjects in the Manon environment."*

Mr. Nyasson, a youth representative, states that it will be important to *"set up a sustainable financing system for the sacred pond and associated ecosystems in order to preserve its long-term biodiversity and threatened species therein"*. For Mr. Togba Zomou, a member of the council of elders, it will also be necessary to *"strengthen the legal and physical protection of this key forest area [the initiation forest for boys and girls], not only because it is home to totemic plants and animals and other species, but also because it is an important area for the ecosystem services provided by the transition zone between the Yogbouo Pond and the Diécké protected forest."*

To do this, local communities today need the support

The Yogbouo Pond of Gampa is a living example of the Manon heritage. Photo: Jean Baptiste Koulemou



The youth's traditional apprenticeship (pot fishing).
Photo: Jean Baptiste Koulemou



Women also participate in focus group meetings.
Photo: Jean Baptiste Koulemou

of international agencies, national governments, and civil society more generally, to help them tackle their challenges, old and new, particularly in the context of future environmental, health or social crises. These crises have a serious impact on the income of farmers who are sometimes forced to draw on their seed reserves for food or to turn to other illicit activities such as poaching and illegal fishing in the conserved areas. To avoid this and to help the population of Diécké and Bignamou as much as possible, various solutions are proposed such as:

- Promoting market gardening on small irrigated areas managed by women's collectives;
- Promoting village fish farming to improve the resilience of local communities in Gampa;
- Strengthening traditional Indigenous conservation methods for the sacred Pond of Gampa by emphasising the importance of their traditional rules; and
- Supporting the conservation and development of the natural and cultural heritage of the initiation forests for the men and women of Gampa's territory of life.

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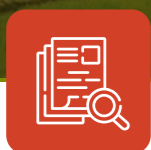
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Photo: Mihanta T. Bakoliarimisa



Fokonolona of Tsiafajavona

A territory of life in Madagascar

Author(s):¹ Mihanta T. Bakoliarimisa

It is said that the *Fokonolona*, or local community, of Tsiafajavona descends from the five sons of the King called Andriampenitra. The community's territory of life is partially overlapped with the 8,130-hectare high-altitude **protected area of Manjakatempo-Ankaratra**. The territory of life consists of at least 16,000 hectares located in the district of Ambatolampy, around 100 km south of the capital city of Madagascar. It hosts the third highest mountain in Madagascar known as Ankaratra, culminating at 2642 m on *Tsiafajavona* which means "always mist".

A relationship deeply rooted by a unique history

The *Fokonolona* of *Tsiafajavona* has existed since the royal era.² The territory of life is delineated by the five *tsatobato*, or stones, symbolizing the five sons of King

Andriampenitra. Its delimitation is known as *Dimy lahy manodidina ny kianja* or "the five men around the arena". *Manjakatempo* was a sovereign kingdom belonging to the Merina ethnic group, which is still the majority population today (followed by the Betsileo ethnic group). The King's story relates two significant facts: the culture of *Tsy azo tantarina* ('keeping secret') and the King's request to his daughter's suitors.

Nowadays, the culture of 'keeping secret' still exists. Initially intended to keep secret the kingdom's defense strategies against other kingdoms during the conquest wars of the reunification period, it is currently used to preserve endogenous knowledge and the genealogy of the King's successive generations.

Although the natural forests already existed, the King promised to marry his daughter to the suitor who would bring him the most forest species in the mountain.



16,000 hectares



Custodians:
Fokonolona of Tsiafajavona,
31,000 members

This is the origin story of today's rich biodiversity which comes from across different parts of the island.

This story is the basis of a strong and rooted identity of the *Fokonolona* community as the descendants of King Andriampenitra. It guides their efforts to bequeath these precious resources and endogenous knowledge to successive generations.

¹ **Mihanta T. Bakoliarimisa** is volunteering for the national network of local communities managing natural resources, **TAFO MIHAAVO**, a Member of the ICCA Consortium. Mihanta is committed to amplify voices for the recognition of rights and responsibilities of local communities. She is also the Chair of the Programme Committee of the ICCA Consortium.

Translation: Mihanta T. Bakoliarimisa and Jina R. Ratsimba

² The royal era lasted between 1500 to 1896; the exact duration of the kingdom of Andriampenitra is not known to the author.

“Ny mitevy ala dia maha kizo fara – Clearing forests compromised our descendants’ future.”

A Tangalamena of Tsiafajavona, 2020

Photo: JRR



One Fokonolona: a territory of life rich in biodiversity, a unique culture, and means of subsistence

More than 5,000 households comprising 31,000 members of the *Fokonolona* depend on the territory of life and its resources. Ankaratra Mountain and its associated forest habitat maintain water sources that feed the lowlands for rice cultivation and provide drinking water. The misty mountain and forest ecosystems of Tsiarafavona regulate the micro-climate of the territory of life due to the soil's water retention and the evaporation that leads to the formation of clouds, mists and rain. The cold lake provides drinking water for the town of Ambatolampy, located about 17 km from the lake.



“Manjakatampo sady tsy tompoina no tsy manompo – Manjakatampo is a sovereign, self-reliant kingdom, not servant to nor served by others.”

Traditional proverb

The *Fokonolona* lives entirely from traditional farming. Rice, cassava, corn and potatoes are the main crops, and cattle, pigs and poultry are the most common livestock. Crops and livestock are dedicated entirely for household consumption. In the case of urgent needs of cash, some of them are sold within the village. The forest also provides firewood from pine and eucalyptus forest plantations, subject to prior authorization from the forestry authorities.

The *Fokonolona* has pride linked to the presence of flagship species, endemic to their territory of life. The existence of the amphibians *Boophis williamsi* and *Mantidactylus pauliani* has granted the area status as a **Zero Extinction Alliance site**. There is also an endangered species of Gecko, *Lygodactylus mirabilis*. Part of the territory of life is considered an important area for birds' conservation, especially for the species *Tachybaptus pelzelni*. Aloe macrolada is also present in the protected area, a widely used medicinal plant listed under **CITES (Appendix II)**. The Protected Area has 11 Critically Endangered, 32 Endangered, and 25 Vulnerable species (**CEPF profile 2014**). This rich biodiversity promotes ecotourism, another source of income for some members of the community who are united in the association of local guides.

The *Fokonolona*'s attachment to their territory of life

The 'cold lake' provides drinking water for the town of Ambatolampy. Photo: JRR



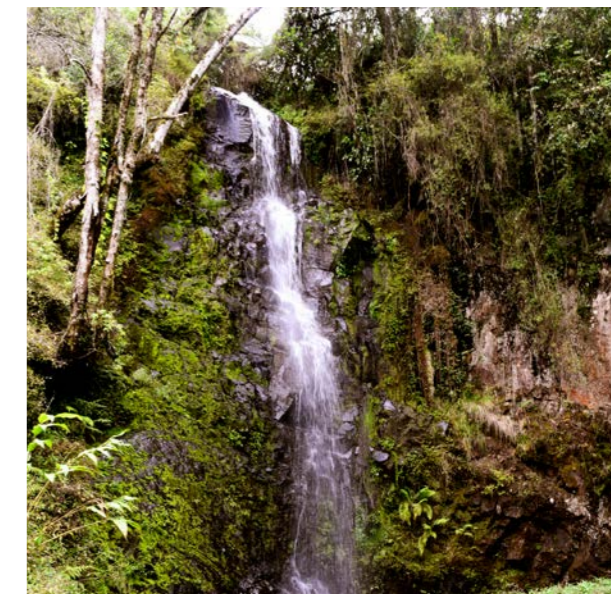
Rice fields alongside the road to the main entry of the Protected Area Manjakatampo-Ankaratra. Photo: JRR

lies in ecosystem services offered to them. They are intransigent about the conservation of their forest because it represents the dowry of their princess and a legacy to successive generations. The territory has seven *Doany*, or unique sacred sites, mostly tombs of successive kings where thousands of people from across the country come to practice rituals and worship every year. Waterfalls and water sources are among the sites where people ask to be healed from incurable diseases or delivered from evil spells or witchcraft.

The methods for weather forecasting rely on the birds called *Kankafotra* (*Cuculus rochii* or Madagascar Cuckoo) which predict a period of rain, drought, or hail. Offering rituals are accordingly indicated by the Tangalamena at specific sacred sites to thank or ask for blessings from ancestors and nature. Astrological omens are used to determine specific days, including the most famous *Alahamady*, *Alakaosy* and *Alahasaty*. *Alahamady* is a rejoicing day celebrated every three years to thank Mother Earth, also known as *Malagasy New Year's Day*. *Alakaosy* is dedicated for rituals to honour parents. People are prohibited from playing music, drinking alcoholic beverages, and eating pork and garlic at *Ankaratra* sacred sites during these rituals.

Several interests in contradiction and a complex game of actors

There are divergent interests between conservation



Waterfall of Ankaratra and sacred site ou Doany. Photo: JRR

and use, commons and private interests, which led to multiple designations in parts of the territory over time:

- From 1923, as a forestry station designed to protect natural forest and practices of silviculture with exotic species such as pines and eucalyptus during colonization;
- Under state management after independence in 1960;
- From 1998: implementation site for the project of Integrated Forestry Development of *Vakinankaratra* through the State Ministry of Water and Forests, and German cooperation (Gesellschaft für Technische Zusammenarbeit);
- From 2001, in accordance with Law 96-025 called GELOSE,³ contracted management of forest by "Union Forestière d'Ambatolampy";
- From 2008, return to state management;
- Proposed twice as an area of high conservation priority;
- As a new protected area (Manjakatampo-Ankaratra) in 2013 for temporary protection purpose (see **ARRETE N° 14983/2013**); and
- As a definitive protected area (Manjakatampo-Ankaratra) since 2015 (see **DECRET N°2015-711**).

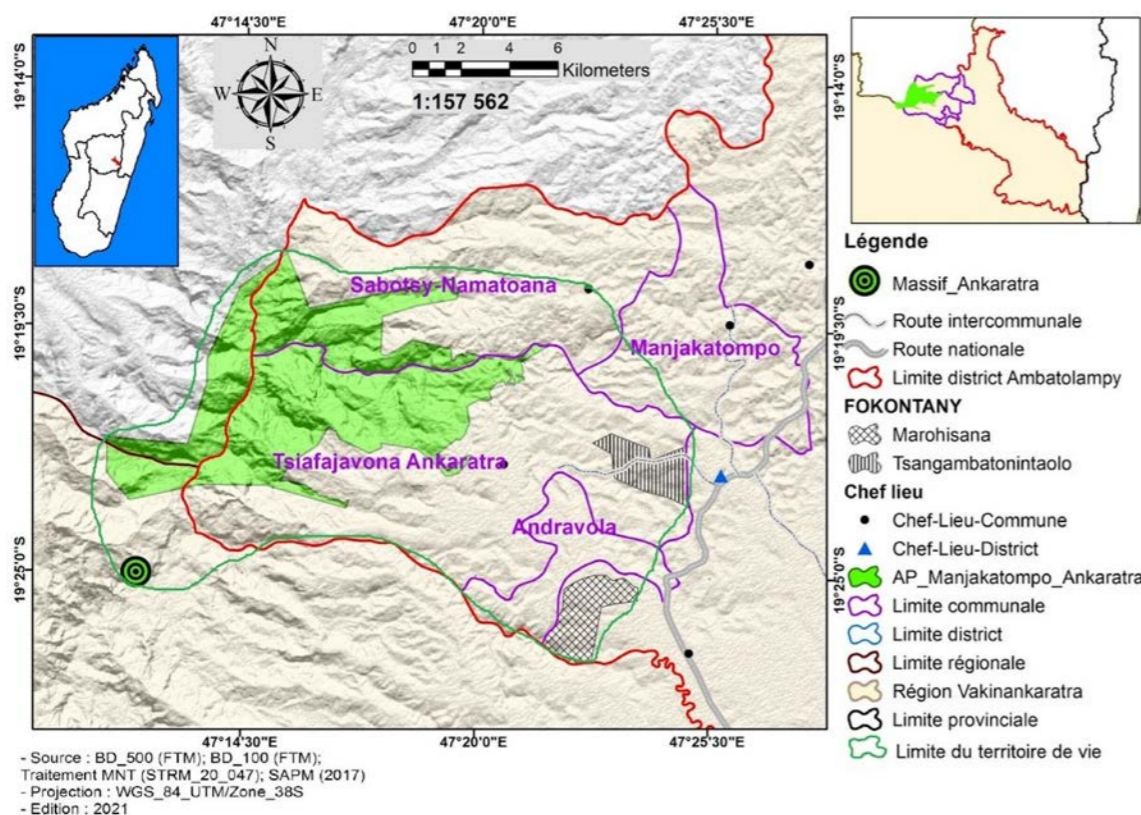
³ Law 96-025 regards local management of renewable natural resources. See [here](#).

The *Fokonolona*'s self-determined territory of life does not have any legal recognition. Governance remains customary and respects the advice of the *Tangalamena*, or wise persons, grouped in the association *Ankaratra Tsy Rava Fenitra*. The *Tangalamena* act as guardians of ancestral values and as cultural guides. They hold specific attributes, knowledge and know-how, depending on the genealogical lineages of the five sons of King *Andriampenitra* to which they belong. They are responsible for: (1) interpreting meteorology; (2) being the guardian of the *Hazomanga* or ritual stick; (3) being the guardian of the fady or forbidden; (4) practicing traditional medicine; and (5) predicting specific days according to astrology and the appropriate rituals of offerings to sacred sites called *Doany*. Decision-making by the *Fokonolona* related to use of natural resources, fauna, flora, water and land, depending on guidelines set by the *Tangalamena*.

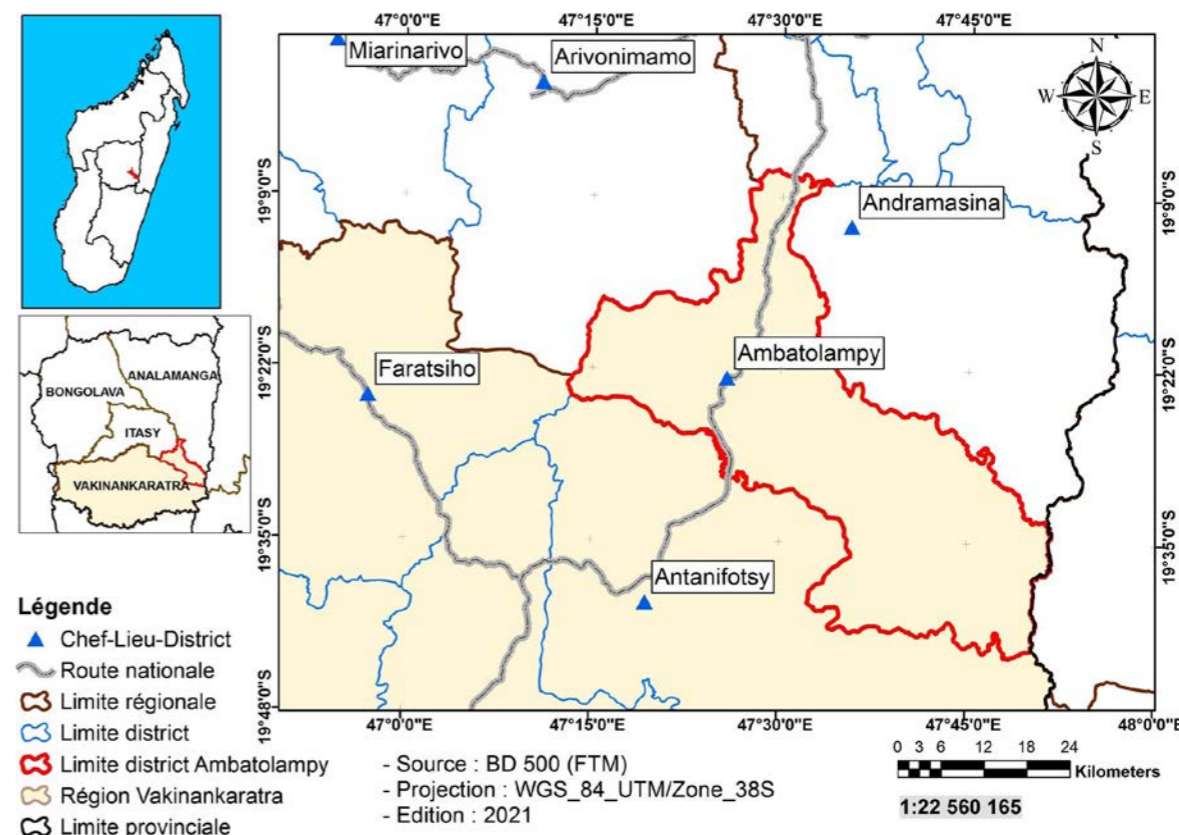
The legal rights to manage the Manjakatempo-Ankaratra protected area (which does not cover the entire territory of life) are assigned to two different types of institutions with overlapping responsibilities. On the one hand, there are eight community-based organizations called *Vondron'Olona Ifotony (VOI)*,

legitimately representing the descendants of the King. Since 2014, they are legally managing eight sectors of the Manjakatempo-Ankaratra Protected Area through contracts of management transfer (initially for 3 years and then renewed for 10 years).⁴ The VOI were created around the same time as the proposition for the new Protected Area in 2011. On the other hand, there is the NGO *Vondrona Ivon'ny Fampandrosoana (VIF)*, based in the capital city Antananarivo, which had promoted the creation of the Manjakatempo-Ankaratra Protected Area with the financial support of Global Wildlife Conservation (GWC) and Conservation International (CI). Following this, the NGO was mandated by the Ministry of the Environment to be the delegated manager of the protected area.

Manjakatempo-Ankaratra is a "Natural Resource Reserve" and classified as IUCN management category VI.⁵ The establishment of a protected area was decided by the State via the Commission of the System of Protected Areas of Madagascar, following a consultation which many residents perceived as flawed. As the community notes, the consultation process did not comply with the best standards for seeking free, prior



Map showing the approximate delimitation of the Fokonolona of Tsiafajavona (green outline) and the protected area (green area). Credits: P. Ramanamandimby / M. Bakoliarimisa



Administrative boundaries and location in Madagascar. Credits: P. Ramanamandimby

and informed consent. Instead, consultation meetings were marked by a culture of fear that created a silent majority, and those who expressed their reservations and disagreement were struggling to find the right arguments and were ultimately not heard.

According to existing laws and rules,⁶ the modality which should be applied in this protected area is co-management with local communities. The creation of the protected area was also formalized through a *Dina* (a typical *Malagasy* social convention) and a *Tangalamena* (wise person) is in charge of its application. The *Dina* is a set of rules defined collectively in consultation within the management committee, which is presided by the mayors of *Tsiafajavona* and *Sabotsy Namatoana* administrative communes and made up of representatives of the eight VOI community-based organizations and the *Tangalamena*. Three monitoring patrols are carried out weekly by rangers called *KASTI* alongside members of *Fokonolona*, to prevent and detect any illegal exploitation and non-compliance with the *Dina*.

There have been challenges, however. Since June 2020, this institutional arrangement has become

flawed because the NGO VIF left the area after its project funding ended. Also, the mandate of the mayor concluded. The management committee is therefore no longer functional. Meanwhile, the process of legal recognition of the *Dina* is still pending at the Court of first instance.

The State government, through various ministries and its branches, owns and holds full powers to decide over the use of national lands and natural resources while the *Fokonolona* remains an advisory body in decision-making related to the use of its territories. Unfortunately, this advice is often ignored by the authorities. The following decisions were made entirely within this prerogative: use of Cold Lake (120 ha) by Jirama (state-owned company supplying electricity and drinking water); establishment of the Harivola trout fishing farm

⁴ According to the law 96-025 (called GELOSE) on the local management of renewable natural resources.

⁵ Article 1 of Decree No. 2015-711 of the Establishment of the Protected Area called "Manjakatempo-Ankaratra".

⁶ Article 5 of Decree No. 2015-711 of the Establishment of the Protected Area called "Manjakatempo-Ankaratra".

in 124 ha; use of 60 ha of forest containing water sources for the Nouvelle Brasserie de Madagascar⁷ bought by the Brasserie Star beer brewery; allocation of cultivation land to Fifamanor; and the allocation of a forest concession to the furniture company Hazovato.

Main threats to the Fokonolona, their territory of life, and their future generations

The risk of conflicts between conservation and use of resources affects the future of the territory of life. The fact that the State recognizes only protected areas as a privileged means of biodiversity conservation and imposed modern governance institutions threatens the *Fokonolona's* sense of belonging to the territory. The lack of recognition of the *Fokonolona* risks leading to disempowerment and disinterest of community members in their traditional governance body.

No proper participatory spatial planning process took into account the different rights-holders and interest groups when the boundaries of the Manjakatempo-Ankaratra Protected Area was superimposed on part of the territory of life. This is detrimental to the sound management of natural resources. Not considering the *Fokonolona's* decisions related to their commons gradually erodes their will to participate in the management of the territory. Even more, community members point out that it disturbs the transfer of traditional knowledge to the next generation. Many consider that the *fady* (secret and forbidden) has been broken.

There are other threats to the survival of the *Fokonolona*. For example, growing families that have been farming

the same plots of agricultural land for generations cannot expand their farmland because the state granted large areas to private groups. Other sources of income such as tourism activities are scarce because of difficult access due to the bad state or lack of roads.

Some members of the *Fokonolona* are demotivated from participating in conservation activities by the imbalance or lack of benefit-sharing by private companies. They are also deprived of the use and access to vital resources to their survival. For example, the Cold Lake supplies the city of Ambatolampy with drinking water, while the communities who are protecting it do not have access to it. Local communities have to pay fees to collect firewood, while each community-based organization has an obligation to produce and plant 12,500 plants annually, according to the contract of management transfer with the Ministry of Environment and Sustainable Development.

Insecurity, due to political instability that has reigned in the country since 2009, pushes the *Fokonolona* to sleep with their livestock to prevent being robbed. The ineffectiveness of law enforcement and the justice system in case of theft or illegal exploitation threatens the social peace within the territory of life.

Uncontrolled bushfires ravaged part of the forest between 2009 and 2011. This threat of wildfires always occurs during dry periods. Reforestation actions are deployed to restore these parts, firebreaks are put in place, and increased surveillance is carried out during risky periods.

The *Fokonolona* members are often victim of reprisals when they claim their rights and seek accountability from



The Tangalamena, a representative of the forest department and community members indicating the territory of life delineation on sketch map. Photo: JRR



Community leaders and representatives of the Fokonolona, the eight community based organisations, the Tangalamena, the association of local guides, TAFO MIHAAVO Vakinankaratra. Photo: JRR

authorities, including compensations for the use of natural resources in their territory. In order to restore the balance in benefit sharing from the use of natural resources, the *Fokonolona* has begun the process of taking over the management of the protected area. This process aims to achieve the status of Community Protected Area under the **Code of Protected Areas**, which mentions "community governance" as a recognized governance type and considers Community Protected Areas and Marine Protected Areas as a specific Protected Area type. Several Community Protected Areas already exist in Madagascar where co-management is promoted between major international conservation organizations and community-based organizations. However, the aspiration for Manjakatempo-Ankaratra is to make it an entirely community-led (governed and managed) initiative.

Appropriate recognition of community rights is the missing piece for authentic sustainable development

Aware of the importance of its flora, fauna, land, and water to their survival, the *Fokonolona* of *Tsiafajavona* aspires to restore indigenous forests and revive local cultures for future generations. This forest restoration drive is accompanied by their initiative to use plastic-free alternatives within the nursery through the use of earthen pots. They request access to technologies such as the use of drones to carry out forest

monitoring, in order to reduce their workload and redirect it to productive sectors.

The *Fokonolona* asks that benefit-sharing arising from the exploitation of the territory of life's resources should be renegotiated with all stakeholders. The aim is to set up win-win collaborations between the state, the private sector and the *Fokonolona*.

Strengthening *Fokonolona's* rights to appropriate and affordable land tenure remains a priority to improve their livelihoods. Community members hope that improved access to land combined with agricultural inputs and capacity building on organic farming will boost production. In particular, they have in mind a local variety of potato called *Ovin'Ankaratra*, for which the region was once famous.

To realize their vision, it is fundamental to gain the appropriate recognition of the customary governance system and legality of *Fokonolona*. Thus, the *Fokonolona* of *Tsiafajavona* wants to have their territory of life recognized as a Community Protected Area where decision-making on resources and spatial planning are community-led and adapted to the local culture.

⁷ Article 6 of Decree No. 2015-711 establishing the Protected Area called "Manjakatempo Ankaratra".





Photo: Christian Chatelain



Kawawana

Community mobilisation for the environment brings the good life back to the village in Senegal

Author(s):¹ Salatou Sambou and Christian Chatelain

Kawawana means “*Our heritage to be preserved together*”. It is the fruit of the efforts of a few local fishermen from the Diola people of Lower Casamance. They united in an association, self-mobilising the communities of their eight villages and bringing together nearly 12,000 people, without any external financial support, and established the reconstruction of a territory of life that had been deteriorating.

The president of these fisherman became especially concerned about restoring better food, social, and environmental conditions for the population. Learning about the possibility of declaring a community conserved area on part of the municipality’s territory, he used his network of fishermen and approached each of the families concerned. The purpose was to help mobilise all possible volunteers around the re-establishment of local, ancestral fishing rules for

the well-being and restoration of their ecosystems. This ecological restoration resulted in the recovery of the food chain, with several species of fish and their predators reappearing.

Kawawana is also an emblematic example of the restoration of the “good life in the village” through solidarity as well as the reactivation and revaluation of traditional rules and practices of natural resource use that are strongly rooted in the local culture. Kawawana also has the great distinction of having been the first territory of life officially recognised as an ICCA (APAC in French) by the government in 2010, paving the way for other communities to declare other territories of life.

Kawawana is located in Blouf, in the southern part of Senegal. It covers 9,665 hectares, representing 30 per cent of the area of the commune of Mangagoulack. Its



9,665 hectares



Custodians: Community of Mangagoulack, 12,000 members

¹ **Salatou Sambou** is the ICCA Consortium’s Regional Coordinator for West Africa. He is a fisherman, the main founder of Kawawana and currently the Coordinator of the National Consortium of ICCAs—Territories of Life in Senegal.

Christian Chatelain is the ICCA Consortium’s Co-Coordinator for Africa and also promotes ICCAs in France.

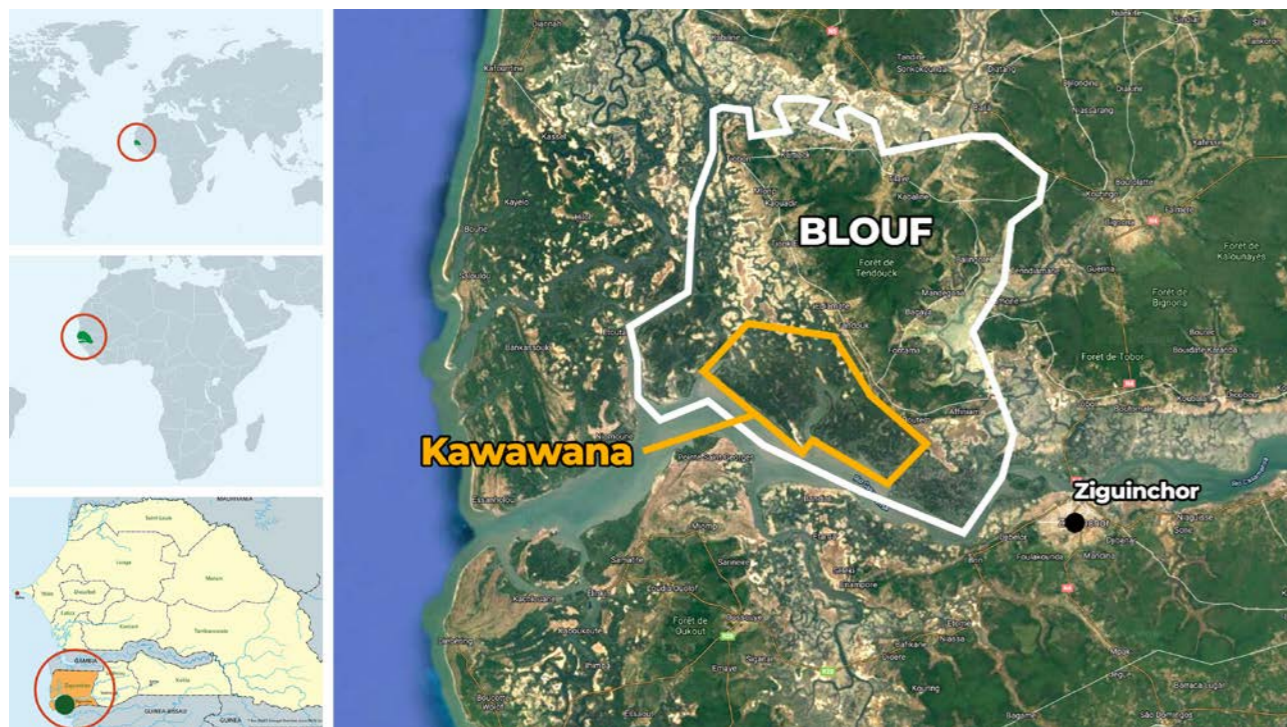
Translated from French by George Smith

“Since Kawawana was born, the people have found themselves in very good health. We have seen that the fishermen live again, thanks to Kawawana. And when the fishermen live, we live!”

Mr. Idrissa Goudiaby, villager of Tendouck

Photo: Grazia Borrini-Feyerabend





Kawawana in Senegal and in the world. Map: Ines Hirata

main ecosystem is Soudano-Guinean and it is made up of estuarine mangroves interspersed with canals (Bolong). The main ecological functions maintained by Kawawana are those of protection (of soils against erosion and salinisation, of species against habitat loss through deforestation, of biological equilibrium against invasive plants) and regeneration (spawning grounds and nursery) of fish in safety from predators.

Links with the territory based on traditions that are still intact despite globalisation and modernism

Historically, each Diola village had its own *bolong* and sacred wood with its own functions and prohibitions. Today, there are still sacred links between the living environment and subsistence activities such as agriculture, hunting, fishing, craftwork, and so forth. The Diola people are known for maintaining strong social cohesion and cultural values that are still very much alive, and the guardian community of Kawawana remains rooted in these traditions, which have strongly resisted the more problematic aspects of development and globalisation. Even today, it still relies on local resources for an economy based on barter (growing rice for food, fishing, arboriculture, gathering, hunting, handicrafts, etc.) as well as close and sacred links

with its living environment (sacred woods, prayer sites, forbidden forests, forbidden *bolongs*, etc.). The community of Kawawana has reinstated customary rules and know-how for the use and conservation of its resources by becoming deeply aware of its dependence on this territory for its survival. The community has a very strong sense of identity with its territory and is very proud of its culture, which it sees as a source of wealth rather than a hindrance to its development.

The majority of the population of Kawawana is made up of young people. Although almost all attend school in the formal education system, the youth are still very attached to their culture and its symbols such as the sacred woods and various rites of passage into adulthood, which provide the spaces and moments for the transmission of knowledge between generations. Emigration affects this part of Senegal, but the presence of Kawawana limits this rural exodus and helps young people stay in the village. While knowledge of the geography and biodiversity of the area is known to all Diolas (even the youngest), more esoteric or mystical knowledge is held and preserved by the initiated. These are particularly the wise men but also the women of the community who are, for example, the only ones who are empowered and able to put in place (necessarily at night) the fetishes required for the application of the traditional rules defined by the whole community.



The Diola community of Kawawana depends on two forests: 1) mangroves, rich in fish and oysters, and 2) terrestrial, rich in timber and non-timber forest products. Both are now part of the Kawawana ICCA and provide many environmental services to the population. Photo: Christian Chatelain

The biological effects of conservation in Kawawana extend far beyond the boundaries of the ICCA and benefit the entire region economically and socially. Photo: Christian Chatelain



The Mangagoulack terrestrial forest (more than 5000 ha), saved from charcoal production by the mobilisation of the population, is now part of the Kawawana ICCA. Photo: Christian Chatelain



Tough local regulation is better accepted and enforced than national regulation

One of the main achievements of the fishermen of the Rural Community of Mangagoulack, grouped in an association called APCRM,² was not to create a new institution with new rules, but to rehabilitate, revitalize and strengthen their local customary institutions and old rules by adapting them to the demands of today's world.

The institution of Kawawana is based on traditional systems of community and local management of mangrove resources and is made up of various bodies, including a General Assembly, a Community Council, a Bureau, a Council of Elders and a Scientific Council, and each of the eight villages concerned is represented in it. It has been recognised by the Senegalese government since 2010 and holds collective rights of access, conservation and regulation. In spite of modern legislation with unclear land law, this customary institution is highly effective in regulation because it is better adapted to the context, better understood by the population, and more effective than modern national regulations, which are poorly applied for various reasons.

Kawawana's governance institutions are empowered to enforce their regulations. Twenty-four of their representatives participated in government training to become qualified as monitoring officers to record infractions, arrest offenders, and present them to the

relevant state services (fisheries or forestry). These 24 volunteer monitoring officers of Kawawana thus ensure, on behalf of their community and in service of the decentralised state, a policing of locally established rules which are much more rigorous and effective than what happens outside of Kawawana.

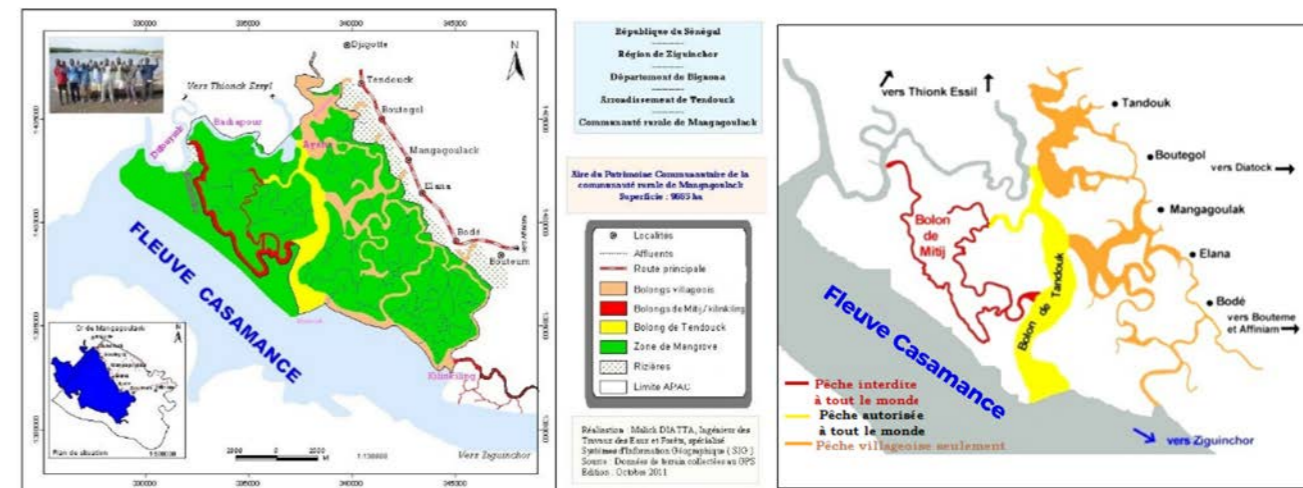
The governing institutions of Kawawana have drawn up a management plan consisting of three internal zones to manage the mangroves in their territory of life. A first zone is off limits to everyone, protecting a reproductive site for fish populations and a home to the ancestors and the spirits of conservation. A second area is reserved for village fishing; the products of this fishery having to be either consumed or sold locally by local intermediaries in order to satisfy local demand at a price accessible to the greatest number of community members. A third fishing zone is authorised to everyone but prohibits the use of nets that are not permitted by national legislation. The fish and fish products from this zone can be sold freely on all markets in the region.

These rules are displayed both in modern and traditional ways (signposts and fetishes), and widely explained, particularly via radio (the 12,000 people in the community know what Kawawana is and are able to describe it). Kawawana has its own team of monitors (who, in addition to their voluntary work, take the time to fish and sell their fish in order to finance the fuel

Decisions are taken by consensus between all members of the community in regular general assemblies.
Photo Christian Chatelain



relevant state services (fisheries or forestry). These 24 volunteer monitoring officers of Kawawana thus ensure, on behalf of their community and in service of the decentralised state, a policing of locally established rules which are much more rigorous and effective than what happens outside of Kawawana.



The Kawawana territory of life with the three conservation zones. Map: APCRM

for the surveillance canoes), as well as a monitoring system (ichthyological monitoring and socio-economic monitoring) measuring the impact of the rules applied both on local biodiversity and on the community's quality of life.

Official recognition of Kawawana by the Senegalese state in 2010 has strengthened the bonds of trust between the population and state services, allowing other conservation actions to be taken such as

the preservation of another part of the forest in Mangagoulack that is being threatened by a carbonisation project for commercial purposes. This recognition has, above all, set a precedent for many other communities in Senegal and beyond, who can also feel more confident in asserting their right to govern their own territories of life.

Biodiversity spectacularly regenerated and a community profoundly revitalised

Kawawana has succeeded in increasing the biodiversity of the environment, both in quantity and quality, with the reappearance of about twenty species of fish, of which only the oldest was previously known, the return of the manatee and many migratory birds, as well as the return of predators such as the dolphin and the crocodile – proof of the increase in available biomass.

Kawawana has also managed to improve people's daily lives. There is more fish at a higher quality and a better price because it is produced, fished and sold locally. Also, the sale of fish has generated more income and less debt for the fishermen, with the creation of jobs for local marketing, starting a virtuous circle for the entire local economy.

Building on its successes, Kawawana is one of the emblematic examples of community conservation in



“I fished with thiasses (monofilament nets). When Kawawana banned them, I didn't really agree with them but I left them aside anyway. Now I think it's good.”

Mr Baboucar Goudiaby, fisherman

² L'association des pêcheurs de la communauté de Mangagoulack (APCRM) – The fishermen's association of the community of Mangagoulack, which now has over 420 members.



“Thanks to Kawawana, there is great cohesion in the community, from Tchioko to Affiniam, and Kawawana is recognised throughout Senegal.”

Mr Idrissa Goudiaby, villager of Tendouck



The fishes are back!
Photo: Christian Chatelain

Senegal. Ten years after its legal recognition by the state and the implementation of its innovative community governance structure, it remains a model that is shaking up the principles of mainstream conservation in the country and in West Africa more broadly.

Kawawana is significant at different geographic levels: at the local level for its governing community, which needs it to “live well”; at the regional level in Casamance because the regeneration of fish species in the territory of life has a spill-over effect on other neighbouring territories and brings economic benefits; and at the national level because the preservation of ecosystems in Casamance has an impact on the entire economy of the country.

Administratively, laws and policies relating to protected areas must integrate community governance as a type of governance in its own right, similar to the required integration of state governance. On the political level, this example of governance by the community of Mangagoulack has helped to open up the field of possibilities for Senegalese civil society as a whole.

Casamance, considered the “breadbasket” of Senegal, is a privileged region in terms of its geography (access to coastal resources), climate (rainfall and temperature) and soils (presence of organic matter). However, it remains essentially a rural region where per capita income is lower than the national average. Three decades of armed conflict in Casamance have resulted in persistent economic poverty. In this context, and in the face of pressure from many migrants in search of resources (especially fish), the community of Mangagoulack is

The Kawawana surveillance boat allows the control of the three river entry points of the ICCA-territory of life. Photo: Christian Chatelain



Despite external pressures and threats, the Mangagoulack community continues its traditional practices, such as post-harvest grazing in rice fields. Photo: Christian Chatelain



doing well, seeking to guarantee its members privileged access to resources at an acceptable price, thanks to its territory of life. For example, fish caught in zone N°2 of Kawawana (village fishing zone) must be consumed or sold only in the village, not in the town, where selling prices are more attractive.

Following the observation of the increasing scarcity of fish products – the basis of Diola food – in their meals, and the visible deterioration of their health, the fishermen of Mangagoulack wanted first to rediscover “good fish” on their plates. Their whole struggle for conservation has had this basic nurturing principle as its foundation and justification, taking the conservation of ecosystems not as an end in itself but as a means of restoring a healthy environment favourable to their various needs for life (food, timber, pharmacopoeia, gathering for resale, etc.) and capable of responding to various external pressures (soil erosion, salinisation of land, exceptional tides, droughts, etc.).

These various pressures are now being exacerbated by climate change, which is having visible effects in the region, such as an overall drop in rainfall, degradation of mangroves in some areas, and salinisation of rice fields by the rising saltwater, posing a serious threat to rice cultivation.

Drawing on their experience in managing difficult periods (such as the great droughts of the 1970s), and led by the conservation efforts of the fishermen, the Mangagoulack community has managed to mitigate these negative effects by preserving a mangrove that is less disturbed and thus better able to play its role in protecting and maintaining land and sensitive ecosystems. The regeneration of the mangrove and the return of a number of predators such as dolphins, to the point of provoking complaints from some fishermen who have seen their nets damaged by them, are indisputable proof of this.

Kawawana faces new threats

The results of the decisions and management measures taken by the Mangagoulack community are very positive, but the governing institutions of Kawawana

must remain cautious and vigilant as various threats remain, especially to the fish and mangrove wood which are sought after throughout the region.

A first risk is becoming a victim of one’s own success. The success of Kawawana has attracted a growing number of fishermen and the effort to control the fishing has had to be managed first and foremost by the fishermen themselves. Young people and returning migrants, all of whom wanted to fish in Kawawana, were encouraged to move into other sectors.

A second risk is the waning enthusiasm for volunteering. So far, the whole community has made a huge effort for Kawawana – an effort principally based on volunteering. The supervisors, follow-up surveyors, fishermen leaders, and all the people involved in Kawawana’s success are involved without remuneration and often even out of their own pockets. Initial solutions have been found to ensure that at least monitoring and sanctions are maintained (for example, collective fisheries are organised to finance some monitoring expenses).

A third risk is dependence on external aid. The support of NGOs and their “projects” is often accompanied by influence – and Kawawana has never wanted this. On the contrary, the community has always asserted its independence and decision-making according to its own means and by carefully choosing which well-targeted support might be accepted.

Finally, the unsustainable exploitation of natural resources – water, forests, or even the subsoil – in and around Kawawana remains a threat. A planned wood charcoal project, which the community unanimously rejected, underlines this threat, even in Mangagoulack



The harvesting of oysters is only allowed from 1 March to 31 May. Traditionally, this activity is carried out by women. Photo Christian Chatelain



A canoe full of oysters.
Photo Christian Chatelain

itself. Indeed, strengthened by their success with Kawawana, the fishing leaders, supported by the village elders, managed to resist the wishes of certain administrative officials of the municipality who were planning to cut down and transform a large part of Kawawana's neighbouring forest into charcoal for commercial purposes. In addition, oil and mining projects are also currently being developed in Senegal. These include a project to extract zirconia in Niafrang on the Casamance coast and a few kilometres from Kawawana, which has already been signed off by the state, and against which several communities are currently mobilising.

Another issue, less visible yet equally threatening, is that of access to land and sustainable resource management, especially for women – an issue which Kawawana officials are currently addressing. While the country's constitution enshrines natural resources as national heritage, each village considers the land and water resources of its territory as the property of the village's citizens. Kawawana is responding to this problem by supporting women's activities such as the gathering of oysters – a key activity with potential impact on coastal-marine ecosystems. By strongly involving women in Kawawana, local leaders

are reducing the threat to the environment that the development of unsustainable oyster harvesting could pose to the area.

Building on its success, Kawawana is the leading example and cornerstone of a comprehensive network of territories of life throughout West Africa

The experience of Kawawana, an important first in Casamance and a model of sustainable community governance and management for all of Senegal, has opened up new perspectives for more inclusive, participatory, equitable and effective conservation in the coastal marine environments across West Africa. Its overall objective of eliminating open access to village fishing areas demonstrates that local and community-led resource management, derived from traditional customary practices can help restore environmental and social benefits for all connected with this ecosystem, including non-local people.

History and culture in Casamance show that local communities maintain a local identity and strong internal bonds of solidarity – ideal for cooperative work that is meant to bring social benefits. At a crucial

moment in their conservation approach, Kawawana were able to benefit from technical support to accompany them in their struggle to safeguard their biological and cultural values, and today they feel capable of contributing to convincing the central authorities of the merits of natural resource stewardship by and for local communities.

This 10-year experience of returning to customary community conservation in Kawawana in Mangagoulack, Senegal, is a success story with many interrelated factors and examples of the improvements of biodiversity and the living conditions: a return of fish in quantity (doubling of the number and average size) and quality (reappearance of 20 fish species) in this specific territory of life, which also includes positive effects in neighbouring fishing areas; a return of a village diet richer in protein (fish and shellfish); a decrease in unregulated cutting of mangroves and an overall increase in plant and animal diversity and abundance (timber, birds, reptiles, etc.); a decrease in family debts contracted with shopkeepers and return to the village of migrants who had left in exodus; and a strengthening of community cohesion and individual involvement in the conservation of the collective good.

The governance institution that has enabled all these improvements for the community in Kawawana is now managing the consequences of its success and is currently resisting outside pressure, which is becoming stronger as the results of its conservation successes become more evident.

Rewarded for its efforts by several international awards and forms of recognition, including the Equator Prize in 2012 and registration in the World Conservation Monitoring Centre's international ICCA Registry in 2012, the community of Kawawana hopes to continue their initiative, expand its area and improve their management capacities and operations. Indeed, the legal recognition of Kawawana as a protected area governed by the community of Mangagoulack, officially expressed by the Senegalese state in 2010, is a major factor in protecting against the increasing external pressures of resource exploitation. But it is only through developing a powerful network of ICCAs—territories of life in Senegal and beyond that communities can hope to represent a significant force for the long-term conservation of West Africa's rich biological and cultural heritage.



Photo: Christian Chatelain





Photo: Lodrick Mika, 2020



Lake Natron

A territory of life in northern Tanzania conserved by the Maasai of Engaresero

Author(s):¹ Emmanuel Sulle, Makko Sinandei and Resiatio Lembeka

Largely occupied by the Indigenous Maasai People, this spectacular territory of life is adjacent to Oldonyo-Lengai, the Mountain of God, an active volcanic mountain in the country. Named after Lake Natron, the world's most critical breeding site for lesser flamingos, the territory is home to diverse groups of flora and fauna and forms an important corridor, ecosystem, and landscape of two World Heritage Sites: the Serengeti National Park and Ngorongoro Conservation Area. The Maasai people depend on the Lake's wider catchment area for their livelihoods because it is the most reliable wetland area for the large dry landscape. The territory is the source of pasture and water for both livestock and wildlife throughout the years.

Currently, this territory is managed and governed by both customary Maasai structures and the national and international frameworks related to natural resources

of national and global importance. It is administratively situated in Engaresero village, Ngorongoro District, in the northern tourism circuit of Tanzania. Engaresero Eramatare Community Development Initiative (EECDI), a community-based organization formed by the general assembly of 12,000 people from Engaresero village, manages the territory of life. EECDI's goal is to support integrated conservation and livelihood development through tourism initiatives and cultural restoration. For years and with support from **Ujamaa Community Resource Team (UCRT)**, EECDI has strengthened community capacity to manage, own and benefit from land and other natural resources, including wildlife. Cultural values and Indigenous knowledge are promoted to restore and create cultural heritage sites in the area. Since the territory is rich with biodiversity as well as mineral resources such as soda ash, communities have to defend their territory against both salt miners



60,000
hectares (estimated)



12,000 people from
Engaresero village

and the government's attempts to annex this territory to establish new types of protected areas.

Lake Natron's catchment is the Maasai's lifeline

For ages, the territory has been at the heart of the Indigenous Maasai because it has special places and trees respected for both spiritual and cultural purposes. Oldonyo Lengai remains an active volcanic mountain in the country. Maasai believe Oldonyo Lengai is the Holy Mountain of God. On the top of the mountain and waterfalls, Maasai people carry out their prayers and rituals. There are ancestors' footprints in this protected

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“We were evicted from the Serengeti area, and we moved to Ngorongoro Crater. Wild animals followed us, and we were moved again out of Ngorongoro and wild animals are still with us here in Engaresero.”

EECDI staff, group discussion, 5 November 2020



and respected area and many archaeological places such as Pinyinyi Ward where researchers from Tanzania and abroad undertake research.

The Lake Natron territory has a unique habitat and landscape that is supported and maintained through traditional knowledge and practices such as traditional grazing calendars. The community self-identifies as Indigenous and has maintained cultural distinctiveness, traditions, and livelihoods for generations. Maa is the native language of the Maasai people; however, most Maasai speak Swahili as a national language with few educated in speaking English.

Managing the territory

Two distinct but interdependent and recognised laws – customary tenure of land rights and statutory land laws – govern the territory of life. First, under customary tenure, communities in this territory who inherited their land before independence and continued to live on it have the right to access, use, control, and to some extent own land.² In this customary system, institutions are made under Maasai culture and customs. The key governance structures include the *Ilaigwanak* (traditional male leaders) and the *Morani* (young men who serve as the community's law enforcement). Outside individuals and groups of people used to enter the territory to collect soda ash. This forced the community to enact by-laws, in partnership with village authorities, to protect the lake's salt. Also, trees used



Giraffe in lowlands of Engaresero village with Oldonyo Lengai in the background. Photo: Lodrick Mika, 2020



Designated livestock grazing area on the slopes of Oldonyo-Lengai. Photo: Lodrick Mika, 2020

to be cut randomly in the area, provoking a response not only from elders and members of the community, but also from the village government, which assigned *Morans* (the male Maasai youth) to guard their territory. *Morans* are guided by *Ilaigwanak* to give warning to those who break the community's by-laws, norms and traditions. As a result, the extraction of soda ash by residents of outside and distant villages no longer poses a major threat to this territory.

Under statutory law, community land is legally designated as 'Village Land', meaning the land within boundaries of a village is registered in accordance with the Local Government Act of 1982. Village land is one

Photo: Lodrick Mika, 2020

of three major categories of land in the country; the other categories are 'Reserved Land', which is held in reserve by the state for the public good, and 'General Land', which comprises all public land that is neither Village nor Reserved Land but includes village land that is deemed as unused. The Village Land is governed by the Village Land Act No. 5 of 1999 while General and Reserved Lands are governed by Land Act No. 4 of 1999, by the Wildlife Conservation Act (WCA) of 2009 for wildlife resources, and by the Forest Act No. 14 of 2002 for forests.³ Although all lands are administratively overseen by the Ministry of Lands, communities have some decision-making powers and responsibilities for how land and other natural resources should be utilized and governed through their local authorities, including district councils, village councils and their assemblies.⁴ A Village Council that comprises 25 members, of which one third must be women, is formed by representatives of political parties in a given village.

The statutory land laws and other resource laws allow and protect customary laws and norms that communities enact to access, use and manage natural resources in their territory. Currently, the territory has its own land use planning and zoning maps based on the two legal regimes. The whole area, apart from

individual homesteads and townships, is communally owned. It supports not only environmental and conservation purposes, but also many people's livelihoods in the territory.

However, several laws and regulatory regimes are overlapping and often contradicting one another in this territory of life. Some of the same land is governed by the Village Land Act and Game Control Areas governed by Wildlife Conservation Act of 2009, as well as being designated a global Ramsar Site. Therefore, while custodians of the territory want to protect and manage

² In the strict sense of ownership, Tanzanians do not own land. Instead, they have user rights because the radical title is held by the President of Tanzania on behalf of all the people.

³ Sulle, E. 2017. Of Local People and Investors: The Dynamics of Land Rights Configuration in Tanzania. Danish Institute for International Studies (DIIS) Working Paper, Copenhagen: DIIS <https://www.diis.dk/node/21038>

⁴ A village assembly comprises all the members of a village above the age of 18; it is the foundation of local government and administration as it is the institution that elects and holds village and district office bearers to account.



their land the way they are accustomed to, government institutions also have their own interests and visions such as establishing a game reserve on the same area.

Some tension exists between the customary and statutory governance structures, the latter of which include the village council (village government), district council and national government authorities. These are a continuation of colonial administrative structures and largely top-down authorities. Some of them were imposed by the national government during the villagisation processes of the 1970s, which affected the traditional Maasai lifestyles and systems of self-governance.

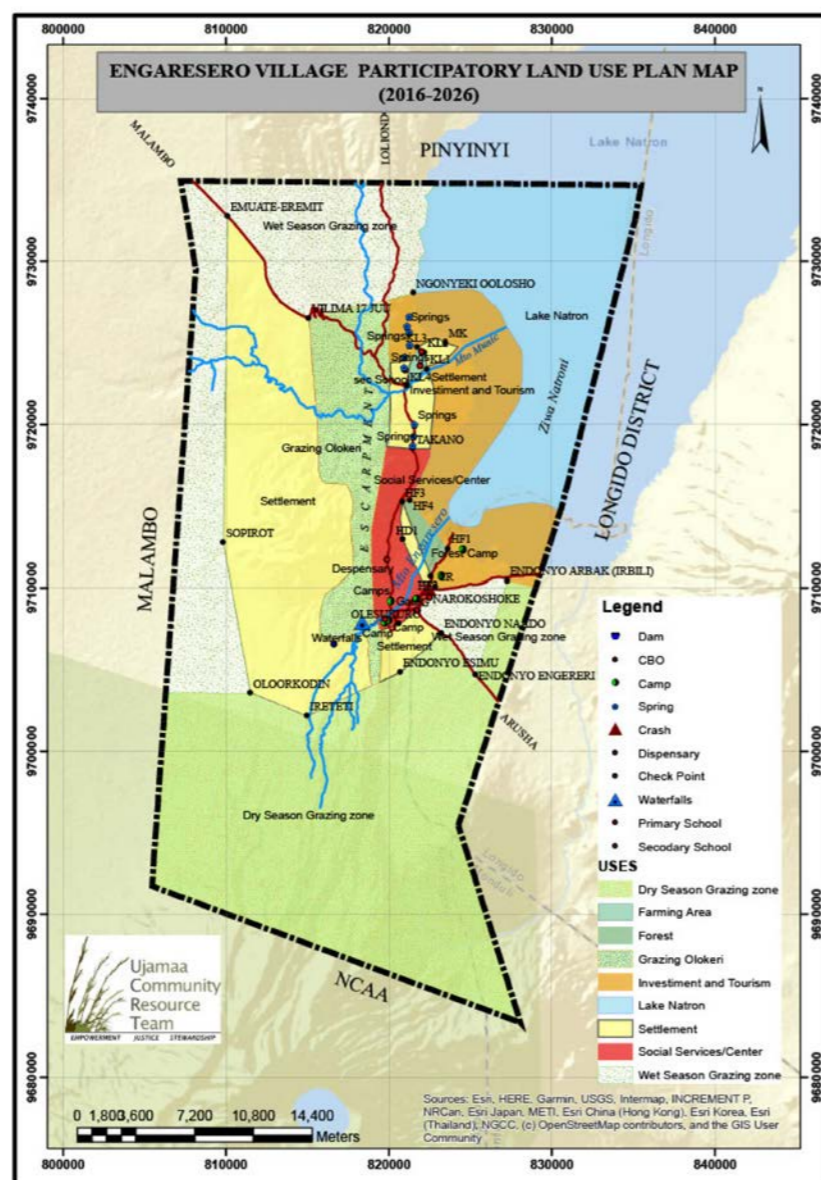
Unmatched contribution to community's wellbeing and biodiversity conservation

The Lake Natron catchment area is the world's most critical breeding site for the lesser flamingo, which is classified as "Near Threatened" in the IUCN's Red List.⁵ The area not only attracts flamingos and a wide variety of birds, but also hosts other charismatic species such as giraffe, zebra, antelope, warthog, buffalo, and lion, among many other mammals. This territory is the most reliable wetland area for the large dry landscape in Maasai Steppe. It forms a crucial corridor, ecosystem, and landscape of the Ngorongoro Conservation Area, including the mountains of Oldonyo-Lengai and Monduli. It is on these bases that the area is under mixed categories of conservation that include a game control area and the Ramsar Site. These are accepted by the Maasai community in the area because they are relatively compatible with the community's livelihoods. The catchment area was declared Ramsar Site Number 1080 in 2001.⁶

Engaresero village land use planning (2016 – 2026). Map: Ujamaa Community Resource Team

Nonetheless, it is largely the communities' conservation practices that continue to sustain the area, with limited support from district and central government authorities.

To the Maasai people, this territory is a great source of livelihood as it provides settlements and grazing areas, water source, salt licks and planted and natural trees as well as key spiritual sites. There are some settled families, while others maintain a semi-mobile lifestyle as they depend on their pastoralist livelihood. Maasai communities still depend on Indigenous knowledge passed on from one generation to the other such as the use of grazing areas and pastures, medicinal plants, special trees, and soil and minerals for rituals and offerings, and handling of family matters.



Livestock in Grazing area of engaresero village. Photo: Lodrick Mika, 2020

The Engaresero village's first land use planning process was completed in 2007 with the support of Ujamaa Community Resource Team. The area was mapped and specific areas of land set aside for different uses, including a settlement area where people build their houses, grazing areas used by both livestock and wildlife, and tourism sites where campsites and lodges are operating. An updated land use planning process was carried out in 2016 (see map).

As noted above, the territory is a crucial landscape for cultural and archaeological sites and especially as the flamingo breeding site. The surrounding areas including Oldonyo-Lengai, Ngorongoro Crater and Kilimanjaro National Park are all attractive to tourists. Tented camps have been established in communal lands in the village where communities earn some income for tourists spending nights while participating in walking safaris and climbing Oldonyo-Lengai to view the active volcano crater. For example, from 2015 to 2019, Engaresero village earned an average annual income of USD 35,119 from tourism activities. Due to the COVID-19 pandemic, tourism revenues declined in 2020 to around USD 8,780.⁷ The revenues from tourism activities in the territory support communities in their quest to improve social services such as the construction of health facilities, teaching in schools, and provision of water to residents in the area.

Responding to internal and external threats

While this territory has faced and continues to face several threats from within and outside, the area remains in good condition because of continued efforts to keep it safe. The inhabiting community members work closely with relevant village and district authorities to enforce existing customary natural resource governance mechanisms and land use planning district and village by-laws. Key internal threats include social fragmentation fuelled by increasing tourism activities in the area as well as modern development such as roads facilitating immigration of people from other communities into the territory.

Climate breakdown is a significant external threat. Like many other dry rangelands of Tanzania, the territory is experiencing ever-increasing weather and climatic

⁵ BirdLife International. 2012. Environmental Advocacy at Work: Lessons Learnt from the Campaign to Save Lake Natron from the Plans to Build a Soda Ash Factory. Nairobi: BirdLife International, Africa Partnership Secretariat, p. 5.

⁶ Ramsar Sites Information Services: <https://rsis Ramsar.org/ris/1080> [accessed 13 July 2020].

⁷ Statistics obtained from unpublished Engaresero village revenue and expenditure reports.

changes with long drought seasons and unpredictable rain patterns in recent years. Droughts in the area not only harm livestock keeping, which is the major livelihood activity of Maasai people, but also negatively affect health, economic and social well-being. At other times, high rainfall also causes flooding across the escapement.

Around the mid-2000s, the government, in collaboration with foreign and local investors, proposed the construction of a large-scale soda ash processing factory in Lake Natron Basin. This plan provoked a backlash from local and international communities and organisations who provided evidence that the factory could have devastating environmental impacts on the unique flamingo breeding site. Community members and their leaders strongly voiced their concerns about the dangers of this mine, including the Engaresero village chairman, who stated that *“the livelihoods of the 4,000 residents of Engaresero village were in danger if the government allowed the soda ash mining.”*⁸ Following years of negotiations and contestations, the government moved the planned soda ash extraction project to a new site far from Engaresero village.

The governance status of the area is continuously tested. In July 2020, the Permanent Secretary of the Ministry of Natural Resources and Tourism stated that the

government intends to upgrade the Lake Natron area into a Game Reserve, a type of protected area where human activities like pastoralism are legally restricted. If the proposed Game Reserve is put in place, it means the community will automatically lose access to and control over their communal land because a protected land is governed and managed by the central government through protected area legislation.

If the Game Reserve is designated, the community will also lose the revenue they generate from tourism businesses operating in their village land. Following the government announcement, villagers and their leaders wondered why there were plans to evict them again: *“We were evicted from the Serengeti area, and we moved to Ngorongoro Crater. Wild animals followed us, and we were moved again out of Ngorongoro and wild animals are still with us here in Engaresero. All this is because Maasai by culture and traditions do not kill or eat wildlife, so due to our land plans in Engaresero, now the numbers of key wildlife species – giraffes, zebras and gazelles – have increased.”* (EECDI staff, group discussion, 5 November 2020).

These community claims of eviction threats have existed over the past few years, but they were reported by the government owned newspaper ‘Daily News’ on 5 August 2020. The newspaper article reported

Tented lodge for tourist. Photo: Lodrick Mika, 2020



Group discussion with community representatives. Photo: Lodrick Mika, 2020

the Regional Commissioner's visit to Engaresero village to calm protesting villagers after the government's announcement to change their village land into a game reserve area. Informing the visiting Commissioner, the Engaresero Ward Councillor Mr. Abraham Sakai reportedly said: *“Our land, the only place we have called home for a long time, is about to be taken by the Tanzania Wildlife Management Authority. This is a major concern to all of us and will greatly affect our livelihood.”*⁹ Responding to villagers' and leaders' concerns, the Commissioner reportedly assured them that his office has noted their concerns and that no one will be evicted.

The Maasai community's hope for the future

For the Maasai people, the key priority is securing tenure rights of land and other natural resources attached to it. Without these rights, their livelihoods, culture, traditions, Indigenous knowledge and history will be jeopardised. Ownership and tenure security are the developmental pillars of EECDI. Securing access to land and natural resources by formalizing collective land tenure security supports vulnerable Indigenous peoples to maintain their livelihoods and exercise their civil, social, cultural, political and economic rights that contribute to local, national, and global sustainable development.

It is on these bases that security of land and other resources are provided to the people through the Certificate of Village Land (CVL) and Customary Certificate of Rights of Occupancy (CCROs), both legal tools for protection of communal areas and wildlife habitats. The legal protection of communal rangeland and empowerment of Indigenous Maasai community in the Lake Natron territory has so far enhanced an integrated approach to both conservation and livelihoods as a lasting solution for biodiversity conservation in the Northern Tanzania rangelands.

The Maasai community in Lake Natron hopes that these legal tools and ongoing support from some government departments as well as local and international organisations will help them maintain their access to and control over their land and resources on which they depend.

⁸ BirdLife International. 2012. Environmental Advocacy at Work: Lessons Learnt from the Campaign to Save Lake Natron from the Plans to Build a Soda Ash Factory. Nairobi: BirdLife International, Africa Partnership Secretariat, p. 43.

⁹ Daily News, 5 August 2020. Tanzania: Villagers Protest Eviction Plan On Lake Natron Shore. The government of Tanzania News Paper. Available at: <https://allafrica.com/stories/202008031002.html> [accessed 12 November 2020].



Photo: Michael Ferguson



Qikiqtaaluk

Inuit and tuktuit on Baffin Island in Arctic Canada

Author(s):¹ Michael Ferguson, Kolola Pitsiulak, Adamie Nuna, David Irngaut, Phillip Manik Sr., Eli Kavik and James Qillaq, for the Qikiqtaaluk Wildlife Board (QWB)

Three late Inuit elders, Abraham Etungat of Kinngait, Lucassie Nutaraluk of Iqaluit, and Etuangat Aksayuk of Pangnirtung, all told similar stories about *tuktuit* (caribou) from when they were young children living along different parts of the coast of Qikiqtaaluk (Baffin Island) in the 1910s and 1920s:

“When I was a young boy and tuktuit were always close by, I could not believe my elders when they told me that there would be no caribou when I would have to feed children of my own; but later when I became an elder myself, there would be many caribou again. They told the truth.”

As predicted by their elders, Abraham, Lucassie, Etuangat and many other Inuit experienced the scarcity of tuktuit on Qikiqtaaluk in the 1940s and 1950s as they tried to feed their young families. Later as elders themselves, they experienced the long-

predicted abundance of tuktuit during the 1980s and 1990s. But then, being elders, they in turn predicted the next cyclical decline, which began in the late 1990s and early 2000s. The abundance has remained low into the late 2010s, but Inuit are reporting signs that the next slow recovery has begun, again just as Inuit elders predicted.

Inuit and their ancestors have harvested tuktuit on the interior of Qikiqtaaluk for at least 3,500 years.² Archaeologists have found ancient human habitation sites in important tuktuit habitats still known by Inuit elders today.³ In *Inuktitut* (the language and culture of Inuit), Inuit can paint maps with words, having evolved in an environment lacking paper and pencils. During past decades when tuktuit were rare, as in the 1940s, Inuit travelled by dog sled to special places where, according to their elders, there could be some tuktuit when there were no tuktuit anywhere else.



These harvesting journeys were extensive, moving up to 375 km inland and often lasting an entire year, so the harvesters could return with dried meat and skins for winter clothing for their extended families living on the coast. Sometimes they could not find tuktuit, but survived by catching small songbirds, like snow buntings, in summer. Some Inuit found starving by others would be escorted back to coastal communities where they would recover on seals, whales, fish and bears. Some never returned. The summer skins of tuktuit were critical to stay warm during the depths of winter. Speaking of the importance of tuktuit and their

¹ Michael Ferguson has been the Senior Wildlife Advisor for the Qikiqtaaluk Wildlife Board since early 2017. From 1981 to 2005, he had been a wildlife biologist for the governments of the Northwest Territories and Nunavut working with Inuit of Qikiqtaaluk and other Arctic islands on tuktuit, muskoxen and other wildlife. He lived in Iqaluit on southern Qikiqtaaluk for 7 years, and then in Pond Inlet on northern Qikiqtaaluk for 17 years.

Kolola Pitsiulak is the Executive Director of the QWB, Kimmirut, Nunavut.

Adamie Nuna, David Irngaut, Phillip Manik Sr. and Eli Kavik are Executive members of the QWB.

James Qillaq is the Chairperson of the QWB, Clyde River, Nunavut. The Qikiqtaaluk Wildlife Board is a Member organisation of the ICCA Consortium.

The QWB Executive approved the draft of this manuscript during a telephone meeting on May 7, 2020.

² Milne, S.B., R.W. Park and D.R. Stenton. 2012. Dorset culture land use strategies and the case of inland southern Baffin Island. *Canadian Journal of Archaeology* 36: 267–288.

³ Park, R.W., S.B. Milne and D.R. Stenton. 2017. Burin and spall use at an inland arctic small tool tradition site, southern Baffin Island, Nunavut. *Canadian Journal of Archaeology* 41:63–78.

“When I was a young boy and tuktuit were always close by, I could not believe my elders when they told me that there would be no caribou when I would have to feed children of my own; but later when I became an elder myself, there would be many caribou again. They told the truth.”

Inuit elders Abraham Etungat, Lucassie Nutaraluk and Etuangat Aksayuk





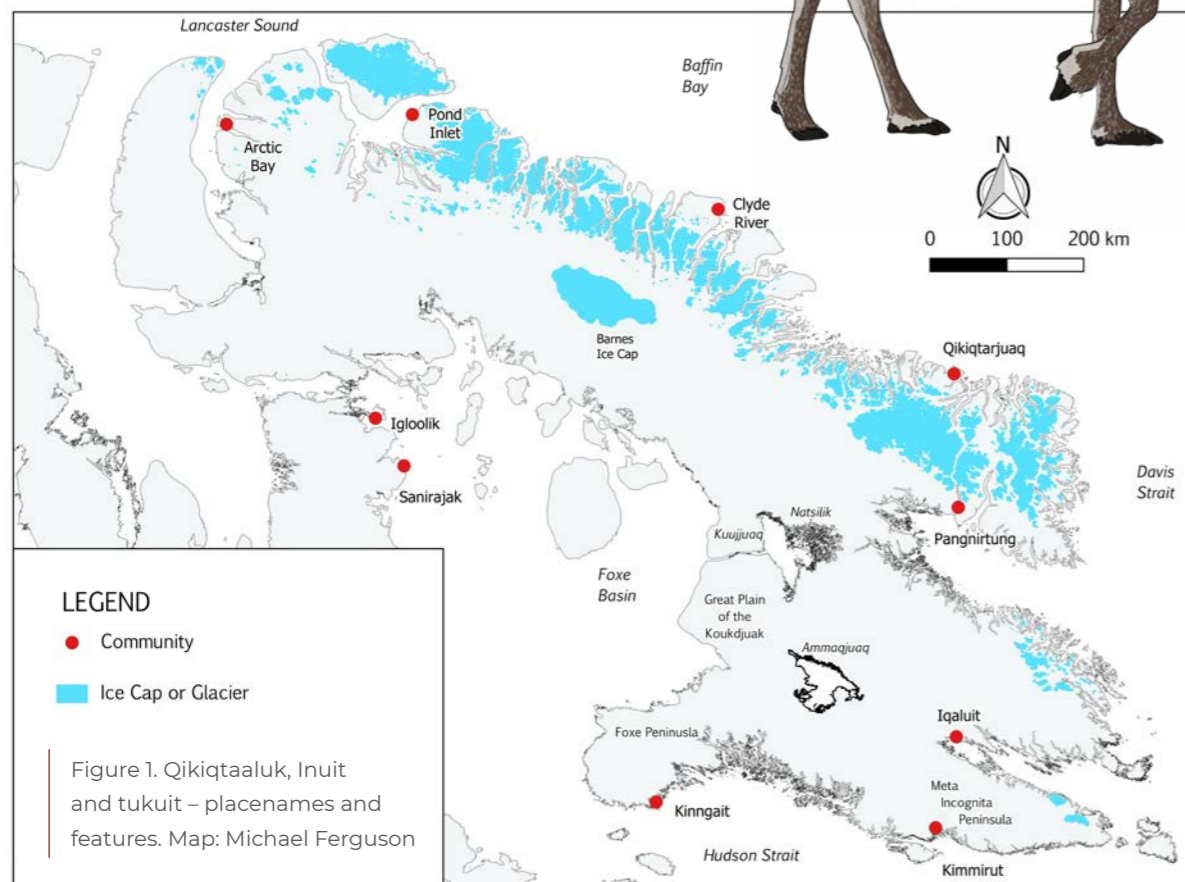
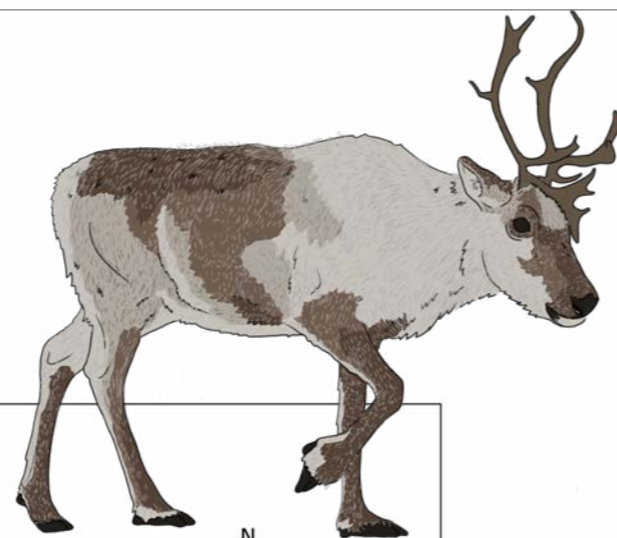
18 Million hectares (proposed)



Custodians: 10 Inuit communities of Qikiqtaaluk



Qikiqtaaluk Wildlife Board



Pond Inlet, northern Qikiqtaaluk, Nunavut, on Eclipse Sound looking north to Bylot Island. Photo: Michael Ferguson



Inuit camp while harvesting tuktuit in the fiords of northeastern Qikiqtaaluk. Photo: Michael Ferguson



Photo: Michael Ferguson

scarcity during the 1940s, the late Elijah Keenianak of Pangnirtung simply said:

“Everybody was cold. Nobody knew where the tuktuit were.”

Using Inuit *Qaujimagatuqangit* (Inuit traditional and recent knowledge), elders anticipate changes in the tuktuit population on Qikiqtaaluk, based on observed changes in distribution, movements, habitat selection and body condition. Inuit and their ancestors have been successfully monitoring and managing Qikiqtaaluk’s tuktuit for thousands of years.⁴ In the early 1980s, Inuit elders predicted cyclical changes in the distributions of

tuktuit on Qikiqtaaluk, which were then seen in the late 1980s and 1990s. More changes were seen by the early 2000s, leading harvesters and elders to anticipate the next major decline in the population from about 2006 to 2020, a period of scarcity similar to that of the 1940s and 1950s. Consequently, in 2004 to 2005, five communities on southern Qikiqtaaluk worked with the Nunavut government to develop a plan to manage tuktuit during this period of scarcity. However, the government failed to implement the plan.

Qikiqtaaluk: its people and ecosystems

Qikiqtaaluk is the world’s fifth largest island with more than 507,000 sq km of Arctic tundra, ice caps, glaciers and lakes. It makes up about one-fourth of the Canadian territory of Nunavut, and forms part of the extensive circumpolar homelands of the Inuit. With a culture and technologies adapted for life on Arctic tundra and waters, the ancestors of the Inuit expanded their range perhaps 4,000 years ago from the northeastern edges of Asia eastward across the tundra ecosystems of North America. Inuit probably reached eastern Greenland about 800 years ago. The human population of Nunavut was about 30,100 (85% Inuit) in 2016. Inuit who have traditionally depended on Qikiqtaaluk’s tuktuit live in 10 communities on or near the coasts of Qikiqtaaluk. In



“Everybody was cold. Nobody knew where the tuktuit were.”

Elijah Keenianak of Pangnirtung

⁴ Ferguson, M.A.D., and Messier, F. 1997. Collection and analysis of traditional ecological knowledge about a population of arctic tundra caribou. *Arctic* 50: 17–28.



2016, these 10 communities had a total population of 18,378 people, 14,335 being Inuit (78%).⁵

Despite increasing outside influences from the south, Inuit traditions and cultural values for tuktuit and other wildlife remain important and largely intact. In Nunavut, the taking of wildlife by Inuit for subsistence food and cultural uses is called “harvesting”. Harvesting of wildlife in Nunavut and other Arctic regions continues to be important for food sovereignty and daily nutrition of Inuit.⁶ Among Inuit of Qikiqtaaluk and other regions, successful harvesters who can feed their families and others in their communities are highly respected.

Monetary employment remains very limited in most communities (with some wages from government, retail, transportation, tourism, crafts and related sectors). An underground lead-zinc mine had been active on northern Qikiqtaaluk from 1976 to 2002 but provided economic benefits to few Inuit. In 2015, Baffinland opened an open-pit iron-ore mine on northern Qikiqtaaluk. The Qikiqtaaluk Wildlife Board (QWB) and local Hunters and Trappers Organizations (HTOs) have concerns about current and future impacts of this mine on tuktuit and important marine mammals like narwhal. Inuit have seen negative impacts of the iron mining on tuktuit, narwhal and other wildlife, but Baffinland has not acknowledge these impacts. Currently, the mine ships 6 million tonnes of ore to Europe annually, and proposes to expand production to 12 million tonnes, which will probably financially enable development of a previously approved railroad and port

for an additional 18 million tonnes annually, for a total of 500% of recent production.^{7,8} In addition, extensive exploration for diamonds,⁹ gold¹⁰ and other minerals are on-going on Qikiqtaaluk.

Qikiqtaaluk holds diverse landscapes and ecosystems, home to many Arctic animal species. Baffin Bay and Davis Strait off the eastern coast hold important populations of polar bears, seals, narwhal, bowhead whales, beluga, seabirds and eiders, all important food and cultural resources for Inuit.

Eastern Qikiqtaaluk has a 1,650-km-long mountainous spine with deep fiords and glaciers, including the Barnes Ice Cap; this last remnant North American Glaciation with ice over 20,000 years old has started to melt rapidly in recent years.¹¹ Today, this mountain range impacts the climate of Qikiqtaaluk as weather systems from the west shed moisture across rising elevations, with drier, windier and cooler air over the eastern mountains. Ancient ice caps and glaciers continue to influence vegetation growth and habitat patterns for tuktuit, especially their rootless lichen winter forage. Inuit recognize different types of tuktuit that have adapted to the mountains and high plateaus of eastern Qikiqtaaluk; their physical structure and migratory behaviours differ from tuktuit that utilize lower elevations.

The western landscape of Qikiqtaaluk is the complete opposite to the eastern mountains. The Great Plain of the Koukdjuak (*Kuujjuaq*), with the world's largest

goose colony (15,775 sq km), is a massive flat wetland lying along Foxe Basin. The Foxe Basin lowlands extend both north and south of the Great Plain over a distance of more than 1,000 km. Besides many other waterfowl, terns, gulls and shorebirds, about 1.75 million snow geese, 33 per cent of the world's population, breed on the Great Plain. The waters of Foxe Basin are home to Qikiqtaaluk's largest *aiviq* (walrus) population, besides many other marine mammals and birds. The Great Plain and all the coastal wetlands around Foxe Basin are important post-calving habitats for tuktuit with lush sedges, grasses and other plants during summer, but their winter forage is not accessible here during winter due to the hard, unbroken wind-blown snow cover.

In addition to the Barnes Ice Cap lying between the lowlands around Foxe Basin and Qikiqtaaluk's eastern mountains, the world's largest lake on an island, *Natsilik* (Nettilling Lake), covers some 5,540 sq km.¹² To the south lies another large lake, *Ammaqjuaq* (Amadjuak Lake; 3,115 sq km). Its watershed flows into Natsilik and then west down *Kuujjuaq* (Koukdjuak River) into Foxe Basin, forming a unique low-Arctic bioclimatic zone. Climatically stable for 4,800 years, this low-Arctic zone is more biologically diverse than the surrounding high Arctic zone of Qikiqtaaluk.¹³ In the 1970s and 1980s, thousands of migratory Natsilik tuktuit swam south across *Kuujjuaq* and the eastern side of Natsilik during July, August and early September *en route* to their rutting and wintering areas.

The Nunavut Agreement and the Qikiqtaaluk Wildlife Board

After about 20 years of negotiation, in 1993 the Inuit of Nunavut signed the Nunavut Agreement¹⁴ with the Crown of Canada. The Agreement is second only to Canada's Constitution, so that no government act or policy may infringe on the rights granted to Inuit. In this Agreement, the Inuit are represented collectively by Nunavut Tunngavik Incorporated, while the Crown is represented by the governments of Canada and Nunavut. The agreement was designed to meet the following objectives:

- to provide for certainty and clarity of rights to ownership and use of lands and resources, and of rights for Inuit to participate in decision-making concerning the use, management and conservation of land, water and resources, including offshore;
- to provide Inuit with wildlife harvesting rights (throughout Nunavut) and rights to participate in



A female tuktuit shaking water from her fur after swimming between islands, eastern Natsilik, Qikiqtaaluk. Photo: Michael Ferguson



Natsilik, Qikiqtaaluk.
Photo: Michael Ferguson

⁵ Based on 2011 census result with estimates projected to 2016 (Nunavut Bureau of Statistics 2016). The communities have young and growing populations, typical of many Indigenous peoples; 48% of the population is 24 years old or less, and only 7% are 65 or older.

⁶ Imported foods are extremely expensive, and 70% of preschool Inuit children live in food insecure homes.

⁷ <https://www.cbc.ca/news/canada/north/mine-blockade-sparks-solidarity-protests-across-nunavut-1.5906285>

⁸ <https://www.cbc.ca/news/canada/north/nirb-baffinland-hearings-suspended-covid-1.5988416>

⁹ <https://nunatsiaq.com/stories/article/de-beers-dreams-of-building-the-diamond-mine-of-the-future-in-nunavut/>

¹⁰ <https://www.mining.com/kivalliq-picks-baffin-island-gold-property-previously-explored-three-majors/>

¹¹ <https://eos.org/scientific-press/last-remnant-of-north-american-ice-sheet-to-vanish-in-300-years>

¹² Inuit named Natsilik after natsiq (ringed seal) because this usually marine seal and important food source of both Inuit and polar bears lives in this lake year-round.

¹³ Jacobs, J.D., A.N. Headley, L.A. Maus, W.N. Mode and É.L. Simms. 1997. Climate and vegetation of the interior lowlands of southern Baffin Island: Long-term stability at the low arctic limit. *Arctic* 50: 167–177.

¹⁴ <https://nlca.tunngavik.com/>



Pond Inlet beach and Bylot Island. Photo: Michael Ferguson

- decision-making concerning wildlife harvesting;
- to provide Inuit with financial compensation and means of participating in economic opportunities; and
- to encourage self-reliance and the cultural and social well-being of Inuit.

The Agreement provided for the establishment of several boards and commissions as instruments of public government to promote continued dialogue between government and Inuit. Ultimate responsibility for decisions was given to government ministers. Three boards and commissions are key players in environmental, wildlife and land use planning issues: the Nunavut Wildlife Management Board, the Nunavut Planning Commission, and the Nunavut Impact Review Board.

Inuit have representation equal to government on these boards and commissions, with independent chairpersons. Although government ministers have the ultimate responsibility on specific decisions made by the boards and commissions, disagreements are usually resolved through negotiations, although in some cases Nunavut Tunngavik Incorporated has taken the governments to court to defend Inuit rights. For the first time in 2021, the Qikiqtaaluk Wildlife Board filed a court case against the Government of Nunavut, which was subsequently settled out of court.

The Qikiqtaaluk Wildlife Board (QWB) is an Inuit Regional Wildlife Organization, recognized under the agreement. The QWB participates in co-management of wildlife and land use planning across the entire

Qikiqtaaluk Region.¹⁵ The QWB has an independent chairperson and 13 directors who are also the chairpersons of the region's 13 Hunter and Trapper Organizations (HTOs). Each HTO represents all Inuit in one of the 13 communities. QWB works closely with the 13 HTOs to represent their interests at meetings of the co-management commissions and boards. The QWB also works with its co-management partners in the federal and territorial governments, and with some environmental NGOs. The QWB has specific and general powers and functions to manage wildlife harvesting among any two or more of the region's HTOs. The QWB's responsibilities apply to most populations of wildlife because most are shared by more than one community. Each HTO is responsible for managing the harvesting by Inuit within its given community.

The QWB also works with another regional Inuit organization, the Qikiqtani Inuit Association (QIA), which is mandated to protect and promote Inuit social, political, economic and cultural interests. The QIA manages the approximately 35 per cent of the region's land for which Inuit own surface rights and the 3.5 per cent for which Inuit own sub-surface rights. QIA is also responsible for negotiating Inuit Impacts and Benefits Agreements with governments, mining and other developers for proposed projects on all regional lands and waters.

The QWB's and HTOs' Submissions to the Nunavut Planning Commission

In Qikiqtaaluk, some wildlife habitats are formally protected in two national parks covering about 8 per

cent of the island (41,300 sq km); however, a large proportion of these parks includes ice caps and glaciers, and little habitat for tuktuit. There are two territorial parks and one proposed park on Qikiqtaaluk. Currently, the largest territorial park covers about 1,260 sq km. Three calving areas, used by migratory Natsilik tuktuit, are recognized in the regulations of Nunavut's Wildlife Act; however, there are no regulations for habitat protection. Gold exploration is currently occurring within one of these calving areas.¹⁶

Although the Government of Nunavut has powers to protect important habitats of tuktuit on Qikiqtaaluk, it has not done so. Habitat protection was proposed in the tuktuit management plan developed in 2005. The Government of Nunavut now appears to oppose any long-term or permanent protection of important habitats for tuktuit and other wildlife.

The 2016 draft Nunavut Land Use Plan did not identify any protected or special management areas specifically for tuktuit on Qikiqtaaluk. During 2017-18, the QWB and HTOs identified many important wildlife areas that should be protected from future non-traditional development. These areas are needed by Inuit for food security and sovereignty, and have been used by Inuit for 1,000s of years. This QWB-HTO project resulted

in 43 written submissions to the Nunavut Planning Commission (NPC) for areas to be protected under the future Nunavut Land Use Plan.¹⁷ Five of these submissions cover different types of habitats important mainly for tuktuit-related values; each submission may identify one or more specific areas. Through these submissions to NPC, the QWB and HTOs have proposed protection for tuktuit across 180,200 sq km (18 Million ha) of Qikiqtaaluk, plus 417 sq km (41,700 ha) of sea-ice crossings in the fiords (see figure 2). Many of these areas could potentially be identified as formal ICCAs or "Inuit territories of life".

¹⁵ Being about one half of Nunavut, the Qikiqtaaluk Region covers the entire Qikiqtaaluk (Baffin Island) of around 500,000 sq km plus many other islands and some of mainland Nunavut for about an additional 500,000 sq km. https://en.wikipedia.org/wiki/File:Map_of_the_Nunavut_regions.png

¹⁶ https://www.gov.nu.ca/sites/default/files/exploration_overview_2020-english.pdf

¹⁷ The most recent 2016 draft of the Nunavut Land Use Plan has not been approved: <https://www.nunavut.ca/land-use-plans/draft-nunavut-land-use-plan>. The next draft of the Nunavut Land Use Plan was not made available in 2020 as suggested by the Commission's Executive Director in 2019. It may become available by 2022 as suggested by the Commission's Policy and Planning Director at the Nunavut Mining Symposium in 2018.

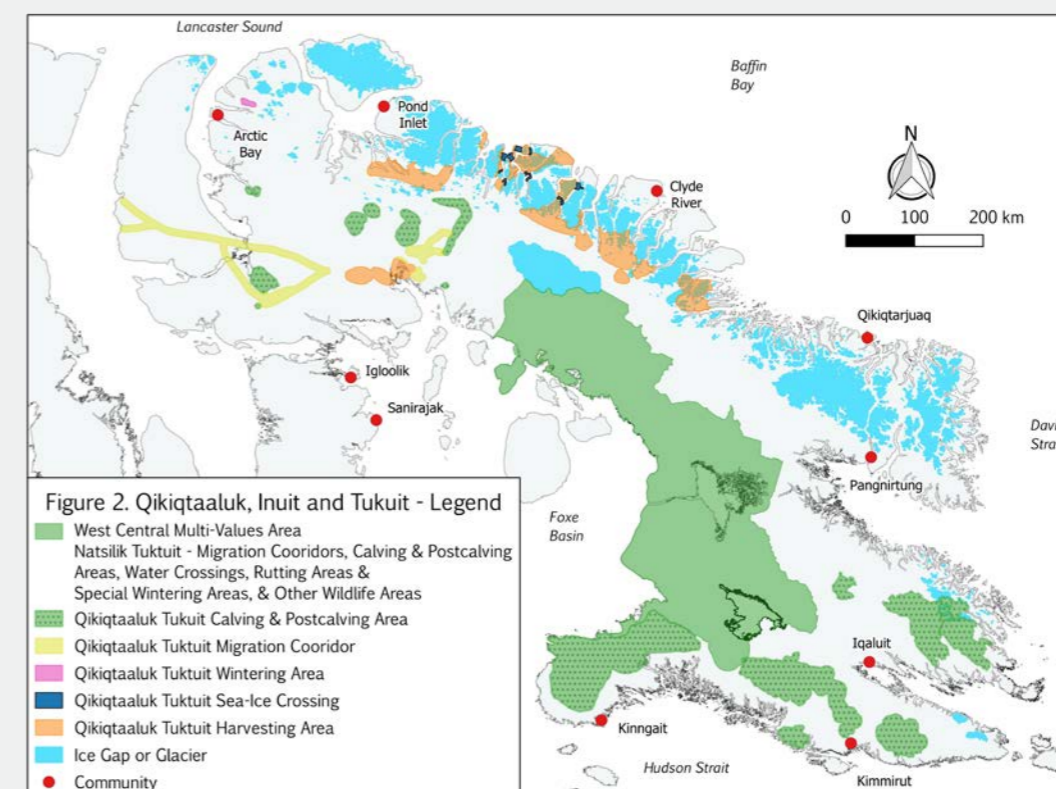


Figure 2. Qikiqtaaluk, Inuit and tuktuit. Map: Michael Ferguson

Given the inaction of the Government of Nunavut to protect tuktuit on Qikiqtaaluk in the past, the QWB hopes to build consensus with other partners that may be more inclined to protect Inuit food and cultural sovereignty. Both the Nunavut Wildlife Management Board and the Qikiqtani Inuit Association have taken positions advocating the protection of at least calving areas for tuktuit. The QWB hopes to work through the Nunavut Planning Commission to influence the future Nunavut Land Use Plan. The QWB is considering self-declaration and registration of several tuktuit and other wildlife conservation areas in the ICCA Registry of the UNEP World Conservation Monitoring Centre to promote recognition of Inuit efforts at the international level.

Inuit consensus building

Before the 1970s and 1980s, most Inuit lived in many small, scattered family areas, often moving seasonally to access wildlife and for other reasons. Inuit used and travelled across all of Qikiqtaaluk. Sometimes several family groups would come together for various purposes and events. To maintain cohesion and cooperation for collective benefit, Inuit social behaviours followed norms that promoted consensus building. Usually elders listened carefully, as other Inuit discussed important issues openly. When the time was right, respected elders would offer a solution that would benefit the entire group.

The QWB and most Inuit organizations continue to follow traditional norms for consensus building. When it comes time to take a vote for the record, it is usually unanimous. If unanimity appears unlikely, then a vote may not be called. In such cases, the best solution would require more discussion, thought and time.

Unfortunately, when working with governments, Inuit norms of behaviour may not be compatible with those of government and other participants, leading others to dominate decision-making while undermining consensus building.

Often at cross-cultural meetings, a tendency can be observed in which a biologist or government manager speaks strongly and appears closed to information or options based on Inuit Qaujimatugangit (IQ, or knowledge). Knowledgeable Inuit may ask non-Inuit if they know about a specific topic, non-confrontational questions that can be subtle invitations for others to seek new information or options from Inuit, instead of apparently continuing discounting Inuit knowledge and views. Some non-Inuit may argue about wildlife or the environment, which makes elders and other Inuit uncomfortable. Such foreign behaviours may undermine consensus building with Inuit. As a result, important Inuit knowledge, views, solutions and wisdom may not be expressed. Silence and lack of disagreement by Inuit in such situations does not indicate agreement. Efforts at finding consensus is also hampered because government ministers

retain ultimate responsibility in Nunavut and usually disregard alternatives based on IQ.

Tuktuit, biodiversity, climate change and development

Inuit Qaujimatungit teaches that the population cycle of tuktuit on Qikiqtaaluk lasts the lifetime of an elder, 70 to 90 years.¹⁸ Inuit elders can predict the phases of this cycle and the abundance of tuktuit through on-going monitoring by Inuit harvesters, without need for expensive surveys. Most Inuit do not believe in the accuracy of scientific wildlife surveys. The truth of IQ has been proven for generations, and it is always being updated, verified and revised if needed by active harvesters and elders working together.

When tuktuit are at high density on Qikiqtaaluk, they change entire plant communities within their wintering habitats.¹⁹ During winter, tuktuit eat mainly lichen for energy if adequately abundant. While digging through snow to access lichen, they break and dislodge shrubs, herbs, grasses, other plants and soil, which may then blow away in the wind into depressions and streams. If tuktuit did not reach high densities for a full cycle, vascular plants could eventually dominate the tundra of Qikiqtaaluk, and those plants would shade out and reduce future growth of the lichen that tuktuit need in winter. Over the long term, the loss of plant biodiversity caused

by high densities of tuktuit is needed so that lichens, tuktuit and Inuit can flourish during some phases of these long population cycles.

Some Inuit elders have stated that after there have been too many tuktuit for too long, it can take 30 years for their food, the lichen, to recover. Once there's been sufficient time, tuktuit immigrate from other areas and gradually increase to become abundant again. Other elders pointed to signs that they see on the land itself, as the late Geosha Uniuqsaraq of Iqaluit explained in the early 1990s, *"my elders told me that tuktuit will return when old antlers become covered with lichens. That was how I knew they would return."*

On the other hand, abundant tuktuit cannot be found in all parts of Qikiqtaaluk at the same time. As elders had predicted in the 1980s, after tuktuit had wintered on Foxe Peninsula for about 20 years, they emigrated en masse, shifting their winter range eastward by about 375 km to occupy a little grazed area on Meta Incognita Peninsula.²⁰ Tuktuit that remained on Foxe Peninsula into the 1990s were in very poor condition and eventually left that area, too. Tuktuit that moved to Meta Incognita Peninsula became fat, were more productive, and could dig through much harder and deeper snow because the lichens under the snow were abundant. As stated by several elders, *"snow is no problem for tuktuit unless there has been too many tuktuit for too long."*

The complexity of these interactions makes it difficult to make predictions about the impacts of climate change on tuktuit or other wildlife. Tuktuit may adapt readily to climate change resulting in deeper snow, more wind or even rain/ice on snow in autumn, where populations have been low. But there are places on Qikiqtaauk where there have been too many tuktuit in recent decades, so climate change could be devastating if, as elders say, the land cannot rest. Tuktuit may leave those places and survive if they can find areas with better snow conditions or more lichens, or they may not.



Two females and a calf swimming between islands in eastern Natsilik, Qikiqtaaluk. Photo: Michael Ferguson



Caribou cow nursing calf Great Plain of the Koukdjuak Baffin Island. Photo: Michael Ferguson

¹⁸ Ferguson, M.A.D., R.G. Williamson and F. Messier. 1998. Inuit knowledge of long-term changes in a population of arctic tundra caribou. *Arctic* 51: 201–219.

¹⁹ Ferguson, M.A.D., L. Gauthier, and F. Messier. 2001. Range shift and winter foraging ecology of a population of Arctic tundra caribou. *Canadian Journal of Zoology* 79: 746–758.

²⁰ Ferguson, M.A.D., and Messier, F. 2000. Mass emigration of arctic tundra caribou from a traditional winter range: population dynamics and physical condition. *Journal of Wildlife Management* 64: 168–178.

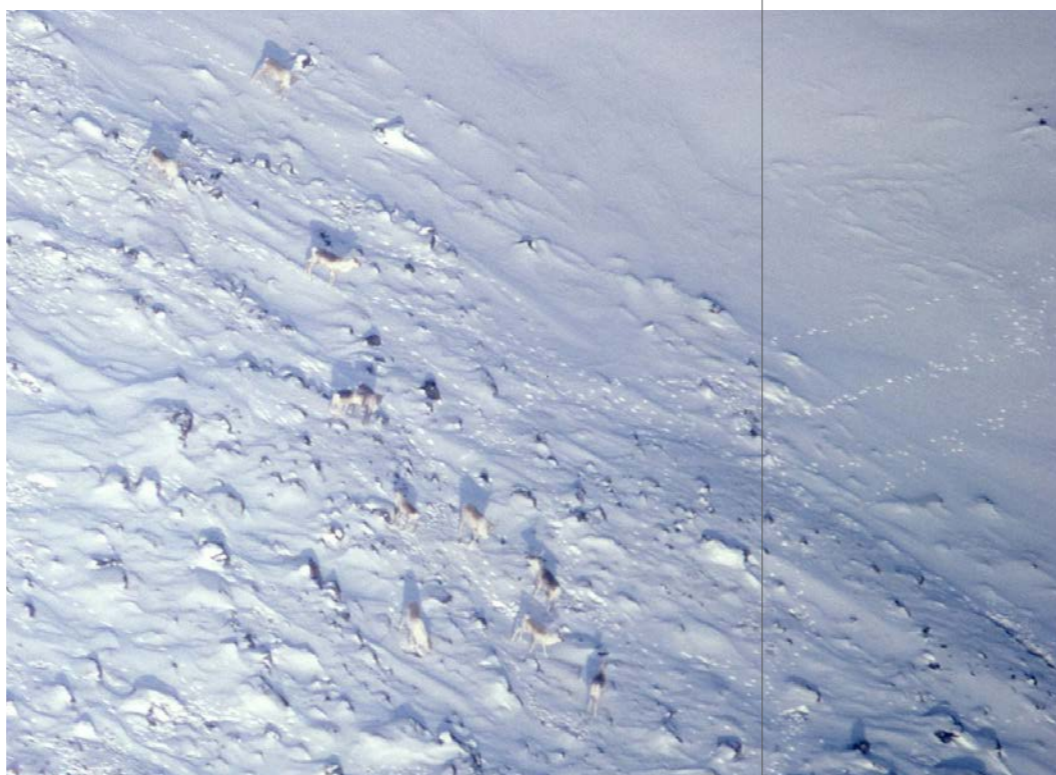


“I hunt for other people. I go out and get a caribou ... It keeps me close to the men I hunt with. I make my parents, kids, relatives and friends happy because they don’t have caribou sometimes, and we all come together and share the meat. Caribou is more important than seal to keep my family and community together. ... What is a community feast without caribou?”

Pauloosie Kilabuk of Iqaluit

Inuit elders understand that when tuktuik are abundant and in good physical condition, they go where they want, as they once did on Qikiqtaaluk in the 1980s and 1990s. However, when there are only a few tuktuik or when they are in poor condition, they are very sensitive to human disturbance and new infrastructure on the land. Females with calves are often most sensitive, but in some areas and seasons males may also be sensitive. On the other hand, malnourished tuktuik may seem undisturbed by humans and not immediately try to escape, but they may not return to such areas. When there are few tuktuik, development such as mining, roads and wind turbines can put the recovery of a small population at risk, especially if their habitats are not protected over the long term. However, at cross-cultural meetings, developers may argue that there just are not many tuktuik in the first place, and therefore they argue that it is pointless to protect the area in question. Such difficult discussions are underway on northern Qikiqtaaluk regarding the Baffinland iron mine and their proposals to increase production and develop a railroad.

As the responses of tuktuik may be delayed and varied depending on forage resources, population density, seasonality, sex and age, physical condition



Well-camouflaged tuktuik during late winter, southern Qikiqtaaluk. How quickly can you find all eleven? Photo: Michael Ferguson

and various environmental conditions, impacts of disturbance and development is difficult to detect using scientific methods. Knowledgeable Inuit often make different conclusions from governments, biologists and developers about the impacts of development and climate change because they have deeper, more nuanced understandings and appreciations of tuktuik and other Arctic wildlife.

Tuktuik and Inuit

Even during periods of cyclical scarcity, harvesting tuktuik gives great pride among Inuit. It ties entire communities together, and helps to ensure the transfer of Inuit Qaujimagatuqangit about tuktuik, weather, climate, the land, plants and other animals to younger generations. As expressed by the late Pauloosie Kilabuk of Iqaluit in the late 1980s:

“I hunt for other people. I go out and get a caribou ... It keeps me close to the men I hunt with. I make my parents, kids, relatives and friends happy because they don’t have caribou sometimes, and we all come together and share the meat. Caribou is more important than seal to keep my family and

community together. ... What is a community feast without caribou?”²¹

From 1980 to 1984, the Qikiqtani Inuit Association's predecessor conducted the first Inuit harvesting study in the region.²² During those years, they estimated that Inuit harvested 12,000 to 16,000 tuktuik annually from Qikiqtaaluk, and all signs indicated that the population was still growing. At that time, it would have cost about 11 million Canadian dollars annually to replace that resource with beef from southern Canada.

From 1997 to 2001, the Nunavut Wildlife Management Board²³ conducted another harvest study and estimated that Inuit harvested fewer tuktuik, 8,000 to

²¹ Ferguson, M.A.D. 1989. Baffin Island. In *People and caribou in the Northwest Territories*. Edited by E. Hall. Department of Renewable Resources, Government of the Northwest Territories, Yellowknife. pp. 141-149

²² Donaldson, J.L. 1988. *The economic ecology of hunting: A case study of the Canadian Inuit*. Ph.D. dissertation, Department of Biology, Harvard University, USA.

²³ Prest, H. and P.J. Usher. 2004. *The Nunavut wildlife harvest study: Final report*. The Nunavut Wildlife Management Board, Iqaluit, NU.



Wetlands of Great Plain of the Koukdjuak, with snow geese on land and in waters at junction of Foxe Basin and Kuujjuaq. Photo: Michael Ferguson





Lichen covered antler (referred in text as a predictor of when tuktuit will return to an area, based on Inuit knowledge). Photo: Michael Ferguson

11,000 annually from Qikiqtaaluk. These were the years when Inuit hunters first reported changes that elders read as signs of potential future scarcity of tuktuit on Qikiqtaaluk; this is likely when the decline phase of the 70 to 90-year population cycle started.

The QWB and local HTOs warned the government about the serious changes predicted by Inuit elders, and requested development of a long-term management plan based on Inuit Qaujimagatuqangit. A 15-year management plan was developed for southern Qikiqtaaluk tuktuit during workshops in 2004 and 2005, held by the Government of Nunavut, the QWB and HTOs. The plan was presented to the Nunavut Wildlife Management Board for review in 2005. The QWB and HTOs requested similar planning workshops for similar changes and Inuit predictions for tuktuit on northern Qikiqtaaluk. Unfortunately, the government did not hold the requested northern Qikiqtaaluk workshops and did not implement the management and research actions requested by the QWB and HTOs in the southern Qikiqtaaluk plan.

When the predicted declines could no longer be ignored, in 2014 the government conducted an ambitious aerial survey of the entire island and nearby lands to produce a population estimate of 4,650 tuktuit (95% CI: 3,460 – 6,250).²⁴ Although the QWB agreed that the population had declined and was at a low point in

its cycle, the QWB did not agree with the specific 2014 population estimate or the subsequent management actions undertaken by the government.²⁵ Initially, the Government of Nunavut imposed a harvesting moratorium, but after about six months, changed that to a Total Allowable Harvest of 250 males in 2015.

In 2020, the QWB applied to the Nunavut Wildlife Management Board to increase the Total Allowable Harvest to 325 and allow the harvest of 45 females. Inuit elders advise against the harvest of only one sex because it may upset the balance of the sexes within the social system of tuktuit sub-populations. These requests were based largely on Inuit Qaujimagatuqangit which has been shown to be accurate and predictive over the past 40 years, and for generations before. These applications were consistently opposed by the Government of Nunavut and denied by the Nunavut Wildlife Management Board, although the harvest of up to 25 females has been permitted since 2019.

Based on IQ and harvesters' observations as they continue to monitor changing distributions of tuktuit, just as Inuit have always done, the QWB understands that the population of tuktuit on Qikiqtaaluk is growing and can support more harvesting. For example, tuktuit are returning to Foxe Peninsula and other areas in winter, where they had been absent during winter for

about 30 years. To prove the point, the QWB has raised funding to formally document IQ, hunter observations and collect fecal genetic samples in three communities during 2021-22.

In the 1940s and 1950s after the previous cyclical decline, Inuit reported that they had to keep harvesting tuktuit even though they were low in abundance. This was for two main reasons: (1) to obtain food and winter clothing, and (2) to "let the land rest" so that continued harvesting would restore the ecological balance between tuktuit and their slow-growing winter lichen forage after too many tuktuit for too long. Tuktuit populations can increase rapidly after sufficient lichen forage accumulates; however, without sufficient harvesting for perhaps a decade or longer after a cyclical decline, their potential for rapid population growth could potentially maintain their winter forage in a perpetually over-grazed state, and the major increase phase of their cycles may never return.

Biologists with the Government of Nunavut have advocated management to maximize current population growth, while stating they do not know why the decline occurred in the first place. Through their ancient knowledge and on-going year-round monitoring of Qikiqtaaluk tuktuit, Inuit accurately predicted the decline, they know why it occurred, and they know how to manage the recovery of tuktuit for future generations of tuktuit and Inuit, and the lichen resources that they all depend upon.

The QWB plans to apply again to the Nunavut Wildlife Management Board in 2021-22 for an increase in the Total Allowable Harvest. Even though government ministers retain ultimate authority, the QWB will continue to promote the recovery, protection and management of Qikiqtaaluk tuktuit and their habitats based on the values, principles and teachings of Inuit Qaujimagatuqangit. In fact, in late 2020 the QWB Executive decided to assert the primacy of Inuit systems of wildlife management as a constitutionally protected Indigenous right in Nunavut.

²⁴ Campbell, M., J. Goorts, D.S. Lee, J. Boulanger and T. Pretzlaw. 2015. Aerial abundance estimates, seasonal range use, and spatial affiliations of the barren-ground caribou (*Rangifer tarandus groenlandicus*) on Baffin Island – March 2014. Technical Report Series No: 01-2015, Department of Environment, Government of Nunavut.

²⁵ Several QWB submissions have been made to the Nunavut Wildlife Management Board beginning the following one in February 2015: <https://www.nwmb.com/en/public-hearings-a-meetings/public-hearings-1/2015-2/public-hearing-concerning-baffin-island-caribou-harvest-management/submissions-4/5106-qikiqtaaluk-wildlife-board-submission-bic-february-13-2015-eng/file>



“My elders told me that tuktuit will return when old antlers become covered with lichens. That was how I knew they would return.”

Geosha Uniuqsaraq of Iqaluit



Flavocetraria nivalis, a preferred lichen of tuktuit on Qikiqtaaluk. Photo: Michael Ferguson

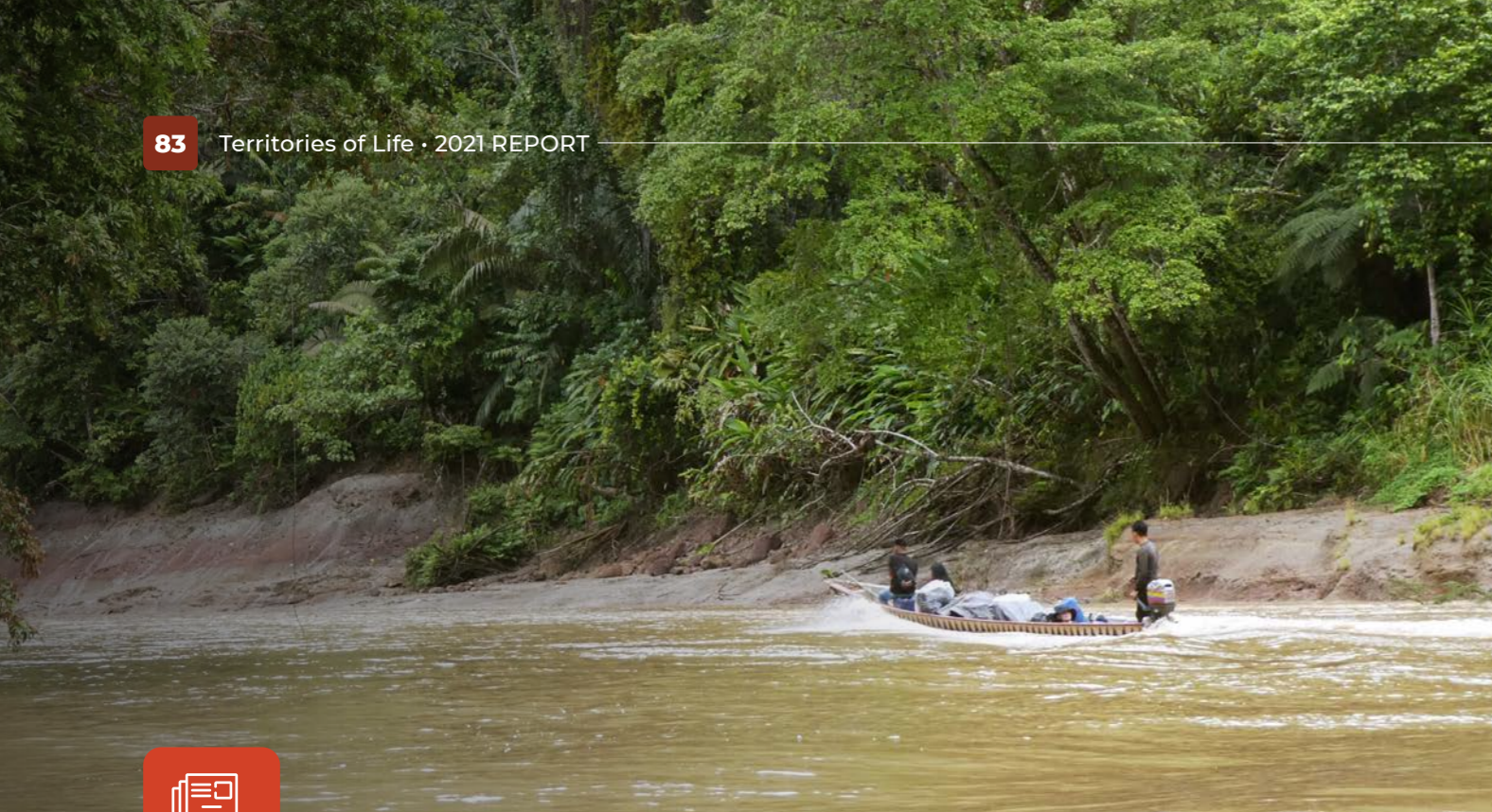


Photo: Wachachik



Sarayaku

The Living Forest of the Midday People in the Ecuadorian Amazon

Author(s):¹ Pueblo Originario Kichwa de Sarayaku and Fundación ALDEA

We, the Sarayaku people, also known as the Midday People, identify ourselves as Kichwa Indigenous people. We have approximately 1,500 inhabitants, organised into seven communal centres: Kali Kali, Sarayakillu, Chuntayaku, Shiwakucha, Puma, Kushillu Urku and Mawka Llakta. We live within a territory of 135,000 hectares, rich in biodiversity: *Sacha* (forest), *Yaku* (rivers), waterfalls, black lagoons, *Allpa* (soil and subsoil) and *Wayra* (air). These sustain a huge number of ecosystems and species of flora and fauna, which are of the utmost importance for the livelihoods of families, who dedicate themselves primarily to hunting, fishing, managing *chakras* (agroforestry systems) and harvesting wild products. Our territory is predominantly tropical Amazonian rainforest, and within its diverse landscape one can find hill forests, floodplains, riparian forests, wetlands, salt licks, *Mauritia* palm swamps and the *Sisa Ñampí* or “great path of flowers.”

In our history, we have experienced the pressure of religious missions, the presence of rubber bosses, dealings with Peruvian traders and confrontations with other Indigenous peoples. Despite this, we have maintained traditional ways of using and managing our territory, as well as traditional forms of organisation and relationships with nature.

The Living Forest

Sarayaku is located in the middle basin of the Bobonaza River, in the province of Pastaza, in the centre of the Ecuadorian Amazon. Our vision of Pachamama and of territory is holistic. From the day we are born, we adopt an integrated way of life that encompasses all beings of the Living Forest, a concept based on the existence of the *Sacha runakuna* (visible and invisible inhabitants of the forest). We build reciprocal relationships with the



Sacha runakuna, thus establishing and putting into practice the concept of *Sumak Kawsay*: life in harmony. In 2018, exercising our autonomy and self-determination in the General Assembly of the Kichwa Indigenous people of Sarayaku, we declared our territory to be **Kawsak Sacha – the Living Forest: a living and conscious being, subject of rights.**

The *Kawsak Sacha* provides us with energy and gives us the air that we breathe; it is fundamental to our worldview. The Living Forest is a being with whom the *Yachakkuna* (Shamans) communicate in order to receive and transmit knowledge. This learning directs and guides us towards *Sumak Kawsay*. *Kawsak Sacha* is the primary source of *Sumak Kawsay*: it provides a space for living and for emotional, psychological, physical and spiritual revitalisation. The land, or *Allpa mama*, is our mother, the origin of life and of existence. Breaking any element of this holistic structure would mean cutting the vital links between the protective beings and human beings.

¹ This report was prepared by the technical support team of the Kichwa Indigenous people of Sarayaku in collaboration with Fundación ALDEA.

The **Kichwa Indigenous People of Sarayaku** and **Fundación ALDEA** are Members of the ICCA Consortium.

Translation from Spanish: Katharine Abbott; revision: Chris Jarrett

“We, the Sarayaku People, are heirs to a history of resistance and a struggle to uphold our freedom against colonists, invasions and external aggressions because we are Sarayaku Runakuna, descendants of the jaguar, inhabitants of the Bobonaza, Pastaza and Marañón basins. Rivers which the Tayakkuna, bearers of ancient wisdom, navigated, naming the places they travelled through along the way.”

Kawsak Sacha Declaration, 2018





135,000 hectares



Custodians: Kichwa Indigenous peoples of Sarayaku, 1,500 members



Visit the website of **Kawsak Sacha**

Self-government

Legally recognised in 1979 as the “Centro Alama Sarayacu”, our statutes were reformed in 2004, giving us our current legal status as the “Kichwa Indigenous people of Sarayaku or *Tayjasaruta*”. A new statutory reform is currently in process. Our political and administrative organisation is mixed and is comprised of traditional authorities: 7 *Kurakakuna*² and 7 *Likuatikuna*³ appointed by each community, as well as 11 leaders, women and men, who exercise self-government and the administration of our own justice system within our territory, in accordance with the Ecuadorian Constitution (2008). The Governing Council is appointed by consensus in the People’s Congress and is responsible for organising a technical support team, a *Kaskirunakuna* team (guardians of the forest), a communications team and the *Wio* security group. There is a women’s organisation called *Kuriñampí* (path of gold) and the youth have formed Sarayaku Malta Runa Tandanakuy (SAMARUTA, Young People’s Association).

In organisational terms, we are members of Pastaza Kikin Kichwa Runakuna,⁴ which brings together the Kichwa people of the Pastaza province,⁵ and we participate directly in the Confederation of Indigenous Nationalities of the Ecuadorian Amazon (CONFENIAE),⁶ the regional Amazonian Indigenous organisation, which is in turn a member of the Confederation of Indigenous Nationalities of Ecuador,⁷ the national organisation. In addition, CONFENIAE is an affiliate of the Coordinator of Indigenous Organisations of the Amazon River Basin,⁸ which is made up of Indigenous organisations from the nine countries of the Amazon.

In 2018, we began the formal process of becoming a member of the ICCA Consortium and at the end of January 2020, we **decided to register** ourselves as Kawsak Sacha and a Territory of Life in the **Global ICCA Registry** and in the **World Database on Protected Areas**, managed by the UNEP World Conservation Monitoring Centre.

The structure of our own government allows for



Photo: Wachachik



The location of Sarayaku in Ecuador and South America. Credits: ALDEA Foundation, 2021



Ayllukuna Kawsana Allpa. Zoning of the territory. Credits: Kaskiruna Team, 2018

strategic decision-making based on our experience and customs, shared orally in the community and passed down through generations. We have a Life Plan and a Natural Resource Management Plan, among other communal regulations. In our territorial management plan, we have formalised areas for human settlements, housing, crops, hunting, *tambos* (resting places) and protected areas. Each area has its own rules, which have been constructed based on traditional practices and approved in assemblies. This zoning enables the sustainable use of natural resources for building houses and canoes, hunting and fishing, harvesting fruit, developing agricultural activities in order to guarantee food security, medicine, traditional festivals and river transportation (see the zoning map above).

The *muskuy* (dream and vision) that guides us is to exercise our collective rights based on our own system of governance for the territory and its natural resources, free from the incursions of external actors.

Sarayaku, selva viviente, es Territorio de Vida. Video 2:30 min., Fundación ALDEA, 2020

Our ancestral customs and regulations for the use of natural resources are set out in a strategic plan that draws together collective approaches for consolidating our own organisation, managing the territory and taking care of nature and life.

Since 2012, all along the perimeter of our territory we have been planting the *Sisa Ñampí*, a living path of thousands of trees that, with their flowers and fruits, enable the Sarayaku territory to be seen from the air.

² Traditional Indigenous authorities that represent each community within the Governing Council of the Sarayaku People.

³ The messenger between the people and the *kuraka* (leader), they also provide security to their *kuraka*, to their community and to the people in general.

⁴ Pastaza Kikin Kichwa Runakuna is commonly abbreviated as PAKKIRU. Visit their **Facebook page (in Spanish)**.

⁵ In Ecuador, the political-administrative structure divides the country into provinces, cantons and parishes.

⁶ CONFENIAE is a regional Indigenous organisation which represents around 1,500 communities belonging to the Amazonian nationalities Kichwa, Shuar, Achuar, Waorani, Sapara, Andwa, Shiwiar, Cofan, Siona, Siekopai and Kijis.

⁷ CONAIE, see <https://conaie.org/>

⁸ COICA, see <https://coica.org.ec/>

It symbolises the presence of people in the heart of the forest, resistance, solidarity and complementarity, as well as the aliveness of the land. The circles of the *Sisa Ñampí* are named after the forest beings to maintain the memory of our ancestors. The *Kaskirunakuna* watch over our territory and monitor the natural resources and their changes.

The great mountains are beings and, at the same time, home to the protective beings of all the animal and vegetable species. In the rivers and lagoons live beings that control and maintain the equilibrium and abundance of water species. In the forest, there are age-old trees that are essential to the spiritual balance with which all people communicate and connect. Furthermore, they are nodes of biodiversity that ensure the life of the forest and its inhabitants.

In defence of territory

The titling of our territory was a milestone that came about following the historic march *Kawsaimanda alpamanda jatarishun*, organised by OPIP⁹ in 1989, which triggered the Indigenous uprising of the 1990s. In 1992, the government legally recognised the territory

and granted titles that did not coincide with ancestral intercommunity and interethnic boundaries. Even though the demarcation was not as the Indigenous people of Pastaza had proposed, the titles served as instruments for defending the territory against the expansion of agricultural and cattle ranching frontiers. The Ecuadorian State issued a collective title for 254,000 hectares of tropical forests to the Kichwa peoples of the middle and lower basin of the Bobonaza River. Of these, 135,000 hectares belong to Sarayaku.

In 1996, the Ecuadorian state granted a concession for a large portion of Sarayaku territory to the Argentine oil company CGC. For their approval to oil exploration and exploitation, the company sought to divide the communities and bribe leaders. Toward the end of 2002 and the beginning of 2003, the company entered the territory by force with a military escort to carry out drilling, plant explosives and launch seismic prospecting activities.

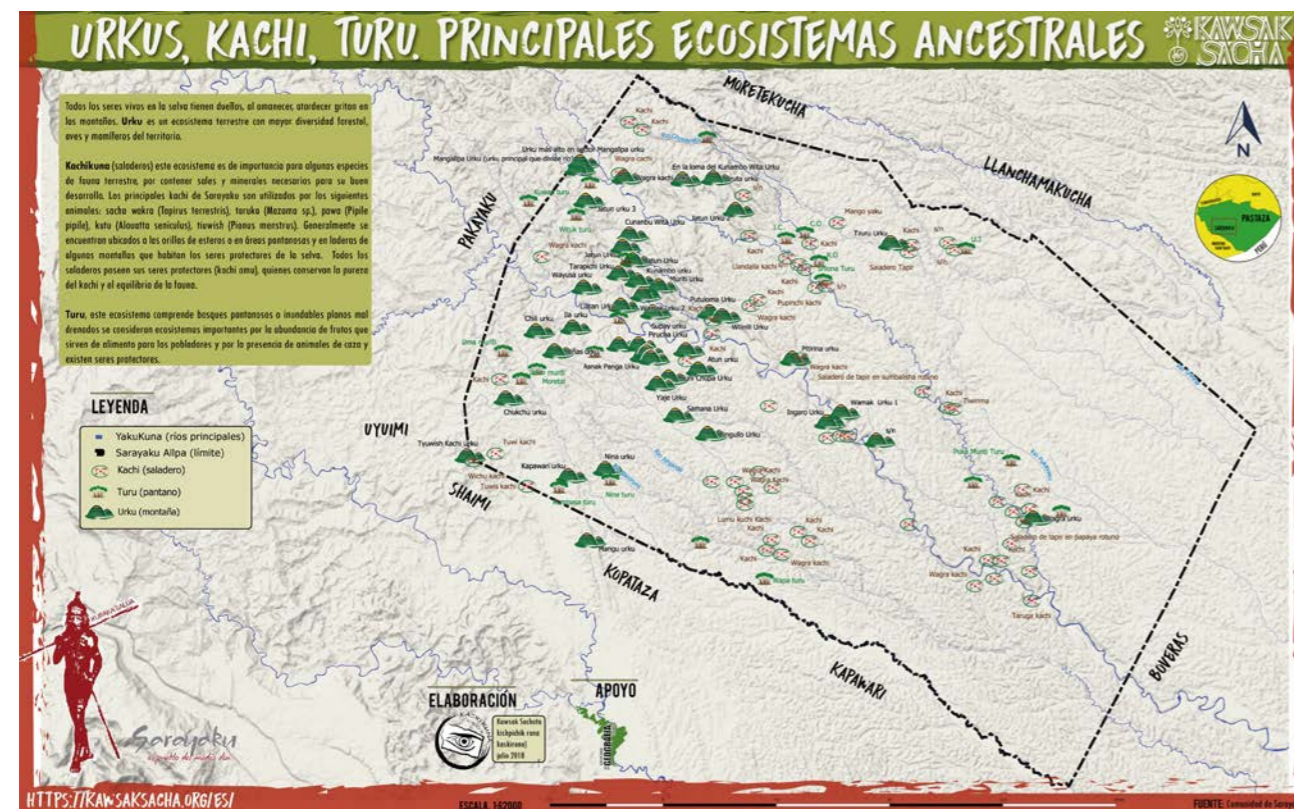
In 2003, we took the case to the Inter-American Commission on Human Rights (IACHR) with a claim against the Ecuadorian State. In 2010, the case was referred to the Inter-American Court on Human Rights (IACtHR) after a background report in which



Children helping in the chacra. Photo: Wachachik



Women collecting clay for ceramics. Photo: Wachachik



Urkus, Kachi, Turu. Main ancestral ecosystems. Credits: Kaskiruna Team, 2018

the IACHR concluded that Ecuador violated the rights to (among others) life, integrity, property and judicial guarantees. A series of recommendations were issued to the Ecuadorian state, including reparations and non-repetition measures, some of which have still not been implemented. The sentence issued by the Court is of great importance because it strengthens jurisprudence on Indigenous peoples' rights in the Inter-American system.¹⁰

Subsequently, with the **Kawsak Sacha Declaration**, we launched a mechanism for national and international recognition of our own protection system developed in a self-determined way, respecting our collective rights and vision.

Territory of life and conservation of biodiversity

Our mission as the Sarayaku people is to take care of and use our territory in a respectful way in order to strengthen *Sumak Kawsay* (life in harmony) and ensure the continuity of the *Kawsak Sacha*, or Living Forest.

Sarayaku territory is not just a physical and geographical space. It is the place from which we elevate our emotions, connecting with the world of the protective beings of living places. The relationships we have with

them allow us to reproduce our economic systems, our technologies, our knowledge and science, our social, cultural and spiritual life and our organisational and political systems, in order to build our future, autonomously decide our destiny and ensure our continuity as an Indigenous people.

The forest is important for our people, but it is also the habitat for the protective beings of the whole ecosystem. We have our own rules and regulations for living together and for the use of natural resources. The *Kaskirunakuna* keep watch and the *Tayjasaruta* Governing Council can sanction failure to comply with the rules.

Other criteria for wealth

Our Life Plan is based on other criteria for wealth, oriented toward achieving *Sumak Kawsay*: having a healthy territory free of contamination, a land that is productive and abundant in natural resources, the

⁹ The Organisation of Indigenous Peoples of Pastaza (OPIP) is now **PAKKIRU**.

¹⁰ See: Inter-American Court of Human Rights. **Kichwa Indigenous People of Sarayaku vs. Ecuador**. Judgment of 27 June 2012.





Hatun Kawsak Sisa Ñampi. The living path of flowers. Credits: Kaskiruna Team, 2018

Sumak Allpa. We have implemented initiatives to strengthen food security such as fisheries, diversified chakras and the experimental breeding of wild species with a producers' cooperative, the *Sumi Sawa*. Products from the forest are common goods and cannot be sold externally; only produce from the chacra can be sold.

The forest provides building materials and roofs for houses, food, medicine, crafts and construction, as well as habitat for the forest's protective beings. Major rivers flow through the territory and along their path give rise to diverse aquatic ecosystems, which provide the main source of fish and other key food species for the population.

These characteristics of the territory are an important contribution to nature conservation, climate change adaptation and sustainable use through activities like small-scale ecological tourism. They are also key to control over access to land and resources, territorial security and food sovereignty.

We have a community fund to which people with a stable income contribute.¹¹ The community fund also receives support from partners of several projects. The compensation we received from the state through the



Inter-American Court of Human Rights sentence was invested in the creation of a community bank and in buying the Aero Sarayaku airline.

Internal and external threats

The main threats to our territory are related to national policies that promote extractive activity in the Amazon (oil, mining, logging). The Constitution states that non-renewable natural resources and subsoil resources (mineral deposits and hydrocarbons) are state property (Art. 408 of the Constitution). Under this argument, concessions and authorisations are granted for exploration and exploitation phases, violating human rights, collective rights and the rights of nature. Another threat to the territory and to our life is the opening of roads, which leads to deforestation, illegal hunting and fishing and colonisation.

Furthermore, the state has reduced investment in Indigenous peoples' and nationalities' public

Reconstruction of the 'Technical House' (office of the leaders and technical teams) in Sarayaku. Photo: Wachachik



“As an Indigenous people defending our rights, we have based our focus on the search for the autonomous management of our territory, as well as the conservation of the Amazonian ecological systems that contribute to maintaining hydrological and climatic cycles of great importance for the planet. All of this is based on the profound knowledge of the Sacha Runa Yachay (wisdom of the forest peoples).”

Kawsak Sacha Declaration, 2018

¹¹ Teachers, project technicians, and other people who have a stable income contribute one per cent of their monthly income to the community fund.



institutions. Among these are intercultural bilingual education and intercultural health, which were created as a result of the Indigenous movement. Territorial planning processes and development management at a local level do not incorporate the decisions expressed in Life Plans. Similarly, national policies drive land use change and land grabbing.

Another direct threat are legal harassments against the exercise of our collective rights through complaints and claims made against leaders of our people. Added to this are militarisation of the territory and persecution, threats and victimisation of leaders and defenders of human rights and the rights of nature, which have occurred under states of emergency declared based on unclear arguments.

Finally, an ever-present threat is that the state, through its respective institutions, does not recognise our organisational process and right to prior consultation or the legal status of the Kichwa people of Sarayaku, given that the authorities do not recognise the treaties and international instruments that promote Indigenous peoples' rights.

A living territory, free of extractivism

In the process of self-determination and in the exercise of our rights over our territory and identity, our objective is to sustainably preserve and conserve our territorial spaces and the material and spiritual

relations that we establish as Indigenous peoples with the Living Forest and the beings that live there.

Floods and the COVID-19 pandemic

In mid-March 2020, while the Ecuadorian government declared a state of exception and a health emergency due to the COVID-19 pandemic and initiated a lockdown, we faced four consecutive floods when the Bobonaza River overflowed. Over 30 families were left homeless, and 80 per cent of the population lost their chakras, seriously impacting food security. Four schools were left unusable. Bridges and community roads were destroyed and means of transport were damaged because the current swept away several canoes and motors. We suffered a double crisis: the global COVID-19 pandemic and the disaster caused by the floods.

The government's call for a lockdown did not take into account any solutions for getting supplies to communities in the Amazon. Emergency payments were offered to vulnerable groups during the pandemic and to flood victims, but in order to receive these, people had to go into the city, in clear contradiction of the restrictions on movement.

After two months of isolation, we started going to Puyo, the capital of Pastaza Province, to stock up on food, medicine and other products. In turn, Sarayaku students and professionals who had been outside the territory returned. These movements inevitably lead to COVID-19 infections. Ninety per cent of the adult population were infected and four elders died.

Since the start of the pandemic and without really knowing what COVID-19 was, we increased the consumption of traditional medicine in our households as a way to lessen symptoms. The Amazonian Indigenous peoples' relative resistance and ability to recover from the disease could be linked to the consumption of medicinal plants and our way of life, in harmony with Pachamama.

Faced with the complexity of the situation and completely abandoned by provincial and national authorities, we adopted our own COVID-19 contingency plan, which promoted use of traditional medicine as a preventative measure in all households. In each community centre, a group of men and women who are knowledgeable about medicinal plants was formed to collect, store, prepare and distribute the remedies. An Internal Emergency Operations Committee was

created. A team of volunteer paramedics was set up to help vulnerable people with symptoms of the illness, coordinating with the *Wio* security team to provide an emergency response. All this occurred despite the destruction of our main lines of communication with other communities¹² and the city of Puyo.

We have taken urgent and culturally appropriate measures to safeguard our right to life, our collective rights and the rights of nature through strengthening community initiatives.

References:

Visit our two websites, sarayaku.org and kawsaksacha.org, for more information and ways to support our struggle.



Kawsak Sacha for the world.
Video 5:50 min., English subtitles, Kawsak Sacha 2019

¹² The main bridge that connects the seven Sarayaku communities was destroyed by the flooding of the river.

The positioning of the Kurakas in the Pachamama (May 2019). Photo: Wachachik

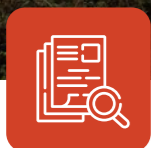


Anniversary of the Atayak association for the preservation of ancestral wisdom. Photo: Wachachik





Photo: Grazia Borrini-Feyerabend



Komon Juyub

The communal forest of the 48 Cantons of Totonicapán in Guatemala

Author(s):¹ Board of Directors of Natural Goods and Resources 48 Cantons, Silvel Elias, Felipe Gómez and German García

The Communal Forest of the 48 Cantons of Totonicapán is a powerful territory of life in Guatemala. Its Indigenous governance system is based on a worldview of equity, inclusion and sustainability principles, which for five centuries has supported the Maya K'iché people of Totonicapán. Thanks to this system, which prevails in a large part of the Indigenous territories in the highlands of Guatemala, the forest maintains its ecological, cultural, social and economic values such as food, medicinal plants, water sources, biological diversity and mitigation of climate breakdown.

Komon Juyub (the Communal Forest of the 48 Cantons of Chwimeq'ená²) is sacred to and protected by the Maya K'iché people of Totonicapán based on sociocultural values, including identity and ancestral history.³ Numerous ceremonial sites are located in this forest, along with more than 1,500 water sources that supply the communities. It also provides food such as

mushrooms, edible and medicinal plants, as well as firewood and timber for subsistence, and many families graze their sheep there as their main way of life.

Komon Juyub is in the municipality of Totonicapán in the department with the same name. The municipality has around 104,000 inhabitants, 97 per cent of whom are Indigenous Maya K'iché.⁴ The municipality remains covered with forests under different forms of tenure, including the Communal Forest of the 48 Cantons, the forests of the Parcialidades (community organizations based on kinship), and the forests belonging to private individuals.

The Communal Forest of the 48 Cantons of Totonicapán is 22,000 hectares, of which 11,377 were declared the protected area of Los Altos de San Miguel Totonicapán Regional Park in 1997.⁵ The old communal forest under the ancestral governance of the Maya K'iché people is



“The old forest of Totonicapán is a symbol of collective unity, a sacred place.”

Photo: Grazia Borrini-Feyerabend



¹ The study was carried out in co-authorship with the **Board of Directors of Natural Goods and Resources 48 Cantons of Totonicapán**, who gave their free, prior and informed consent. The 2019 Board of Directors and the new Board of Directors of Natural Goods and Resources of 2020 reached agreements regarding work meetings, review and approval of the report.

Silvel Elias is Professor at the University of San Carlos in Guatemala and Honorary member of the ICCA Consortium.

Felipe Gómez belongs to the Maya K'iché people and is the **regional representative for Mesoamerica in the ICCA Consortium's Council**.

German García is a Technician of the National Council of Protected Areas (CONAP), affiliated with the Board of Directors of Natural Goods and Resources of the 48 Cantons of Totonicapán.

Translated by Teodora C. Hasegan; review: Constanza Monterrubio Solís

² Chwimeq'ená, in Maya K'iché language, means *the place above hot water*. After the Spanish invasion, this place was renamed San Miguel Totonicapán. In the Nahuatl language spoken by the Indigenous people who came with the Spanish, Atotonilco has the same meaning. The local residents continue to use the native name of Chwimeq'ená to refer to their ancestral territory.

³ Elias, Silvel, Larson, Anne y Mendoza, Juan. 2009. *Tenencia de la tierra, bosques y medios de vida en el altiplano Occidental de Guatemala*. Guatemala: **Editorial de Ciencias Sociales**.

⁴ According to the 2018 National Population Census, 1.7 million inhabitants belong to the Maya K'iché people, which represent 11.5% of the total population of Guatemala.

⁵ Parkswatch. **Parque Regional Municipal los Altos de San Miguel Totonicapán**.





22,000 hectares

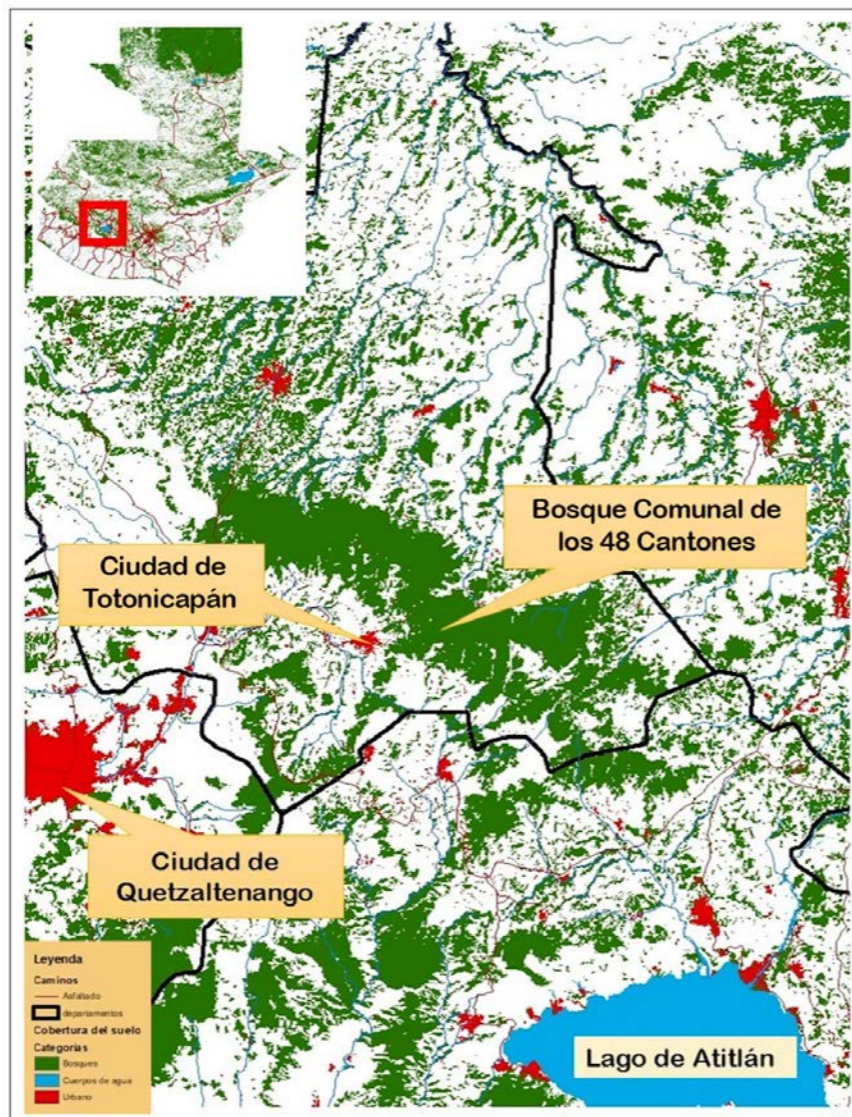


More than 1,500 water sources



Custodians: Maya K'iché Indigenous peoples of Totonicapán

Localisation of the *Komon Juyub* (Bosque Comunal de los 48 Cantones) in Totonicapán.



recognized for its long tradition in conservation, thanks to the collective tenure system, the strength of the community territorial government, and the multiple values, goods and services it provides for the population. The old forest is a symbol of collective unity and a sacred place.⁶ The inclusive, equitable and sustainable ancestral governance model of community forest management is an inspiration for many people who visit it, both from within Guatemala and from abroad.

K'axq'ol: a mission of sacrifice and service to care for, defend and protect life

The Maya governance of the Communal Forest is an expression of the right to self-determination of Indigenous peoples and is under the responsibility of the Board for Natural Goods and Resources of 48 Cantons of Totonicapán, an ancestral territorial

government with five centuries of existence.⁷ This government comprises a Communal Assembly that has representation of authorities elected in each community through the system of positions, locally called K'axq'ol (sacrifice and service). This community service, since its ancestral conception, has the mission to care for, defend and protect life.

The Assembly appoints five Boards of Directors: (1) Communal Mayors; (2) First and (3) Second Fortnight Marshals; (4) Hot Water Baths; and (5) Natural Goods and Resources. The latter, comprised of nine people supported by their assembly, leads the surveillance and control of the communal forest, the maintenance of forest nurseries, reforestation tasks, and conflict resolution. The rules within the community are transmitted through minutes, hearings, meetings and assemblies, as well as the so-called *directives*, a mechanism by which the outgoing community

authorities transfer to the incoming ones the rules for the governance of the territory. In 2019, for example, it was agreed to celebrate the start of the 260-day cycle of the Mayan Sacred Calendar (*Tzolk'in*), a decision that was left as a directive for the future Boards of Directors of Natural Goods and Resources to continue.

Despite its importance, Mayan governance based on ancestral spiritual, social and cultural principles is not officially recognized by the State. The Municipality of Totonicapán (an official local government structure) assumed control of the forest, without the consent of the people. In 1997, it proposed to the National Council of Protected Areas (CONAP) the creation of Los Altos de San Miguel Totonicapán Municipal Regional Park, managed by the Municipality. Although the designation of the communal forest as a state protected area does not have the consent of the people and the customary governance and management systems continue to operate regardless, a certain degree of coexistence and some coordination has been developed since then. For example, CONAP supports the 48 Cantons with a technical advisor who works exclusively with them (the only case in the country that has this support). Controlling and reporting illegal activities in the forest are supported by the National Civil Police and the Courts of Justice. The custodians have a specific office and access to computer equipment, cameras, cell phones and GPS.

Monitoring is a central element of the governance and vigilance exercised by the Board of the 48 Cantons. This is conducted through annual walking tours in the forest during the change of the Board. With participation of the incoming and outgoing authorities, accompanied by a large number of community members, the tour not only serves to identify violations and discuss actions in this regard, but also to transmit knowledge about the territory of life and its multiple values. This monitoring practice is widely used by communities with communal forests in the Western Highlands.

The governance is strengthened by alliances with various entities such as universities, ecological organizations, government entities and cooperation agencies. Recently, the Board of Natural Goods and Resources of 48 Cantons has had outreach, exchange and internal discussion with the ICCA Consortium (a non-profit global association dedicated to ICCAs—territories of life), along with the national ICCA network in Guatemala.

⁶ Ixchú, Andrea. 2012. *Totonicapán. Un bosque.*

⁷ Stener Ekern. 2001. "Para entender Totonicapán: poder local y alcaldía indígena." *Revista Diálogo*, 8.

The Board for Natural Goods and Resources of 48 Cantons of Totonicapán. Photo: German García



A territory supporting numerous lives and life forms

The *Komon Juyub* territory preserves and sustains important historical and socio-cultural values, including sites considered sacred such as *Tzilin Chich Abaj* (Stone Bell), *Tum abaj* (Stone Drum), *Kojom Abaj* (Stone Marimba), *Yamanik* (María Tecun), *Piedra Coyote*, *Saq Kab'*, and *Chwi K'axtun*. At the Caves of San Miguel, spiritual celebrations are held for family and collective well-being, such as the request for rain, the blessing of seeds, the protection of community life and the Waxakib Batz (the 260-day cycle of the Maya sacred calendar *Tzolk'in*).

The territory has high hydrological value since this is the location of the headwaters of four hydrographic basins that mark the watershed towards the Gulf of Mexico, the Caribbean Sea, the Pacific Ocean and also the main sources that supply Lake Atitlán (one of the main tourist attractions in the country). For local residents, the water they consume is of fundamental value. Its sources are in the communal forest, so having sustainable access to water is a main motivation for efforts to conserve the territory of life. The communities are organized into Water Committees that manage the provision and maintenance of household water services includes fees. But they must also contribute their *K'axq'ol* when applicable and participate in forest maintenance activities such as reforestation and fire control.

The population of Totonicapán has an income below

the national average and is located in the economically poorest area of the country. Until two decades ago, the forest was the main source of wood supply for producing furniture, which is one of the main economic activities in the municipality. The forest's status as a state protected area has limited local access of wood and thus the contribution of the forest to local livelihoods. However, about a thousand families living in the 16 communities closest to the forest supplement their agricultural, artisanal and commercial production activities with the collection of non-wood forest products, constituting up to 20 per cent of their subsistence, such as honey, fruits, 30 edible species of wild mushrooms, and medicinal plants.

This territory of life is in a high mountain ecosystem, 3,000 meters above sea level, with a high degree of endemism. It is the main location of endemic tree species included in the List of Threatened Species such as Guatemalan fir or *pinabete* (*Abies guatemalensis Rehder*), six species of pine (*Pinus sp.*), madrone (*Arbutus xalapensis*), five species of birds, including the horned guan (*Oreophasis derbianus*), ten species of mammals, including rabbits (*Sylvilagus spp*) and coyotes (*Canis spp*), as well as other species of animals, plants, and fungi typical of this ecosystem. Its expansion and good forest cover contribute to the connectivity of landscapes between the high forests and the lower altitudinal lands. Finally, the forest helps reduce soil erosion, retain carbon, and mitigate the impacts of climate breakdown such as prolonged droughts, heavy rains, and rainstorms.



The comunal forest of Totonicapán. Photo: Grazia Borrini-Feyerabend



Photo: Grazia Borrini-Feyerabend

Overlapping legal and governance systems and threats to the territory of life

Because of the communal or collective land tenure, the main legal entities are the communities of the municipality of Totonicapán, grouped in the organization of the 48 Cantons, where principles of their own legal system are applied to regulate use, access, and territorial control. However, the land titles, which are held in the power and in the name of the K'iché people of Totonicapán, are disputed by the Municipality of Totonicapán. Half of the communal forest territory is registered as a state protected area, under which official norms established by CONAP prevail. There is an overlapping of rights between the legitimate tenure and ancestral governance exercised by the 48 Cantons, the Municipality's state-recognized ownership, and the government management of the territory as a state protected area. This lack of clarity generates disputes and uncertainty in decision-making, especially regarding access, use, and administration of government resources and external cooperation for the territory. Legal insecurity and the lack of appropriate recognition and support for the 48 Cantons' Board of Natural Goods and Resources, who are the true custodians of the territory, may be a long-term



Photo: Grazia Borrini-Feyerabend

threat, but it has not been an obstacle for community governance to remain in force until now.

Given its leadership and convening capacity, the organization of the 48 Cantons also faces being co-opted by political parties, government officials and economic actors who want to take advantage of its organizational potential. Furthermore, the migration of young people to other countries is creating an intergenerational gap that affects the governance and management of the territory. Another threat is the looting of forest products for commercial purposes, especially firewood, timber and products that are used as Christmas decorations (e.g., moss, bromeliads, pinabete), a situation that requires efforts to increase control and surveillance during that season. Also, the pine beetle (*Dendroctonus spp*) has damaged large areas of the pine forest (*Pinus oocarpa Schiede ex Schtdl*); this phenomenon has been spreading around the world's forests, fuelled by warming temperatures.

The control and surveillance system, as well as the decisions made by the 48 Cantons' Natural Goods

and Resources Board of Directors, help counter these threats and prevent and reduce the intensity of conflicts. The communities are aware of the threats to their ancestral territory and discuss in assemblies how to face them. This includes prioritizing for the three State organisations those decisions that affect them, for example, the justice system and the fight against corruption, projects of extractive and hydroelectric industries, as well as proposals for a national water law.⁸ The organization of the 48 Cantons regularly takes a stand regarding issues affecting the political, social, economic and environmental situation of the country, demonstrating again their internal power and integrity as an Indigenous institution.

Self-declaring the communal forest as a territory of life

Totonicapán continues to be a bastion of resistance due to its own Indigenous organizational model.⁹ Their fight for the defence of the territory has been constantly repressed by the State, from the famous uprising of the Maya K'iché people of Totonicapán, led by Atanasio

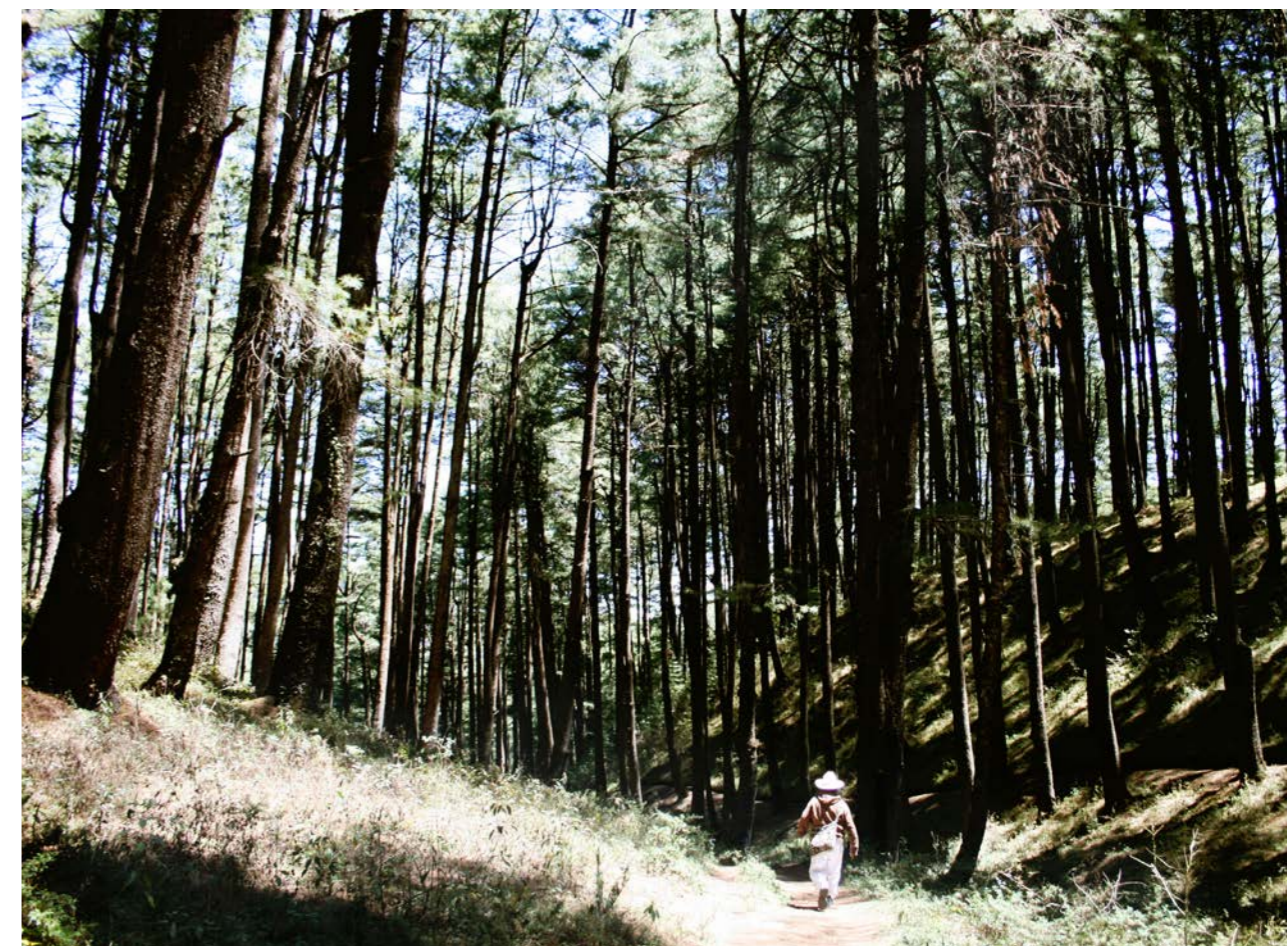


Photo: Grazia Borrini-Feyerabend

Tzul and Lucas Akiral in 1820,¹⁰ to the Alaska Massacre of 4 October 2012, where six Indigenous Maya K'iché were killed by military personnel during a peaceful demonstration.¹¹ However, the population remains firm in its vision of keeping extractive industries, mainly mining, monoculture and hydroelectric industries, which are considered harmful due to their environmental and social costs, far from their territory.

Faced with the interest of various sectors to have a water law, the 48 Cantons require respect for their right to give or withhold free, prior and informed consent to anything that might affect their territory of life (such as projects developed by the State), so as to not have their rights violated as true custodians of the territory and water sources. Today, the organization of the 48 Cantons aspires for the State to recognize and reward their full governance system as custodians of the ancestral territory and the communal forest.

During this 200-year commemoration of the uprising of the Maya K'iché people of Totonicapán, the

community proposes to declare the Communal Forest as a territory of life. The objective is to strengthen the 48 Cantons' Natural Goods and Resources Board and document the experience of hundreds of years of autonomous control over the forest. The Board wishes to share its governance experience with other peoples and communities, learn from other experiences and support mutual strengthening in Guatemala, Latin America and beyond.

⁸ Escalón, Sebastián. 28.03.2016. La ley maldita. **Plaza pública**.

⁹ Gamazo, Carolina. 2016. **Totonicapán. El poder político de un bosque**.

¹⁰ González Alzate, Jorge. 2010. "Levantamiento K'iche' en Totonicapán 1820: Los lugares de las políticas subalternas." **LiminaR**, 8(2): 219-226.

¹¹ Consejo Editorial Plaza Pública. 09.10.2012. "Toto: un parteaguas para el país." **Plaza pública**.

A visit to the communal tree nursery. Photo: Grazia Borrini-Feyerabend



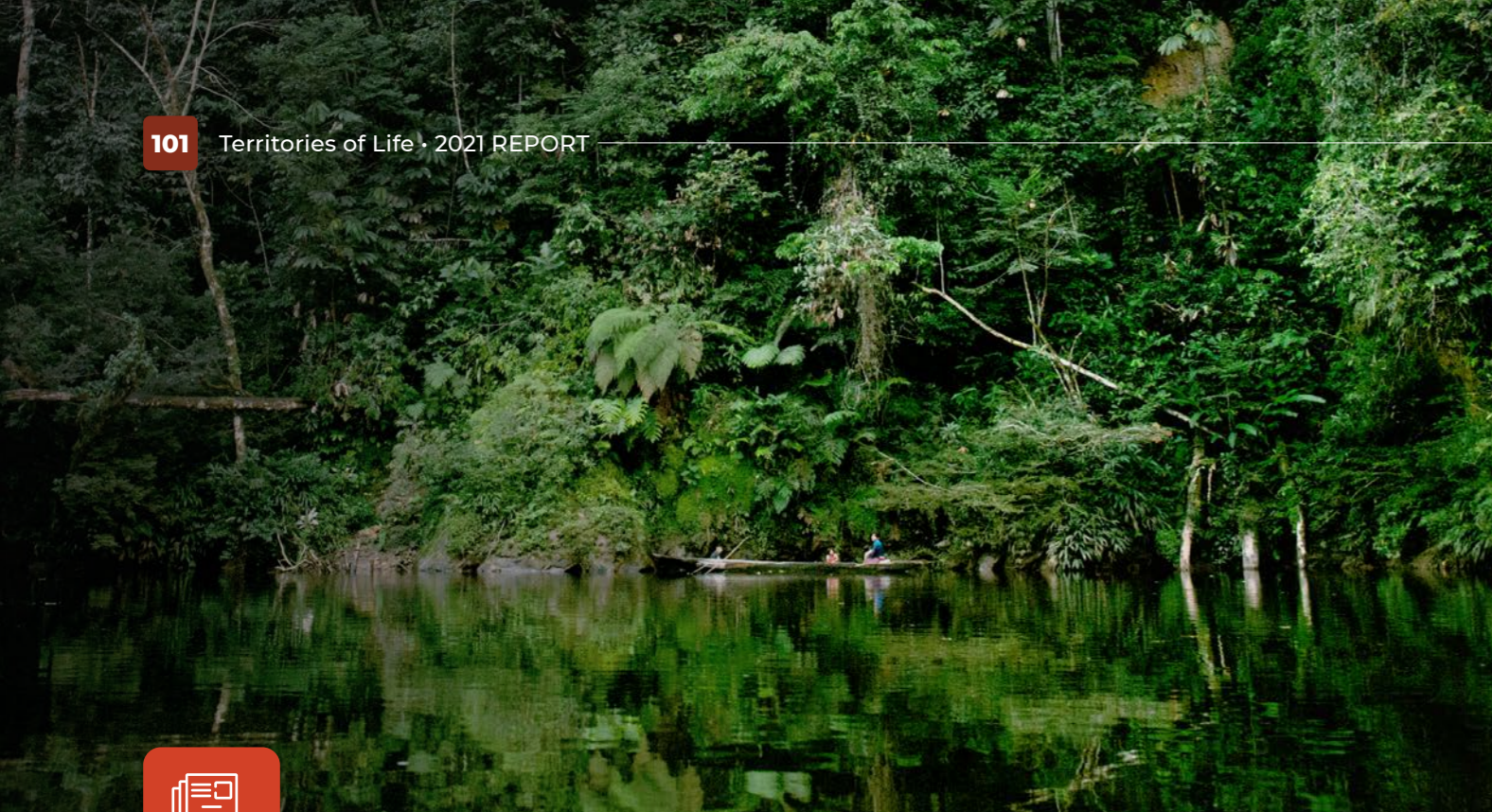
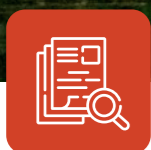


Photo: Jacob Balzani Lööv



Iña Wampisti Nunke

The Integral Territory of the Wampis Nation in the Peruvian Amazon

Author(s):¹ Wrays Pérez, Tami Okamoto and Thomas Niederberger

In November 2015, the Wampis Nation constituted its autonomous territorial government – the **Gobierno Territorial Autónomo de la Nación Wampis** (GTANW) – with the aim of governing and protecting their ancestral territory of more than 1.3 million hectares in the northern Peruvian Amazon, according to their own development priorities. As the first autonomous Indigenous government in Peru (Servindi 2016), under the protection of the 2007 United Nations Declaration on the Rights of Indigenous Peoples, the Wampis set a remarkable precedent in the exercise of self-determination in the region, as they place the defense of their well-preserved territory firmly within global efforts for biodiversity conservation and the fight against catastrophic climate breakdown.

The Wampis territory: an ancestral relationship

The Wampis today have a population of approximately

15,300 people living in 22 titled communities along the rivers Santiago and Morona (*Kanus* and *Kankaim* in Wampis), in the departments of Loreto and Amazonas in Peru. The Wampis Nation belongs to the Jivaro or *tarimat shuar* ethno-linguistic family, closely related to the Indigenous Shuar of neighbouring Ecuador. They are historically famous for their warrior spirit, strong sense of identity, egalitarian ethic, and their attachment to the ancestral territory, which enabled them to resist many attempts at conquest and subjugation by the Inca and Spanish colonists. It was not until the mid-20th century that the Wampis started a progressive process of inclusion into Peruvian society. Their approach to integration was premised on the recognition of their territorial rights by the Peruvian Government (Pérez 2018).

The Wampis refer to their ancestral territory as *Iña Wampisti Nunke*. Their cultural practices, identity,



language and own forms of governance express deep knowledge about and intricate relationships with the region's forest, water bodies, wildlife and biodiversity. Their quality of life largely relies on the health of their natural surroundings. The self-demarcated ancestral territory includes all lands and water bodies along the two main watersheds, irrespective of the different legal categories and titles that were assigned to them by the state. The Wampis consider the territory not solely as the surface area or as the delimitation of jurisdiction but as something greater: "The integral territory is not only a vision, concept or idea, but a system of life" (Noningo Sesen 2017).

In the Wampis statutes (GTANW 2015), the constitutional document of their government, the territory is defined as "integral and unified", comprised of intimate relationships between people and the different beings that inhabit the interconnected levels of *Nayaim*, *Nunka*, *Nunka Init*, and *Entsa* (i.e., aquatic, earth,

¹ Wrays Pérez is the *pamuk* (president) of the **Gobierno Territorial Autónomo de la Nación Wampis** (period 2015 to March 2021).

Tami Okamoto is supporting the GTANW since 2016 as a geographer; she is a PhD candidate at the Department of Geography, University of Cambridge, UK.

Thomas Niederberger is the **Coordinator for Research and Publications** at the ICCA Consortium. He collaborated with the GTANW from 2016 to 2018, as part of his PhD research in social anthropology at University of Bern, Switzerland.

“The integral territory is not only a vision, concept or idea, but a system of life.”

Shapiom Noningo Sesen, 2017

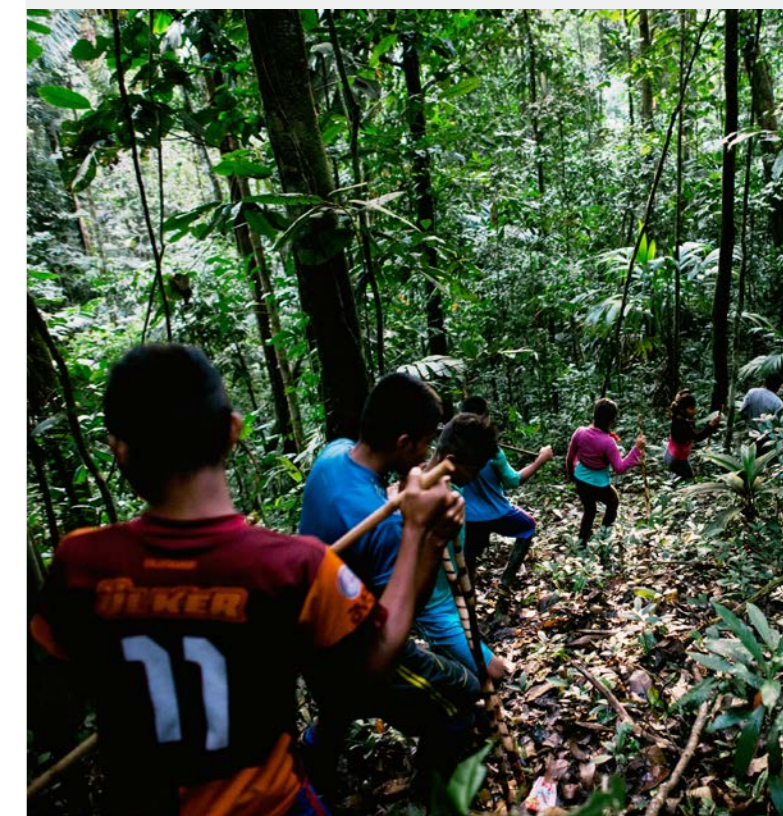


Photo: Jacob Balzani Lööv





1,327,760 hectares



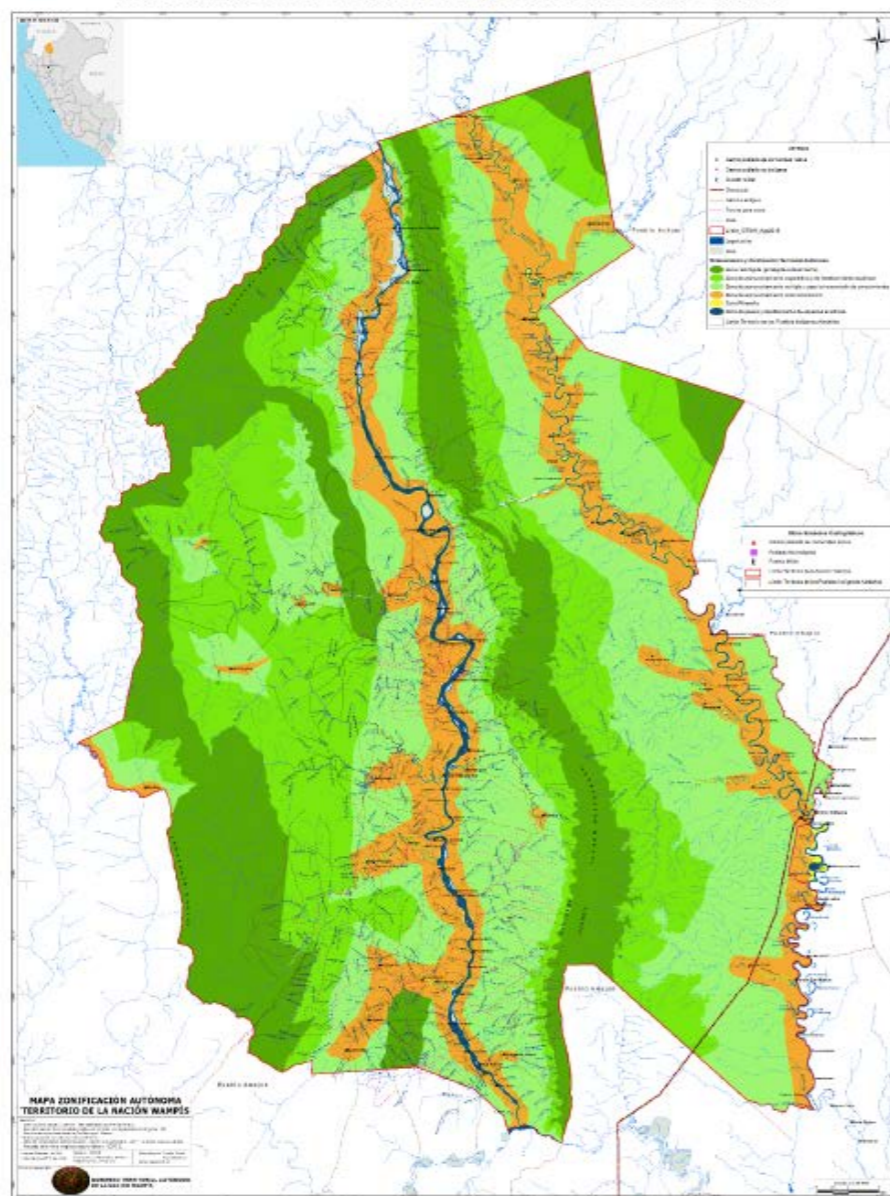
Custodians: Wampis Nation, 15,300 inhabitants



Gobierno Territorial Autónomo de la Nación Wampis

Autonomous zoning of the Wampis territory, based on Indigenous vision. Map: GTANW

ZONIFICACIÓN AUTÓNOMA DESDE LA VISIÓN INDÍGENA - GTANW



subsoil, and space): “Our Nation and its people are part of this territory” (art. 21). The concept of “life rooted in territory” reverberates their ancestors’ inherited knowledge, wisdom and philosophies (art. 46). The Wampis asseverate that only this integral vision of territory is capable of securing their people’s good living, or *Tarimat Pujut* (art. 23). These ancestral relationships, intricately regulated between all beings, both visible and invisible to human eyes, are the foundation for their present-day autonomous governance. In this sense, the integral Wampis territory constitutes a ‘territory of life’ in its fullest sense.

The Wampis language as well as their ancestral knowledges remain alive in everyday activities and are

also reflected in the many stories about the common origin of all the *jivaro* peoples; these stories frequently refer to places where their ancestors lived. Of particular spiritual relevance within Wampis territory are the three sacred cordilleras: Kampankias, Ichinkat Mura, and Tuntanain (see Wampis Statute, art. 39). The waterfalls in these mountain ranges are particularly important places for meditation and the search of vision provided by the *Arutam* spirit of the ancestors. Acquiring vision is considered essential to become a strong and brave man or woman, a good hunter or warrior. Nowadays, vision is also central to becoming a good professional or a respected Indigenous leader.

In activities such as hunting, fishing and crop

cultivation, Wampis men and women establish personal relationships with powerful beings that exert control over the various fields of human action: *Etsa*, the sun; *Arutam*, the ancestral spirit; *Nunkui*, the mother of the earth and the plants who provides abundance; *Tsunki*, the owner of the depths of the waters and aquatic life; *Tijai*, owner of wildlife; and other spirits and beings. A good relationship with these beings prevents scarcity, hostility, loneliness, or even death. For the Wampis, political power (that is, governance) is also intricately related to the spiritual powers that emanate from the territory and the beings that inhabit it.

The Wampis remain associated to ancestrally used areas and *purmas* (*asaak*), which continue to be ecological, social, and cultural refuges. Although for the Wampis people these places of historical importance are relatively far from the main settlements today, the Wampis families remain the heirs of detailed ancestral knowledge about the *collpas* (ponds) and other places where wildlife, fish, important trees, plants, and other resources abound. The *purmas* of the ancestors exert in the present a kind of territorial centre of gravity for their descendants, who have the right to reuse and resettle there – and therefore mark territorial boundaries between kinship groups (GTANW 2016: 74).

Among the Wampis, a subsistence economy based on reciprocity remains. The subsistence needs are largely fulfilled by small garden plots and resources harvested from the forest, rivers, streams, and fish ponds. The type of cultivation (clearing and rotating plots) proves efficient for the conservation of the ecological levels of Amazonian forests (GTANW 2016: 66; Chicago Field Museum 2012: 312). The forest provides the space to collect wild fruits, medicinal plants, honey, insects, larvae, and game animals; furthermore, timber species and yarn palm leaves are used to build houses, canoes, spears, blowguns, musical instruments, ornaments, and various utensils.

While the Wampis still have low levels of consumption of imported products and modest need for money, some products like plantain, manioc, and peanuts



Iña Wampisti Nunke.
The Integral Territory of the Wampis Nation in the Peruvian Amazon. Video 3:39 min., 2021 (English subtitles).



A shared meal of meat, yucca and plantain during collective work in the chacra garden. Photo: Jacob Balzani Lööv



(in some cases dried salted fish and game) are sold in nearby towns and to itinerant merchants. The cultivation of cacao is another important commercial activity for many families.

Self-governance: the Autonomous Territorial Government of the Wampis Nation

The ancestral way of living in their territory *Iña Wampisti Nunke*, which altogether constitutes a system of life, is what provided the means for a territorial political organization around sub-basins and rivers. In the exercise of their right to autonomy and grounded in international, constitutional, and their ancestral jurisprudence, the Wampis declared their Nation's Autonomous Territorial Government (GTANW) and issued their collective governing Statute in November 2015. They became the first Indigenous Nation in Peru to do so.

The Wampis Government has a supreme decision-making body called the *Uun Iruntramu*, an assembly composed of elected representatives called *Irunin*. Additionally, there are three more levels of governance: the central government, the river-basin governments of Kanus and Kankaim, and the communal governments. Three ordinary sessions are held per year and extraordinary assemblies when necessary. The Statute determines membership, leadership, and election processes.

At the family level, the Wampis exercise a high level of autonomy in the organization of daily chores and their

economic life. The present-day communities emerged in the 1950s and 60s and are administered by the communal assemblies, which elect a board of directors headed by a president (today called *iimaru*). The board seeks agreements among families and community members. Rules about the conservation, access to and use of natural resources are generally incorporated in written communal by-laws.

In Peru, the communal property regime does not consider Indigenous peoples or First Nations as a subject of rights. In the face of increasing threats brought by the expansion of settlers arriving with the construction of Amazonian roads in the 1960s, the Wampis organised themselves in Indigenous federations. In this manner, they succeeded in taking advantage of the Native Communities Act of 1974 for the promotion of state demarcation and land titling processes that led to the legal recognition of a considerable part of the Wampis territory as 'titled communities' along the riverbanks (Chirif and García Hierro 2007). Areas collectively used by the Wampis people that cannot be assigned to a particular group (such as wildlife reserves or sacred areas) were left untitled (GTANW 2016: 38). Together with the superposition of different foreign administrative categories (districts, provinces, and protected areas), this resulted in the fragmentation of the legal status of the ancestral territory.

No Indigenous people in Peru has achieved the titling of their ancestral territory as a single, integral block (GTANW 2017). However, under international law, the

state has an obligation to recognise the ancestral territories of Indigenous peoples.²

The sacred hills of Kampankias: heart of the Wampis territory

The Wampis territory is completely covered by tropical forest, except for small agricultural plots and the settlement areas. Along the Andean foothills, it is one of the few remaining regions that retains full and undisturbed connectivity between the Amazon plains and the higher altitude humid forests, thereby evidencing extremely diverse flora and fauna. The Kampankias (also known as Kampankis) range consists of terrestrial and aquatic ecosystems between 800-900 meters above sea level, with endemic species and threatened species of mammals, amphibians, reptiles, and birds (the most emblematic being the jaguar, boa, and tapir).³

The tropical forests of the Kampankias are also a source of clean water and an important carbon stock, above- and below ground. It is a reservoir of seeds for timber trees and other useful plants as well as a safe haven for the reproduction of animals – which make its conservation exceedingly important (Chicago Field Museum 2012: 270).

Several protected areas, officially administered by the Peruvian government, currently overlap in part or fully with titled communities and important sacred areas



“We demand that no protected area be created [by the state], because for us that would mean losing the ancestral ownership of our territory; after having been ours, it would be controlled by the state. We would have to get permission to enter there, to make use of our own resources.”

Wrays Pérez in **Servindi, 2016**.



Carmen Pirucho, Sabia from Soledad community working at her chakra. Photo: Candy López



Fishing with nets in a subsidiary of the Kanus river. Photo: Jacob Balzani Lööv

² See, e.g., the case *Awas Tingni vs Nicaragua*: the ownership of the Indigenous territory is not determined by the land title of the property granted by the state; rather, the granting of that title constitutes the recognition of a pre-existing right. The legal justifications for the Wampis' right to their territory, as well as the viability of the concept of integral territory, are detailed in legal (GTANW 2017) and anthropological (GTANW 2016) reports.

³ A rapid biological inventory found more than 20 species of plants, fish, amphibians and reptiles described for the first time by Western scientists, as well as a unique floristic composition (Chicago Field Museum 2012).



Wray Pérez, former Pámuk of the GTANW (2015-2021), speaking to the general assembly. Photo: Kathia Carrillo

of the Wampis territory: the Tuntanain Communal Reserve, the Ichigkat Muja–Coordinera del Condor National Park, and the Zona Reservada Santiago-Comaina (ZRSC). The ZRSC was established in 1999 as a transitory land-use category for areas that are envisaged to become protected areas in the future ('reserved zone').⁴ It extends from the Rio Santiago in the west to the Rio Morona in the east, and from the Peru-Ecuador border in the north to the Manseriche gorge in the south, and overlaps the entire Kampankias range and a considerable area of titled communities.

Given that Kampankias constitutes the heart of the Wampis' ancestral territory, and that its remarkable state of conservation is due to the fact that they have vigorously defended it for centuries, the Wampis oppose this categorisation as 'reserved zone' and state interference in its stewardship. Instead, they insist that the Peruvian state recognise it as an integral part of the Wampis' ancestral territory, under their self-determined governance and conservation.⁵



Since 2014, the **Wampis** run an autonomous environmental monitoring programme on the Santiago River (Kanus). Video: 2:20 min., 2021 (English subtitles).

A constant challenge: defending the territory for future generations and for the world

The Wampis have defended their territory with impressive success against colonization and other threats. The good state of conservation of the territory, with the forest cover intact, is undoubtedly thanks to this defense. A well-known example of their organisational capacity for territorial protection is the resistance to a series of decrees and laws enacted during Alan García's government (2008), which aimed to facilitate private investment in the Amazon by weakening the collective rights of Indigenous peoples (such as the right to ownership of their territories). This led to Indigenous mobilisations, which were attacked by the armed forces in June 2009, close to the town of Bagua, leaving 34 dead; an (known as the 'Baguazo' or 'Bagua massacre').

While such mobilisations have been an inevitable recourse in some cases, the legal route was and still is a main strategy for the Wampis' territorial defence. In 2019, they achieved, through a historic ruling in their favour, the annulment of oil lot 116 (overlapping the Kampankias hills), due to lack of consultation (Pérez 2019; Okamoto and Doyle 2019). And in 2020, joint legal complaints with the neighbouring Achuar people contributed to the **withdrawal of the company Geopark** from oil lot 64 (also superimposed on their

territory) prior to the start of the oil exploitation phase (see campaign on nacionwampis.com; also, Chirif and Barclay 2019).

Another achievement includes the abandonment, due to lack of consent, of a cross-border highway from the Ecuadorian side (known as the *quinto eje vial*), which would have provided access to the Kampankias range with the risk of encroachment by settlers. Likewise, thanks to coordinated action and constant pressure on national authorities, in 2018 the Wampis succeeded in expelling illegal gold mining, installed along the Kanus (Rio Santiago) since 2014. Despite the evidence of the strength of their organisation, the Wampis are aware of the possibility of the return of these and the existence of other threats, which is why they reiterate the need for permanent vigilance.

There are also plans to build 20 hydroelectric dams and a 'fluvial highway' on the Marañón River, close to the southernmost part of the Wampis territory. Both megaprojects pose serious threats to aquatic ecosystems and human subsistence, especially considering that the survival of the Indigenous peoples living in the area is closely linked to the territory. Illegal logging⁶ and the regularisation of small timber concessions in Peru's new forestry and wildlife legislation (Law No. 29763) is another source of concern and discontent. Internal challenges include the pressure

on their self-reliant economies due to population growth in some communities, and the disrespect of communal regulations, in some cases leading to scarcity of fish and game animals.

With the constitution of their Autonomous Territorial Government and the issuing of its Statute in 2015, the Wampis defined a series of priorities to strengthen their self-governance. They trained Wampis technicians in communications and launched an autonomous radio station (Tuntui Wampis), as well as a training programme for young Wampis leaders, in order to

⁴ The extension of the ZRSC was initially 863,277 hectares and later reduced to 398,449 ha. See Supreme Decrees **DS 005-99-AG** and **DS 029-2000-AG**. Also, Barclay et al. (2009).

⁵ See: *La Nación Wampis rechaza la pretensión de SERNANP de expropiarle Kampankias*; **Nacion Wampis, 25. Feb. 2021**. This rejection is nothing new. E.g., the **Chicago Field Museum (2012)**, stated that "The ZRSC [...] encompasses forests that the region's indigenous inhabitants have protected effectively for many years. As a result, indigenous residents are in disagreement with the Reserved Zone and have proposed that it be declared part of Wampis and Awajún territory."

The Oleoducto Norte pipeline of PetroPeru, which caused a major oilspill at Mayuriaga in 2016. Photo: Jacob Balzani Lööv



revalorise cultural identity. As part of this effort, Wampis youth have designed culturally appropriate methods to build a Common Plan of Life (*plan de vida*) with the Wampis communities.

The design of protocols for external relationships, which promotes the respect of their people's right to give or withhold free, prior and informed consent, is another element in progress (Barclay 2020; Okamoto y Doyle 2019). Likewise, they decided to strengthen their environmental monitoring through the formation of communal committees to watch over the conservation and sustainable use of nature's bounties, according to the autonomous zoning plan (see map).

Finally, the Wampis' autonomous government seeks: (1) the recognition and respect of the Wampis people as rightsholders over their ancestral territory; (2) the autonomous determination of the internal ordering and governance of the territory according to customary law; and (3) the comprehensive protection of their integral territory by themselves, for both present and future generations, and for the Wampis as well as the world.

An man building a trap for ground birds, a construction that can take up to two days and is accompanied by traditional songs. Photo: Jacob Balzani Lööv



People at work in the Mayuriaga oil spill. The disaster affected 30 km of quebrada before polluting the Rio Morona, affecting all the downstream population. Photo: Jacob Balzani Lööv

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⁶ Since 2020, a sharp increase in demand for balsa wood has become a concern (see **Mongabay, 28.01.2021**); the extraction is driven by timber traders from across the border in Ecuador. The GTANW has repeatedly demanded action from the Peruvian Government to implement border controls and has organised several interventions to stop the unregulated cut and trade of timber (see nacionwampis.com, e.g.: **20.10.2020; 25.11.2020; 23.03.2021**)



Photo: KESAN



Hkolo Tamutaku K'rer

The Salween Peace Park in Burma/Myanmar

Author(s):¹ Saw Paul Sein Twa, Julia Fogerite, Casper Palmano

This article was written before the illegal seizure of power by the Myanmar military on 1 February 2021. For the recent developments, refer to the update on report.territoriesoflife.org/territories/salween-peace-park-burma-myanmar/

The Salween Peace Park was founded by the Indigenous Karen people of Mutraw District, Kawthoolei, Burma/Myanmar, to protect and bring peace to this bastion of biodiversity and Karen culture after over 70 years of conflict. The Park is a result of grassroots efforts by the Karen people living in 348 villages within it to practice democracy and self-determination, protect themselves and the environment from destructive investment, and develop their own vision for a just, peaceful, and sustainable future.

The Salween Peace Park (*Hkolo Tamutaku K'rer* in

Karen language) was formally declared in December 2018, after a referendum approved its Charter with signatures from over 75 per cent of the 67,800 voting-age people living within its area. The Charter established the principles and governance of the Peace Park, with *Kaw* common territories managed with Karen customary laws and practices at its heart (KESAN 2019a).

Situated in south-eastern Burma, the Peace Park covers 5,485 km² (548,500 ha) of forests, mountains, and farmland along the Salween River basin. The Salween River, stretching across 2,800 km, is the longest river with no mainstream dams in Asia. It delineates the eastern boundary of the Peace Park, where it also marks the international border with Thailand. The Park protects some of the most intact forests in mainland Southeast Asia and a rich diversity of wildlife, including many endangered species (Moo et al.).²



Alongside being a bastion of Indigenous Karen culture, and home to diverse nature, the Salween Peace Park is an Indigenous response to one of the world's longest running civil wars. Located on the frontier of the Karen conflict, originating in 1949, its montane landscape is a haven for hundreds of conflict-displaced families (KESAN 2018b). The Salween Peace Park directly addresses the threats of militarization, land grabs, destructive business concessions, and cultural erasure stemming from the conflict. It does this by putting communities at the centre of decision-making about land management and economic planning, and centring human rights and Indigenous rights in its founding document, the Salween Peace Park Charter.

¹ **Saw Paul Sein Twa** is an Indigenous Karen leader, Chairperson of the Salween Peace Park General Assembly and Director of the Karen Environmental and Social Action Network (KESAN, ICCA Consortium Member). He has worked with Karen communities in the Salween Peace Park area for over two decades. He is also a Council member of the ICCA Consortium and recipient of the **2020 Goldman Environmental Prize** for Asia.

Julia Fogerite is an environmental researcher who has worked on biodiversity conservation, land tenure, and environmental governance in Burma since 2013 and an Honorary member of the ICCA Consortium.

Casper Palmano is a technical advisor at the Karen Environmental and Social Action Network and has worked on natural resource and territory rights issues in Burma since 2014 and an Honorary member of the ICCA Consortium.

² Documented by a community-led team of women researchers in Khehsor Ter community forest Luthaw Township, Mutraw District. More information can be found in Karen language in the KESAN report *Studying Orchids, Enriching Lives* (2018): <http://kesan.asia/resource/studying-orchids-enriching-lives/>

“We, the Indigenous Karen people of Mutraw, [...] in order to create and sustain a lasting peace in our lands, protect and maintain the environmental integrity of the Salween river basin, preserve our unique cultural heritage, and further the self-determination of our people; do enact and establish the Salween Peace Park.”

Declaration of the establishment of the Salween Peace Park, on 19 December 2018 in Day Bu Noh Village, Mutraw District, Kawthoolei.





Salween Peace Park, 548,500 ha

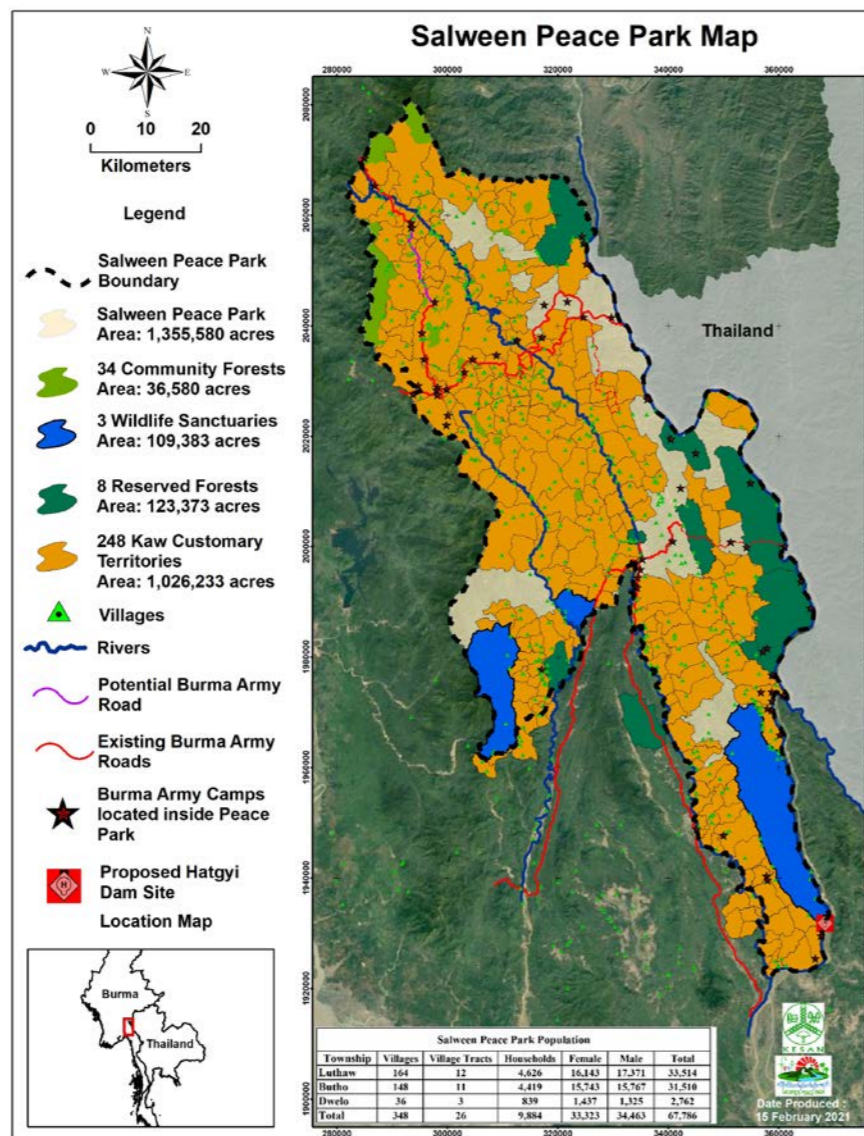


Salween River, the longest river with no mainstream dams in Asia (2,800 km)



The Karen Indigenous people living within the Peace Park, 67,800 population

Map of Salween Peace Park with different areas. Credits: KESAN 2021



The three pillars of a bold vision

The Salween Peace Park is a bold vision to fulfill three core aspirations of the Karen Indigenous people, integrated into the Peace Park’s design and implementation in the form of three pillars: (1) peace and self-determination; (2) environmental integrity; and (3) cultural survival.

Peace and self-determination

Since the signing of a bilateral ceasefire in 2012, and a larger Nationwide Ceasefire Agreement in 2015, the Karen National Union (KNU),³ *Tatmadaw*,⁴ and Burmese Government⁵ have engaged in stuttering negotiations centring around the creation of a federal democratic union.⁶ With public consultations to collect feedback on the peace process unilaterally blocked by the *Tatmadaw*,

Mutraw District’s Indigenous Karen communities took it into their own hands to bring to life their vision for a peaceful future under a federal system (KPSN 2018).

The Salween Peace Park develops a community-led, democratic system of governance with supportive KNU laws and policies that address root causes of conflict, including democratic governance, respect for Karen culture, and protection of communities from dispossession of their lands and forests. This is achieved through the formal recognition of the General Assembly as the Peace Park’s governing body, and of Indigenous Karen socioecological systems in the form of the *Kaw*.⁷

This enables the Salween Peace Park to serve two key purposes in the pursuit of peace and self-determination. The formal recognition of Indigenous Karen territorial rights and practices supports post-conflict reconstruction



Youth exchange in the field. Photo: KESAN

and livelihood restoration, allowing displaced communities to return to their ancestral territories and kinship networks. The Peace Park also embodies a community-driven path to a peaceful federal democratic union, and a potential way forward for Burma’s deadlocked peace negotiations (BEWG 2017).

Environmental integrity

The Indigenous Karen communities in the Peace Park follow biocultural traditions, where people and nature are intimately interconnected. They believe that the vitality of the nature around them directly impacts their own prosperity, and have integrated respect for nature and its protection into their everyday practices and socioeconomic systems (KESAN 2017).

Guided by this belief and way of life, the Peace Park was founded to preserve the teak forests, free-flowing rivers, sacred mountains, wildlife, and diverse farmlands of the Karen people, and protect them from mega hydropower dams, logging, mining, agribusiness, and other extractive industries that have devastated other parts of Burma (KESAN 2017).

Central to the Peace Park’s aim of environmental integrity is the formal recognition of *Kaw* common territories. Traditional *Kaw* management is sustainable, protecting community forests, fisheries, forests on slopes, ridges, and along rivers, and maintaining wildlife

Celebrating the Salween Peace Park Proclamation,
11min. KESAN 2018.

³ The Karen National Union is the de facto governing body in Karen territory, and the civilian government of the Karen independence movement. The KNU is both lead negotiator in ongoing peace negotiations, and the primary governing body and service provider in Karen governed areas. Its departments have been responsible for public education, land and forest governance, public healthcare, fisheries, and courts of law, among other government services, across Kawthoolei since the KNU’s founding in 1947. More information can be found at www.knuhq.org.

⁴ Burma’s army, comprising its territorial army, navy, and air force.

⁵ The Government of the Republic of the Union of Myanmar, headquartered in Nay Pyi Taw and governed by the National League for Democracy led State Counsellor Aung San Suu Kyi and President Win Myint. The *Tatmadaw* (junta) staged a military coup and overthrew the democratically elected government on 1 February 2021. At the time of publication in April 2021, the crisis has not yet been resolved. For more information, see the ICCA Consortium’s **open letter and call to action on the situation in Myanmar**, published on 5 April 2021.

⁶ Union Accord will have 51 agreed points. Ministry of Information of the Republic of the Union of Myanmar. Retrieved from Myanmar Ministry of Information: <https://www.moi.gov.mm/moieng/?q=news/14/11/2018/id-14228>

⁷ These are formally recognized by the KNU, Mutaw District’s de facto governing body in line with the 2012 and 2015 ceasefire agreements.



“I am Karen. I live in the mountains. I live with birds and among vast forest. I have peace. I enjoy laughter. I enjoy warm and good love.”

Karen song, Saw Cau Chiv, Indigenous Karen musician (watch on [youtube](#)).



Photo: KESAN

corridors between agricultural fields (Paul 2020). Taboos on hunting some rare species and cutting certain trees also protect the environment, and the spirits of the forests, waters, and wildlife are respected. Karen people also maintain agrobiodiversity in their upland *ku* swidden fields, lowland farms, medicinal plant forests, and the community forests where they harvest upwards of 150 different species (KESAN 2006; Khoe Kay 2008).

According to the Salween Peace Park Charter, all economic activity must have the free, prior, and informed consent of local people. Economic development must be in the spirit of living together with nature and shall not harm the collective and public interest of the Peace Park, including both the environment and the right to self-determination.

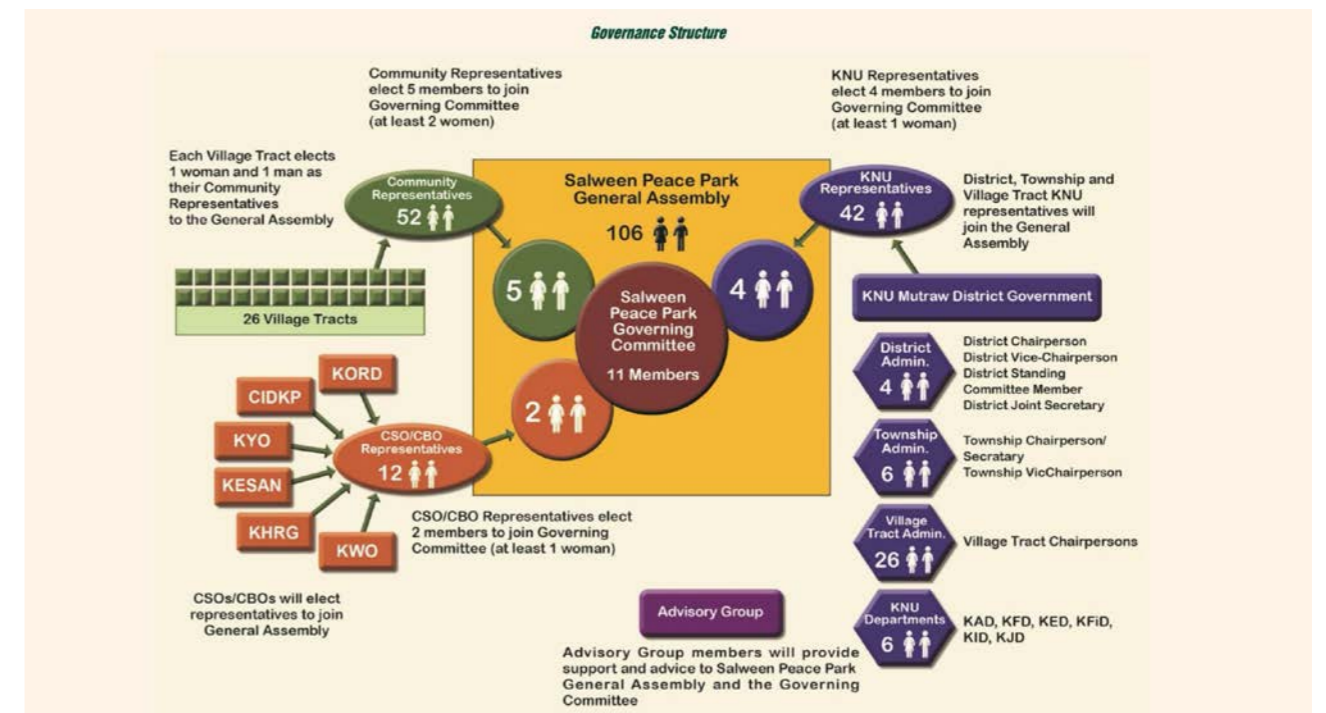
Cultural survival

Decades of war have taken their toll on Karen culture and traditional practices. Approximately 100,000 Karen people have fled to refugee camps on the Thai border and still more have been internally displaced multiple times throughout their lives (KESAN 2018b; KHRG 2015). In Mutraw District, 80 per cent of the district’s 107,000 inhabitants were displaced by this violence at its height (KESAN 2018c). The Salween Peace Park is the strongest remaining center of Karen culture, and the heart of its revitalization.

Indigenous Karen traditional knowledge and skills such as weaving, crafting and forging are essential parts of the ethnic Karen’s livelihood, identity, culture and their relationship with nature. *Tha Nue Chet La*⁸ cultural school in the Peace Park provides vocational training to revive and preserve Karen culture, teaching traditional skills such as textile weaving, bamboo handicrafts, and blacksmithing.

The Peace Park’s General Assembly also has a working group on Karen cultural practices and traditions. The Assembly is compiling a cultural curriculum in collaboration with Karen Education and Cultural Department, which will be taught in all KNU schools in an effort to strengthen Karen communities’ livelihoods and the protection of the wildlife and nature around

Teaching Cultural Resilience – Video about the *Tha Nue Chet La* cultural school, 6:16 min. KESAN 2020.



Governance structure of the Salween Peace Park. Credits: KESAN

them, and preserve Karen identity, both within the Peace Park and in Karen areas across Burma.

Governance of the Salween Peace Park

Salween Peace Park conservation areas demarcated (2018)	Area in acres
Total area of the Salween Peace Park	1,355,580
248 <i>Kaw</i>	1,026,233
3 Wildlife Sanctuaries	113,324
8 Reserved Forests	123,373
34 Community Forests	36,580

The Salween Peace Park’s governance is strongly decentralized, focusing decision-making power in the Karen customary *Kaw* territories, with a General Assembly that plays a coordinating role. The Peace Park centres community voices, both women and men, in decision-making at every level.

Community-led conservation has set the foundations for the Peace Park over the last decade. These activities include establishing community forests and fish conservation zones. Communities, with assistance from the Karen Forest Department and Karen

Environmental and Social Action Network (**KESAN**), have been documenting traditional *Kaw* boundaries and reviving *Kaw* governance systems. The Salween Peace Park builds upon these local initiatives and brings them together to form a representative democratic governance system across the landscape.

The General Assembly

The Salween Peace Park’s General Assembly was endorsed with the ratification of its Charter in December 2018, and its members were elected in 2019. Comprising 106 popularly elected representatives, the General Assembly is responsible for the overall coordination of the Peace Park area and the development of long-term strategies and targets for the territory (KESAN 2019). It comprises representatives from the KNU, Karen civil society, and one male and one female representative from each of the 26 KNU-defined village tracts inside the territory.

The General Assembly’s executive body, the eleven-member Governing Committee, is tasked with coordinating nine working groups who are responsible at the landscape scale for conflict and

⁸ Pronounced 'tha-noo-say-la'.



dispute resolution, basic infrastructural development (schools, clinics, etc.), external relations, cultural education, and conservation. The groups operate under guidelines established by the Salween Peace Park Charter, which was guided by customary law and Karen tradition and is formally recognised by the Mutraw District KNU.

The Kaw

The *Kaw* is the heart of the Salween Peace Park. The *Kaw* is simultaneously a physical place, a unit of land administration, and a social system, including the cultural, political, and social traditions and customary practices of the Karen people that have been practiced for generations (BEWG 2017). *Kaw* ancestral territories comprise entire landscapes, understanding the forests, land, waterways, wildlife, and people within as important and interdependent components of a greater whole. The *Kaw* includes rules and customary practices for managing the land together as part of a holistic, integrated system. Village meetings and committees provide a decentralized system for making decisions, remedying grievances, and resolving disputes, where community members can fulfil their right to self-determination through direct participation and deliberative democracy (Paul 2020).

The primary livelihood is farming, using traditional practices to manage agricultural fields, forests, fisheries,

and livestock to meet household needs. Transportation is difficult with poor roads and no public transport infrastructure, limiting connectivity with outside areas in Burma/Myanmar and neighbouring Thailand, but there is a healthy trade network between the Peace Park's many *Kaw* (Pimbert et al. 2019).

Family plots within communal upland cultivation areas, or *Ku*, are demarcated once every cycle (on average 7-10 years) by the *Hteepoe Kaw K'sa*, who use their knowledge of Karen *loola hta* poetry and the *Kaw's* taboos to identify which areas are suitable for cultivation. Areas of unbroken vegetation and trees are also purposefully left between *Ku* plots so that arboreal mammals are still able to travel easily around the *Kaw*. Areas that are considered sacred, or very important to local nature (such as ridges), are never used for cultivation (KESAN 2017).

The spirits of the land, forest, rivers, and wildlife are all greatly respected, leading to the protection of fish spawning areas, sacred forests, mountains, and waterfalls. It is also considered taboo to hunt hornbills, tigers, and gibbons, among other species (KESAN 2019b).

Forests along ridges and riparian forests are protected and not cleared for agriculture. It is taboo to cut trees whose branches are reflected in ponds and rivers. Trees with specific branching patterns where wildlife make their nests are also protected (BEWG 2009).



Traditional agriculture in the *Kaw*. Photo: KESAN

Forests provide over 150 different non-timber forest products including construction materials, wild foods, and medicinal plants. Karen communities manage their own medicinal herb forests (KESAN 2006).

Sacred forests within the *Kaw* are protected. These include graveyards and forests where the umbilical cords of newborns are placed inside bamboo containers and tied to trees. The life essence of the child is directly connected to the tree, and if it grows large and strong, the child will have a good and healthy life. Another sacred landscape is the *loh*, areas where the spirit world and the corporeal world meet. When someone dies, a small portion of their body (hair, bones, etc.) is buried in the area so that their spirit may find its way along the spirit path into the next world in preparation for rebirth (Paul 2019).

Thaw Thi Kho mountain, in the north of the Peace Park, is central to many folk tales and is considered sacred by communities all across the Kawthoolei region (KESAN 2020). There are other sacred sites that are strictly protected and can only be visited in the presence of the *Hteepoe Kaw K'sa* local spiritual leaders.

Wildlife Sanctuaries and Reserved Forests

Within the Salween Peace Park, communities and the KNU (particularly the Karen Forest Department) manage 8 Reserved Forests, 34 community forests, and 3 Wildlife Sanctuaries⁹ (covering a total of 540.64 km²). The majority of community forests in the Peace Park are managed directly by communities themselves, as a part of their *Kaw*, with minor support from the Karen Forest Department, and the rest are co-managed directly with the Department. The Wildlife Sanctuaries are co-managed and the Karen Forest Department, KESAN, and Karen villages conduct research, demarcate boundaries, and develop management rules together.¹⁰

Conservation values of the Salween Peace Park

The Salween Peace Park is part of the Dawna-Karen hills ecoregion. Forests include lowland dry dipterocarp forest, teak forests, mixed deciduous forest around 100-800 metres above sea level, evergreen forest from 300-1,000 masl, subalpine forest around 800-2000 masl, and montane evergreen forest over 1,000 masl.

These forests are home to the critically endangered sunda pangolin, endangered species such as tigers,



A traditional trap to protect rotational land from rats. Photo: KESAN



Villagers come together to help harvest rice of their fellow villagers. Photo: KESAN

⁹ These Wildlife Sanctuaries were formally gazetted by the British and are now being revitalized by the Karen Forest Department, KESAN, and local communities to be actively managed and protected.

¹⁰ Kaydoh Mae Nyaw, for example, was established in 2017 after five years of collaboration with 43 villages surrounding the Wildlife Sanctuary and two villages within its boundaries. Villages can continue to cultivate their established farms and orchards, and have set 10 rules to guide expanding and establishing new cultivation areas. Research has documented 64 mammal, 122 bird, 12 amphibian, and 20 reptile species in the Wildlife Sanctuary (KESAN 2016).

Asian elephants, dhole, gibbons, and banteng, many vulnerable species such as leopards, Asiatic black bears, sun bears, and gaur, and 35 other species protected by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (SBB Moo et al. 2017). Research teams have documented 93 species of orchids in the Peace Park. Initial camera trap data indicate thriving wildlife populations, with an intact and diverse assemblage of carnivores living in the same areas (19 species have been documented so far) supported by a robust prey base, including the sambar deer, which has been heavily hunted through much of the Indo-Burma region.

The Salween Peace Park is the northern end of the forest corridor that stretches across Myanmar and Thailand that offers the best hope for tiger conservation in the region, with a source breeding population in Thailand's Western Forest Complex. The Park is also home to one of the most significant breeding populations of Indochinese leopards (*P.p delacouri*) remaining in Southeast Asia, which now lives on only 2.5 per cent of its range (Moo et al. 2017).

This ecological health and diversity are outstanding in the country and in the Mekong region, which has seen dramatic declines in wildlife species over the past few decades of intensified hunting and wildlife trade, large scale land grabs, agribusiness, and resource extraction.

The Salween River

The Salween River is the longest free-flowing river in Asia, and plays a central role in the livelihoods of the people and health of the environment of the Peace Park. It is threatened by a series of mainstream hydropower mega dams planned during Burma's previous military regime. The most prominent of these is the 1350 MW Hatgyi dam, proposed in 2001 as a joint venture between

the Burmese Government, China's Sinohydro, and the Electricity Generating Authority of Thailand.

The establishment of the Salween Peace Park is a grassroots declaration of opposition to the Hatgyi dam, the construction site of which lies directly at the Park's southern tip. Should it be constructed, it would displace tens of thousands of people, cause coastal erosion, damage fisheries, threaten endemic fish with extinction,^[10] flood two wildlife sanctuaries, and directly impact the livelihoods of the 10 million people fishing, farming, and living in the Salween River basin. These planned dams would cause irreparable damage to the 2,800-km river's ecology, geomorphology, and flow. As the southernmost of the planned mainstream dams, building the Hatgyi Dam alone would disconnect 91% of the river basin's aquatic habitat from the sea, altering flow regimes and blocking sediment that would cause coastal erosion and significant reductions in river and coastal fisheries productivity (IFC 2018).

Conclusion

The Salween Peace Park is an Indigenous Karen declaration of hope. The region is beset by conflict, threatened by large-scale extractive projects, and encroaching impacts of the global climate emergency. In response, Indigenous Karen communities have brought together key stakeholders and united them behind their vision for an ecologically sound, just, and peaceful landscape. Built upon a foundation of Indigenous knowledge and generations of Karen stewardship, the Salween Peace Park offers stability to its people and wildlife, and a valuable learning opportunity both for Burma's governing bodies and the wider world. Through the Peace Park, and with the support of other territories of life around the world, Mutraw's Indigenous Karen offer us an alternative

IUCN Red List Status of species found within the Salween Peace Park	
Critically endangered	Sunda pangolin (<i>Sunda pangolin</i>)
Endangered	Tiger (<i>Panthera tigris</i>), Asian elephant (<i>Elephas maximus</i>), banteng (<i>Bos javanicus</i>), dhole (<i>Cuon alpinus</i>), Phyare's langur (<i>Trachypithecus phayrei</i>)
Vulnerable	Asiatic black bear (<i>Ursus thibetanus</i>), sun bear (<i>Helarctos malayanus</i>), leopard (<i>Panthera pardus</i>), clouded leopard (<i>Neofelis nebulosa</i>), sambar (<i>Rusa unicolor</i>), gaur (<i>Bos gaurus</i>), binturong (<i>Arctictis binturong</i>), northern pig-tailed macaque (<i>Macaca leonina</i>), stump-tailed macaque (<i>Macaca arctoides</i>), hog badger (<i>Arctonyx collaris</i>)
Near Threatened	Marbled cat (<i>Pardofelis marmorata</i>), Asiatic golden cat (<i>Catopuma temminckii</i>), Chinese serow (<i>Capricornis milneedwardsii</i>)



Commemoration of International Day of Action for Rivers and Against Dams. Photo: KESAN

vision of the future; a place where all things can live together in peace.

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¹¹ In the river basin, 170 fish species have been documented, 60 of which are endemic. Community-led research has identified 90 species of fish downstream of the planned Hatgyi dam site (KESAN 2015).





Photo: BRC / Qingchuan Song



Fengshui forests of Qunan

Community conservation and environmental education are leading the way to cultural revival in China

Author(s):¹ Yingyi Zhang

The Zhuang Indigenous community of Qunan revitalised the governance of its territory of life by establishing an environmental education base. Focusing on the value of its biocultural diversity and the active conservation of the critically endangered white-headed langur, the Qunan community obtained governmental recognition and appreciation from the national public as a community conserved area. With custodianship over the territory, Qunan also gained an increased sense of pride in their cultural heritage as a value to be passed on to future generations.

Located in the Guangxi Zhuang Autonomous Region in southern China, the community of Qunan is comprised of 450 individuals (110 households), who belong to the Zhuang Indigenous people.² The Qunan territory of life dates back at least 300 years. Today, the community holds the collective rights over about 1,010 hectares

in total, including Fengshui forests, other forests, agricultural areas, and water bodies.

The Zhuang people have been known for safeguarding the Fengshui forests surrounding their villages.³ The vitality of these forests is believed to indicate the health, fortune, and well-being of their custodians. Fengshui forests are places of worship; some old trees in the village are also held sacred, and each hill within the territory has its own guardian spirit. Fengshui forests play important roles in preserving water resources, preventing natural disasters such as rockfall, and contributing to local peoples' livelihoods.

The Qunan territory is rich in endemic biodiversity, falling into the Sino-Vietnam Biodiversity Corridor of the Indo-Burma hotspot (one of 36 global biodiversity hotspots).⁴ The biodiversity baseline surveys conducted



by the Guangxi Biodiversity Research and Conservation Association (BRC) showed that the limestone seasonal rainforest of Qunan provides refuge for white-headed langur, rhesus macaque, wild boar, musk deer, python, gecko, and other wildlife. The most significant of these species is the white-headed langur (*Trachypithecus poliocephalus*). Endemic to a small area of about 200 km² between the Ming and Zuo rivers in Guangxi, the white-headed langur was once listed as one of the 25 most endangered species in the world, with a global

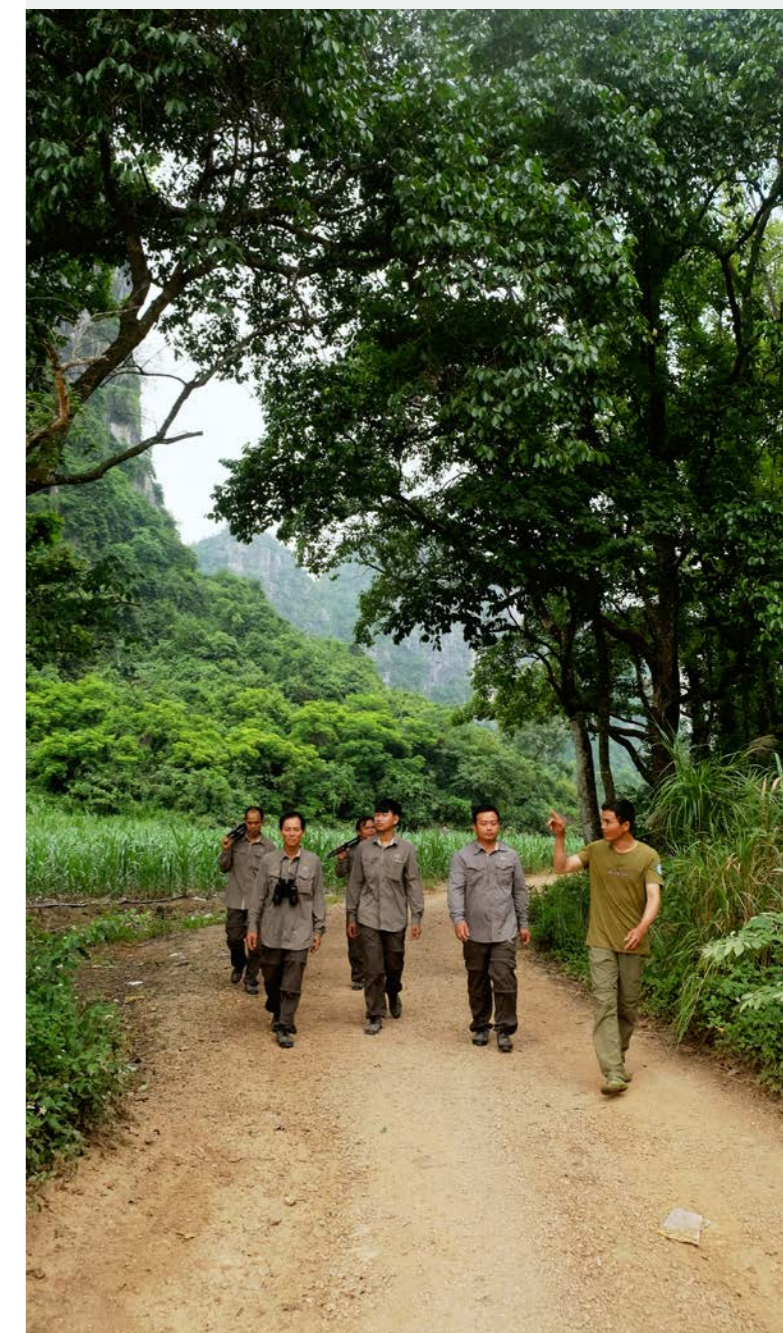
¹ **Dr. Yingyi Zhang** is the regional representative for East Asia in the Council of the ICCA Consortium. She holds a PhD in conservation biology and is a founding member of the Working Group on ICCAs in China, as well as co-founder of **Guangxi Biodiversity Research and Conservation Association** (BRC).

English revised by Teodora C. Hasegan

² The Tai-speaking **Zhuang people** are among the largest and best-known of the 56 "ethnic minority groups" officially recognised by the People's Republic of China, with an estimated 18 million members, and over 2000 years of historical records.

³ In China, fengshui forests are an ancient cultural-religious phenomenon with many different manifestations. See, e.g., Bixia Chena, Chris Coggins, Jesse Minor, Yaoqi Zhang. 2018. 'Fengshui forests and village landscapes in China: Geographic extent, socioecological significance, and conservation prospects', **Urban Forestry & Urban Greening** 31: 79-92.

⁴ Ecosystem Profile, Indo-Burma Biodiversity Hotspot 2011 Update, Critical Ecosystem Partnership Fund, October 2012. (<https://www.cepf.net/our-work/biodiversity-hotspots/indo-burma>)



The volunteer patrolling group of Qunan. Photo: BRC / Okranz





The Qunan territory of life dates back at least 300 years



1,010 hectares



Custodians: Community of Qunan, 450 residents

population of just about 1,200 in 2017.⁵ Today, it is still listed as critically endangered by the International Union for Conservation of Nature,⁶ although the numbers have recovered, thanks in part to the conservation efforts of the Qunan community: in November 2019, a survey in Qunan territory counted 249 individuals in 31 groups.⁷ This result is in line with the villagers' observation that both forests and langurs have been recovering steadily over the past 20 years.

Collective governance and management as the key to successful conservation

Fengshui forests are essential to the daily life of people in Qunan for their ecological, cultural and spiritual values. Within the Qunan territory of life there are three patches of Fengshui forests: one is primary, one restored, and the third was planted over 70 years ago. All of them are well protected and well respected as the residences of the guardian spirits of the Qunan community. For

instance, if people eat in their territories, they should share food with the spirits or else the spirits will be offended. Transmitted from generation to generation through legends, stories, and traditional practices, such traditions remain important today, although there have been notable changes as well. Traditionally, all families of Qunan used to assemble every year on the Lunar date of 4 May at the front of the Sacred Dragon Temple in one of the Fengshui forests. Not just a religious gathering, this was an important occasion for conflict resolution and collective discussion of public affairs. However, since the 1980s, this institution has gradually weakened as the officially elected and government-supported Qunan Management Committee became more politically powerful. Now, it mainly serves as a religious festival to enhance communal solidarity.

In the 1980s, when communal farmland was allocated to each household under a new government policy, some forests at the foot of the characteristic limestone hills were seriously encroached by agriculture and animal



The white-headed langur lives in family groups comprised of one adult male and several adult females. As a leaf-eating monkey, skilful in climbing cliffs, they are very adaptive to the limestone ecosystem. This species is listed as a Grade I national protected animal, and its hunting is strictly prohibited. Photo: Jipeng Liang

husbandry. Across the country, this policy resulted in large-scale deforestation for the opening of more farmland. Deforestation was banned at the beginning of the 1990s; today, commercial logging is prohibited and the natural forest in Qunan is under the protection of a national payment for ecological services programme, with direct payments to each household.

In recent years, many farmers switched their cash crops from sugarcane to oranges. The orange orchards not only require more financial and labour investment, but also cause serious air and soil pollution due to the use of pesticides. The market price of oranges has fluctuated greatly, and some families have taken loans they have to pay back. In contrast, the revenue from sugarcane is low but stable, as the market is controlled by the government as a poverty alleviation measure.

Despite the fact that these cash crops are the main livelihood source today, the Qunan community still conserves traditional seed varieties (e.g., peanuts and soybeans, which form part of the traditional food). They also use a variety of wild plants for food, medicine, dyeing, and building materials. However, the youth are

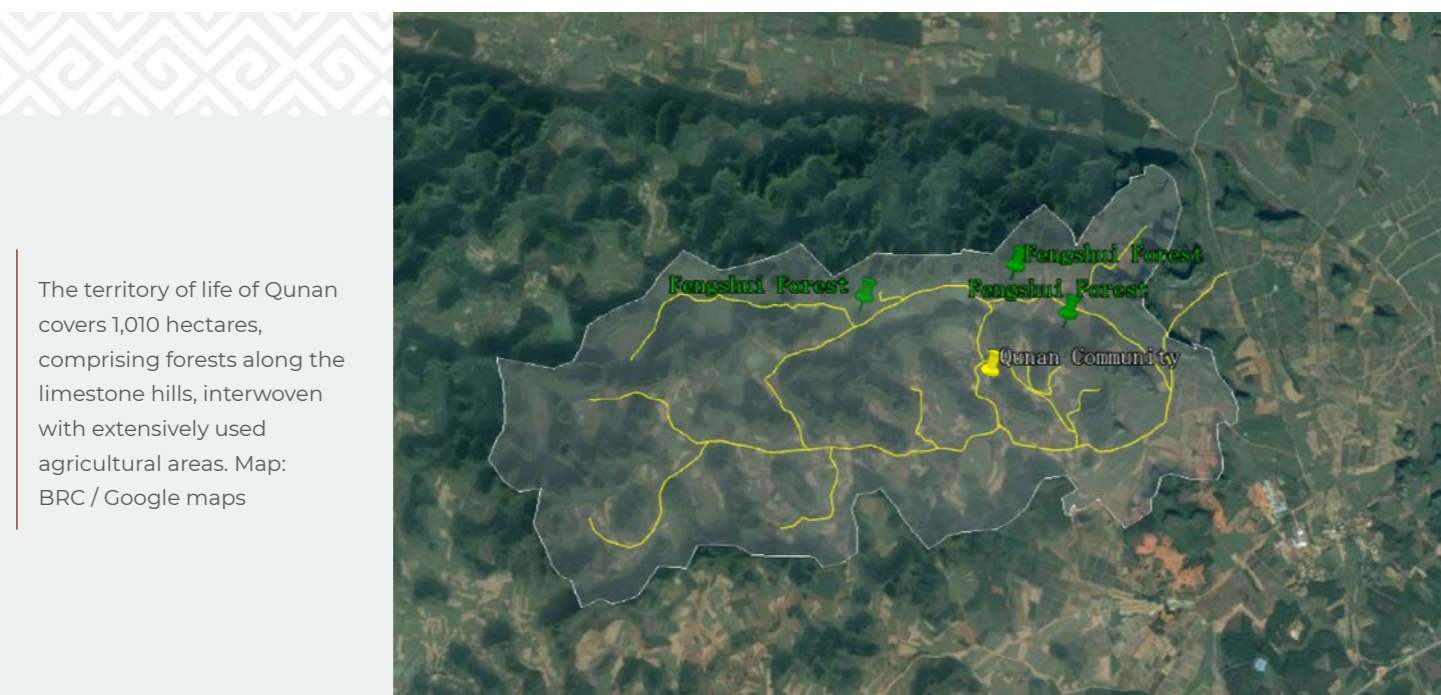
losing this traditional knowledge as they attend schools away from the community and only go back home on weekends or holidays.

An important change came in 2012 when the state designated the Chongzuo White-headed Langur National Nature Reserve in the direct vicinity of Qunan. Since the forests of Qunan territory are part of the habitat of the critically endangered white-headed langurs, the Reserve and local forestry bureau were very interested in obtaining support from the Qunan community for their protection. A new provincial policy

⁵ The latest survey conducted by the Chongzuo Municipal Forestry Bureau in 2017 counted about 1,000 individuals (<http://www.czbyh.cn/bhqgk/423822.shtml>); according to personal communication with staff, there are about 200 more in the Nonggang National Nature Reserve.

⁶ Bleisch, B., Xuan Canh, L., Covert, B. & Yongcheng, L. 2008. *Trachypithecus poliocephalus*. **The IUCN Red List of Threatened Species 2008**: e.T22045A9351127.

⁷ Unpublished data from BRC who organized and carried out the survey together with Qunan community members.



The territory of life of Qunan covers 1,010 hectares, comprising forests along the limestone hills, interwoven with extensively used agricultural areas. Map: BRC / Google maps



was issued in 2014, encouraging local communities to register and manage their conserved area on their own collective land. Recognising that the Qunan community valued and conserved their territory well, the local NGO BRC reached an agreement with the Reserve to jointly facilitate Qunan to get official recognition and enhance its self-governance and management of the territory.

In addition, BRC proposed to establish an environmental education base in Qunan. Realising that a prosperous market for environmental education activities was emerging, Qunan seemed an ideal destination for the educational camps focusing on langur and limestone ecosystem conservation. These ideas were welcomed and approved by all households of Qunan during a general assembly in late 2014, where they also agreed to seek governmental recognition and to register in the global **ICCA Registry** hosted by the UN Environment Programme World Conservation Monitoring Centre.

Although only part of the langur habitat in Qunan was formally recognised as a Community Conserved Area by the county forestry bureau in December 2014, Qunan still regards and manages the entire

territory as an integrated whole, as they did before. The governmental recognition protects the territory from industrial projects like limestone and bauxite mining, which are causing problems in some other communities in the region.

During the 2014 assembly, the community agreed on four principles for enhancing their management of the territory: 1) outsiders are not allowed to enter their territory without permission; 2) poaching of wildlife, bird catching, illegal logging for expansion of agricultural farmland, and collecting natural resources by outsiders are prohibited; 3) fire at the foothills is not allowed; and 4) any violation witnessed should be reported.

The rules were accepted and implemented by all members. Since the main threats are from outsiders, a voluntarily patrolling group was created in early 2015, consisting of 17 young rangers. All community members participate in the surveillance and report to the rangers any violation they observe when working in the fields. If needed, the community rangers will then ask for help from the Nature Reserve to enforce the law. In the past five years, only 29 cases of illegal activities were reported; the last two were in 2018.

Students in a winter camp learning the traditional knowledge about plants in Qunan. Photo: BRC.



Members of the Qunan womens group. Photo: Wuying Lin /BRC

Since the initiation of the environmental education base, a new consultative mechanism (the “co-management committee”) was developed for both internal and external cooperation in 2015. It includes the representatives of the reserve, BRC, Qunan Management Committee, the patrolling group, the dancing group, the Homestay Association, and the Green Grass children’s group. The co-management committee holds meetings every quarter and consults on all important issues regarding environmental education and conservation of the territory. The purpose of this mechanism is to ensure the equal participation of each group in the governance and management of the ICCA as well as good cooperation with external stakeholders, such as the Nature Reserve, the forestry bureau, and NGOs. The creation of the committee was proposed initially by BRC and has generally been well accepted. However, the mechanism is facing challenges when the political power of internal and external stakeholders is unbalanced, and there is still a need to strengthen the awareness and capacity of different interest groups to address this problem.

Environmental education as a driver for the revitalisation of traditions

In January 2015, Qunan successfully hosted the first winter camp together with BRC. Unlike mass tourism, the environmental education camps are open only to students whose courses are organised by reliable NGOs, and are only being held during weekends and holidays. Any camp needs permission from the Qunan community beforehand, and the students have to follow the “No-Harm-to-Environment-and-Culture Principles” established by BRC and Qunan.

The environmental education activities were welcomed by all community members. They also promoted the formation of many different groups in Qunan and their active participation in the governance and management of the territory: the Homestay Association, the Green Grass children’s group, and the Kapok women’s nature guide group.

The first group established was the Homestay Association comprised of 15 families who mainly provide

meals and lodgings (68 beds) for environmental education camps. The Association has the right to decide whether and how to host the students to avoid any negative impacts to their traditional culture and make sure the income is equally distributed among all members. About 11 per cent of the income goes into the collective community fund, in addition to the rent of rooms and equipment.

Qunan used to be a marginalised community, remote from urban centres and with very limited public services and infrastructure. The environmental education camps not only attract students and their parents from big cities across China, but also the children from Qunan itself are free to join. Thus, due to the appreciation shown by the visitors, the children of Qunan are becoming prouder and prouder of their territory and culture. They established their own association called Green Grass, with its own rules and procedures for member recruitment and elections. They organise to clean up garbage in the community, manage their small library donated by visitors, and also actively participate in each camp.

Another initiative emerged from a group of women who used to dance together in their spare time. Since becoming involved in designing and delivering courses about the Indigenous biological and cultural values of the territory, the group also started to perform traditional Zhuang songs and dances (with some men also joining). In 2018, some women from this group learned how to be nature guides and formed another team, named Kapok, which offers night observation courses of wildlife.

The volunteer patrolling group also plays an important role in the environmental education activities. Being trained to do field surveys and monitor wildlife, they are usually responsible for finding the langurs, teaching students how to observe their behaviour, and telling stories about them.

In the beginning, the courses offered in the environmental education camps were mainly designed and delivered by BRC with the active participation of all these groups. However, over time the community groups were able to design and provide courses on



A woman nature docent introducing a spider web during a night nature observation course. Photo: BRC / Li Luo



White-headed langur group.
Photo: BRC

their own. In addition, the courses have extended from teaching about the langurs and limestone ecosystems to teaching about birds, butterflies, reptiles, Zhuang traditional knowledge, culture, and the history of the Qunan territory.

Challenges and new opportunities for a more sustainable future

Before any official recognition and NGO support, the Qunan people valued their territory as their homeland and source of dignity and identity. Then, the langur were categorised as critically endangered and came under special legal protection. As a result, the commitment of the Qunan community to the conservation of the langur and their habitat earned great recognition and appreciation from government and the public, which in turn enhanced the awareness and pride of Qunan about their custodianship over the territory.

Although the langur and its habitat have been well conserved up to now, the current livelihoods of Qunan are not sustainable in the long-term. Community members are very anxious about the market price of their harvest, especially when more and more families replace sugarcane with oranges, with serious environmental impacts. Since the Qunan people now need cash for education, medical and other expenses, it is not easy for them to change their livelihoods toward a more sustainable and self-reliant way.

Realising the pollution and the harm to their health caused by pesticides and fertilisers, the Kapok women's

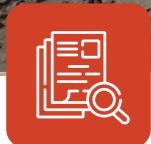
group has started exploring permaculture agriculture on a small barren island in the village pond, changing it into an organic vegetable garden. This action, which received support from other groups, may be used for designing environmental education courses on sustainable gardening in the future.

The community members hope that the environment education base could generate more income and play a more important role in their livelihoods in the future. Being more confident in their management capacities, they expect that more visitors could come to Qunan without negatively impacting their nature and culture. However, they also realise that they still rely heavily on external partners to organize camps and design courses. If the community opens the door to tourists, it may require more infrastructure development that the community may not be able to afford both financially and environmentally. External investments might create power imbalances among the different groups within the community, undermining their self-governance.

Taking such questions into consideration, the overall experience has so far been positive, and the emergence of different groups within the community has led to an increase in participation and equity among its members. Today, the environmental education courses show the rich biodiversity and inherent cultural and spiritual values of this territory. The external appreciation makes the Qunan people more aware and proud of their traditional culture and knowledge. Being confident about its values to the region and the world, they reflect on their relationship with nature, identify challenges and improve their own management and governance.



Photo: Aditi Veena



Adawal ki Devbani

An Oran sacred grove in Rajasthan, India

Author(s):¹ Aditi Veena, Aman Singh, Nitin Bathla

Orans are sacred forests situated in the arid and semi-arid regions across western India. Considered divine domains, Orans are places where land, water, and jungle peacefully cohabit. They are community assets that lie at the centre of rural life, a land resource for all to share equally, and for all to protect under a communally enforced code.

Unlike other community conserved forests around the world that include a single large tract of forest, Orans are relatively small, with a range from 10 to 400 hectares. Their outstanding value, beyond serving individual communities, lies in their sheer number and the fact that they comprise a *network* of forests and semi-mobile agro-pastoral communities. It is estimated that there are over 25,000 Orans covering a total area of more than 600,000 hectares in Rajasthan (Singh, G. 2016). One of these is the Oran named *Adawal ki Devbani* in the Arawali hills, close to the town of Alwar.

Orans are ecological ecosystems that regulate the local climate. They are also home to endangered biodiversity and are critical water sources in the arid landscape of Rajasthan. Here, Orans protect springs and aquifers, and host centuries-old water storage facilities. Research into Oran water resources suggests that these potentially provide a permanent solution to water scarcity and degradation in the area (Krishna and Singh 2014). They ensure a continued supply of water after the monsoons have passed, and they greatly benefit local livelihoods through increased availability of water for livestock and crop irrigation. For example, Garuba ji Devbani and Adawal ki Devbani districts in Alwar irrigate about 200 hectares of land.

Many Orans today are overlapped by government-designated protected and reserve forests, including the Sariska Tiger Reserve, from which communities have been evicted, reinforcing a false nature-culture divide



50 hectares



Custodians: Sirawas village, population 1,000

(Singh and Jobanputra 2009; Singh 2011). Also, many are faced with multiple threats from urbanisation, population pressures and climate breakdown. Nevertheless, Orans continue to thrive to this day owing to the revered status accorded to them by communities.

¹ **Aditi Veena** is an ecologist, educator and artist whose work lies at the intersections of ecology, art and social empowerment. She is currently a visiting faculty at the **School of Planning and Architecture**, New Delhi. Aside from academic research, she is a musical artist who writes songs inspired by nature and works on community based and socially engaged art projects as *Ditty*.

Aman Singh is founder of Krishi Avam Parishitiki Vikas Sansthan (**KRAPAVIS**, ICCA Consortium Member), and **Chair of the Membership Committee in the Council of the ICCA Consortium**. He has overseen the regeneration of over 140 Orans (community conserved areas) in Rajasthan, India.

Nitin Bathla is an architect and researcher, currently pursuing Doctoral Studies at ETH Zurich. His work focuses on the intersections of urbanization and commodification of everyday life, especially through the questions of labour, ecology, and infrastructure. He is an Honorary member of the ICCA Consortium.

The case study is partially based on the forthcoming *Oran Atlas of Aravallis of Rajasthan*, edited by Aman Singh and Nitin Bathla, KRAPAVIS.

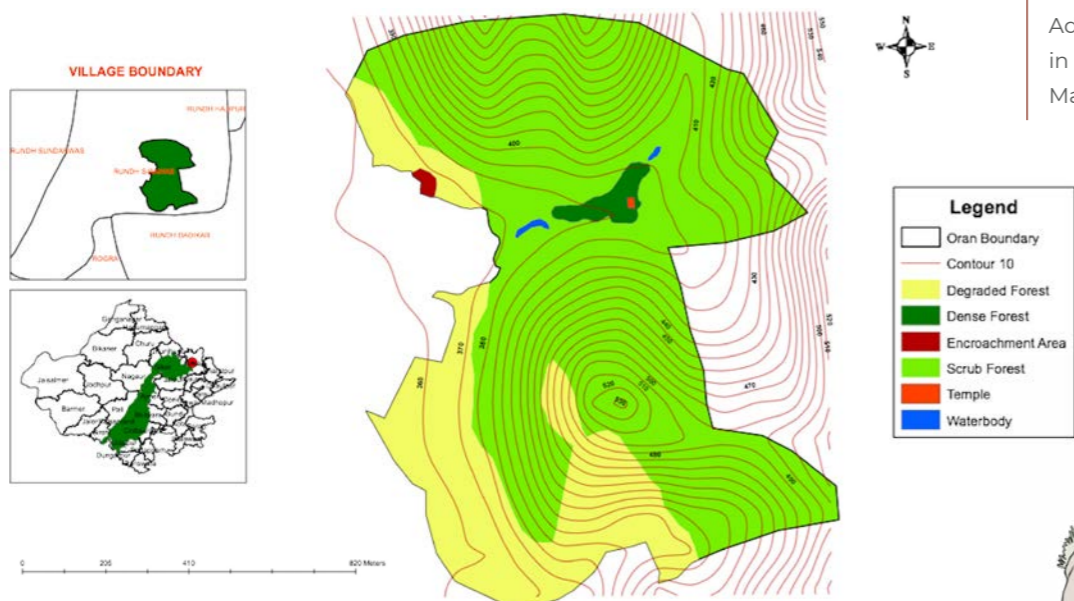


“The Adawal Oran is the driving force of our livelihoods. We are all aware that if we need anything, we take it from there. Our animals graze there. We understand that if we destroy the Oran, our lives will be compromised, and that is why we organize through the Samiti [village organizing body]. We consider it our duty to protect and conserve the Oran.”

Deenaram Meena



ARV-ALW-04 - ADAWAL KI DEVBANI, SIRAWAS, ALWAR



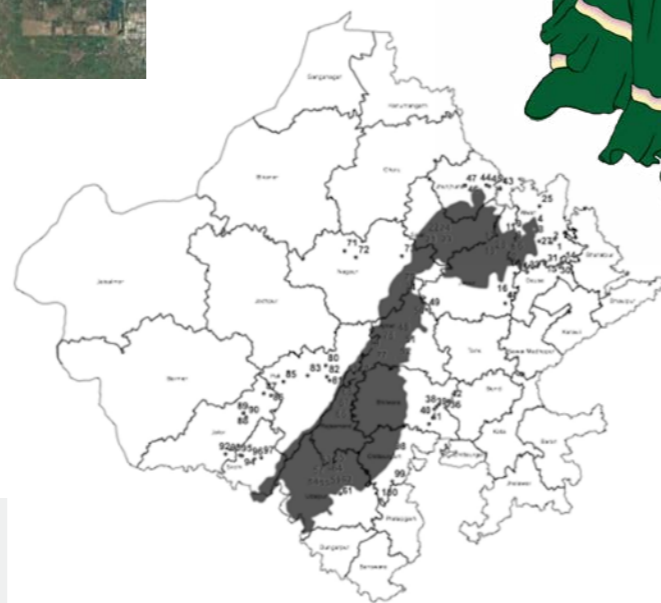
Adawal ki devbani in Sirawas, Alwar. Map: KRAPAVIS



Location of the Adawal Oran near Alwar. Map: Aditi Veena / googlemaps



ARAVALLI HILL RANGE WITH ORAN POINTS



The Aravali mountain range in Rajasthan with Orans. Map: KRAPAVIS

India Boundary



Orans as a model for conservation

The Orans provide a much-needed lifeline and safeguard the communities that are dependent on them, functioning as a vital infrastructure for resilience even in the face of the most extreme hardships. They have done so by allowing space for trans-species, religious and cultural solidarities. In contrast with state-led environmental conservation projects such as wildlife sanctuaries and citizen-led environmental initiatives for greening and restoration, the Orans are where communities conserve the environment for their socio-material sustenance and as part of their religious beliefs. They become important gathering points for communal congregations, festivals and other social events, the performance of which is linked to agrarian rhythms and the continued commitment of the communities towards environmental conservation.

The authors travelled to the Adawal Oran and neighbouring villages with year-long support from Krishi Avam Paristhitiki Vikas Sansthan (**KRAPAVIS**) as part of their research for the Oran atlas. The table below shows results from visits to and interactions with the communities of the Adawal ki Devbani Oran.

Adawal ki Devbani

Adawal ki Devbani is located in the Sirawas village of Alwar district, about two kilometres from the village

settlement. It is spread over a 50-hectare area of hilly topography. The soil found in the Oran is mainly of mountain and loamy type. There is a perennial spring that emerges from the Oran. Several communities, with a total population of about 1,000, live in proximity to the Oran in different hamlets in the Sirawas village and interact with the Orans for their sustenance and livelihoods. The Gujjars are the original inhabitants of the Sirawas village. The Meenas were resettled here from a village nearby. There is also a community of Kumhars (potters).

Daya Ram Gujjar explains that they hold reverence for the Oran and take measures to conserve it since their livelihood depends upon it.



Dayaram Gujjar about the sustainable use of Orans. Video: Aditi Veena, 2021

The God's forests

Interspecies care and nurturing is integral to the relationship of Indigenous communities with their environments across the planet. In India, the sacred forests can be considered such an entity in which the

	Not Important	Some what important	Important	More important	Most Important
1) How important is the Oran to you?	0	0	0	0	72
2) How important is Devi to you?	0	1	0	0	71
3) How important is the Samiti to you?	0	1	5	4	62
4) How important is the Forest Department to you?	31	14	20	2	5
5) How much conflict over private land is there in village?	1	51	14	3	1
6) How much conflict over the Oran is there in the village?	69	2	1	0	0
7) How much conflict over other land is there in the village?	0	22	48	2	0
8) How is the state of the local environment now compared to the past?	0	46	22	3	1
9) How is the state of religious belief now compared to the past?	9	34	18	4	7

Results from a survey conducted by KRAPAVIS with 72 residents from the Bakhtpura village on the significance of Orans to their everyday life and livelihood.



Aman Singh on the multiple functions of Orans. Video: Aditi Veena, 2021



biophysical environment and livelihoods are part of a web of spiritual interspecies relationship. Sacred groves are premised on a belief that all creations of nature have to be protected, an idea which finds genealogical references in nature worship back to the Vedic period (5000 B.C).

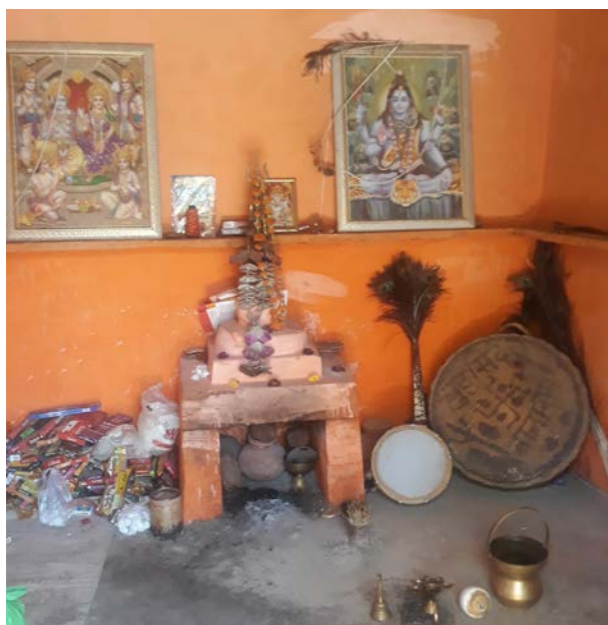
The Orans are community conserved forests preserved in the name of local gods, goddesses, deities or saints. The temple is an important aspect of the forest. The Orans are colloquially referred to as *Dev-Banis*, literally translated as 'God's forests'.

At Adaval, Shri Hari Om Das Maharaj (the ascetic who lives in the temple complex in the forest) receives gifts and food from the community and plays a vital role in the preservation of the forest. He explains that the temple is a medium for conservation and reverence amongst the communities.



Hari Om Das Maharaj on the temple as a means for conservation of the forest. Video: Aditi Veena, 2021

The Oran is imbued with myths and legends that are communicated from generation to generation in the form of oral histories, stories, and songs. According to the oral sources from the community, Adaval dates back to centuries ago when a saint by the name of *Choor Sidh* sat in the forest in meditation for several years. The



Gujjars recall that he was served by their community. In return for their care, the community was blessed with protection from tigers, cheetahs, and snakes in the forest. Pappi Gujjar, an elder woman from the Gujjar community whom we met during our visit to the Gujjar village, shares with us a folk song. She explains that they celebrate the forest and its inhabitants with zeal. Below, she and her daughter-in-law sing a popular folk song celebrating the monsoon and peacocks in the forest.

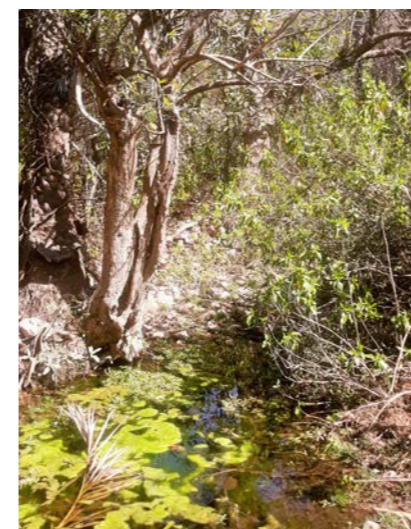
Adawal ki Devbani also serves as a socio-cultural centre for the community as it unifies people religiously, culturally and socially while providing a forum for village level discussions, festivals and other social events. An annual *Mela* (festival) is organized in the Oran in the month of April in conjunction with *Vaishakhi Purina*, with an estimated 10,000 pilgrims visiting.

The community acknowledges the presence of the perennial spring that flows through the Oran and takes extensive measures to conserve it. The tradition known as *Chitawal* (feeding birds) and feeding of aquatic species like fish and tortoise are examples of interspecies care. Several important tree species such as kadam (*Neolamarckia cadamba*), bargad (*Ficus bengalensis*), neem (*Azadirachta indica*), peepal (*Ficus religiosa*) and gular (*Ficus glomerata*) can be found abundantly conserved in the Oran and have been assigned religious significance.

Ecosystem values and livelihoods offered by the Oran

Livestock grazing and non-timber forest products collected from the Oran provide a major source of livelihood for the community. Major products from the Oran include khajjur or date palm trees (*Phoenix sp.*), which yields both carbohydrate-rich fruits and leaves that can be used for making brooms and other products. Other important non-timber forest products from the Oran include kair (*Capparis decidua*) and ber (*Zizyphus mauritiana*). Water from the Oran's spring is used for irrigation by the community through a network of channels and pipelines that has been laid out from the spring. As much as 50 hectares of agricultural land is covered by this irrigation network, which is dependent on the Oran. The Oran land is also an important source

The Choor Sidh Maharaj Deity shrine located at the heart of the Adival Oran. Photo: Aditi Veena / Aman Singh



Water in the Adaval Oran. Left: A narrow stream emerges from the hills. Middle: The water body is the primary source of water for cattle. Right: Water level in the well is 50 feet. Photos: Aditi Veena

for grazing of village livestock. The community also depends on the Oran for local construction materials such as thatch, wood, sand, and stone.

The community depends on the Oran for their sustenance for nine of twelve months of the year and thus its conservation is critical for their semi-mobile agro-pastoral way of life. About 50 per cent of their income comes from the Oran during normal monsoon rains. In the summer, pastoralists from the village migrate for grazing or labour. For approximately three months during the winter, the community depends

on their agricultural land. During this time, they also use harvested leaves and grasses from the Oran. For about six months during and after the monsoon, their livelihood is partly dependent on the Oran. During drought periods, the Oran can sustain their livelihood for two to three months.

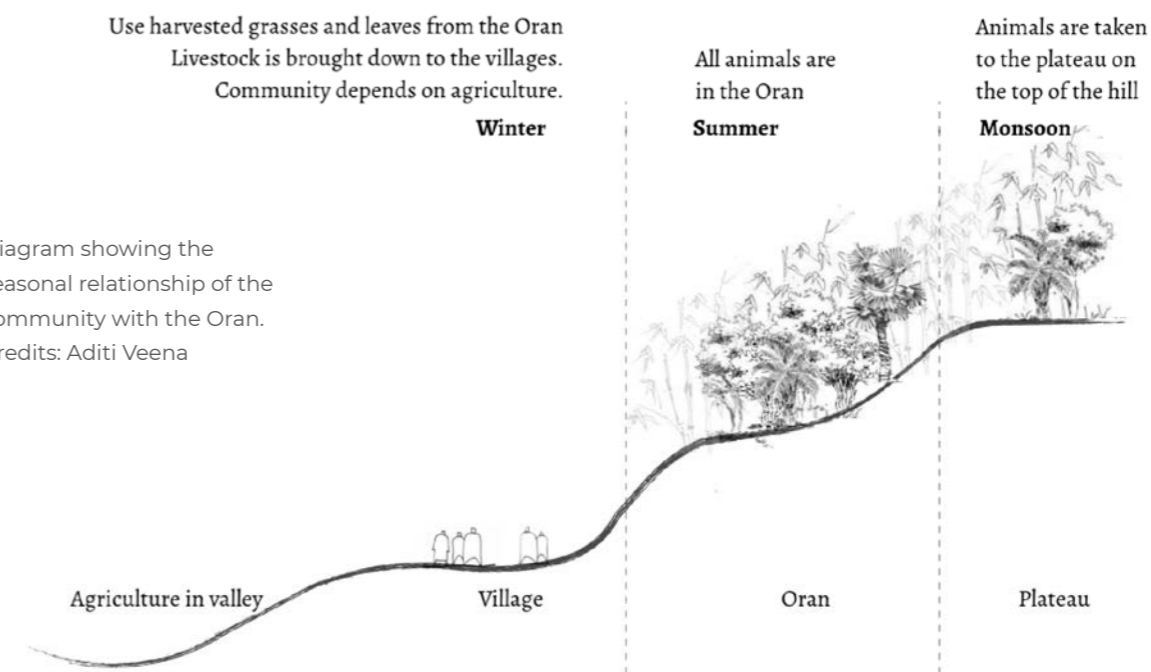
The Oran is critically important for sustaining pasture tracts for local livestock and to meet the real needs of the community. Thus, productive and better conserved Orans can reduce poverty and increase livelihood security among communities.

Use harvested grasses and leaves from the Oran. Livestock is brought down to the villages. Community depends on agriculture. **Winter**

All animals are in the Oran. **Summer**

Animals are taken to the plateau on the top of the hill. **Monsoon**

Diagram showing the seasonal relationship of the community with the Oran. Credits: Aditi Veena



Governance and ownership of the Oran

Strong internal social control within Oran communities enables effective sanctions to be imposed on violators, reflecting their importance to resource users. Orans generally have a well-defined boundary and are governed through an egalitarian system. The communities participate in setting and enforcing rules and not just in their implementation. Normally, every Oran has a mechanism for conflict resolution along with simple and clear rules for all, and there is significant commitment from all resource users (for example, they give annual contributions for maintenance).

Strong religious beliefs also support the Oran; for example, respect for the Devbani stems from strong faith in God. Orans are generally utilized and maintained in accordance with traditional, community-defined rules. For example, "a fallen log can be taken for a funeral pyre, but trees can never be felled"; "the water body can be used by livestock, but not so much for irrigation"; "herbs can be used for medicinal but not commercial purposes"; and so on. Maintenance of the Oran and its management is coordinated by the village community. The village community guards against the privatization of Oran land by any individuals and there are strict norms to prevent felling of trees and poaching.

The ownership of the Adaval Oran land is presently under the Rajasthan Forest Department, but Meena Sahakari Samiti, a village level institution, is involved in



"The forest gives us everything."

A common saying amongst the Gujjar agro-pastoral tribes in Alwar, Rajasthan



A **song about the peacock**, by Pappi Gujjar, in the yard of the Oran temple. Video: Aditi Veena, 2021

its management. An ascetic named Shri Hariom Das looks after the Oran.

Biodiversity and livestock

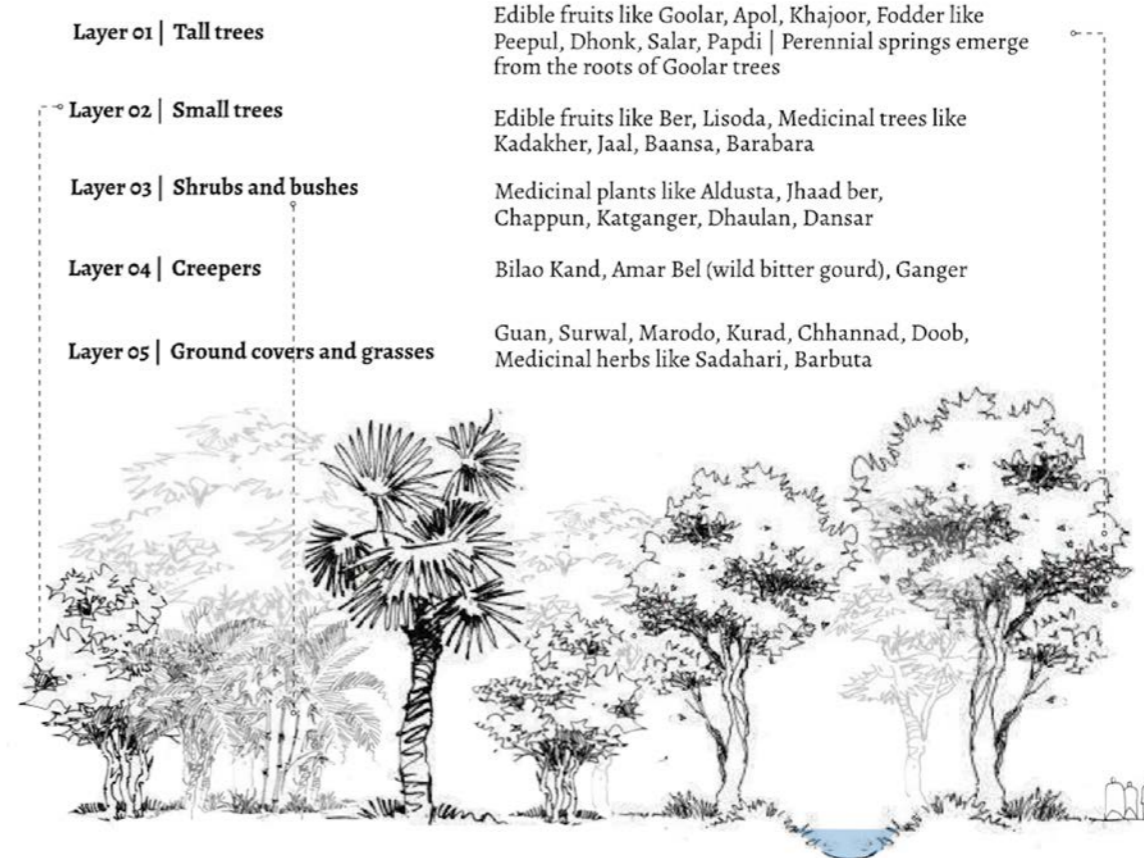
Orans contain unique and fragile terrestrial and freshwater ecosystems that comprise rare, threatened and endangered species and habitats, keystone species, species of evolutionary significance, and wild progenitors of cultivated plant species. The sites are culturally, aesthetically, and ethically important in the context of conservation management.

In Adaval, the livestock consists of 600 cows, 700 sheep, and 700 goats that directly depend on the Oran. The dominant tree species include khajjur (*Phoenix sp.*), dhok (*Anogeissus pendula*), kikar (*Vachellia nilotica*), neem (*Azadirachta indica*), gular (*Ficus racemosa*), peepal (*Ficus religiosa*), sheesham (*Dalbergia sissoo*), kair (*Capparis decidua*) and chapun (*Grewia hirsutae Vahl*). Many birds, including pahadi chidia (*Passer domesticus*), peacock (*Pavo cristatus*), parakeet (*Psittacula krameri*), pigeon (*Columba ivia*) and Indian robin (*Saxicoloides fulicatus*), can be commonly sighted in the Oran. Other animals found in the Oran include wild pigs (*Sus scrofa*), leopard (*Panthera pardus*), blue bull (*Boselaphus tragocamelus*), rabbit (*Oryctolagus cuniculus*), and mongoose (*Herpestes edwardsii*).

In the Oran, khajjur (*Phoenix sp.*) and dhok (*Anogeissus pendula*) are the key protected tree species and pahadi chidia (*Passer domesticus*) the key protected bird species. The water sources in the Oran include a perennial spring and stream. These originate from places where gular (*Ficus glomerata*) trees are found in the Oran. The community recognizes the connection between the ficus trees and the originating spring and believes that ficus trees create water. The roots of the ficus trees create large cavities which collect water and become extensions of the interconnected underground aquifers. This water can slowly escape from the ground in the low-lying areas as a spring.

The communities see themselves as a part of a larger ecosystem. The Gujjars believe that they are a blessed community to be so close to the natural world.

Several ethno-botanical and ethno-veterinary traditions are associated with the Oran. The communities go to the local Vaid or apothecary who has extensive knowledge of the *jadibootis* or medicinal herbs and plants found in the forest. Ishwar Meena, a 40-year



Graphical representation and classification of various different layers of Flora in the Adaval Oran. Credits: Aditi Veena

old pastoralist from Meena ki Dhani is a carrier of the ethno-veterinary traditions and Indigenous knowledge. He shows us around in the forest and introduces several plants in his extensive repertoire.



Banwari Lal Gujjar about the co-existence with animals in the Sariska forest. Video: Aditi Veena, 2021

area. This has been detrimental to the areas that have been left included and unincluded. The change of land status leads community members to give up their responsibility towards the Oran. The other unincluded area is thus facing a severe and rapid degradation.

Rights to all activities like hunting and grazing in reserved forests are banned unless specific orders are issued otherwise. Therefore, if these areas are protected by the Forest Department, the communities and their livelihoods remain excluded from these ecosystems. This leads to a change in attitude in the people towards the forest. Banwari Lal Gujjar, from the Gujjar community, explained that the Sariska Reserve was a community managed forest for centuries. Since it has become a Reserve Forest, the forest has suffered illegal poaching and felling of trees. He says that the community that coexisted with, depended upon and understood the spiritual significance of the forest has now been excluded from the duties and responsibilities of taking care of the forests. The forest officers who are employed in the forest lack the skills and the Indigenous wisdom that would protect and maintain the forest lands. He says that the government must find a way to integrate the communities, understand the value of Indigenous

Internal and external threats and communities' hope for the future

Today, the main threats are the expansion of agriculture into the Oran. This occurs mainly due to internal politics and change in land status. At Adaval, the inner part of the Oran is fairly undisturbed and well taken care of by the communities as long as it still belongs to them. The other boundaries of the Oran are suffering because the Forest Department has envisaged a new strategy to include Orans and commons into their forest area and has declared an increase in total forest



wisdom that has been acquired over centuries, and not separate the forests from the people.

Another current challenge exists where the Oran falls under the supervision of the Land Revenue Department and is in the process of being acquired by the Forest Department. The Revenue Department is able to lease the land for development. For example, the **Delhi-Mumbai Corridor** has seen large tracts of land used to build roads and highways, and this land is the habitat of endangered wildcats. Urbanizing such ecologically important and sensitive areas is detrimental to plant diversity and to the movement of animals of local and national importance.

There are also other threats such as an excess number of livestock, particularly goats, which graze through most foliage. Shri Ram Meena told us that about a decade ago, the Oran was experiencing severe degradation due to the large number of goats. In 2011, the community, in its yearly self-initiated committee meeting, decided to put a restriction on the number of goats that each villager could rear. Goats were reduced to 20 per cent of their original population and this significantly restored the Oran. Meena also mentioned that 10 years ago, the water that originates from the spring at the Adaval Oran used to irrigate about 50 Bighas of land (**a local land measurement**) whereas today, due to encroachment and increase in population, only 20 Bighas are irrigated. Some developments have entered the villages and had different impacts; for example, electrification of the villages has had the potter community switch to electric wheels, some communities have started growing water-consuming vegetables like

onions as cash crops, and the local apothecary has been replaced by a western medicine doctor which has led to loss of trust within the community in the healing power of plant medicine. All of these changes have reduced and limited the community's connection with and dependence upon the Oran.

Lastly, the community longs for a larger watershed management plan. Through the support of organizations like KRPAVIS and self-organizing community efforts, the community has been able to construct water harvesting structures like anicuts and check dams. The communities lead a very simple existence where they are only able to fulfil their basic needs of food clothing and shelter. They hope to find a way to co-exist with the changing ecological, social, and economic landscapes and create a secure world for their children.



Banwari Lal Gujjar about the impact of state-controlled conservation. Video: Aditi Veena, 2021

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Left and middle: The Kumhar potter community use clay from the water bodies that emerge from the Oran to create earthen vessels. Right: Pappi Gujjar using tools made from timber from the forest. Photo: Aditi Veena



Pastoral communities depend upon milk, yogurt, and cheese from their livestock. Photo: Aditi Veena

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Photo: Andris Salo



Tana' ulen

A Vital Conservation Tradition for the Recognition of Territories of Life

Author(s):¹ Cristina Eghenter, with contributions from Kasmita Widodo, Yutang Bawan, Saul Jalung and Andris Salo

When the late Customary Chief of Bahau Hulu, Anye Apuy,² visited the small village of Batu Puteh in Kinabatangan, Sabah (East Malaysia), the local leaders told him: “They took the forest from us. Do not let them do that to you, if you still have forest in your village. Forest is life.” That was not the first time Anye Apuy had witnessed the economic, social and environmental costs of industrial oil palm plantations and logging operations, leaving behind only pockets of fragmented forests and just memories of once-thriving hunting grounds, with no significant economic gains for Indigenous peoples. He had seen a period of rampant logging along the main rivers of the interior near his village in the 1970s, and he had visited communities in Sarawak where timber concessions had encroached upon Indigenous territories. He had long realized that timber is gold, but, in his own words: “This is not the kind of gold that is good for us, I want to protect the

forest in my area, as the forest is life for Dayak people” (quoted in WWF 2012: 71).

Millions of hectares of forests, wetlands, lakes and coastal areas in Indonesia are governed by Indigenous peoples and local communities. They do so to protect and conserve natural resources and ecosystem functions and to maintain the basis of their livelihoods and food security, including their spiritual values and religious beliefs, for present and future generations. By 2020, more than 10 million hectares have been documented and registered in Indonesia by their custodians, according to the Agency for the Registration of Indigenous Territories (known as BRWA in Indonesia).³

Tana' ulen is a practice of forest conservation by the Dayak Kenyah Indigenous peoples who live in the upper reaches of some of the major rivers in the interior of



Borneo, along the border between Sarawak (Malaysia) and Kalimantan (Indonesia). It is a model of effective and locally rooted conservation. For the Kenyah people, conservation means caring for the forest as a source of livelihood and cultural identity, and the belief that the forest will continue to sustain the community in return. This underpins the local management approach in the traditional Indigenous territories of the Kenyah people in the current provinces of East and North Kalimantan (Eghenter et al 2003; 2018). It is also most evident in the tradition of *tana' ulen* in the territories of Bahau Hulu and Pujungan, two communities in the Malinau District in North Kalimantan, where we focus our story.

Tana' ulen: Forest conservation, the Dayak Kenyah way

Tana' ulen, is *tana* (land) that is *m/ulen*, meaning restricted or prohibited. The forest of *tana' ulen* is old-growth or primary forest rich in biodiversity and with a high level of endemism. Dipterocarp tree species (*Shorea*) tend to dominate. Many rattan and other palm species can be found in the under storeys and the ground is covered by gingers, aroids, ferns and begonia plants. Rare and emblematic animal species like hornbills, clouded leopards (*Neofelis nebulosa*), forest cats and civet species can be found. Hundreds of bird species, deer, wild boar, and wild cattle⁴ also

“They took the forest from us. Do not let them do that to you, if you still have forest in your village. Forest is life.”

Local leaders of Batu Puteh, quoted in WWF 2012

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Contributors: Kasmita Widodo (BRWA and WGII), Yutang Bawan (FoMMA Pujungan), Saul Jalung (Customary Chief Pujungan), Andris Salo (FoMMA Bahau Hulu; map and photos).

² This text is dedicated to the memory of Anye Apuy. It was his leadership and vision that helped keep alive the conservation tradition of *tana' ulen* among his people and succeeded in the recognition of the customary territory by the local government in 2019.

³ The Agency for the Registration of Indigenous Territories (BRWA) was set-up by the Alliance of the Indigenous Peoples of the Archipelago (AMAN); as of early 2021, its database tanahkita.id covered maps of 866 Indigenous territories covering a total of 11.1 million hectares. See chapter ‘National analysis Indonesia’ in this report.

⁴ *Banteng* (*Bos javanicus*) are wild cattle that were once found in most parts of Southeast Asia, but are nowadays limited to small populations. These animals are grazers and browsers who can live in the forest but prefer the open grasslands which are traditionally semi-managed by local people.



Territory of life: Tana' ulen system of ICCAs



93,296 ha in Bahau Hulu; 174,291 ha in Pujungan



Custodians: Dayak Kenyah Indigenous peoples of Bahau Hulu and Pujungan



inhabit this forest. Animal parts (e.g., hornbill feathers, bear teeth and nails) are used as cultural items in traditional customs and dances—indicating the strong interconnection of biodiversity, forest and culture in the identity of Dayak Kenyah people (Eghenter 2018). *Tana' ulen* also contain plants, trees, fish and game with high livelihood values for local people. *Tana' ulen* areas are generally named after a river (e.g., *tana' ulen sungai Lutung*)⁵. The tradition of designating at least one *tana' ulen* area within the larger customary territory has long been practiced by the Dayak Kenyah people⁶ and it is still observed today in every Dayak Kenyah community in the District of Malinau in North Kalimantan, Indonesia.

In general, *tana' ulen* areas are strategically located near the village so that management and control by the locals is easier. The size of a single *tana' ulen* area varies from 3,000 hectares to over 80,000 hectares. Access and

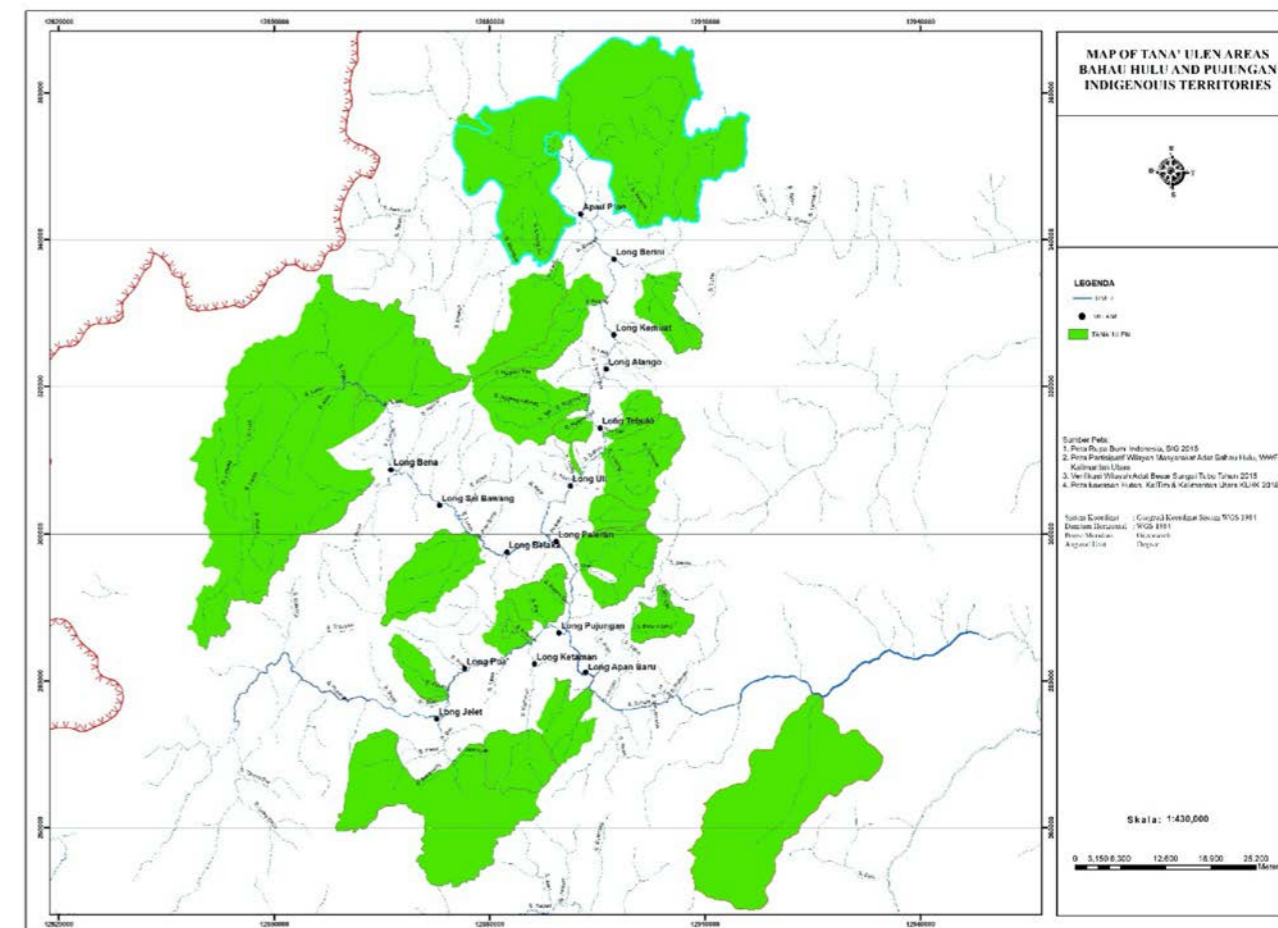
use are limited to protect the resources for long-term utilisation. They are also generally off-limits to outsiders, including sometimes nearby villagers.

Tana' ulen are a vital part of the governance of the broader Indigenous territories, which are known as *wilayah adat*. In a way, the *tana' ulen* represent the 'protected areas' of the Indigenous territories. The *wilayah adat* of Bahau Hulu is 321,607 ha; 93,296 ha (29 per cent) of this are *tana' ulen*, divided among the six villages along the Bahau River. The total population is 1,610. The *wilayah adat* of Pujungan is 584,866 ha, with 174,291 ha (29.8 per cent of the total) of *tana' ulen* in 9 villages along the Bahau, Pujungan and Lurah rivers. The total population is 2,155.

Historically, *tana' ulen* are also integrated into a broader territorial governance system. This is key to the future



Local people from Long Alango carrying out a biodiversity survey in the *tana' ulen*. Photo: © Andris Salo



Map of *tana' ulen* areas Bahau Hulu and Pujungan Indigenous territories. Map: Andris Salo (FoMMA Bahau Hulu)

of *tana' ulen*. The cultural and natural values are inextricably linked, and Indigenous communities are central to sustaining this system.

Changing governance and the vitality of traditions

In the past, *tana' ulen* functioned mostly as forest reserves managed by the *paren*, or the families of the aristocratic class, on behalf of the entire community. The forest was considered a public good for which the aristocratic leaders were entrusted as managers and keepers. Recently, the governance model has undergone a profound evolution as a result of democratisation of local leadership and widespread education and schooling. While the basic regulations for the use of resources and protection of the *tana' ulen* have not changed, the decision-making and accountability have been transferred to the customary council. In Bahau Hulu and in Pujungan, *tana' ulen* areas are now under the responsibility of the customary councils. The authority is often vested jointly in the

customary chief and the head of the village. In one village, Long Alango, the customary authorities have decided to establish an additional management committee (*Badan Pengurus Tana' Ulen* or BPTU) in order to share responsibilities and strengthen the protection of the *tana' ulen*. The change is not a sign of weakening governance but rather an indication of the resilience and strength of the *tana' ulen* system adapting to changing circumstances.

Principles of conservation and sustainable use apply in the entire territory, but stricter regulations apply in *tana' ulen*. For example, the forest in *tana' ulen* may not be

⁵ Originally *tana' ulen* might have been more appropriately called '*sungai ulen*,' that is the 'restricted river' which included the forest and watershed area of that river, always a tributary to the main river.

⁶ Conservation traditions like *tana' ulen* have also been common among other Dayak peoples in the interior of Borneo, using other names such as *tana jaka*, *tana ang*, *tana pra*, etc.



cleared to open rice fields. Collection of economically important non-timber forest products is restricted in various ways, including:

- The time and duration of harvesting;
- tools and methods employed (e.g., *gaharu*⁷ must be collected in the traditional way by selecting and felling only those that are infected);
- quantity and kind of animals hunted; and
- harvesting of resources on a collective basis.

Violations are prosecuted and fined according to forms of payments agreed by the customary council, either in money or heirloom items like machetes (*parang*) or *gongs*. Fines are specific to the kind of product and gravity of violations. Regulations are not fixed but discussed at special assemblies and adapted to evolving conditions. There are new regulations that require outsiders to pay a hefty fee to the village treasury for accessing the territory. Moreover, communities are now writing down customary regulations to strengthen the exercise

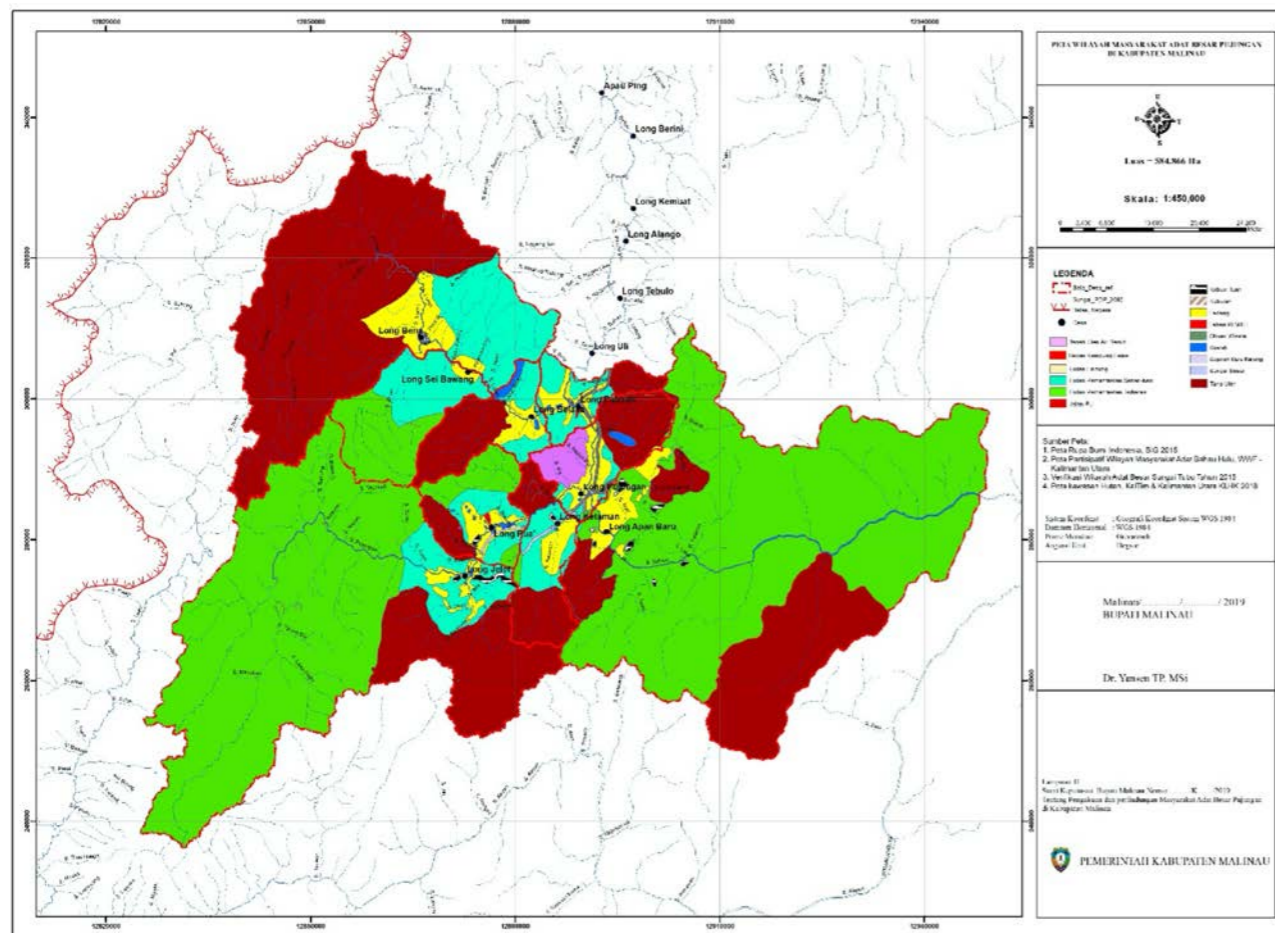
of their rights and increase enforcement and compliance by outside encroachers.

To this day, *tana' ulen* areas exhibit high levels of biodiversity. While there is no formal monitoring system used for measuring effectiveness, local people comply with the regulations by reporting to the customary council or village leadership changes in the availability of key species and the presence of outsiders they notice when they go to the forest. Depending on circumstances, they proceed to seize the *gaharu* collected and food supplies and ask encroachers to leave the area immediately.

Why are *tana' ulen* important?

In the past, religious beliefs of Dayak Kenyah people required the organization of celebrations throughout the year to mark the agricultural cycle and other social occasions like the safe return of war parties and traders.

Land zoning map of Pujungan with *tana' ulen* areas in red. Map: Andris Salo (FoMMA Bahau Hulu)



A re-enactment of a long-standing tradition and collective action nuba ikan: catching fish in a stream using natural poison from a bark. Photo: Gamel Yutang

The village chief, and member of the aristocratic family, acted as prime host. He offered hospitality to travellers and delegations from other communities and prepared the meals for the people working in his fields. In order to fulfil his responsibilities, he and his family needed to ensure there was enough good food, especially fish and game, for the guests. This continues to be relevant today. Collective hunting and fishing are coordinated in *tana' ulen* at times like New Year's celebrations, harvest festivals and other collective ceremonies to procure abundant food safely, quickly and at low cost.

Construction timber is another important resource in *tana' ulen* (collective longhouses in the past, individual dwellings today). Equity considerations have always been factored into the governance system of a *tana' ulen*. The proceeds from harvesting of resources are divided among all with special allocations for the poorest and most vulnerable individuals of the community like widows and orphans.

Securing appropriate recognition for vital *tana' ulen*

Over the last years, new opportunities have opened up for the recognition of collectively conserved territories and their custodians in Indonesia, while important limitations remain. In 2013, a fundamental Constitutional

Court ruling (no. 35) declared that forests traditionally conserved by local and Indigenous communities have a different status and are distinct from state forests. In 2014, a law (no. 32) on the management of small islands and coastal areas recognized the rights and roles of Indigenous and local communities in managing their traditionally conserved coastal areas. Equally important, many districts are increasingly legislating on the recognition and protection of Indigenous peoples' rights. However, the national law on Indigenous peoples and ratification of the UN Declaration on the Rights of Indigenous Peoples is still pending in parliament at the time of publication in early 2021.

The purported dilemma of conservation versus economic development directly affects Indigenous territories, especially in the form of mining, resource exploitation and land use conversion. Communities aspire to economic empowerment and investments like oil palm plantations can appear as tempting alternatives

⁷ Aloeswood or *gaharu* is the trade name for the fragrant resinous wood from trees of the genus *Aquilaria* that have been infected by a fungus. *Gaharu* is used as incense wood in the perfume industry, and for medicinal purposes. The *gaharu* rush in Borneo started in the 1990s and saw the coming of many people from other places and provinces of Indonesia. Local customary institutions often failed to enforce exclusive control over their resources. The new *gaharu*-based economy benefited some people but also negatively affected livelihoods over the long-term (Eghenter 2005).



for local people. In many cases, the revitalization of *tana' ulen* has been used as a form of resistance against such threats to fight back timber companies and the commercial exploitation of forest products by outsiders. Other threats can come from local government infrastructure projects when planning is done without meaningfully consulting communities or respecting their most valued forest, including *tana' ulen* areas.

Under conditions of increased competition for forest resources, *tana' ulen* become a means to seek affirmation of community land rights and protect resources. In Pujungan, an old *tana' ulen* area was recently revitalized under the collective responsibility of all nine villages; two new *tana' ulen* were established for the governance of water resources in the villages of Long Pujungan and Ketaman. When strong conservation values are upheld and governance institutions are effective, the result is the sustainable and equitable use of biodiversity (see Ostrom 1999, 2008).

In 2015, following growing frustrations of communities because of slow recognition of their ancestral rights, *tana' ulen* custodians had come together at the *Tana' Ulen* Congress held in Tanjung Selor (North Kalimantan) to share their concerns and voice their demands. Customary chiefs from several Dayak communities along the Kayan

River agreed that *tana' ulen* continue to be examples of effective Indigenous conservation and sustainable use, and committed to a form of "development that in order to be sustainable needs to respect and protect our values and traditions like *tana' ulen*" (author's notes).

While communities have started drafting village regulations to ensure some minimal legal status for *tana' ulen*, efforts at the village level are not enough to assert exclusive rights over their land and forest resources. In the Malinau district, *tana' ulen* and Indigenous territories (*wilayah adat*) can now be secured through the district regulation (PERDA no. 10 of 2012) for the recognition and protection of Indigenous peoples' rights. Communities' leaders have reached out to the Agency for the Registration of Indigenous Territories (BRWA) and the Working Group on ICCAs in Indonesia (WGII)⁸ for support with the documentation, registration and verification of their territories and traditional practices needed to obtain recognition. BRWA and WGII are also engaging with local government to build their capacity to develop standard procedures and guidelines and for setting up proper mechanisms for verification including an agency (called BPUMA) as mandated by the district regulation. The partnership of the NGOs with the communities in Bahau Hulu and Pujungan, and

the open collaboration with the local government, contributed in significant ways to the acceleration of the implementation of the local law and the first formal recognition of the Bahau Hulu Indigenous territory by the Malinau District government in September 2019.

Tana' ulen are the realization of economic, environmental, social and cultural rights of Indigenous Kenyah communities. Not only do they conserve a vast range of habitats, biodiversity and ecosystem functions, but they are also the basis of livelihoods for their custodians. As such, *tana' ulen* retain a central place in forest governance among the Dayak Kenyah communities (Eghenter 2018). The conservation model of *tana' ulen* will not easily disappear but needs the right support and appropriate recognition to be sustained.

The strength of Indigenous conservation initiatives depends on the existence of international and national legal instruments as much as on the vitality of the Indigenous institutions and governance mechanisms, the vigour of regulations and values of the communities themselves. This includes the cultural bond between the communities and their *tana' ulen*, but also the strength of the social and advocacy networks of which the communities are part. In the community members' own words, much depends on "how strong and committed we are." Local institutions need to be strengthened through information, innovation and skill-sharing to ensure that new champions of conservation emerge and conservation practices are sustained. As Dayak Kenyah people say, the respect for their forest values is paramount to the security and resilience of the community for present and future generations: "There is no Dayak community without forest."

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"There is no Dayak community without forest"

Saying of the Dayak Kenyah people

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⁸ Ten member organizations are part of **Working Group on ICCAs in Indonesia**: AMAN, BRWA, WALHI, NTFP-EP, SAWIT WATCH, WWF Indonesia, HUMA, JKPP, Pusaka. The Working Group on ICCAs in Indonesia has been a Member of the ICCA Consortium since 2015.



Traditional fishing with nets.
Photo: Andris Salo





Photo: Hamed Shahiki



Chahdegal

The continuous effort to conserve territories of life in Iran

Author(s):¹ Hamed Shahiki, Nina Aminzadeh Goharrizi, Ali Razmkhah

The Chahdegal Balouch peoples' territory of life is a powerful example of an interconnected social-ecological system in desert and semi-desert landscapes. They migrate seasonally and have a strong affinity with their camel herds as well as the construction of vegetation-based wind shields to protect them from desert sandstorms. Through intentional conservation of their territory, both ecological biodiversity and human well-being are secured, ensuring long-term resilience and sustainability. Despite the severity and scope of natural and man-made threats, such as an upstream dam constructed in 2009, the communities continue to fight to keep themselves and the territory alive.

According to the elders, the Shahiki tribe, part of the Balouch nomadic peoples of Iran, migrated to Chahdegal about 150 years ago. Fleeing government threats and other invading tribes, they found refuge in Chahdegal, an area of high biodiversity and rich

in natural resources. It was during this time that the people of Shahiki started forming small villages and developing underground water systems (qanats) for agriculture to complement their more traditional nomadic lifestyle. This encouraged more Balouch sub-tribes to migrate to Chahdegal; nowadays, Chahdegal has a population of 6,053, consisting of two main tribes and more than 10 sub-tribes.

With rich biodiversity, wild and domestic flora and fauna play a key role in the resilience and sustainability of this environment (Aminzadeh et al. 2019). The Chahdegal Balouch peoples' territory of life consists of several sub-sections and encompasses extensive areas of desert and semi-desert ecosystems, with a total of approximately 580,000 hectares (about half the size of Lebanon). As semi-nomadic communities, the Chahdegal Balouch peoples use Chahdegal strictly as their 'wintering ground' (*Qeshlag*), which is an arid landscape found



in Kerman province, and the *Kuh-e-Zنده* as their 'summering ground' (*Yaklak*), a semi-arid landscape situated in the Sistan and Baluchistan provinces of Iran.

The Chahdegal Balouch peoples identify themselves as Indigenous peoples belonging to the wider Iranian Balouch ethnic community.² They have their own Balouchi language, religion (Sunni Islam, a minority in Iran), traditional culture, clothing and rituals. Their identity is profoundly linked with their territory, which holds a particular place in the community's collective consciousness and shared sense of the past. This historic relationship with their environment means Chahdegal Balouch peoples confidently define their own territory,

¹ Hamed Shahiki is a researcher in ecology and the local animator of the Chahdegal development plan project.

Nina Aminzadeh is project manager and facilitator in community-based water management systems and sustainable livelihoods.

Ali Razmkhah is senior legal advisor on Indigenous peoples' and local communities' rights and their territories for CENESTA (ICCA Consortium Member) and Regional Coordinator of the ICCA Consortium for West and Central Asia and the Caucasus.

The study is based on the results of the project *Chahdegal: Comprehensive cognition, participatory analysis and formulation of the endogenous development plan for indigenous Balouch people's territory* (Aminzadeh, Nina, et al. 2019).

English revision: George Smith

² The Balouch people also settle in Pakistan, Afghanistan and India; their total number is estimated at around 10 million, of which up to 2 million live in Iran.

“Our territory of life has been forming our identity. We have learned to use our territory’s resources with care. If we build a new house, the previous one is not destroyed. We never throw anything away, but reuse it for a new purpose.”

Changiz [Genghis] Elder of Kamalan-Zehi sub-tribe





580,000 hectares



Nomadic peoples migrated to Chahdegal 150 years ago



Population of 6,053

clearly demarcating their summering and wintering grounds, their migration routes and other related natural resources, as seen in the participatory project carried out by the authors (Aminzadeh et al. 2019).³ However, most of this remains unrecognized by the Iranian state.

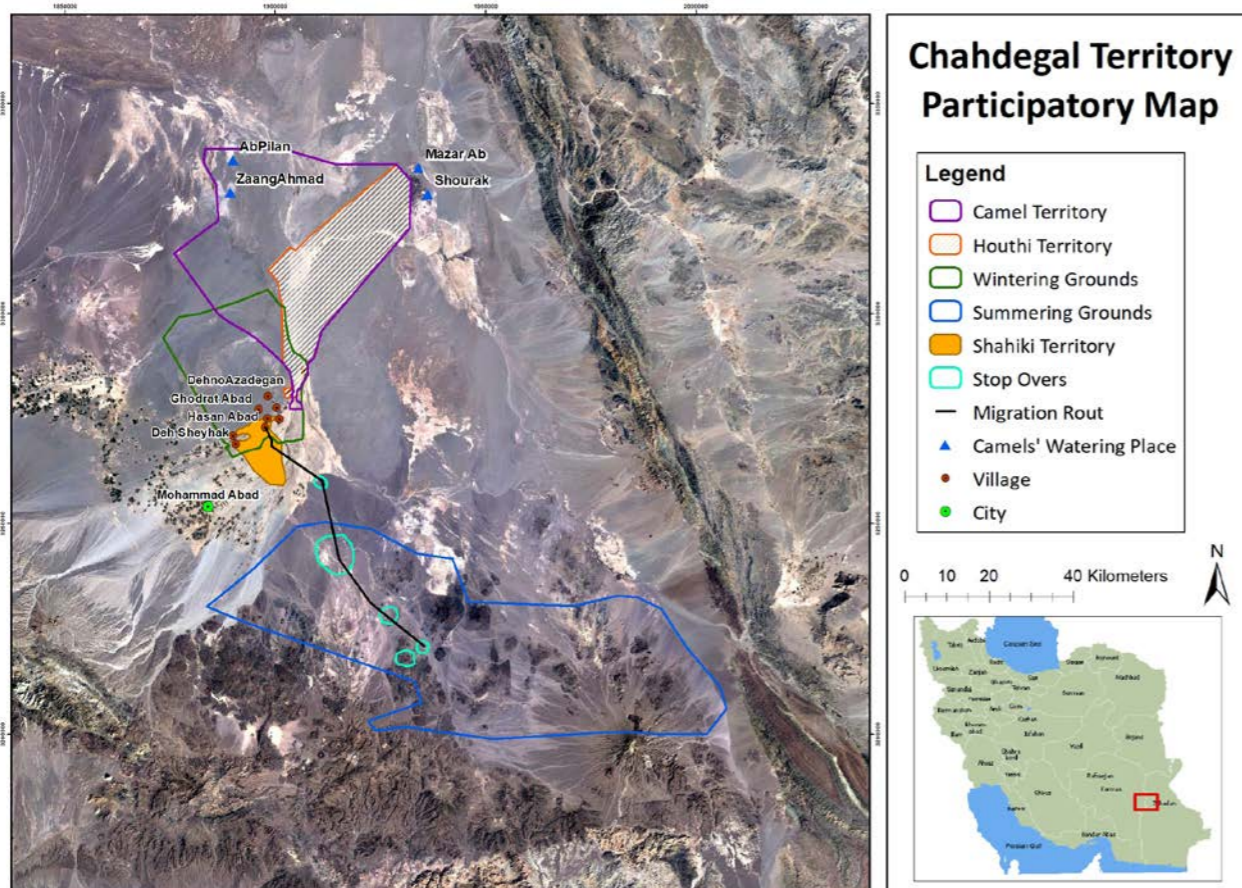
Governance and fair distribution: the Chahdegal council of tribal elders

The Chahdegal Balouch peoples have a collective governance system which includes decision-making institutions and various traditional governance methods founded upon the tribal social structure.

Chahdegal Polygons Approximate Area

Polygon	Approximate Area (km ²)
Camel territory	1800
Hoot tribe territory	700
Chahdegal territory	800
Shahiki Summering Ground	3,000
Shahiki territory	100
Overall extension (taking overlaps into account)	5,800

The main decision-making institution is the elders' council of Chahdegal. This institution is structured around the *Sardar* (the headman of all the tribes), and other elders who will consult him in decision-making processes. The council is also formed of representatives of all sub-tribes who have the authority to manage parts of the territory of life and settle disputes. The council makes all its decisions based on traditional



Participatory map of the Chahdegal territory. Credit: CENESTA 2020.

knowledge and experiences. These decisions are therefore considered fair and transparent by community members. Until 30 years ago, the council convened in a specific location called *Kerteki*.⁴ As communal land shared by everyone, the idea was that decisions taken on the *Kerteki* would be fair and unbiased. Today, the council meets in local mosques due to various religious reasons. Despite many challenges, the credibility of the elders' council has enabled the traditional governance system to remain alive and dynamic in accordance with the changing needs of the communities and the environment.

Besides the council, the Chahdegal Balouch peoples have several other traditional methods of governing their territory. For instance, *Tir-Andakhtan* is a method to distribute farmland: an elder will demarcate various areas of land using a series of unique signs (small stones or animal dung, for example). Each sign will correspond to one individual farmer's access to a certain area of land. The rationale behind this method, which is believed to follow a divine justice, is that each farmer has equal access to one good-quality area of land (with richer soil and nearby a *qantas* needed for irrigation), and one poorer quality area of land.

The Chahdegal Balouch peoples have also developed regulations for the hunting of animals found in their territory such as wild boar, wild goat, rams and rabbits.

Only a limited number of people, most belonging to the highest social caste, are permitted to hunt in common hunting grounds; the meat must be distributed among all members of the sub-tribe and outsiders are completely prohibited from hunting.

As is the case for other nomadic tribes, the government of Iran has nationalized the Chahdegal Balouch peoples' ancestral territory. In addition, the summering ground of their territory of life has been designated as a government protected area. The communities have therefore lost their collective ownership of the summering ground; however, the government still respects their tenure rights and management methods, thus ensuring the continued conservation of this area and its rich biodiversity. In the wintering ground, the government has not taken serious action to restrict the communities' access to farmlands. However, the

³ The study is based on the outcomes of the "Comprehensive cognition, participatory analysis and formulation of the endogenous development plan for indigenous Balouch people's territory", Chahdegal region, Kerman province, CENESTA, funded by Kerman Khodro Corporation.

⁴ People also call this place "T'al-e-Shariát (Sharia)" because they held some religious meetings there.



Elders of Chahdegal Balouch peoples demarcating their territories of life through a mapping process involving Participatory Geographic Information Systems. Photo: Nina Aminzadeh





**“We have the
“proud soil” in our
territory of life.
This is a real gift
of nature and we
are all responsible
for saving nature
and biodiversity.”**

Ali Khorram, the elder of Jomeie sub-tribe. “Proud soil” means productive soil in the Balouch language.

communities are facing increasing challenges due to being prevented from planting palm trees on nationalized lands by the local natural resources office, as well as due to interference by local government authorities on their access to natural resources, including through judicial prosecutions.

A system of values: camels, prosopis trees and the link to the land

The socio-cultural values of the Chahdegal Balouch peoples are intimately connected to their environment, as evidenced in their daily lives. For instance, many of the community’s cultural artefacts (carpets, tents and needlework) are made with local materials and adorned with patterns reflecting the flora and fauna, geography and climate. Houses are constructed using in-depth knowledge of local materials (such as brick, adobe, goat wool and dried Tamarix or palm branches) and in accordance with the direction and intensity of seasonal winds.

These socio-cultural values are also reflected in the unwavering spiritual relationship with the territory. In particular, the Balouch peoples’ relationships with the prosopis tree and with camels reflect their intrinsic gratitude for the gifts of nature that make life possible in Chahdegal. For example, it is under one particular sacred prosopis tree that the community performs

Palm trees in Chahdegal buried in the sand. Photo by Hamed Jalivand



several rituals, including the sacrifice of animals, and a ritual called *Ziarat-e-Sed Soleiman*, which consists of tying a fabric to its branches in order to wish for rain and good fortune.

In the Chahdegal Balouch peoples’ territory of life, the nourishment of the community depends profoundly upon the gifts of nature. Livelihoods are sustained by agriculture (cultivating palm, wheat, barley and alfalfa) and semi-nomadic pastoralism (herding camels, goats and sheep). All the community’s foods, as well as herbal medicines, come from their immediate environment. Some products like dates (one of the main agricultural products grown in Chahdegal) are sold in local markets, as are male camels and goats, which are sold in limited numbers and particularly during more arid years to prevent overgrazing of their own rangelands. Nevertheless, most products are consumed within the community. In this sense, knowledge of their natural environment, and their traditional governance and management systems, ensure that all the people of Chahdegal can subsist on the land. For example, Chahdegal Balouch women practice a participatory system to share goat milk among themselves, called *Badali*. This guarantees that all families have access to an appropriate amount of milk for food.

Traditional knowledge, values and practices contribute to Chahdegal peoples’ resilience to climate change and environmental degradation. Within their territory of life, they have detailed knowledge of at least four kinds of winds and nine different soil types. This means, for example, they know precisely where to plant prosopis trees as shields against sandstorms that would otherwise destroy villages and surrounding farmlands. They then know how to make use of soils that are brought by the wind and accumulate under the prosopis trees to improve the soil fertility of their agricultural lands.

The community’s relationship with camels also plays a significant role in the conservation of this territory of life. Due to camels’ ability to live in harsh desert ecosystems, the Chahdegal Balouch peoples have specific customary regulations for these animals, which prohibit the sale of camel milk and meat and only allow for camels to be slaughtered on a specific religious day, the *Eid-e-Ghorban* (feast of sacrifice). The community also makes extensive use of the fertilizing effect of camel dung in their fields and rangelands. Indeed, camel dung helps to enrich the biodiversity as it distributes seeds of wild flora such as *Prosopis*, *Calligonum*, and *Desmostachya bipinnate*.



A Balouch woman producing Tegerd, a traditional ground cloth, from palm leaves. Photo: Nina Aminzadeh



Women in Chahdegal are responsible for livestock feed, except camel. A Balouch woman shows the amount of feed of a Baluchi cow. Photo: Nina Aminzadeh



As camel herders, Chahdegal Balouch peoples identify deeply with these animals, imbuing in camels their own social values, establishing remarkably precise naming customs based on the camel's age, sex and life stages. They even consider them as part of their own families.

Chahdegal Balouch peoples practice various customary herding techniques to prevent over-grazing and damaging floral diversity: for instance, *Gole-Kardan* involves an elder assessing the grazing capacity of the rangelands before livestock arrive in spring season; and *Keid-Kardan* means tying the front feet of the herd leader camel in order to control direction and range of its movements and, consequently, of the herd. Examples like these illustrate the intimate human-animal relationship of camel herding and livestock rearing in Chahdegal, a bio-cultural system optimized for the sustainable use of scarce resources of this semi-desertic territory of life.

Planting prosopis: threats, resilience, and the hope for recognition

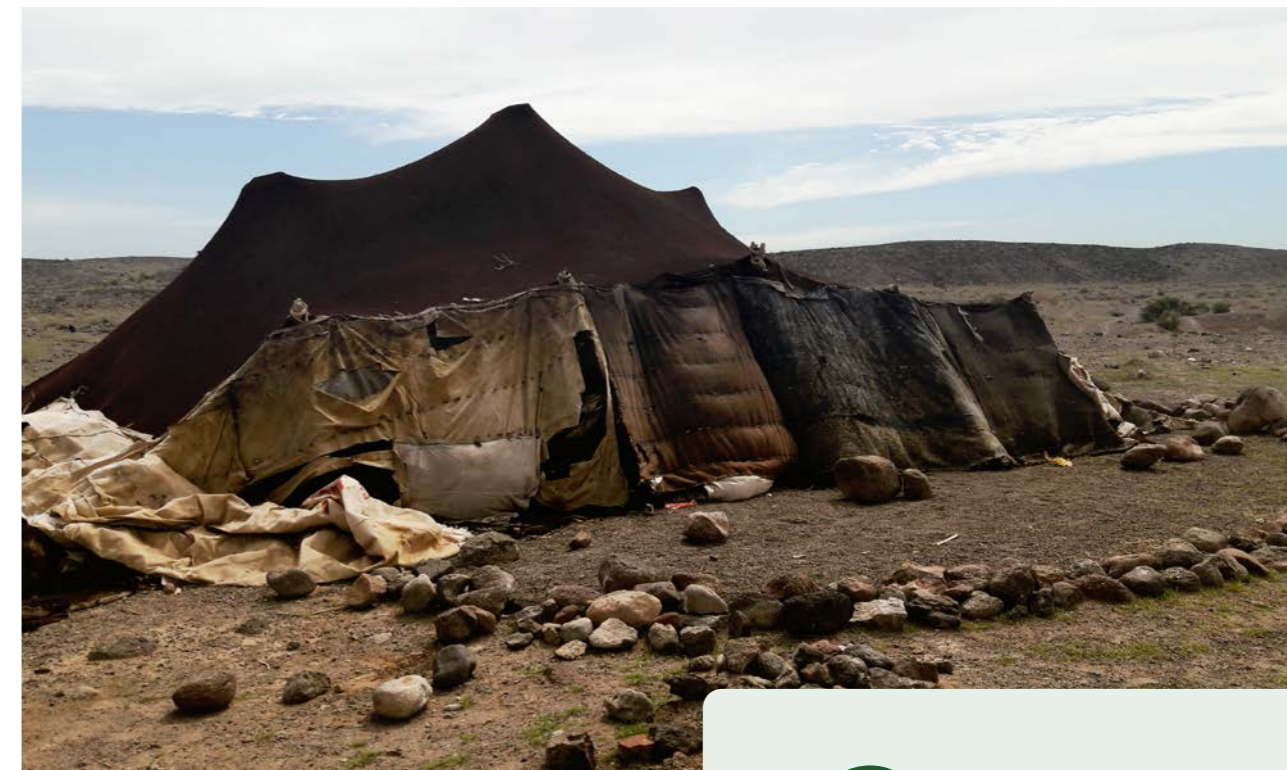
The Chahdegal Balouch peoples' territory of life is currently facing a series of threats, both natural and man-made; water scarcity and seasonal droughts are exacerbated by climate breakdown and inadequate government policies, including the construction of an upstream dam in 2009.

Today, the communities are exposed to sandstorms for more than 300 days a year (a significant increase), which cause severe soil erosion; the construction of a dam and the propagation of borewells with motor pumps interfere with the traditional irrigation systems; and with underground water reservoirs decreasing, many *Prosopis* and *Tamaris* trees are drying out. The area's rich biodiversity is in danger of depletion.

The communities have developed several initiatives to deal with these threats. For instance, they have constructed windshields around villages and farmlands using natural materials (such as palm foliage or prosopis trees) to prevent the destruction caused by sandstorms. They have also planted drought-tolerant plants such as sour tea (*Hibiscus sabdariffa*) or other mixtures of wheat varieties that are adaptable to climatic change. Elsewhere, they have collectively reduced their grazing time in the summering grounds to allow plants to recover. This means that the community now stays in their summering ground for less than three months per year, compared to the five or six months they would have stayed there thirty years ago.

The communities' resilience and ability to adapt to a changing environment is evident and will enable them to better cope with an increasingly uncertain future. The deep sense of communal solidarity, together with well-designed customary institutions, a migration-

Keid-Kardan technique: by tying the front feet of the herd leader camel, the direction and range of herd movements can be controlled. Photo: Nina Aminzadeh



Balouch black tent. Photo: Hamed Shahiki

based lifestyle that allows for flexible adaptation and the profound knowledge of their environment, are further elements that enable them to manage their natural resources sustainably and conserve their territory's rich biodiversity.

The Chahdegal Balouch people express a desire for the future of their territory of life to mirror as much as possible the lives of their ancestors. They know that the forces affecting their lives and their resources – such as the global climate crisis or top-down government interferences – are driven by other people's activities at both local and global levels. An immediate hope is that state authorities will recognize the land tenure of their territory of life, as well as their water rights and customary irrigation systems. Ultimately, the Chahdegal Balouch peoples want to be able to strengthen their own customary institutions through integration of traditional and modern knowledge to combat the desertification of their land.

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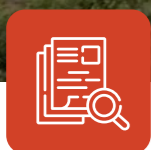
“Over the last 40 years, dealing with change has become an inevitable part of our life; however, the rich biodiversity of our territory of life has strengthened our resilience to cope with critical situations on our own.”

Sardar Ali Reza of Shahiki tribe





Photo: Lopsang Chiring Lama



Tsum Valley

Nature-culture stewardship of the Tsumba people in the Western Himalaya, Nepal

Author(s):¹ Jaiab Kumar Rai and Nima Lama

Tsum Valley is four days' walking distance from the nearest road, one of the most remote areas in the Western Himalaya of Nepal. Tsum Valley is the traditional homeland of the Tsumba Indigenous peoples, who speak a unique *Tsumke* or *Tsumba*, a dialect influenced by Tibetan language. The Valley was declared by its inhabitants as "Shyagya", a non-violent area, in 1920. The Shyagya, a culture of non-violence rooted in Buddhist religion, is the main guiding principle that shapes daily lives of Tsumba. Regular visits to the *Gumbas* (Buddhist monasteries), offering prayers and celebration of different religious and cultural festivals, reaffirms the spirituality. Monasteries, including Mani Bompos, Mani Walls, Kanis, and Chortens, are important cultural heritage sites that forge spiritual connections with the Tsumba territory (Rai and Thing 2020).

For the Tsumba, mountains surrounding Tsum Valley

are abodes of gods, and the Buddhist saint *Milarepa* is believed to meditate in the caves. The valley is considered a *beyul* (a sacred hidden valley refuge for followers), created by the 8th century *Guru Rinpoche*, who introduced Buddhism in Nepal, and is considered a sacred natural site (Rai et al. 2016; Rai and Thing 2020).

Located in Manaslu Conservation Area, the valley extends 54,417 hectares (544 km²),² is surrounded by majestic Himalayan peaks, and lies between altitudes of 1600 and 6705 metres above sea level (NTNC 2020, Rai & Lama 2020, ICIMOD 2008). It is a respected Buddhist cultural heritage site, attracting pilgrims and tourists alike. The valley provides excellent habitat for wild animals, particularly blue sheep, musk deer, Himalayan thar and snow leopard, with approximately 2,000 species of plants (50 medicinal plants), 110 species of birds, and 33 species of mammals. A diverse natural



54,417 hectares



Custodians: 1,810 Tsumba Indigenous peoples

environment, it hosts 11 different types of forests (ICIMOD 2008, 15).

The Tsum Valley is divided into Chumchet and Chekampar villages, known as Lower Tsum and Upper Tsum, respectively, across the Budhigandaki-Shiarkhola River. The 33 settlement clusters, with 1,810 people among 529 households, sit between altitudes of 1905 and 3100 metres above sea level (GoN/NPC/CBS 2012, 56).

¹ Jaiab Kumar Rai, assistant professor of anthropology at the Central Department of Anthropology at Tribhuvan University, Nepal, is volunteering as national coordinator of the ICCA Network Nepal (ICCA Consortium Member).

Nima Lama is a community leader from Tsum Valley and Honorary member of the ICCA Consortium.

The research is partially based on documentation gathered in 2015; see: Rai, J. K and Sudeep Jana Thing (2020) 'Photo Story: A Territory of Life in Tsum Valley, Gorkha District, Nepal'. ICCA Consortium.

The authors would like to thank Sudeep Jana Thing for additional editing.

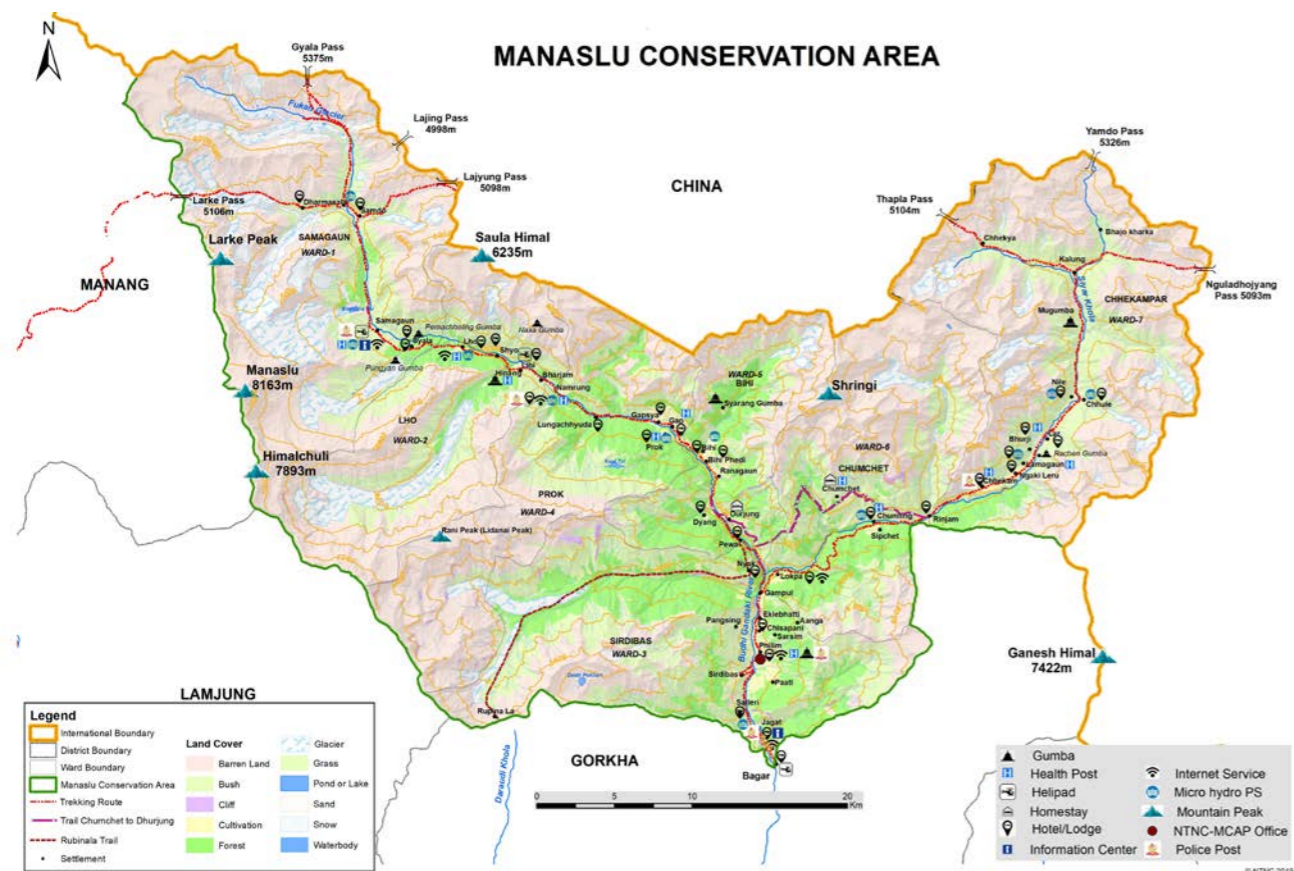
² Topographic maps of the Government of Nepal 1996; ICIMOD 2008, 2.



“We feel proud to have been born and grown up in such a historically valuable place of the world where nature-culture conservation is sustaining through beliefs and practices based on the culture of non-violence or locally called Shyagya tradition.”

Mr. Nima Lama





Map of the Manaslu Conservation Area; Tsum Valley is the eastern 'arm' of the Area, between China, Yamdo Pass and the Ganesh Himal peak. Map: NTNC 2019

A number of traditional arts and crafts, such as Thangka paintings (special paintings in cloths and woods), stone carving (*Mani*) made mainly by males, traditional woven clothing (such as *bakhu*, *dhoja*) and carpets (known as *galacha*), are relevant to their cultural identity.

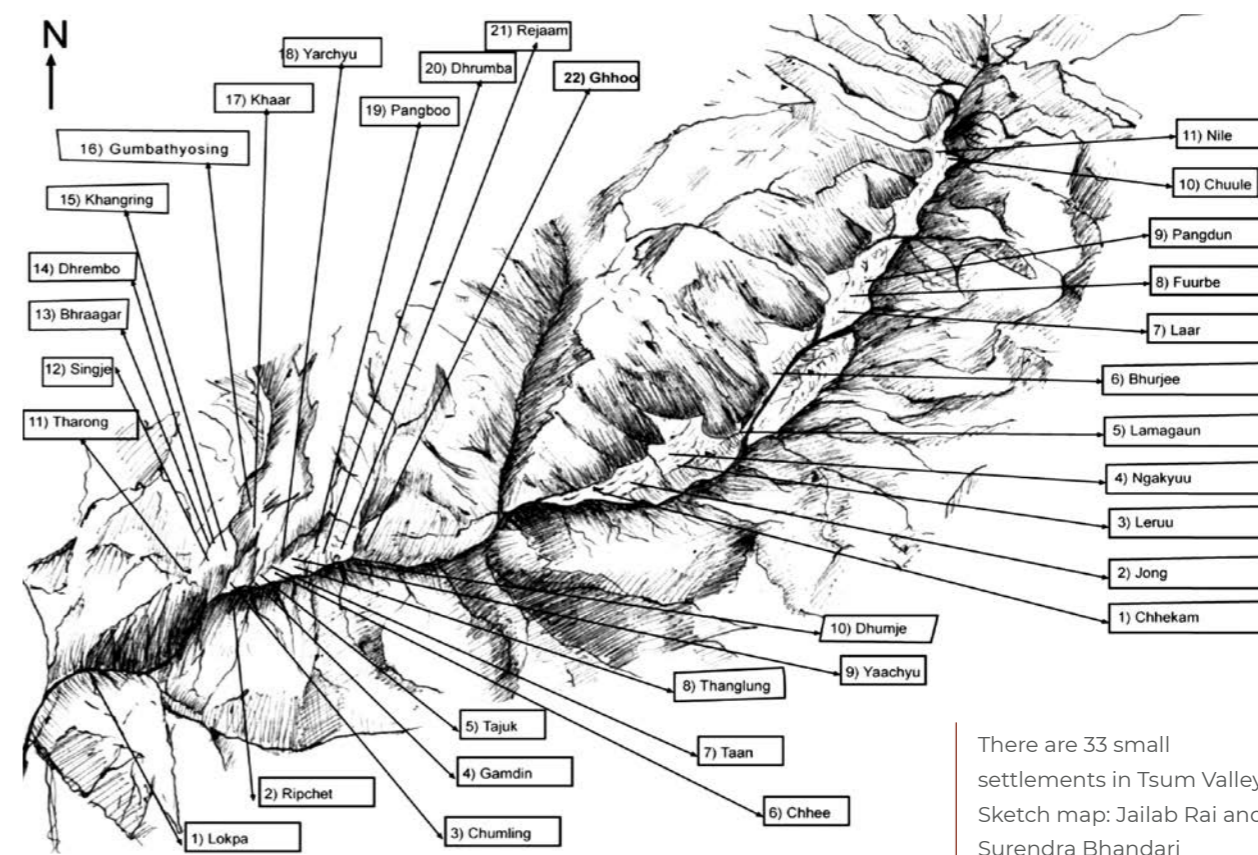
While some Tumba are employed by government and non-government agencies, there are other forms of income for livelihoods. Major subsistence crops grown in the valley are wheat, bouquet, mustard, beans, potato and vegetables in the Upper Tsum, and wheat, maize, millet, buckwheat, beans and vegetables in the Lower-Tsum. Animal husbandry, primarily for agricultural and milk products used for self-consumption, is another source of livelihoods. The Tumba also derive income from the collection and supply of Yarcha Gumba (*Codycepts sinensi*) from May to July, and of wild garlic during September and October (ICIMOD 2008, Rai and Thing 2020).

Tourism is another source of income. Tsum Valley is a gateway to the Tibet province of neighbouring China, with the Tibetan border about 15 km from the highest Niley village. For political reasons due to Khampa's movement for the demand of autonomous Tibet, Tsum

Valley remained restricted to foreigners from 1975 until 2008 (Mainali 2014). After continuous lobbying by community leaders between 1991 and 2008, it was opened for tourism. Since then, the number of tourists visiting Tsum Valley has gradually increased.³ Foreigners require two Nepalese permits: one is for entry to the Manaslu Conservation Area and the other is a special permit to enter Tsum Valley. Tourism infrastructure includes 40 hotels, lodges, retail shops, trekking agencies and tourist guides that host visitors to the Tsum valley. The Tumba have a collective decision to forbid outsiders to buy the lands and operate any businesses in the valley. However, in 2020, only 27 tourists visited the valley (NTNC/NCA 2021). This dramatic decrease is due to the global COVID-19 pandemic.

Governance of the place and the people

Governance in the Tsum Valley is conducted through several institutions: government, which is comprised of elected village leaders, security forces and other government offices; semi-government institutions; other community groups and local committees known



There are 33 small settlements in Tsum Valley. Sketch map: Jailab Rai and Surendra Bhandari

as Conservation Area Management Committees formed by the Manaslu Conservation Area Project; and customary institutions of Tsumba. A village assembly nominates customary community leaders, including the *Ghenchen* (village leader), *Syara* (clan leaders) and *Ghyange* (supporter to the Ghenchen), who are responsible for enforcing community decisions and rules (Rai et al. 2016, Rai and Thing 2020). Their roles include *Bigo Laune* for the settlement of disputes about damage of food crops by domestic animals as well as disputes about the use of pasture lands, forest and agriculture. They also take and enforce decisions about the use of irrigation, arrange *Ne-Tonle* (a harvest ritual in September), and they manage and arrange *Chyokor*, which is a special ritual performed by the village *Lama* (spiritual leader) during ripening of the crops in July. At least one member of every household, generally the head of the family, participates in the assembly to discuss affairs pertaining to current and new leaders.

Traditional doctors known as *Amchi*, with knowledge and wisdom about the use of herbal medicines, also play important roles in the lives of Tsumba (Sherpa et al. 2019) given the inadequate health infrastructure and services. The village *Amchi*, who have exclusive rights over collection and distribution of herbal medicines in

the valley, are entrusted to ensure their sustainable use and ensure three types of *Amchi* persist: (1) ones with specialised knowledge about medication for domestic animals; (2) those who undertake general medication for villagers; and (3) those who offer treatment for poisons.⁴

Likewise, *Lama* (spiritual leaders) play important roles in preserving cultural practices and spirituality. They teach religious norms, values and spirituality to the Tsumba through religious rituals and cultural celebrations (Rai et al. 2016). The *Lama* are respected people in the valley. Becoming a monk or nun is a highly respected choice of religious life. *Laprang*, the local Lama, performs life cycle and village rituals. The *Lama* in Gumba Monastery, also known as *Autari-Lama* (Lama having rebirth), performs major religious celebrations and offers teaching and preaching of religious philosophies and spirituality.

³ A total of 236 foreign tourists visited Tsum Valley in 2015 increasing to 274 in 2016, 476 in 2017, and 387 in 2019 (NTNC2021).

⁴ Currently, there are 9 Amchis in total (3 for general medication, 4 for domestic animals, and 2 for the treatment of different poisons). Ten Amchis from Tsum Valley are working in different places in Kathmandu and in India.





A village assembly meeting. Photo: Christian Chatelain

Two modern community-based organisations, Tsum Welfare Committee and Tsum Shyagya Conservation Committee, were legally formed in 2006 and 2018 under the leadership of Nima Lama. They provide institutional platforms for community development, preservation of culture, religion, and identity of Tsumba, organisation of *Shyagya* festivals, promotion of the culture and practice of non-violence beyond the valley, and establishment of relationships with government, political leaders and conservation agencies.

In 1998, the entire Tsum Valley was subsumed by the Manaslu Conservation Area under the jurisdiction of the Department of National Parks and Wildlife Conservation. The management of this Area is entrusted to the National Trust for Nature Conservation, a conservation agency constituted by a special law in Nepal. The National Trust, through the Manaslu Conservation Area Project, has established local people's committees (7 Conservation Area Management Committees in total) in

the Area, including in Tsum Valley (NTNC 2020b). As part of Conservation Area Management Committees, the Tsumba are also organised into a women's group, farmer groups and youth groups. Conservation and community development activities such as livelihood improvements in Tsum Valley are planned and carried out by two Conservation Area Management Committees (NTNC 2020a, 2020b). Similarly, local government institutions and other institutions of health, education and security carry out social and development activities. Modern and state institutions are gradually replacing Tsumba customary institutions (Rai et al. 2016).



Conservation of nature and culture

The biocultural landscape constitutes scenic Himalaya mountains, lakes, and waterfalls along with common wildlife such as musk deer and blue sheep, all co-existing with Buddhist cultural heritage and sacred sites. Conservation of nature and culture is part of the daily life and spiritual commitment of Tsumba in the sacred valley. The



Horse riding organized in first Shyagya Festival in 2009 in Upper Tsum. Photo: Lopsang Chiring Lama

Tsumba declared Upper Tsum as a non-violent area during a *wang-pooja* celebration in 1920 after endorsing the proposal by revered Lama *Serap Dorje Drukpa Rinpoche*. The declaration note of non-violence guided by Buddhist philosophies includes seven rules. These were written in the *Sambota* script, collectively signed, and have become law (Rai et al. 2016, p. 228; Rai and Thing 2020, Thing 2020):

1. Not to kill any animals;
2. not to hunt;
3. not to collect honey;
4. not to sell animals to butchers;
5. not to trap animals/birds;
6. not to trade meat; and
7. not to burn forests.

Growth of rare tree species, especially at high altitude and a cold climate, is very slow. Thus, the declaration note is vital for conservation of nature and living beings in Tsum Valley. Through cultural rituals and celebrations over time, the Tsumba have sustained collective commitments to the declaration note. In 1939, the *Lamas* from all the Gombas in the Valley and the locals gathered during *Saka-Dawa*, a special event to celebrate Buddha's birth, and expressed commitment to the declaration note. It was again reaffirmed during cultural events in 1965, 1970, 1972 and 1998. Cultural

events and festivities such as *Loshar*, *Nara*, *Dhachyang* and *Shyagya*, and different prayers (*Saka-Dawa*, *Lwahwaaf Tuechyen*, *Yaarney*, *Lahkhang*, *Mani Tyungyur*, *Dukpa Chhesi* and *Farning*) forge community solidarities and sustain nature-culture conservation (ICIMOD 2008; Rai et al. 2016, Rai and Thing 2020).

Leadership of Lamas is also critical. For instance, the leadership of *Kyabje Drukpa Rinpoche* (Ngawang Khanrap) since 1965 is very important for his teachings of *Shyagya* tradition and philosophies during cultural festivals. The Tsumba revere him as the main patron of the *Shyagya* tradition. Similarly, three Labrang Lamas from three villages in Upper Tsum (*Niley*, *Ngak* and *Khangsar*), a Lama in *Muu Gumba*, and a Lama in *Rachen Gumba* are other respected patrons of *Shyagya* tradition. Community leader *Nima Lama*, from Upper Tsum, is another *patron* for his lifetime dedication to the valley.

The Upper Tsum was demarcated with four boundaries and self-declared as non-violent in 2008 when *Nima Lama* was the Chair of the local government. It was a symbolic claim and a commitment for non-violence in the Tsumba territory. Since then, the Tsumba leaders have developed consensus with government officials deployed in the valley to respect and comply with non-violent culture as the local community bylaws.



The first and second *Shyagya* festivals of Tsumba in 2009 and 2012 included cultural activities such as dances, songs, music and traditional games and sports in addition to preaching from Lamas. These events also served to sensitise non-Tsumba people and government officials. During the 2012 festival, Tsumba from Lower-Tsum also self-declared Lower-Tsum as a non-violent area and committed to the declaration note of non-violence followed by voluntary handover of 58 illegal guns to the government authority (Rai et al. 2016, Rai and Thing 2020).⁵

These cultural festivals not only sustain Tsumba cultural values, beliefs and practices of nature-culture conservation, but also transmit them to new generations. Biocultural conservation and practices of non-violence thrive in the Tsumba territory of life due to the persistent collective actions of Tsumba and their leaders. As Nima Lama acknowledges, “We are living here with all the wild animals and birds as members of the same family.”

External and internal threats in Tsum Valley

Though Tsum Valley has strong cultural and natural practices, it is facing five major threats. First, the

Photo: Christian Chatelain

expansion of modern conservation and development institutions such as Conservation Area Management Committees, although vital community-based institutions of the Manaslu Conservation Area, are gradually replacing and displacing customary institutions and practices of Tsumba. Second, ongoing road expansion towards Tsum Valley, from Arughat in the south-west and from the Tibetan border in the north-east, is another threat to the territory. There are no appropriate safeguards for cultural heritage



Blue Sheep (*Pseudois nayaur*) in Upper Tsum. Photo: Madhu Chettri



Working on the ‘photo story’ about Tsum Valley (see Rai and Thing 2020). Photo: Christian Chatelain

sites as evidenced by use of a bulldozer in 2013 during opening of a road track in the valley. This has triggered debates on nature-culture conservation “versus” development in the Tsum Valley as well as more broadly in Nepal.

The third main threat to the Tsum territory is increasing tourism requiring growth of hotels, lodges, shops and retail shops. Increased import of goods in the valley are driving over-population and triggering environmental degradation, pollution, threats to wildlife, and fuelwood consumption by lodges. This is mitigated by rules forbidding outsiders from operating hotels, lodges and retail shops in the valley as well as increased use of liquid petroleum gas.

The fourth threat is rapid out-migration to cities for education and job opportunities, especially among youth. This has resulted in gradual loss of tangible cultural heritage such as costumes, foods, handicrafts, songs, and dances, as well as intangible elements such as values and beliefs alongside the Tsumba language. Schools in Tsum Valley⁶ provide education only up to grade five, and there are concerns that youth living alone away from families are at risk of losing their culture.

Lastly, local livelihoods and natural environments are impacted by climate breakdown-induced natural disasters and extreme weather events such as heavy



“We are living here with all the wild animals and birds as members of the same family.”

Mr. Nima Lama

⁵ The centennial celebration *Shyagya* had to be postponed in 2020, due to the COVID-19 pandemic; see: The Himalaya Times, 11. Feb. 2020, ‘Sacred Tsum Valley Gears up for Centennial Celebrations’.

⁶ A total of 7 schools: 3 in Upper Tsum and 4 in Lower Tsum.



“We would like to see our culture, practices and faiths fully internalised and transferred to the new generation, well documented, and [the] importance of Shyagya communicated [to the] national and global community. We want to develop Tsum Valley as one of the examples of [an] open museum for nature-culture conservation and dedicate to the world.”

Mr. Nima Lama

snowfalls, avalanches, no snowfall or less snowfall, decreased length of snow-ice deposits in the farmland and terraces, and decreasing layers of snow in the mountains. Reduction of grasses in open terraces has increased crop raids by musk deer and deer in the valley during the dry season. Pests in farmlands have increased and seasonal harvesting of Yarcha Gumba, a caterpillar fungus (*Cordyceps sinensis*) and major livelihood for Tsumba, has reduced.

Opportunities and desired future of the Tsumba people

The conservation, cultural practices, and spirituality of the Tsumba people are sustained through different community and cultural events such as Shyagya Festivals that forge community solidarity and collective commitment. Biocultural diversity conservation in the Tsum territory thrives due to strong culture, traditions, and religious beliefs. Despite local collaborations with the Manaslu Conservation Area Project, there are currently no state legal or policy designations or recognition for voluntary declaration of non-violence, customary laws and institutions. Despite facing multiple threats, the Tsumba people are committed to sustain *Shyagya* cultural practices and tradition. They aspire to have respect and appropriate recognition of their territory of non-violence and its associated rules and cultural conservation practices as they co-exist in the co-managed Manaslu Conservation Area. Nima Lama affirms: “We would like to see our culture, practices and faiths fully internalised and transferred to the new generation, well documented, and [the] importance of *Shyagya* communicated [to the] national and global community. We want to develop Tsum Valley as one of the examples of [an] open museum for nature-culture conservation and dedicate to the world.”

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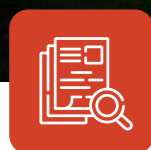
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Yaks are used for transport and ploughing. Photo: Christian Chatelain



Photo: Glaiza Tabanao



Pangasananan

The territory of life of the Manobo People in Mindanao, the Philippines

Author(s):¹ Glaiza Tabanao

In the Philippines, an estimated 85 per cent of its remaining forests and 96 out of 128 of its key biodiversity areas overlap with Indigenous territories.² This is a strong indication that Indigenous peoples and their communities are central actors in protecting and conserving the Philippines' remaining forests and in sustaining diverse life across the country. One such community is that of the Manobo in the villages of Sote and Baguis in the hinterlands of Bislig City, province of Surigao del Sur, island of Mindanao. This community calls their territory *Pangasananan*, which covers about 6,996 hectares.

Pangasananan is an old Manobo word that literally means a place where food, medicines and other needs are obtained. It is where the Manobo hunt wild game, collect honey, cultivate farms of fruits, vegetables, root crops, and upland rice, plant and grow pulp-wood trees, get fish and shellfish for a meal, gather herbs

and spices for their dishes, and collect various plants and plant parts to cure illnesses of the body, mind and spirit. It provides them shelter and space to live and learn, a means to connect with the spirit world and their ancestors, a place for eternal repose and an inheritance to their children.

The Pangasananan and its Manobo custodians

The Manobo is the largest ethnolinguistic group in the Philippines. Its sub-groups are highly dispersed across Mindanao, each adapting to their environment and developing a localized version of the general Manobo culture. The custodians of the *Pangasananan* are a Manobo community of about 1,500 people who mainly rely on multi-cropped and intercropped cultivation of rice, corn, legume, root crops, vegetables, fruits



6,996 hectares



Custodians: Manobo Indigenous peoples of Sote and Baguis, 1,500 residents

and coconut in their *kaingin* or swidden farms. This is supplemented by hunting, fishing and gathering. Many also maintain abaca and pulp-wood trees in these farms. Some community members earn cash income as labourers and transporters. Despite being largely Christianized, the Manobo life remains governed by beliefs of the spirit world.

Aside from providing sustenance, the *Pangasananan* also serves as a sanctuary in times of crisis. During the

¹ Glaiza Tabanao is a community development worker specializing in participatory research and mapping of Indigenous peoples' territories in the Philippines. The Manobo community is the first she worked with when she joined the Philippine Association For Intercultural Development, Inc. (PAFID) in 2010. She has worked with Indigenous peoples ever since and is an Honorary member of the ICCA Consortium.

This case study is an updated and expanded version of the one submitted for the Global ICCA Registry in 2019.

² Analysis done by PAFID using data on key biodiversity areas from the Department of Environment and Natural Resources – Biodiversity Management Bureau and data on Indigenous territories from the National Commission on Indigenous Peoples.

“If we abandon the territory, what will become of us? Nothing.. we will perish and become nothing.”

Chief Hawudon Tinuy-an Alfredo Domogoy





“This is what we gain from protecting our territory and its forests. All the difficulties paid off – the virus cannot harm us here [in the Pangasananan]. We survived the Japanese, [the logging] company and armed rebels. We will surely survive this pandemic.”

Hawudon Sungkuan Nemesio Domogoy

Second World War, Manobo families hid in the forest to escape from Japanese invaders. Abundant food, herbal medicines and water ensured survival until the war ended. In 2020, the coronavirus (COVID-19) pandemic resulted in heavy-handed government lockdowns across the country, which affected their income-generating activities and compromised their safety. According to Archie Cortez, a young Manobo woman, if it weren't for the *Pangasananan*, her family wouldn't have had a safe space out of COVID-19's reach. Hawudon Danao Virgilio Domogoy, a community leader, and his wife Victoria also shared their realization of how fortunate they are to have the *Pangasananan* because, despite losing some of their livelihoods, they were still able to survive on the crops in their farms, food from the forest and clean water from the creeks. Hawudon Sungkuan Nemesio Domogoy, another Manobo leader, said, “This is what we gain from protecting our territory and its forests. All the difficulties paid off – the virus cannot harm us here [in the *Pangasananan*]. We survived the Japanese, PICOP company³ and armed rebels. We will surely survive this pandemic.”

The Manobo believe that their continued existence as a people depends on the *Pangasananan*. For the Manobo, its destruction would mean the ultimate taboo: ingratitude and disrespect to the spirits and their ancestors, the obliteration of their indigenous identity, and turning their backs on the future of their children. Their chief Hawudon Tinuy-an Alfredo



Updating the 3-dimensional map with the current land uses in the territory. The map visualizes the Manobo's knowledge of their territory and its physical features, identifying areas in need of reforestation or rehabilitation, and delineating areas for protection. Photo: Glaiza Tabanao

Domogoy once said, “If we abandon the territory, what will become of us? Nothing... we will perish and become nothing.”

Management and governance of the Pangasananan

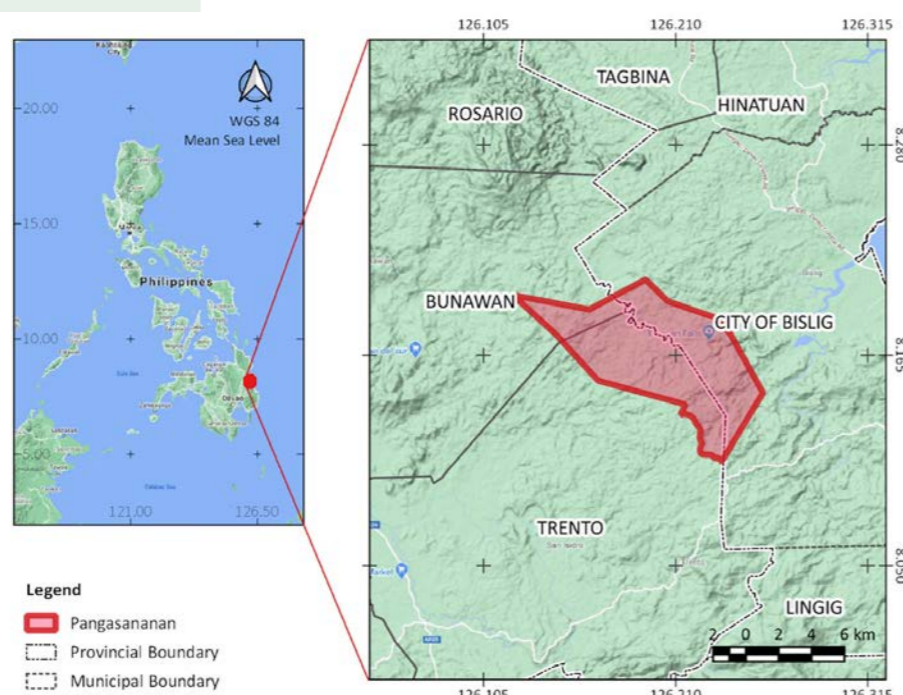
The territory is divided into nine sectors called *Kadumalahan*. Each is headed by a *Hawudon* who is in charge of decision-making, conflict resolution and territorial security. Together, the *Hawudon* of each *Kadumalahan* form the council of leaders. This council convenes when the leaders need to discuss matters that affect the whole territory such as policy formulation and resolution of issues not resolved at the sectoral level. The *Hawudon* is helped by the *Mala'as*, *Bagani* and *Baylan*.

The *Mala'as* is a respected and influential elder in the community. They form the council of elders called *Kamala'asan*. They act as counsellors to the *Hawudon* and may influence the *Hawudon's* decision but are not decision-makers themselves. The *Bagani* (warriors) help in the enforcement of policies, physical security and apprehension of illegal activities such as logging, poaching and migrant entry without consent. The *Baylan* (spiritual leader) does not partake in decision-

making and enforcement of community laws. Their role is making sure that the community's spiritual link is sustained. The conduct of rituals that require invoking powerful spirits for blessing, guidance and consent can only be facilitated by a *Baylan*.⁴

Through observation and with advice from leaders of other Indigenous communities and trusted partner organizations, the leaders have also adopted modern strategies to better manage the territory and its affairs. An example of this is the formation of the Manobo Tribal Council of Sote (MATRICOSO), which acts as a legal body tasked to manage business affairs and implementation of community development and conservation activities. MATRICOSO can also represent the community in negotiations and discussions with the government and other support groups. The community also forged an alliance with the Philippine

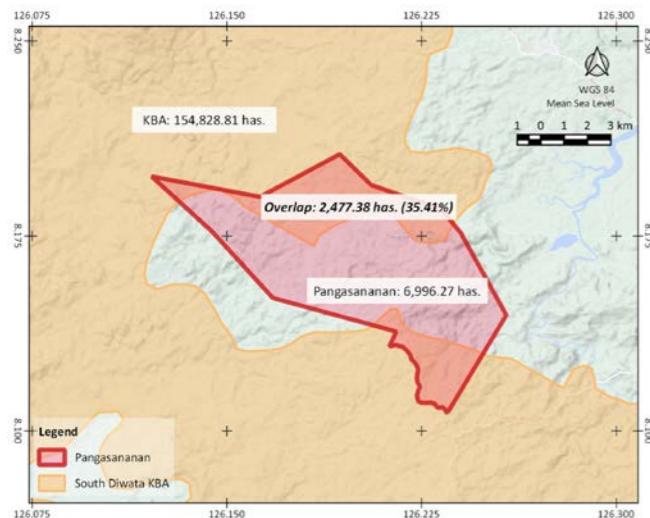
Location of the Pangasananan in the Philippines and Mindanao. Map: Glaiza Tabanao⁸



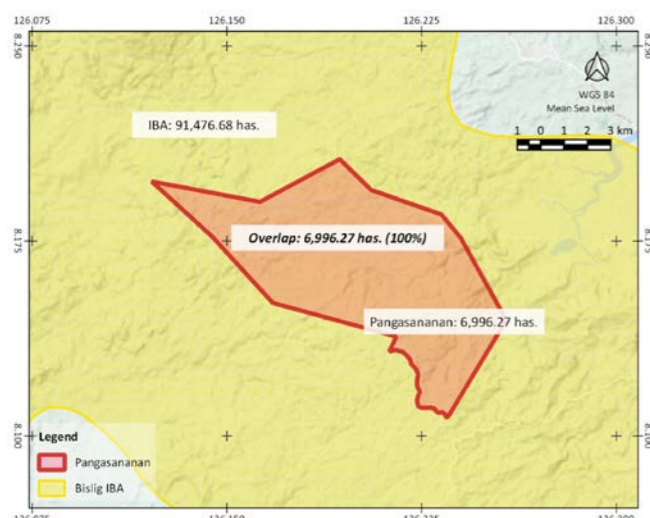
³ According to Casiro and Catubig (2019), Paper Industries Corporation of the Philippines, Inc. (PICOP) was the biggest and first wood-based company that operated a fully integrated pulp and paper mill in Southeast Asia in 1963. Its operation lasted for about 50 years. It is also said that PICOP was instrumental in the development of Bislig City's economy.

⁴ The *Baylan* is also a healer and has the most expansive knowledge on traditional medicines and healing rituals.

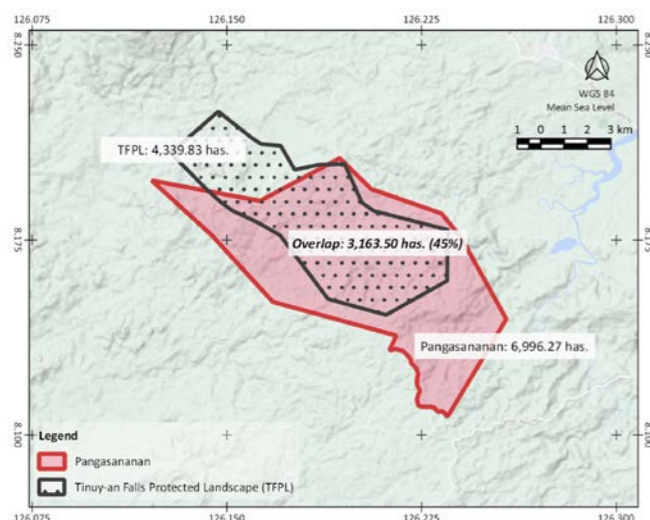




Overlap of the Pangasananan and South Diwata KBA. Map: Glaiza Tabanao⁸



Overlap of the Pangasananan and Bislig IBA. Map: Glaiza Tabanao⁸



Overlap of the Pangasananan and the Tinuy-an Falls Protected Landscape. Map: Glaiza Tabanao⁸

military to help with territorial security and to provide some form of financial and other support to the *Bagani* (warriors).

Ecological profile and biodiversity significance

The Manobo's *Pangasananan* is 63 per cent forested, composed of old-growth and secondary forests, which hold approximately 470,755 tonnes of carbon in its woody trees.⁵ Agroforestry areas, six small villages and several small to mid-sized multi-crop farms are also scattered across the territory. Caves and underground rivers abound.

A sacred lake called *Danao* floods the surrounding trees and caves during rainy season, creating a unique forest half-submerged in clean, cold water. The *Danao* is believed to be connected to a network of above- and under-ground rivers traversing through the territory making up the Tinuy-an Watershed. This watershed irrigates rice lands, farms and plantations and acts as an important water source for domestic use by the Manobo and the city downstream. It also hosts the Tinuy-an Falls, a famous tourist destination dubbed the "Little Niagara of the Philippines". Before the pandemic, it attracted up to 160,000 visitors a year and contributed an average of PhP 8-11 million⁶ earnings to the local government.

This mosaic of a landscape nurtured not only the Manobo but also the diverse and highly endemic life therein. In fact, the *Pangasananan* forms part of the Government-identified priority conservation site South Diwata key biodiversity area and the internationally renowned Bislig Important Bird and Biodiversity Area designated by BirdLife International.⁷ This ecologically important area features endemic lowland dipterocarp forests dominated by *Lithocarpus spp.* and *Shorea spp.* According to BirdLife International, the Bislig Important Bird and Biodiversity Area hosts threatened and restricted-range bird species such as Mindanao Brown-dove, Mindanao bleeding-heart pigeon, spotted imperial pigeon, silvery kingfisher, rufous-lored kingfisher, wattled broadbill, azure-breasted pitta, Philippine leafbird, little slaty flycatcher, and celestial monarch. A variety of Philippine hawks and migratory birds are also seen in the territory. The *Pangasananan* forest is also a proven nesting and feeding ground for the critically endangered Philippine Eagle (*Pithecophaga jefferyi*).

Recognizing the area's biodiversity significance, ecological functions and socio-economic importance,

the Philippine Government, through its Department of Environment and Natural Resources (DENR), officially designated the Tinuy-an Falls and its entire watershed as a protected landscape⁹ through Republic Act No. 11038 or the Expanded National Integrated Protected Areas System Act of 2018. The Tinuy-an Falls Protected Landscape overlaps with 3,163 hectares or roughly 45 per cent of the *Pangasananan*.

Effective community conservation

Nature in the *Pangasananan* remains rich and healthy because of a combination of traditional beliefs, Indigenous practices, strong defensive actions, innovative solutions and strategic partnerships. What started out as a means to survive daily life became a conscious effort to protect and conserve the environment to secure a better future.

The traditional belief that nature and its resources are managed and guarded by a host of spirits, whose favour must be won and wrath avoided, guides the Manobo in a respectful attitude towards their environment. Various rituals asking for permission to take from the bounty of nature (like hunting, fishing or obtaining honey), opening up the land for farming and entering sacred sites are conducted in reverence to the spirits and to ask for a bountiful hunt or harvest and safe passage. Through these rituals, the Manobo also ask for forgiveness in advance for any offense they might commit in the process. The Manobo also fear that if spirits are offended or displeased by their actions, it may result in a failed harvest, hunting accident, sickness, misfortune and sometimes even death, depending on the extent of wrongdoing or the spirit's wrath.

Centuries of interdependence with their immediate environment has required them to develop practical, sensitive and essential conservation techniques that have sustained populations of traditionally important flora and fauna. Indigenous practices such as designating sanctuaries for wildlife, limiting or restricting entry into sacred areas, preserving key species of flora and fauna, designing hunting traps to avoid pregnant and young animals, designating off-season for hunting and limiting farm size indicate a conservation and protection approach to resource management. Harvesting timber also has certain restrictions based on their beliefs.

Aside from these practices, the Manobo have strongly defended and continue to defend the territory from



Manobo leaders showing the billboard they erected at the entrance of the Tinuy-an Falls eco-tourism park to inform guests that the place is part of their *Pangasananan*. This is part of the awareness campaign they launched with the help of the Philippine ICCA Project. Photo: Glaiza Tabanao

⁵ Carbon stock obtained through a quantification study conducted by the Manobo community and PAFID in 2018.

⁶ Roughly equal to \$164,000-226,000 USD.

⁷ According to BirdLife International, the Bislig Important Bird and Biodiversity Area is a popular destination for birdwatchers from around the globe, "as it is one of the best places to see several scarce lowland forest birds."

⁸ Map Data Sources: Manobo Participatory 3-Dimensional Community Mapping: Identification of Present Land Cover/Use, Landmarks, Traditional Use Areas, Roads/Trails and Rivers/Creeks on November 2017; Manobo & PAFID, GPS Survey of ancestral domain claim boundary corners from 27 March, 8 April and 2 July 2018; NAMRIA and PSA. Municipal boundaries of the Philippines (first quarter 2016). Publication Edition: 2016; CADT Boundary data from NCIP Region XIII, 2019; Base map from Google Terrain Hybrid; IBA shapefile from BirdLife International 2013. **Country profile: Philippines.** KBA shapefile from Conservation International, Department of Environment and Natural Resources-Protected Areas and Wildlife Bureau, Haribon Foundation. Priority Sites for Conservation: Key Biodiversity Areas.

⁹ The Philippine law describes a Protected Landscape as "an area of national significance, which is characterized by the harmonious interaction of man and land while providing opportunities for public enjoyment through recreation and tourism within the normal lifestyle and economic activity of the area."



large-scale commercial logging, small-scale illegal logging, armed rebel groups and forest clearing by migrant farmers. Most notable of these was their stand against the logging company Paper Industries Corporation of the Philippines, Inc. (PICOP). Around the 1990s, the company had almost entirely deforested the territory except for a few thousand hectares of old-growth forests. The Manobo families living in the forest were allegedly threatened and harassed by the company's private army to make them leave by burning houses, destroying farms and criminalizing individuals. With nowhere to run and everything to lose, the young Manobo leaders and their patriarch founded the village of Sote on the road leading to their forest. When the bulldozers and armed men came, they gathered everyone using a *taragong*¹⁰ and acted as human barricades. This effectively hindered the continuation of forest destruction in the area. To maintain vigilance on the territory boundaries and forest margins, the Manobo youth and their leaders organized themselves and regularly patrolled the territory. They established posts and camps in strategic locations to apprehend illegal entry and activities in the vicinity. Sure enough, they caught illegal loggers, seized their equipment and poached timber and turned them over to local officials.

The Manobo also forged strategic partnerships and alliances with groups and individuals who helped them strengthen traditional institutions, defend and secure legal ownership of the territory, provide livelihood assistance and establish networks and alliances. These include the local church, private armed groups, Armed

Forces of the Philippines, various Philippine government agencies, migrant settlers with useful skills, Indigenous peoples' organizations, local and international non-governmental or non-profit organizations, local government, and international funding agencies. It was through these partnerships that the community was able to apply innovative solutions, including a variety of participatory processes such as participatory research, 3-dimensional mapping of the territory, local resource inventory and community conservation planning.¹¹ They used all of these to finally get the government's approval after more than 10 years of trying to do so.

Threats and responses

Despite the community's clear strength and resilience, it is still fraught with both external and internal issues that threaten the *Pangasananan*.

1. **Significant overlap of a government protected area with the *Pangasananan*:** The government-declared Tinuy-an Falls Protected Landscape, legislated via the Expanded National Integrated Protected Areas System Act of 2018, overlaps with 45 per cent of the *Pangasananan*. This should have been a cause for celebration as, in some ways, it recognizes the community's conservation success and said law also supports recognition of traditional resource governance within protected areas. Funds will also be allocated by the government for the protection,

rehabilitation, and conservation of the Protected Landscape. However, it is viewed by the community as problematic for several reasons explained below, namely: (a) they did not provide their free, prior and informed consent for its establishment; (b) it criminalizes the community for continuing their livelihood activities in areas overlapped by the protected area; and (c) it is undermining traditional governance.

- **No free, prior and informed consent:** DENR went ahead with the Tinuy-an Falls Protected Landscape without proper coordination and consent from the community. After many instances when the DENR and Manobo leaders met and discussed the future of the *Pangasananan* and about how their traditions should be respected and their governance recognized, the community felt betrayed by this sudden announcement without prior information, consultation and coordination with the community. In February 2021, DENR conducted a communication, education and public awareness campaign in the community wherein they discussed the protected area's objective, coverage and policies but once again did not seek consent. The Manobo leaders feel like the DENR is not keen on pursuing further steps in seeking their consent since the protected area activities continue despite not having a clear agreement with the community.

- **Criminalizing traditional resource use and management:** When the Tinuy-an Falls Protected Landscape was enforced in 2019, traditional resource use and management was no longer allowed within it, despite the law saying they would be respected. This is a critical threat, as the areas overlapped by the protected area are the forests, hunting and fishing grounds and areas designated for agricultural use by the community. The DENR charged a Manobo with "illegal occupation" for maintaining a farm within the protected area. They then prepared an affidavit that says he is voluntarily vacating the lot within the protected area in admittance of his wrongdoing. The local DENR officer also allegedly told a Manobo that they are not allowed to obtain anything from the Tinuy-an Falls Protected Landscape, not even a blade of grass. A billboard erected by DENR near the entrance to Tinuy-an Falls Ecotourism Park essentially states that no one is allowed to use the resources inside the protected area. To this, Hawudon Danao, the best Manobo hunter in the *Pangasananan*, said, "Our farms and fallow areas are overlapped by the protected area. I hunt in the



Hawudon Sungkuan Nemesio Dumogoy, Jr. in his traditional garb. He leads the Bagani in guarding the *Pangasananan* and its forests. The nesting site of the Philippine eagle is located in his Kadumalahan. Photo: Glaiza Tabanao

forests surrounding our farms. My son fishes in the creeks near our farms. Now that these are not allowed, how are we going to live? Where do they suppose we get our food and money for our needs?"

- **Traditional governance undermined:** The Manobo successfully kept the natural environment relatively intact and healthy within the territory and this is mainly due to their steadfast governance and management of resource use in the area. They defended the territory with their lives. But now, they feel like this very success has jeopardized their hold on the *Pangasananan* because of the significant overlap of the protected area. Ever since the Tinuy-an Falls Protected Landscape was declared, DENR has filed charges against community members without coordinating with the traditional leaders, not giving the Manobo a chance to exercise their own governance processes. The Manobo are paraded in documents as members of the Protected Area

Hawudon Sayaw Rodino Domogoy during one of the farm planning sessions in the community. Photo: Ariane de los Angeles



¹⁰ Usually a piece of Indigenous musical instrument made of bamboo. A wooden or bamboo stick is used to strike the taragong and make a loud sound reminiscent of a toll bell.

¹¹ For more information on the processes undertaken, see [this case study](#) in the ICCA Consortium guidance.

Management Board but the Manobo feel the insincerity of this act. When the DENR and local government have activities, the Manobo are not consulted and their permission is not secured; they are just informed, as if they do not have the choice to say no or lay down their terms. The Manobo leaders lamented that the DENR only calls them when they need a guide in the forest. Hawudon Sayaw Rodino Domogoy further said, "According to the law, 'The ICCAs and IPs concerned shall have the responsibility to govern, maintain, develop, protect such areas in accordance with their Indigenous Knowledge Systems and Practices (IKSP) and customary law, with the full and effective assistance from the NCIP, DENR, and other concerned Government Agencies'¹² Why does it feel like we are the assistants here? Why are our customary laws not respected? Why is it difficult for them to understand that we also have our own governance system? It seems like they are breaking the very law they created."

- 2. Conflict with the Local Government:** When the 2019 elections ushered in a new administration, the Manobo's good relationship with the local government of Bislig City came crumbling down. The previous administration had forged a Memorandum of Agreement with MATRICOSO for the co-management of Tinuy-an Falls Ecotourism Park. This Memorandum of Agreement also ensured a 10 per cent share of the profits and accorded priority to Manobo community members for work in the ecotourism park. These were all put on hold when the new administration came in. A local

government representative even threatened the Manobo leaders when they pushed for their right to be part of the management board. After two years of pushing, the local government finally allowed them to be part of the management board. According to the Manobo, however, this is just for show. They were there in paper, but they were not treated as decision-makers in reality and not even consulted regarding the local government's planned developments and activities for the Tinuy-an Falls.

- 3. Weakening culture:** Aside from external challenges, the community acknowledges that they are also contending with internal issues. They identified the need to strengthen their Manobo cultural traditions in order to prevent the loss of their unique identity and to ensure that present-day efforts will be continued by succeeding generations. Traditional arts, music and dances are not practiced anymore, especially now that the knowledge-holders are either too old or have already passed and the youth seem to be more interested in mainstream culture.

Hopes and dreams

Despite these challenges, the Manobo of *Pangasananan* hope to achieve a better life for their community and their children without sacrificing the integrity of their culture, nature and territory.

With the recent (2019) approval of their ancestral domain claim, the community hopes to strengthen themselves

enough to better protect and develop their territory, as well as connect with suitable partners in implementing their self-determined development and conservation plans. Highlights of the community's plans include reinforcement of riverbanks to minimize erosion and siltation; reforestation of denuded areas and water sources; strengthening of their Manobo culture; skills and capacity-building; financial, technical, and equipment support for the *Bagani*; provision of equipment for better monitoring of the Philippine Eagle and other important wildlife and the forest; and biodiversity-friendly projects that can support socio-economic needs such as potable water systems, livestock cultivation, fishponds and agroforestry development. They wanted to interface these plans with the local government's comprehensive plans for the city's development as well as with the Protected Area Management Plan for the Tinuy-an Falls Protected Landscape. They also wish to actively participate in the crafting of plans for the development of Tinuy-an Falls Ecotourism Park and reclaim their seat in the management board.

From these, it can be gleaned that the community does not wish to be isolated. They want to be seen and accorded respect for their traditional governance and resource use and management in their *Pangasananan*, especially by the government and its agencies. As Hawudon Sayaw expressed, they do not wish to oppose the government as they know that it could be their strongest and most sustainable ally; however, the only way their differences can be settled is if the government genuinely appreciates and supports their demonstrated commitment and internally driven efforts to conserve and protect the *Pangasananan* and the natural environment it cradles.

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¹² Portion of Section 13 of the Expanded National Integrated Protected Areas System Act of 2018.

Photo: Glaiza Tabanao





Photo: George Iordăchescu



Homórdkarácsonyfalva Közbirtokosság

The Christmas Village in Romania

Author(s):¹ George Iordăchescu, Anna Varga, Monica Vasile, and Irina Sinziana Opincaru

Homoródkarácsonyfalva village (**hear pronunciation:** English: Christmas village; Romanian: Crăciunel) is nestled in the valley of the Homorod stream, in the scenic foothills of the eastern rim of the Carpathian Mountains, South-Eastern Transylvania, Romania. The community identifies as Szekler (*székelyek*), a subgroup of the Hungarian-speaking people and an ethnic minority in Romania. It is an area with a rich silvo-pastoral culture, entangled with a recent history of centralized socialist economic modernization. In 2000, the community has regained communal rights over pastureland and forests that were confiscated and passed to state ownership by the socialist regime (1948-1989). Since then, the community has also seen a turn towards nature conservation, including a return of emblematic species, and lower rates of forest harvesting. As a special feature, in the whole region, ancestral

systems of common rights and traditional ways of rights distribution have survived, although transformed, despite impositions by successive legal reforms.

We are who we were, and we will be who we are

The community defines itself strongly in relation to ancestry and past landholding traditions, which enabled them to remain free landholders and to prosper during periods of hardship for most Eastern European communities (Imreh, 1973, 1982).

The present communal landholding system goes back to the older rights systems, with a communal freeholding regime recognised by the medieval and early modern



1,098 hectares of land in total



732 hectares of forest



347 registered rightsholders

Hungarian Kingdom as a privilege given in exchange for border defence services (Varga, 1999). Towards the end of the 19th century, the *Közbirtokosság* was constituted as a formal institution in charge with governing the commons according to by-laws (Dezső, 2002).

After the First World War when Transylvania was annexed by the Romanian Kingdom, the local customary institution (*Közbirtokosság*) became recognised by the Romanian state. Up until the middle

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The report is based on data collected by the authors in 2021. The material was published with the free, prior and informed consent of the community.

“During communism we did not have full control of our lands and this affected our capacity to self-organize, to strategize and to nurture the community. Since we received our commons back, we started to think as a collective again, to plan for the future.”

Csaba Orbán, President of the Közbirtokosság, 2021



of the 20th century, the community property and land use systems followed the typical patterns of feudal silvo-pastoral villages in Europe, with a certain degree of independence in self-managing resources communally.

During state socialism (1948-1989), the communist regime nationalized the lands and put an end to this customary property regime. Forests were nationalized and managed in a state-centralized manner. Most of the agricultural land was collectivized as a cooperative. The cooperative erased the older communal rules and allowed locals to retain ownership of only one head of cattle per household, but obliged people to enrol as paid workers for the cooperative herd and deliver produce for the centralized economy (Verdery, 2003). In the socialist system, economic productivity was paramount, and an ethos of modernization and industrialization dominated land use and management (Verdery, 2001).

After the 2000s, a set of legal land reforms allowed the community to regain property and use rights to their territories.

Restoring rights to common land, a restitution moment

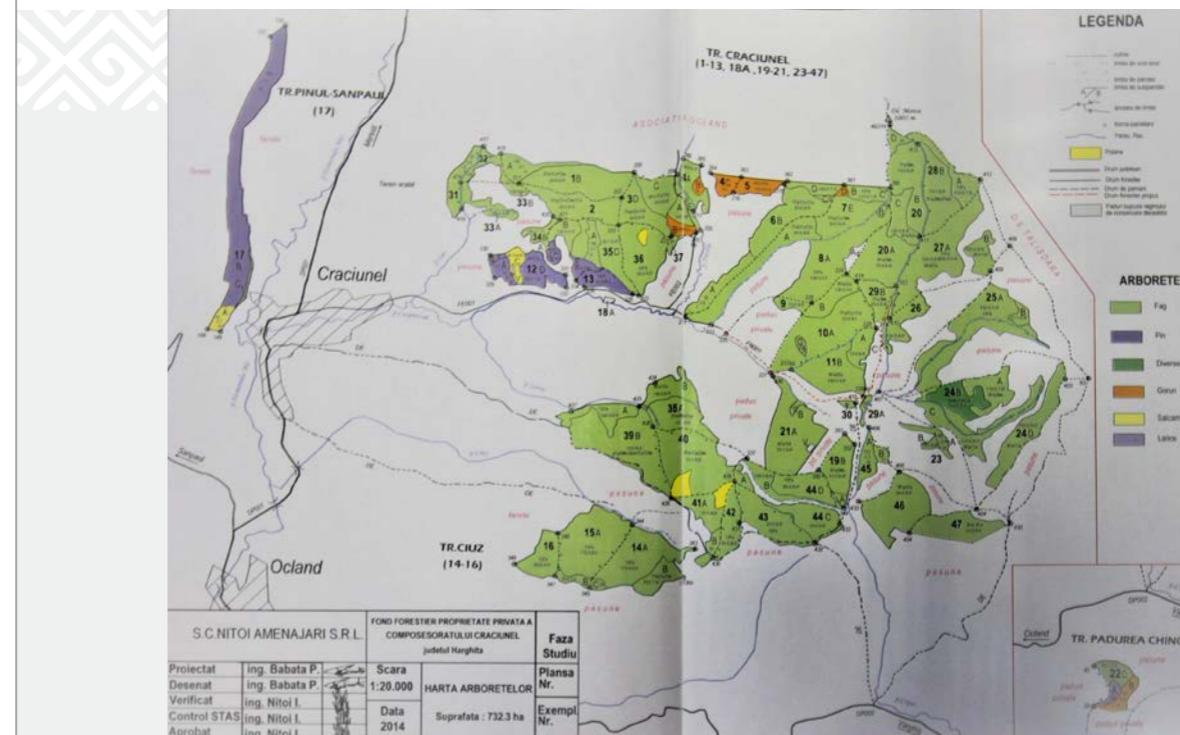
In the post-socialist period, in the year 2000, the communal property system, *Közbirtokosság* (which existed prior to 1948), was reinstated through restitution law 1/2000 and the community again took hold of pastures and forests.² Under this law's provisions,

Homoródkarácsonfalva Közbirtokosság was registered on 1 April 2000, with the founding document signed by the regional and local authorities along with appointed representatives of the community. The biggest challenge in the registration process was the lack of historical documents to prove rights to commons. Eventually, the commission in charge of restitution found a table mentioning the distribution of commons' forest rights dated 1946 and a land registry from the 1890s. These documents are now framed and displayed in the main hall of the commons institution's headquarters as a remembrance of the past (see photo 'Historical tables of rights to commons').

Közbirtokosság: a system to collectively govern the commons

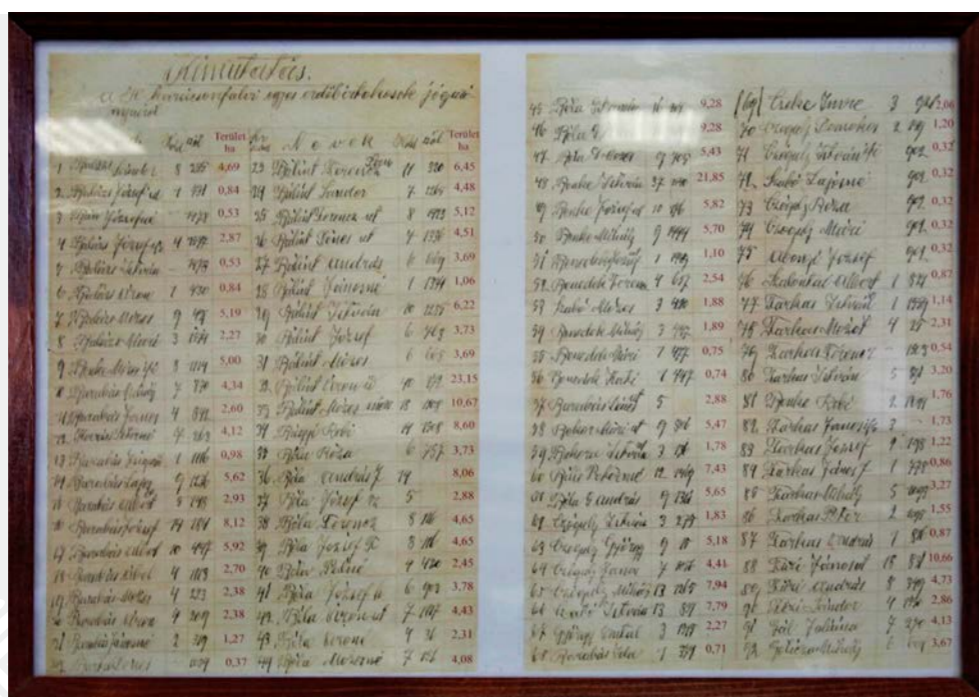
The forest, pasture and water sources are governed by the community institution as a commons: an elected executive committee functions according to written by-laws and decisions taken by the general assembly of rightsholders. The commons are considered private property of the community, and delimited within the Romanian legal categories of land ownership as 'historical associative forms of property' – separate from municipality property, state property and individual private property.³

The commons has 1098 hectares of land in total, of which 732 ha are forest (with an estimated monetary value of 1,389,800 euros) and 366 ha are pastures.



Map of forestland showing the species composition, over 90% European beech followed by sessile oak, pine and other species. Various tracts of forest alternate with pastures or forests belonging to private owners.

Historical tables of rights to commons from 1946. Photo: George Iordăchescu



There are currently 347 registered rightsholders, around half of whom reside in the village. The other half are descendants of the old rightsholders who currently reside elsewhere, though they have relatives in the village who are delegated to use the common lands and participate in decision-making processes. The Unitarian and Catholic Churches are also considered rightsholders, as entities with distinct rights given their need for firewood to heat the church and so on.

Within the community, each rightsholder has inherited rights from their ancestors. The rights are legally registered and counted as communal shares called 'quota-parts'. Sales of shares between the members of the community of descendants are allowed but not excessively, as the rules of the commons mention that no person can inherit or acquire more than 5% of all shares. A small percentage of village families do not hold rights to the commons, such as newcomer families who moved there in the 20th century.

The rights are held by the elders and only after the death of an elder the offspring can inherit the rights. As such, some younger families do not officially hold rights or participate in communal assemblies, but have 'arrangements' with their parents or grandparents for using the commons. Though women and men are entitled to inherit rights to the commons, women tend to marry outside the village, and it is usually men who



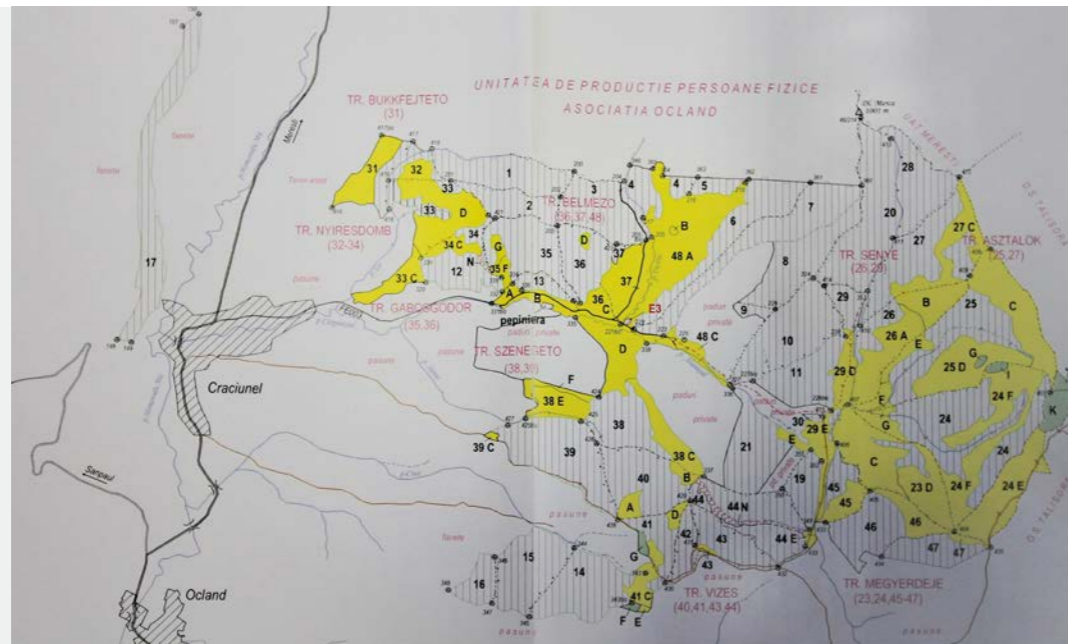
“Vagyunk, akik voltunk, és leszünk, akik vagyunk – We are who we were, and we will be who we are.”

The inscription on flag of Homoródkarácsonfalva

² For an extended discussion of the commons in present day Romania, see Vasile and Mantescu 2009, Vasile 2018, Vasile 2019a and Vasile 2019b.

³ For an extended discussion of the Romanian commons, including cross-regional and historical comparisons, refer to the website of the Romanian Mountain Commons Project: <https://romaniacommons.wixsite.com/project>.

Map of pastures. The use of pasture differs according to proximity to the village, those closer to the village are used for daily grazing, while those located further are reserved for grazing young cattle over the summer months.



inherit the household and thus the common land rights. The community devised a set of clear rules to avoid challenges such as excessive division of rights and lack of participation. For example, the parents usually choose only one of their offspring as inheritor and bearer of the rights, usually the youngest one or the one that will continue to live in their house after their death. The siblings have to agree with this decision, and the governing bodies do not require certified documents to attest the inheritance of rights.

Rights to forest use are quantified and considered different than rights to pasture use (Vasile, 2019b). For each right (share) to the forest, a rightsholder is entitled to approximately 0.62 cubic meters of timber. If the member does not need the timber (for example, if they reside in the city, or can supply it from a private forest), they will receive the equivalent in cash. For each right to pasture, the member can send one cow or up to 7 sheep to graze. Those who do not need to use the pastures receive around 10 euro (50 RON) per year per right. Similarly, rightsholders who own more cattle but do not have sufficient pasture rights are allowed to acquire the grazing rights from other rightsholders who do not use them and offer compensation in return.

The communal rights are currently recognized by Romanian law (Law no. 1 of 2000) and registered in official land books and property documents. The by-laws are validated and registered with the court of law. However, the management of local resources is also dictated by overarching regulations and policies. Pasture management is subject to European

regulations dictated by a policy of direct payments under the Common Agricultural Policy. Forests are additionally subjected to country-wide legislation and vested in specialized institutions – i.e., forestry districts accredited by the state, forest management plans designed by hired experts and approved by the Ministry of Environment. In addition, a series of customary documents locally regulates the use of resources, for example, the use of pasture and mineral water springs.

Revenues from commons are used in part to sponsor community activities such as the construction of a communal spa bath, the annual Chestnut Festival, the renovation of historical buildings and various other cultural activities. More recently, the governing institution started to sponsor these activities using EU direct payments. Over the years, the community built a complex of public baths around the mineral springs located in the south-eastern part of the village, called “Dungó Feredő”. Due to a set of miraculous healings, some members tend to attach spiritual values to Dungó Feredő and consider the place sacred. Other revenues derived by the community institution *Közbirtokosság* are used to cover the costs of its operations, such as bills and taxes, and the rest is redistributed to members of the community.⁴

The territory of life – pastures and woods

The territory of life surrounds the village and it is zoned in three main areas of approximately equal size: forestland, wood pastures and pasture. Private

properties, both forests and pastures, are interspersed throughout or border the territory of life. A sweet chestnut orchard of approximately one hectare is located close to the center of the village. The pastures are divided into two categories according to seasonal use: the upper pastures are more difficult to reach and used for young cattle from April to September and the pastures around the village are used daily to graze milking cows, goats and sheep.

Wood pastures are among the oldest land use types in Europe and have high ecological and cultural importance (Hartel et al, 2013). Here, grassy vegetation

forms a mosaic landscape with interspersed ancient trees, including oak, sessile oak, and beech, which represent local biodiversity hotspots. Mosaic areas offer a broad range of habitats for biodiversity and good conditions for silvo-pastoral livelihoods, grazing livestock, in shade and sun (Varga and Molnár, 2014).

Wood pastures are rapidly declining all over Europe because of changes in land use and lack of regeneration, and they are generally not recognized in the nature conservation policies of the EU or protected as distinct landscapes despite evidence from research showing their special management history and values. In Karácsonyfalva, the wood pastures were maintained by the community throughout history despite adverse state-driven tendencies. ‘Acorn’ forests were incredibly valuable in medieval Transylvania and most of Europe given the importance of acorns for feeding pigs.

During socialism, animal husbandry practices were intensified, large trees on pastureland were cut down and artificial fertilizers introduced.

After the fall of socialism in 1989, pastureland was abandoned, and scrub was not cleared thoroughly anymore. Yet, Romania’s accession to the European



“We protected the large trees on the pastureland, but many of them were cut down in the 1960s during socialism.”

Mózes Balázs, forester assistant, 2008

⁴ For more details about commons as forms of social economy, refer to Opincaru, 2020.



The landscape around Homoródkarácsonyfalva. Photo: Anna Varga





“We did not try to find explanations for the recent return of wildlife, we are just very happy about it.”

Csaba Orbán, President of the Közbirtokosság, 2021



Cattle resting in the forest, 2008. Photo: Anna Varga



Building the Dungo Spa Community Baths in 2006. Photo: Anna Varga

Union in 2007 brought direct payments through the Common Agricultural Policy, which spurred scrub clearance and pasture maintenance activities to correct the neglect of the previous years (Varga, 2006). The pasture is currently understocked with no problems of overgrazing. Most people have few animals and a few farmers have a higher number of cattle and sheep.

The forest is temperate and over 90 per cent of it is comprised of European beech (*Fagus sylvatica*) that is healthy and around 120-200 years old; the rest of the forest is sessile oak (*Quercus petraea*), oak (*Quercus robur*) and pine (*Pinus sylvestris*). Though pine was planted by the Hungarian state and considered an imposition from outside, it offers great protection to the chestnut orchard by stabilizing the land against erosion and landslides.

The forests owned and managed as commons have two types of uses: firewood and commercial use. The community can harvest up to 2200 cubic meters of timber annually (as calculated by experts in the management plan for keeping to a sustainable yield principle), but the actual volume has always been lower, contributing to a net increase of the tree cover. The majority of timber felled is used locally as building material or for firewood. Although practiced in neighbouring communities and throughout the area, commercial felling in Karácsonyfalva dropped constantly and is now almost insignificant. The fact that the community harvests less than what they would be allowed to do and only to cover home necessities is a remarkable conservation feature for this area.

There are several forest conservation elements, including 120 hectares under voluntary non-intervention protection, where no cuts are allowed, and 30 hectares of sessile oak is under strict protection as a seeding area. It is also considered a quiet zone, which commoners believe has contributed to the return of wildlife.

Emblematic species and conservation actions

There are several vulnerable, endangered and critically endangered species of flora and fauna with important ecological functions. Oak is a diminishing species around the world; thus, this sessile oak reserve holds special importance. The black stork (*Ciconia nigra*), a threatened species in the EU, nests on undisturbed mature trees in the area and has been spotted by locals recently. The European beaver (*Castor fiber*), a species

considered under threat in Europe, lives here and is welcomed by locals. Numbers of the grey wolf (*Canis lupus*) and brown bear (*Ursus arctos*) have increased in the area and country in the last five years after the Romanian government introduced a strict ban on hunting. More recently, endangered species such as the lynx (*Lynx lynx*) and the wild cat (*Felis silvestris*) have been sighted. The number of white storks (*Ciconia ciconia*) is increasing year after year, not only signalling a healthy habitat, but also locals' positive attitude, as this species usually nests around houses and is considered a good omen for the health and prosperity of each family.

A Natura 2000 protected area (PA ROSPA0027) for bird protection overlaps most of the Homoródkarácsonyfalva village and commons and the surrounding villages. Among the most representative species conserved within this protected area are: lesser spotted eagle (*Aquila pomarina*), greater spotted eagle (*Aquila clanga*), common kingfisher (*Alcedo atthis*), black-crowned night heron (*Nycticorax nycticorax*), grey-headed woodpecker (*Picus canus*) and lesser grey shrike (*Lanius minor*). Locals were not consulted when the protected area was declared, as is the situation with almost all Natura 2000 areas in Romania (Iordachescu, 2019). Nevertheless, the community welcomes the existence of the protected area and has plans to seize the opportunity and build ecotourism in the village.

Since its reestablishment as a juridical entity, the governing board of the commons managed to register two protected areas of local interest in an attempt

to protect natural values from infrastructure or construction development (decision No.162/2005 of the Harghita County Council).

A chestnut grove, herbal medicine, an open-air spa, and a festival

The age of the villagers and rightsholders influences their relationships with the commons. Some areas of the territory such as the open-air baths complex are used for leisure and healing. Some members are hunters of wild boar and deer and tend to know the forests better than the others. They also declare sightings of species that have returned or are new to the area. Some commoners have an intimate knowledge of existing species of flora and engage actively in harvesting and selling traditional medicine based on herbs and plants that are picked, dried and made into teas, creams, and lotions (Papp and Dávid, 2016). One such plant is the striking blue trumpet-shaped gyertyányökér (*Gentiana asclepiadea* L.), a flower that fills the pastures from late summer and into autumn. Locals organise regular meetings and workshops, open to the community and to outsiders, for transmitting traditional knowledge about plants. Edible mushrooms are also collected in the forest.

Another beloved communal territory is the sweet chestnut grove, planted by community members at the beginning of the 20th century and used by the school to teach lessons about biology and ecology. Every first Saturday of October, the community organises the



The community attending the opening of the Chestnut Festival. Photo: Csaba Orbán



Chestnut Festival using the commons' budget and reunites members from all over, assembling for a day to celebrate their commons. This festival represents a true expression of community values.

Worries and hopes for the future

Although the Homoródkarácsonfalva Közbirtokosság has recovered well from pressures during the period of state socialism, it is not without worries. Today, the threats of invasive plants and drought are causing serious vulnerabilities. Medicinal plants are declining and others such as stag's horn clubmoss (*Lycopodium clavatum*) and the blueberry bush (*Afinum myrtilus* L) are migrating to higher altitudes. Erosion was affecting the topsoil in small areas some years ago, but they have been planted with appropriate species and grazing was reduced to more than half of the allowed capacity.

The lack of cooperation with national authorities in managing growing interaction with potentially dangerous wildlife is also a disturbing issue for the community.

The community's vision for the future is centred around raising the quality of life for its members. They hope that their village and commons will be blessed with a favourable climate, including enough rains and water to thrive.

From a demographic point of view, children are an important part of the village's future. For them, the community desires university education, as well as a quality of life comparable to other European countries (which can only be achieved with monetary revenue). To halt potential emigration and demographic collapse, the community feels revenue should be generated from conservation initiatives.

The community sees value in developing ecotourism services catering to a market of consumers that appreciate nature-based activities such as horse riding, walks and hiking, wildlife observation and consuming natural products. The community envisions a future of rich cultural activity around the local churches as historical heritage, the chestnut orchard as a place of celebration, and around the mineral springs of Dungo (see map *Vision for the future*).



Vision for the future of Homoródkarácsonfalva Közbirtokosság drawn by the community's children.

Photo: George Iordăchescu

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**National and regional
analyses on the status
of territories of life**

Photo: Roshni Lodhia





Photo: Fundación ALDEA



Ecuador

A national analysis on the status of territories of life

Author(s):¹ Paola Maldonado, Jaime Robles, Verónica Potes

It is estimated that at least 40% of Ecuadorian territory (approximately 104,059.1 km²) are territories of Indigenous, Afro-Ecuadorian and Montubio peoples and nations. In a plurinational and intercultural state, the recognition and guarantee of territorial and collective rights and the rights of nature is an essential path to ensuring biodiversity conservation. Five territories of life have been registered in the World Database of Territories of Life (ICCA Registry), as of April 2021. In total, they cover about 17,906.37 km² of natural ecosystems (tropical rainforest, dry forest and shrub vegetation), in key areas for biodiversity conservation, under their own forms of governance. Yet, 80.2% of these territories of life are threatened by extractivism.

Context

Ecuador is one of the planet's megadiverse countries. Located at the crossroads of the Andes Mountains and

the equator in South America, it is one of the smallest and most densely populated countries in the region. 45.5% of its surface area is part of the Amazon basin, which is home to the country's largest areas of tropical forest in good state of conservation. The highland region (*Sierra*) accounts for 23.6%, the coastal region for 27.5%, and the Galapagos Islands for 3.2%. See Map 1.

In response to the demands of the Indigenous movement and social organizations to recognize the cultural diversity of the country, Ecuador's Constitution recognizes it as a state of rights, intercultural and plurinational (Art. 1). Peoples, nations, and collectives are rights holders, including Indigenous, Afro-Ecuadorian, and Montubian communities, peoples, and nations (Art. 10, Art. 57 et seq.), and nature is also a rights holder (Arts. 70-74). According to the 2010 census, Ecuador's total population is 14.4 million, of whom 7.4% self-identify as Montubian, 7.2% as Afro-Ecuadorian, and 7% as Indigenous.²

There are Indigenous Peoples living throughout Ecuadorian territory. However, there are regions where they have a prominent presence, for example in the Amazon and the Sierra. In the Amazon, there are the following nations: Achuar, Aï'Kofán, Waorani, Siekopai (also known as Secoya), Quijos, Andwa, Shuar, Siona, Shiwiari, Sapara, and Amazonian Kichwa (comprised of multiple autonomous peoples, including the Kichwa People of Sarayaku). The Amazon region is also home to the Tagaeri and Taromenane Indigenous peoples in isolation,³ or "peoples in voluntary isolation," as defined by the Constitution. In the Sierra live the Natabuela, Otavalo, Karanki, Kayambi, Kitu Kara, Panzaleo, Chibuleo, Salasaka, Kispincha, Tomabela, Waranka, Puruhá, Kañari, Saraguro, Paltas, and highland Kichwa. On the coast, there are the Épera, Awá, Chachi, Tsáchila, Manta, Huancavilca, and coastal Kichwa. See Map 2.



Location of Ecuador in South America. Map: ALDEA, 2021

Although there is no official national-level mapping, several studies estimate that at least 40% of Ecuadorian territory (104.06 km²) corresponds to the territories of Indigenous Peoples and local communities. The Amazon is the region with the largest area of Indigenous territories, representing 73% of the country's territories belonging to peoples and nations.

Some Indigenous Peoples were separated by state borders, which affected and continues to affect dynamics of mobility and territorial use. This occurs along the borders with Colombia and Peru. These transboundary peoples include the Awá, Chachi, Aï'Kofán, Siona, Siekopai (Secoya), Shuar (in Ecuador, Wampís nation in Peru) and the Achuar in Ecuador and Peru.

The majority of Indigenous communities are affiliated with second-level organizations, that is, provincial and sub-provincial organizations, and these in turn are affiliated with regional organizations such as CONFENIAE⁴ in the Amazon, ECUARUNARI⁵ in the Sierra, and CONAICE⁶ on the Coast. These are in turn affiliated with a national organization, CONAIE,⁷ the largest Indigenous organization in Ecuador. Other national Indigenous organizations are FENOCIN⁸ and FEINE.⁹ At the supranational level there are two relevant

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² Censo Nacional de Población y Vivienda, INEC, 2010. According to the census methodology, self-identification according to culture considers the following options: Indigenous, Afro-Ecuadorian, Montubio/a, Mestizo/a, White, Other.

³ The Tagaeri Taromenane are isolated family groups, linguistically and culturally related to the recently-contacted Waorani nationality. Narváez, et al. 2020. *Pueblos indígenas aislados y de reciente contacto (Waorani) en la Región del Yasuni: estado, vulneración de derechos y amenaza a la vida en el contexto de la pandemia de COVID-19*, Quito, Ecuador: Fundación ALDEA, Fundación Pachamama.

It is likely that there are other peoples in isolation in the Ecuadorian Amazon, a subject on which further research is urgently needed.

⁴ Confederación de Nacionalidades Indígenas de la Amazonía Ecuatoriana

⁵ Confederación de Pueblos de la Nacionalidad Kichwa del Ecuador

⁶ Confederación de Nacionalidades Indígenas de la Costa Ecuatoriana

⁷ Confederación de Nacionalidades Indígenas del Ecuador

⁸ Confederación Nacional de Organizaciones Campesinas, Indígenas y Negras

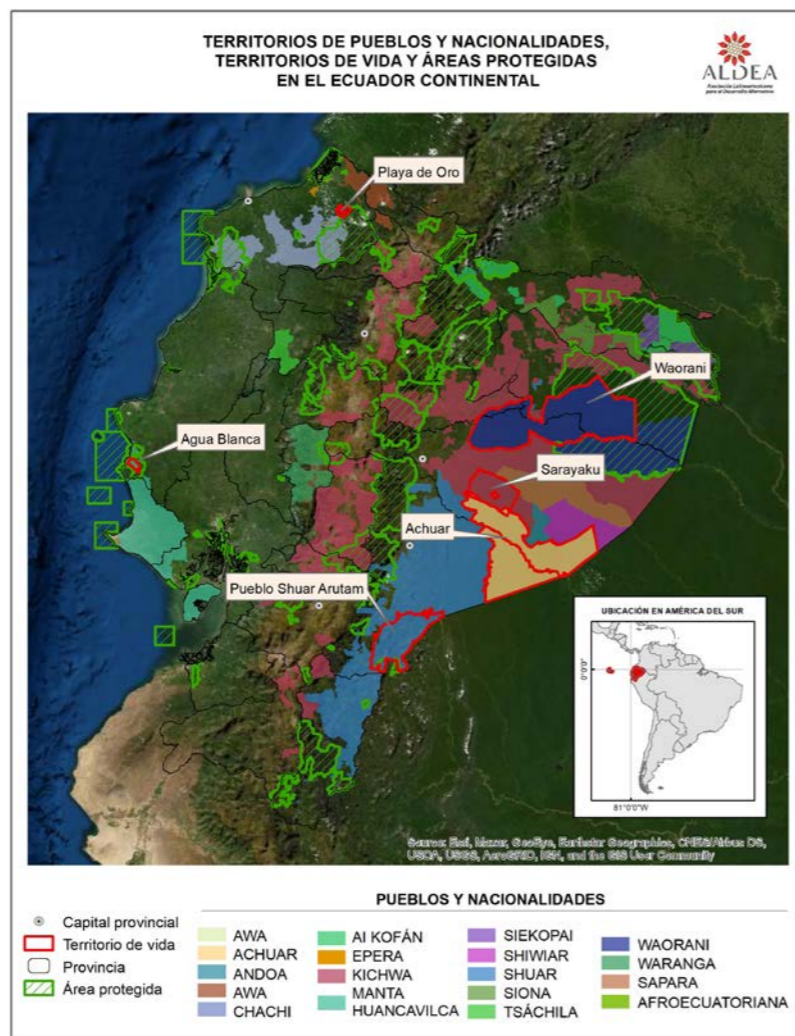
⁹ Consejo de Pueblos y Organizaciones Indígenas Evangélicas del Ecuador



organizations: COICA,¹⁰ which brings together the Indigenous organizations of the nine Amazonian countries, and CAOI,¹¹ which is comprised of the organizations of the Andean countries (Colombia, Ecuador, Peru and Bolivia).

Territories of life, protected areas and extractivism

Biodiversity is important to Ecuador and is protected in the Constitution, which recognizes the rights of nature. Ecuador has ratified and been a “party” to the Convention on Biological Diversity (CBD) since 1993, which commits it to meeting the Aichi Targets and the National Biodiversity Targets. In terms of protected areas, approximately 20%¹² of the country’s land area (continental and insular) is part of the National System of Protected Areas (SNAP), which seeks to guarantee biodiversity conservation and the maintenance of ecological functions.¹³ Although the SNAP is made up of four subsystems—state, decentralized autonomous, private and community—the latter “is still being structured”.¹⁴ The experiences of co-management and co-administration of protected areas have not yet been able to effectively integrate the territorial dimension and the importance it represents for the peoples and nations, most of whom have a close relationship with their territory that is expressed in their profound knowledge of the forests, paramos and mangroves, as well as in their own knowledge, practices and forms of organization that allow them to recognize and collectively manage their common goods. About 16.4% of the SNAP overlaps with the territories of peoples and nations. Several peoples and nations are demanding recognition of their own governance and conservation systems, such as the Achuar System of Conservation and Ecological Reserves (SACRE), proposed by the Achuar nation, which maintains 95%¹⁵ of their forest in a good state of conservation; the *Kawsak Sacha*, of the Kichwa people of Sarayaku; or the Kayambi people in the northern Sierra of the country, who have maintained collective agreements for several years for the management and care of the paramos and water resources.



Map 2. Territories of Indigenous, Afro-Ecuadorian and Montubian Peoples and Nations. Map: ALDEA, 2021, based on Zamora G., Maldonado P. (2016); EcoCiencia, Atlas Amazonía Bajo Presión (2018); Organizaciones de los TICCA en Ecuador (2017-2020).

While there are efforts to advance conservation, at the same time, extractivism is advancing. In 2008, Ecuador implemented the Socio Bosque program, a mechanism of economic incentives to individuals, peasant communities, peoples and nations to conserve forests, paramos, and other fragile ecosystems. According to the Ministry of Environment and Water, by 2018, the total area of the Socio Bosque program reached 1.616 million hectares.¹⁶ Some of these areas compensated for conservation are at the same time concessioned for oil and mining activities. One of the most extreme examples of this contradiction is the case of the territory of the Shuar Arutam People (PSHA), where 41% of its surface area is in the Socio Bosque program and, at the same time, 76% has been concessioned for mining and oil activities.¹⁷ This shows the dispute over and pressure on Indigenous territories: on the one hand, a



Emblematic Ceibo tree in the dry forest conserved by the Agua Blanca Community, Manabí, Ecuador. Photo: Edu León, Fundación ALDEA, 2019

developmentalist model based on extractive activities and, on the other, a proposal for self-determination, territorial defense, and conservation of nature through community governments.

In addition to this, there is an explicit vision of protected areas as “reserve zones for future extractivism.” Since their creation, National Parks (a category within the SNAP) are not susceptible to exploitation. Despite this, Yasuní National Park (YNP), which was one of the country’s first parks, has had its boundaries modified several times to adjust to the demands of oil exploitation, despite being part of traditional Waorani territory (a recently-contacted nation) and of the Tagaeri and Taromenane peoples in isolation.

In 2008, the Constitution extended intangibility to all protected areas and intangible zones, except for in the exceptional case of “national interest,” alleged by the Executive and authorized by the National Assembly. In 2013, the Assembly authorized exploitation in blocks 31 and 43 within Yasuní National Park. In this way, the state in practice treats protected areas and the territories of life of Indigenous Peoples and nations as zones reserved for future extractivism. Protected areas are state creations subject to objectives and regulations that do not always coincide with those of the communities and sometimes even contradict them, that is, they are spaces without democratic and localized governance systems. Therefore, strengthening local communities through an interpretation that guarantees rights to

participation could be an appropriate way to enact a different vision of the SNAP and its subsystems.

Recognition of collective rights guarantees, among other rights, peoples’ exercise of autonomy and self-determination, in addition to the right to territory and the right to maintain their own forms of organization, conflict resolution, and Indigenous justice. Yet, all of these forms of recognition have not yet permeated the structure of a state that maintains its hegemonic, racist, patriarchal, and colonial vision. The Ecuadorian economy depends on the extraction of raw materials, which in many cases implies dispossession, displacement and invisibilization of the socio-ecological and cultural diversity of the

¹⁰ Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica

¹¹ Coordinadora Andina de Organizaciones Indígenas

¹² According to information from the MAAE, by 2020 it was 20.35% of the land area (including the Galapagos National Park) and 12.07% of the marine area (including the Galapagos Marine Reserve). “Estadísticas del Sistema Nacional de Áreas Protegidas SNAP – 2020.”

¹³ <http://areasprotegidas.ambiente.gob.ec/es/info-snap>

¹⁴ <http://areasprotegidas.ambiente.gob.ec/info-snap>

¹⁵ <https://www.wwf.org.ec/noticiasec/?uNewsID=365496>

¹⁶ <http://sociobosque.ambiente.gob.ec/node/44>

¹⁷ <https://www.landrightsnow.org/the-shuar-arutam-people-defend-their-territories-and-biodiversity/>



country. High-impact activities in the territories, such as mining, oil, agribusiness, real estate expansion, among others, have not followed the processes of free, prior and informed consultation (FPIC) provided for in the Constitution. As a result, the affected peoples have not had the opportunity to express, condition, or deny their consent for these activities, which is why, in some cases, they have resorted to the judicial system to sue for non-compliance, as will be explained later in this text.

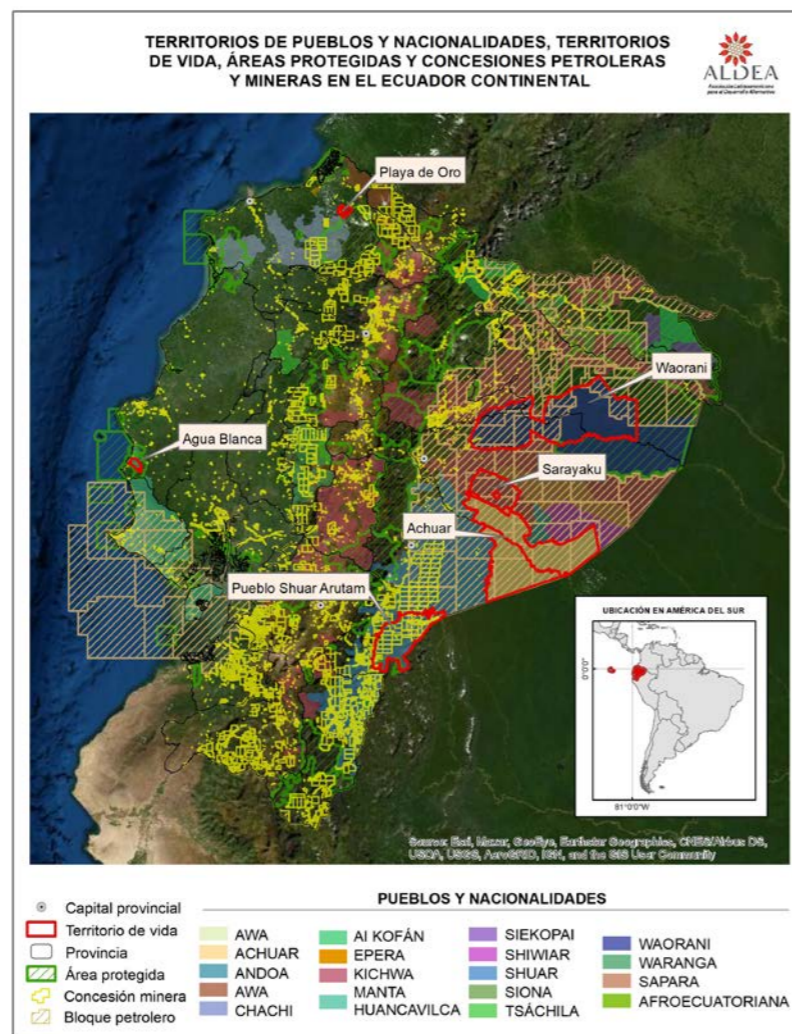
Ironically, parallel to the recognition of the Ecuadorian state as plurinational and intercultural, over the course of the last 15 years the extractivist model has been consolidated. As can be seen in Map 3, approximately 37.5% of the national continental territory and more than 60% of the territories of peoples and nations are concessioned for mining and oil activities. Extractivism is concentrated in areas of high biodiversity, in the headwaters of watersheds and in areas where impacts transcend national borders. For example, mining concessions increased from 0.04% of the territory in 2004 to 9.5% in 2019.

As of April 2021, the territories of life registered in the World Database (ICCA Registry) are located on the Coast and in the Amazon. On the coast are the Playa de Oro community (106.09 km²) and the Agua Blanca community (92.02 km²); in the Amazon region are the Shuar Arutam People (2,325.34 km²), the Waorani Nation of Ecuador (7,744.88 km²), the Kichwa People of Sarayaku (1,350 km²) and, in the process of registration, the Achuar Nation of Ecuador (6,779.30 km²). Together, all of these territories of life possess approximately 17,906.4 km² of tropical forests, dry forests, shrub vegetation, and other fragile ecosystems in Ecuador. With the exception of the Agua Blanca community (which is located within Machalilla National Park), the territories of life are not part of the SNAP.

Recognition and registration as territories of life arises from a process of self-empowerment, informing,

and internal discussions, to recognize the strong link between the population and its territory, and the existence of a self-organizing governance structure that makes decisions to implement their life plans. As a result, nature is maintained in a good state of conservation. Territories of life are the expression of the self-determined effort of peoples and nations to manage their territories, culture, and life, even as 80% of the surface area of these territories of life are affected by mining and oil concessions.

The Playa de Oro commune is a Territory of Life. Video, 1:55 min, Fundación ALDEA, 2019.



Map 3. Territories of Indigenous, Afro-Ecuadorian, and Montubian Peoples and Nations and their overlap with mining and oil concessions on continental Ecuador. Map: ALDEA, 2021

National legal and policy context

Undoubtedly, the declaration of a plurinational and intercultural state is positive for the peoples and nations, and also for territories of life in Ecuador. With plurinationality, the recognition of the collective territorial rights of Indigenous peoples and nations, Afro-Ecuadorian people, and Montubio peoples has important political potential. The collective rights of peoples are not simply a derivative application of individual rights in the liberal understanding, but spaces to build from perspectives that are parallel to, and even adversarial to, the status quo.

Article 57 of the Constitution recognizes (Indigenous and by extension since 2008, Afro-Ecuadorian and Montubian) collective property as something distinct and differentiated from classic individual property. It recognizes a particular relationship between peoples and territories that manifests itself in a profound interdependence and a deep sense of responsibility of the peoples towards those territories. The constitutional recognition of this relationship is revealed in the fact that the territorial rights of peoples comprise much more than the right to be owners, like any other private owner. Territorial rights give rise to greater safeguards for use, and enjoyment of full ownership. They guarantee imprescriptibility, inalienability, and indivisibility, as well as governance systems, thus guaranteeing recognition of the special relationship between peoples and their territories.

In fact, territorial rights are broad in scope. They include ancestral possession as equivalent to full ownership (Art. 57.5). This is fundamental for at least four reasons: first, because the titling of ancestral territories does not convert those predating the Ecuadorian state into “property” but simply recognizes them; second, because in practice such titling becomes impossible when the state demands the fulfilment of the ordinary legal requirements for any other civil possessor; third, because the collective property of the communities, peoples, and nations is imprescriptible, unseizable, inalienable, and indivisible (Art. 57.4); and fourth, because the possession or ownership of ancestral

The Agua Blanca Commune is a Territory of Life. Video, 2 min., Fundación ALDEA, 2019.

territories grants communities status as an “ancestral form of territorial organization” (Art. 60).

Furthermore, territorial rights provide peoples with the physical and spiritual space necessary for the maintenance of their identity, ancestral traditions, and social organization (Art. 57.1), the generation and exercise of their own authority (Art. 57.9), and the maintenance, development, and application of their own laws (Art. 57.10). They even allow for the possibility of establishing territorial subdivisions (*circunscripciones*), within the framework of the political-administrative order of Ecuador, expressly for the preservation of culture (Art. 60).

It is in the peoples’ territories that their biodiversity and environmental management practices (Art. 57.8); their knowledge, science, and technologies, including medicines and traditional medical practices; and their knowledge of the resources and properties of the flora and fauna (Art. 57.12), are developed and expanded. For all of this, it is necessary to conserve the genetic resources of biological diversity and agrobiodiversity: plants, animals, minerals and ecosystems (Art. 57.12).

It is because of this special protected relationship that it is expressly prohibited to displace peoples from their ancestral territories (Art. 57.11) and that they have the right to recover and protect their ritual and sacred sites (Art. 57.12). In addition, in recognition of the history of violence, military activities are expressly limited in the territories (Art. 57.20). In the case of peoples in isolation,

Training workshop for information teams on territories of life. Quito. Photo: Vane Terán, Fundación ALDEA, 2019



their territories (which are their lives) are expressly forbidden for extractivism due to the possibilities of forced or voluntary contact (Art. 57, penultimate paragraph unnumbered).

From a more instrumental point of view, but no less substantial, territorial rights require, in particular, the exercise of participation rights in the specific and strategic state decisions that might affect them. Expressly, they apply to the management of renewable natural resources within their territories (Arts. 57.6 and 57.8) via prior, free and informed consultation. These range from strategic decisions on plans and programmes, to decisions on the possible carrying out of activities in phases. (Art. 57.7). Expressly, and also by prior consultation, the peoples must participate in legislative measures that might affect them (Art. 57.17) and they also have the right to participate in specific government bodies, in defining public policies that concern them and in designing and deciding their priorities in state plans and projects (Art. 57.16).

The effectiveness of land rights and participation would shape new territorialities (many of these denied and hidden up until now) and a new democracy; that is the emancipatory potential of plurinationality. However, the practice is far from this potential. The territories remain subject to the fiction that divides the soil from

the subsoil, in which the state reserves subsoil resources under the Constitution (Arts. 1 and 408). This subsoil “property” has been used to support a developmentalist ideology, according to which extractivism is imposed. Nothing in the constitutional texts suggests that, of this property, the state has to extract the resources; they only ratify their inalienable ownership over them. In a plurinational state, these resources belong to the whole population, this includes all Indigenous peoples and nationalities, and to those who do not necessarily share the hegemonic vision of economic growth based on extraction from nature. However, the governmental-entrepreneurial vision is that to deny extractive activities in Indigenous peoples’ territories requires a constitutional reform, under the argument that the only areas where it is expressly prohibited to operate are the protected and intangible areas (Art. 407). Given that this prohibition is not expressly extended to Indigenous territories, the official ‘logic’ is that the state cannot refuse resource extraction. Therefore, territoriality in Ecuador remains fundamentally state-run, hegemonic and extractivist in practice.

At the same time, the possibilities of a new intercultural democracy are limited, given the (non) implementation of recognised participatory mechanisms for Indigenous peoples and nationalities. Strategic decisions about the territories are exclusive



Training workshop for information teams on territories of life. Photo: Vane Terán, Fundación ALDEA, 2019



Meeting between the Shuar Arutam People and the Autonomous Territorial Government of the Wampis Nation in Soledad, Peru. Photo: Edu León, Fundación ALDEA, 2019

to the central government, despite mandates for consultation and participation in making these decisions. Indigenous peoples and nationalities do not participate in macro plans and programmes, with their non-hegemonic visions on the use of land and economic development. These decisions are then crystallised as specific projects, in which the real possibility of influencing the decision is also lessened by the developmentalist ideology referred to above. The potential enrichment of managing public affairs with alternative visions through intercultural democratic mechanisms still remains to be seen.

In general, the rights of Indigenous Peoples are far from being defined. In particular, the territories as spaces for the peoples’ relational autonomy still face official mistrust. The objection to “states within the state” is put forward against claims based on the territory, including the right to consent in prior consultations. In this adverse environment, Indigenous peoples are exercising, de facto, their self-determination, their own rights, their own justice systems and their governance. In some cases they face serious obstacles, like the criminalisation of Indigenous judges (recently granted amnesty)¹⁸ and defenders of nature.

In the legal sphere, results have been achieved with

differing impacts. **Sarayaku** is without doubt an emblematic case, because it includes international condemnation of Ecuador by the Inter-American Court of Human Rights, for the violation of rights of an Indigenous community. The sentence has not been fully implemented, given that the pentolite has not been removed from the Sarayaku territory. Nor has the secondary legislation been updated with the international standards for prior consultation. Instead, the government even issued a substandard regulation without consultation for hydrocarbon operations. In spite of the above, the sentence has been useful in advancing other cases with lack of proper consultation in the local courts. The **A’I Kofán community of Sinangoe** obtained a favourable ruling for lack of prior consultation to grant mining concessions in an ancestral territory with no legal title.¹⁹ The **Waorani communities of Pastaza** won

¹⁸ <http://www.pueblosynacionalidades.gob.ec/la-asamblea-nacional-concedio-amnistia-a-las-20-autoridades-indigenas-de-la-comunidad-de-san-pedro-del-canar/>

¹⁹ <https://www.dpe.gob.ec/fallo-historico-a-favor-de-la-nacionalidad-ai-cofan-de-sinangoe-contra-la-mineria/>

a case for lack of appropriate prior consultation and consent for Indigenous peoples in recent contact in the establishment of an oil block.²⁰ This sentence enabled other Amazonian communities to argue the invalidity of the whole of the Eleventh Oil Bidding Round, a state oil expansion plan towards the central-southern Amazon, which was not consulted. In the **Piatúa River case, violations of the rights of nature by a hydroelectric project without consultation** were acknowledged.²¹ In Río Blanco, in the mountains of southern Ecuador, another judicial victory for lack of consultation has not restored the social fabric that was damaged by mining projects without consultation: an anti-mining leader was recently killed in an incident with a pro-mining co-proprietor.

Because of the above, we believe that, compared with other available mechanisms including resorting to types of protection already known in the SNAP (national system of protected areas), the best potential for recognising territories of life in Ecuador is in the recognition and guarantee of Indigenous Peoples' land rights. As explained in this section, in the framework of plurinationality, these rights provide a greater protective scheme, particularly regarding the possibility of self-government; however, it is potential, since, as also indicated, the developmentalist bias still takes precedence. The Afro-Ecuadorian and Montubio communities have the constitutional basis to claim an equivalent treatment to Indigenous rights, as applicable, but the other Mestizo and rural communities do not have an explicit protection framework like the Indigenous, Afro-Ecuadorian and Montubio communities. However, they do hold constitutional rights related to a healthy and ecologically balanced environment, to life, health, water, food, food sovereignty, prior environmental consultation and to claiming the rights of nature. They can argue these rights in their collective dimension and in the exercise of their autonomy, establish themselves as territories of life. In this case, recognition could be argued as the creative use of freedom of association (Art. 66.13) and collective organisation to "develop economic, political, environmental, social and cultural proposals and demands; and any other initiatives that contribute to good living." (Art. 97 in the chapter on participation in democracy in the title on involvement and organisation of power). We are not aware of antecedents of this use of the law, but undoubtedly it could be pursued.



“We must fight, men and women, to defend our territories. We have to continue even more strongly to conserve our heritage, our forests, and care for nature, because this is our legacy for our daughters and sons, for our grandchildren and our contribution to caring for life all over the world”.

Participant testimony in the meeting of the ICCA Consortium, Ecuador, 2020

Defending territories of life

The peoples and communities affected by state extractivism without consent have taken up a historic fight to defend and conserve their territory, as much inside the borders of Ecuador as in the areas bordering Colombia and Peru. The Shuar nationality (Ecuador) and the Wampis Nation (Peru) acknowledge each other, state “we are the same blood”, and join efforts to strengthen collaborative action.²² Based on shared life stories, including common threats, they defend their territory, a healthy environment free from contamination, and the integrity of nature.

This fight is based on each people's and nationality's own systems of governance, which are based on communities, assemblies, parliaments and governing boards. They are the spaces from which alliances are formed and relationships are built to progress with their life plans. They are the spaces in which decisions are made to protect and defend their territories against extractive activities driven by the state and carried out by private companies, where they are held accountable before the collective and where strategies and the way forward are rethought.

The strengthening of own forms of government and the defence of Indigenous peoples' and nationalities' territories coincide with the vision, objectives and

actions promoted by the ICCA Consortium through the promotion of adequate recognition processes for territories of life, ICCAs, hence why some of the country's Indigenous peoples and nationalities and local communities continue to join this initiative. The territories of Indigenous Peoples and local communities have driven self-strengthening, documentation and registration processes, with the support of the GEF/UNDP/SGP initiative and the member organisations of the ICCA Consortium in Ecuador.

The territories of life that are registered and in the process of registering in Ecuador possess significant biodiversity, culture and knowledge, and their own organisational structures enabled them to take measures to address COVID-19. Collective responses like the production of plants and traditional medicine, or collective food cultivation allowed them to respond to the crisis caused by the health emergency and containment measures.

Meanwhile, they had to deal with the onslaught of balsa wood exploitation in their forests, which experienced an

²⁰ <https://www.amazonfrontlines.org/chronicles/victoria-waorani/>

²¹ <https://www.derechosdelanaturaleza.org.ec/rio-piatua/>

²² <https://www.youtube.com/watch?v=CEOC6PgaX-I>



Nemonte Nenquimo, president of CONCONAWEP (Waorani organisation of Pastaza) and Goldman 2020 award winner, together with Gilberto Nenquimo, president of the Waorani Nationality during the community assembly to decide on the registration at the World Database of Territories of Life, Toñampare, Pastaza, Ecuador. Photo: AMWAE, 2020

unusual rush due to economic stimuli in countries like China and Germany regarding renewable energy. Balsa wood is required as a raw material for the production of wind turbine blades.²³ In the middle of the lockdown, the worst oil spill in recent years took place, affecting approximately 25 thousand Kichwa families in the north of the Ecuadorian Amazon, with no adequate response from the state to date.

Since the start of the pandemic, the state has not managed to act diligently or responsibly to provide a culturally differentiated treatment for the country's Indigenous peoples and nationalities, who had to make their own arrangements to address their needs. The only available information about the impact of COVID-19 on Indigenous peoples and nationalities arose from efforts driven by CONFENIAE²⁴ which record that, up until December 2020, 3257 people were affected by COVID-19.

Lessons learnt and challenges in the process of recognising territories of life in Ecuador

In Ecuador, several lessons can be drawn from the promotion of the recognition of territories of life, the processes of self-strengthening, mutual support, peer recognition and registration in the global ICCA Registry since 2017.²⁵ Territories of life contribute to:

1) the exercise of collective rights, within the framework of territorial self-determination, and they are a contribution to the construction of the plurinational state; 2) the strengthening of their own governments, based on the participation of women, men and young people, and on the application of mechanisms such as community consultation, permanent dialogue and the popularisation of actions taken; 3) the strengthening of their identity, which manifests itself in the recovery and revaluation of their identity as an Indigenous people or nationality, or as a local community; 4) the defence and conservation of their territories, with territory being understood in an integral way, as a system in equilibrium, in intimate relationship with nature; 5) the

Menkay Nenquihui, president of the Association of Waorani Women of Ecuador (AMWAE) during the community assembly to decide on registration at the World Database of Territories of Life, Toñampare, Pastaza, Ecuador. Photo: AMWAE, 2020

mitigation of impacts of the climate crisis, which means that territories of life are becoming a benchmark for proposals for the conservation of territories; 6) women's protagonism in the process of defending and sustaining territories of life; and 7) peer-to-peer recognition to share knowledge, know-how and experiences for the construction of knowledge and the promotion of collective strategies.

The following are some of the proposals identified for the process of territories of life in the future:

- Build a public policy proposal on the basis of the processes driven by Indigenous peoples and local communities, to be presented to the legislative and executive levels, in order to sustain, expand and support the exercise of their rights, the protection of their territories and the conservation of nature in the framework of a plurinational and intercultural state.
- Strengthen territorial defence strategies through the recognition of self-government, Indigenous justice and legal security over territories.
- Continue with the ICCA process and promote alliances to strengthen the territorial defence actions of Indigenous peoples and local communities. These alliances could include cross-border, bi-national, Amazonian and Latin American processes.
- Generate spaces of articulation with different actors that support the appropriate recognition and strengthening of ICCAs-territories of life: local governments, academia, NGOs, international cooperation.



- Support current and new processes carried out by Indigenous peoples and local communities through training programmes, exchange of knowledge and experiences.

Conclusion

Ecuador, a plurinational and intercultural state, recognises the collective territorial rights of Indigenous peoples and nationalities, the Afro-Ecuadorian people and the Montubio peoples. Territorial rights guarantee imprescriptibility, inalienability and indivisibility and their own systems of governance; they also consider their ancestral ownership and consolidate a physical and spiritual space necessary to maintain their identity, traditions and social organisation, to generate and exercise their authority, and to maintain, develop and apply their rights. Collective rights include participation, through free, prior and informed consultation, in state decisions on non-renewable resources existing in their territories.

In this context, state policy, through the national government, promotes a developmentalist model based on extractive industries: oil and mining, hydroelectric dams, logging and intensive agriculture that directly affect the peoples, their territoriality and their collective rights. These state actions have historically meant the reduction of their territories, the displacement of peoples and the destruction of their vital spaces.

Faced with this reality, the peoples and local communities maintain their historical and permanent

struggle for the full exercise of their rights, their self-determination, their territorial rights, their systems of governance and their ways of life. For this, they are pursuing alternatives for the construction of their own proposals of self-government and conservation, such as the Achuar System of Conservation and Ecological Reserves, Kawsak Sacha-Living Forest of the Kichwa people of Sarayaku (see [this report](#)), Kayambi People, among others. Further, they are taking legal action at the national level (a'i kofán of Sinangoe, Waorani communities of Pastaza, Río Piatua and Río Blanco) and at the international level (e.g., the ruling of the Inter-American Court of Human Rights in favour of the Kichwa people of Sarayaku), advocacy to amend Ecuadorian legislation, as well as conservation and integral protection systems and programmes (SNAP, Bosque Protectores, Socio Bosque, among others).

The objectives and actions promoted by the ICCA Consortium are aligned with the processes of self-government and territorial defence of the peoples and nationalities. The recognition as territories of life, or ICCAs, contributes significantly to their struggle. Through their registration as territories of life, the communes of Playa de Oro and Agua Blanca in the coastal region, the Shuar Arutam People, the Waorani Nationality and the Waorani Women's Association, the Kichwa People of Sarayaku and the Achuar Nationality of Ecuador, as well as other nationalities and peoples, gained access to an international mechanism that contributes to the defence of their territories, making them part of a global network to sustain and defend biodiversity and life, as well as their defenders.

²³ <https://www.opendemocracy.net/es/fiebre-madera-balsa-pandemia-territorio-achuar/> y <https://www.infobae.com/america/agencias/2020/07/18/la-balsa-de-la-esperanza-y-de-la-deforestacion-en-ecuador/>

²⁴ <https://confeniae.net/covid19>

²⁵ ALDEA 2020. *Memorias: Reunión del Consorcio TICCAs – Ecuador*. Quito: Fundación ALDEA

"Mot mot" bird or "pedrote", Agua Blanca Community, Manabí, Ecuador. Photo: Edu León, Fundación ALDEA, 2019



Photo: Cindy Julianty



Indonesia

A national analysis on the status of territories of life

Author(s):¹ Cristina Eghenter, Cindy Julianty, Kasmita Widodo and Dewi Puspitasari Sutejo

Indonesia is one of the world's most biologically and culturally megadiverse countries. Many areas of high biodiversity are conserved and managed in sustainable ways by Indigenous peoples who have a close bonding with their territories and have developed effective governance systems. These areas are a source of cultural and spiritual identity and foundation of their livelihoods. Over 11 million hectares of Indigenous territories have already been mapped, with over 460,000 hectares of territories and areas conserved by Indigenous peoples and local communities (ICCAs) spread across 13 provinces and the five big islands of the archipelago. The recognition of ICCAs and more inclusive models of conservation and governance of natural resources are critical for the future of biodiversity and the acceleration of agrarian reform in Indonesia.

The Working Group ICCAs Indonesia (WGII) has been supporting and advocating for ICCAs for the last ten

years. WGII was established in 2011 to promote the documentation and recognition of ICCAs. It gathers ten of the most important actors of civil society in Indonesia who are active in conservation issues, mapping, community land use and tenure rights and Indigenous peoples' rights. They are: AMAN, BRWA, JKPP, HuMa, KIARA, NTFP-EP, Pusaka, Sawit Watch, WALHI, and WWF Indonesia.² Currently the secretariat of WGII is hosted by BRWA. The secretariat coordinates activities and organises annual meetings where the workplan is agreed.

Formally recognised ICCAs provide a way to respond to both the need to protect critical ecosystems and biodiversity and the need to respect and secure the livelihood, cultural, environmental and social rights of Indigenous communities. WGII has managed to become the single most important advocacy platform for ICCAs, which are now firmly on the policy reform map of Indonesia.



ICCA of Kasepuhan Karang community. Photo: Engkos Kosasih

The situation of ICCAs—territories of life in Indonesia

Exemplary ICCAs protected and sustainably used by Indigenous communities in Indonesia have been described in two books by WGII in 2014 and 2016. A third book with the fifty voices of women and men leaders and champions of Indigenous conservation is being finalised (2021). The stories include people such as the Ammatoa Kajang of Bulukumba, South Sulawesi, who have been protecting *Borong karamaka* or sacred forests for generations³; the people in Haruku, Maluku, who, like many communities in the coastal areas of eastern Indonesia, traditionally practice Sasi or the temporary closure of fish catch or mollusc collection to allow for regeneration; and the Dayak Kenyah people in North Kalimantan and their communal forest reserves or *Tana Ulen* managed by the customary councils (see **chapter in this report**).

These stories illustrate examples of holistic governance of ecosystems and biodiversity in Indonesia. They conserve a vast range of habitats, biodiversity and ecosystem services through their own zonation systems and regulations. From a rights perspective, ICCAs are the realisation of economic, environmental, social and cultural rights of Indigenous peoples. Many ICCAs are living evidence of ancestral connections as they contain megalithic monuments.

However, ICCAs in Indonesia are still facing many threats. The most significant is tenure insecurity. Lack of legal status makes ICCAs vulnerable to land grabbing, big infrastructure projects and agribusiness concessions. ICCAs are also not currently recognised as a

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² AMAN (Alliance of Indigenous Peoples of the Archipelago), BRWA (Indigenous Territories Voluntary Registration Agency), JKPP (Participatory Mapping Network in Indonesia), HuMa (Association for Community and Ecology-based Law Reform), KIARA (Peoples Coalition for Fisheries Justice), NTFP-EP (Non-Timber Forest Products-Exchange Programme - Indonesia), Pusaka (an Indigenous peoples' advocacy organization), Sawit Watch (Oil Palm Watch Indonesia), WALHI (Indonesian Environmental Forum / Friends of the Earth Indonesia), WWF Indonesia.

³ The flora and fauna of the customary forest are protected. Nobody is allowed to take anything or hunt in the forest. There are traditional sanctions for those who try to take any plants or hunt any animal in the forest. The Kajang people also believe that these acts will bring hereditary bad luck to the family and they could even be evicted from the village. For Kajang people, a forest is not an ecosystem nor a tourism service nor a project-based carbon provider. The Ammatoa say to protect the forest is to maintain universal balance.



separate category of protected areas by the Indonesian government.

Ecosystem Representation of Registered ICCAs (n=86)	Percentage (%)
Freshwater lake	9.52
Forest	75.00
Karst	1.19
Coastal areas	9.52
River	4.76
Total (400K + ha)	100%

In terms of ecosystem representation, 75 per cent of registered ICCAs are forest ICCAs. By overlaying the map of ICCAs with the map of forest functions of the Ministry of Environment and Forestry, it shows that most ICCAs (60%) are overlapped by protected areas:

ICCA Status vs. Forest Function	Percentage (%)
Conservation	60.08
Production forest	19.76
Other use	20.16
Total	100%

The data shows that there is still a significant risk of conflict between Indigenous communities and the government, especially in protected areas.

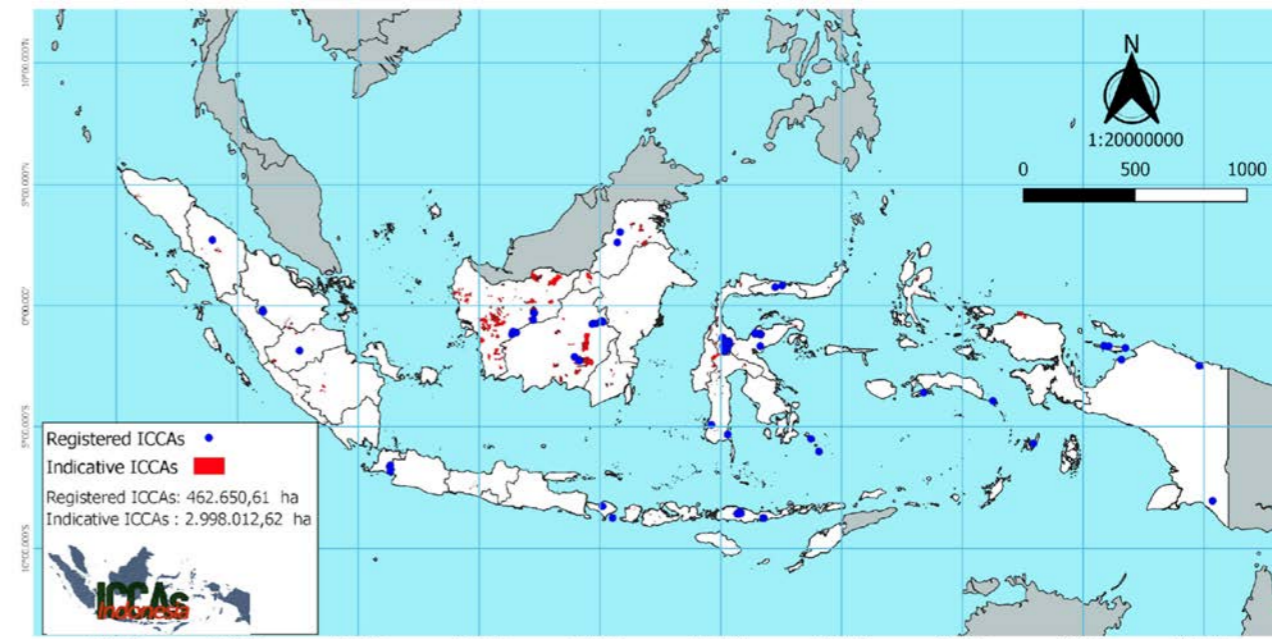


Documentation of ICCAs—territories of life

In the beginning, WGII moved quickly to develop a tool for environmental, social, cultural and historical self-documentation of ICCAs by communities.⁴ In 2016, WGII developed specific guidelines and an online database to register ICCAs in a national registry. The submission of the filled questionnaire by the communities requires the signature of six members of the community to ensure that the community has consented to the process and that the information is accurate. The information submitted covers ecological, social, cultural and historical information about the ICCAs and the community. Self-documentation of the ICCAs happens through the initiative of young members who participated in trainings and other events, or it is facilitated by local community-based organisations. The documentation process takes between one day to one week. The participatory mapping process results in a map with the outer boundary coordinates of the ICCAs. This makes it possible to locate the ICCAs on other government maps and spatial plans, and identify the degree of overlap with other permits.⁵

So far 102 ICCAs covering a total area of 462,650 hectares have been registered and uploaded into the portal tanahkita.id, but only 25 ICCAs are legally recognised with a decree from the District Head,

ICCA of Kampung Sega. Photo: Cindy Julianty



Map of ICCAs registered in the tanahkita.id database (462,650 ha) plus 'indicative ICCAs' (2.9 million ha), as of 2020; indicative ICCAs are yet to be verified and registered definitively. This is work in progress and numbers may further increase. Source: tanahkita.id

a regional regulation, or formalised as customary forest with a certificate issued by the Minister. Following preliminary desk analysis, there is at least an additional 2.9 million hectares of potential ICCAs in Indonesia.⁶ Some islands (i.e., Papua), however, have not yet been analysed.

National policy and legal context of ICCA in Indonesia

To date, no national law has been approved by the government to directly recognise ICCAs and the contribution of Indigenous peoples to conservation. A Constitutional Court landmark ruling in 2013 in Indonesia declared that customary forests or forests claimed, cared for, governed and/or managed by Indigenous peoples are not '*hutan negara*' or state forests but another rightful and separate category of forest land. This ruling opened new opportunities to recognise Indigenous forest management and conservation. To make the ruling operational, provinces and districts around Indonesia need to legislate on the recognition and protection of Indigenous peoples' rights, which is currently the basis for actualising customary forest rights.

Another existing regulation at the sub-national level

that could support the recognition of Indigenous conservation practices is the regulation for the recognition of local wisdom in the management of natural resources and the environment (Ministry of Environment and Forestry Regulation No. 34/2017). Its implementation still requires several guidelines to be operational.

WGII has tried to identify various opportunities and legal loopholes to overcome the current legal vacuum and advocate for the recognition of ICCAs. Indigenous tenure rights can be secured through the recognition of the larger Indigenous territories at sub-national level. Many forest ICCAs can also be recognised as customary forests. Since agrarian reform was

⁴ The **tool for documentation** is a two-part questionnaire modelled after the one developed by Ashish Kothari and Neema Pathak Broome of Kalpavriksh for the documentation of ICCAs in India.

⁵ WGII is also developing a peer-review system to accelerate the verification of ICCAs after they have been registered. The aim is to train at least one youth per community in registration and verification methods.

⁶ Maps are obtained through land use analysis in customary areas and villages on participatory maps sourced from BRWA, AMAN, and JKPP.





Traditional Medicines

launched, only 56,900 hectares of customary forests have been approved.

Additional opportunities for recognition are possible. For example, after the adoption of Decision 14/8 by the 14th meeting of the Conference of the Parties to the UN Convention on Biological Diversity (CBD), WGII has focused on “other effective area-based conservation measures” (OECMs, as defined in CBD Decision 14/8 in 2018) as an opportunity for recognition of ICCAs.

Indigenous conserved areas could be identified as OECMs based on the community’s decision and free, prior and informed consent. Communities could also directly submit information about their ICCAs to the World Database on OECMs. WGII has held several dialogues on this with the Ministry of Environment and Forestry, but there is no clear resolution yet. Another critical opportunity will be the passing of the long-standing bill on Indigenous peoples, which is slotted for discussion in the parliament for 2021.



Indigenous territory Kayan Pura in Apo Kayan-Malinau



Traditional farming system of Kasepuhan Community. Photo: Ajat Sudrajat

The current slow progress on recognition of Indigenous territories and ICCAs, and the subsequent tenure insecurity, have been exacerbated by the ratification of the Job Creation Law No.11 of 2020. The law, justified as a priority response to the economic recession triggered by the pandemic, weakens environmental assessment and public consultation for approval of new investment in ways that make it easier for land-grabbing by corporations. Customary forest and Indigenous territories are put at risk to become even more invisible and marginalised in decisions about land use.

Challenges and opportunities

The varying political will and the slow pace of recognition of customary forests by the Ministry is one of the main challenges. However, most recently the government revived its commitment on the recognition of customary forests and has a plan for accelerating verification of communities’ submissions. So far, BRWA has submitted maps of 866 Indigenous territories, covering 11.1 million hectares, to the government.

While ICCAs are still not recognised and the COVID-19 pandemic has delayed several community advocacy agendas at regional and national levels, nonetheless, the advocacy work continues and the CBD process can be an opportunity.

Recommendations

- ICCAs are part of broader Indigenous governance of natural resources. This element is key for the future of ICCAs. It shows that local and Indigenous communities are central to sustaining and safeguarding the cultural and natural values of their territories. There is an urgent need to support communities to strengthen management and sustainable development plans.
- Ultimately, the strength of ICCAs and traditional conservation initiatives depend as much on the existence of international and national instruments as on the strength of the Indigenous communities themselves. Their institutions need to be sustained and strengthened and empowered through information, capacity building and skill sharing. The network of ICCA custodians will be essential for this effort to empower Indigenous peoples as champions and partners in conservation and sustainable development in Indonesia.
- A peer review system for the ICCA national registry will strengthen the collective ownership of the data by the ICCA custodians. This is also an appropriate mechanism to support ICCAs’ registration at the international level.





Photo: CENESTA



Iran

A national analysis on the status of territories of life

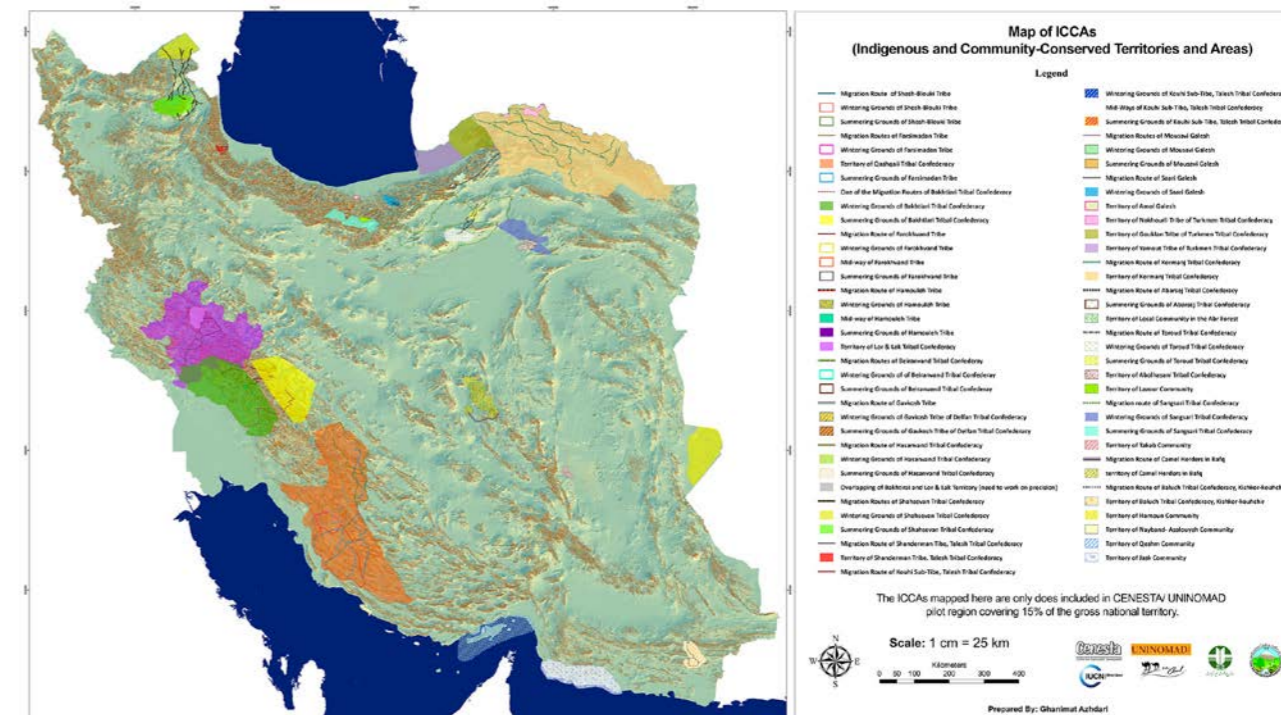
Author(s):¹ Ghanimat Azhdari, Ali Razmkhah, Nina Aminzadeh Goharrizi, Maede Salimi, Ahmad Beiranvand, Nahid Naghizadeh, and Soheil Hosseinzadeh

Iran is a vast country located in the arid belt of southwest Asia; 85 per cent of its land area comprises arid and semi-arid regions harbouring rangelands, high to low-density forests and deserts. Thousands of territories of life in Iran are formed by various ethnic groups – including Arab, Baluch, Gilaki, Kurd, Lur, Persian, Turk and Turkman – with significant diversity in culture, language, traditions and customary systems of nature conservation. Historically, both nomadic peoples and non-nomadic communities have had an intertwined relationship with nature through their complex social-ecological governance systems. This relationship with nature is based on social organisation, identity, collective production and adaptation of the governance and management systems of communities.

The territories of life of Indigenous nomadic peoples of Iran cover almost 59 per cent of the country, including 34

million hectares of rangelands and 660,000 hectares of agricultural land (irrigated and rainfed). Nomadic peoples established and evolved an adaptive dynamic system of seasonal migrations approximately 12,000 years ago in Iran. According to the latest statistics, Iranian nomads form 104 tribes and 554 independent tribes,² consisting of 246,000 families with a population of 1,108,000, or 1.32 per cent of the country's population. In addition, nomads hold 28 per cent of light livestock and 4 per cent of heavy livestock of the country, and produce 20 per cent of red meat and livestock products, supplying 9 million livestock to the market annually. With the production of 35 per cent of the country's handicrafts, nomads are among the most productive parts of society.³

Iranian non-nomadic communities have also led to the formation of diverse territories of life alongside other agricultural heritage systems. This diversity is



Map of ICCAs in Iran (including only a pilot region of about 15% of the national territory). Credits: CENESTA/UNINOMAD

evidenced in historical background, cultural, climatic and environmental features.

In these territories of life, a wide variety of governance systems exist for managing and conserving nature and biodiversity. These systems provide exceptional and valuable experiences that help address climate change and environmental challenges and they also feature technologies that provide a variety of services on a sustainable basis.

Biocultural governance systems of territories of life in Iran

The unique biocultural governance systems of the Indigenous peoples and local communities of Iran include a set of norms, ethics, values and cultures that they have learned and created throughout history, influenced by climatic and environmental diversity. The systems of governance have contributed to a range of diverse ecosystems such as wetlands, forests, pastures, grasslands, deserts, marine and coastal environments. Despite all differences and local variations, the common issue among Indigenous peoples and local communities of Iran is their knowledge and biologically- and culturally-based governance systems for the conservation of their territories of life.

Indigenous technologies and sustainable methods of these systems adapted to harsh environmental and climatic conditions on a local scale, directly and indirectly, affect the conservation and sustainable use of water, soil and biodiversity. Underground water management systems (*Qanats*), seasonal migration, multi-layered cultivation system and *Qorukh*⁴ (protection, prohibition) are examples of resource management practices in territories of life.

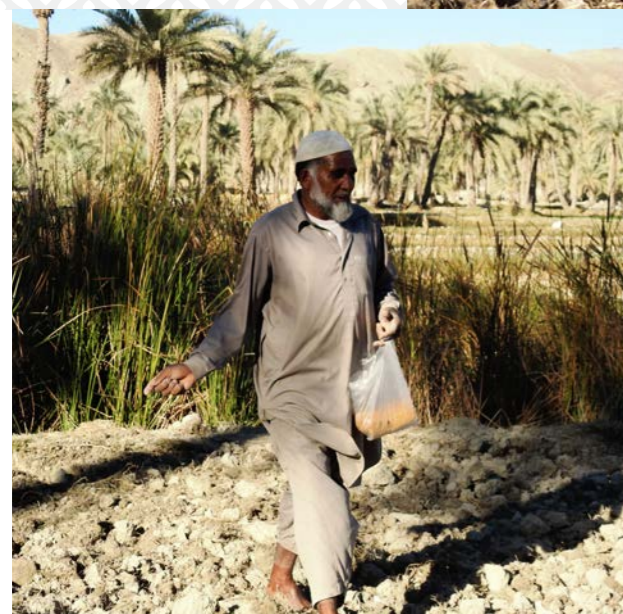
¹ This report was prepared on behalf of the **Centre for Sustainable Development and Environment** (CENESTA), in memory of the beloved **Ghanimat Azhdari**, who sacrificed a large part of her life to protect and defend the territories of life in Iran and the world.

² Including, among others: Qashqai tribal confederacy, Bakhtiari tribal confederacy, Lor and Lak tribes, Shahsevan tribal confederacy, Baluch peoples and central desert periphery tribes such as Sangsari, Abolhassani, Toroud, Abarsej, etc.

³ Summary of the results of the basic statistics of the nomadic population of the country, Statistics Centre of Iran, 2020.

⁴ *Qorukh* (in Turkish, *qorq* in Persian) is a strictly enforced land use limitation system due to needs such as seasonal and periodic restoration of rangelands, forests, wetlands, wildlife and fishing grounds; special needs of certain livestock species (e.g., lactating or young livestock, endangered wildlife, draft animals) or adjustments in range management due to drought periods, migration and transhumance routes.

Traditional farming in Qasr-e-Qand, Balouch peoples, Chabahar. Photo: CENESTA



allow for release of dolphins and turtles are practised by villagers of northern Qeshm Island,⁵ although trawl fishing by international and national industrial fishing vessels has been promoted by the Fisheries Organization of Iran (*Sheelat*). However, fisheries have been in decline since territories of life have been undermined by various policies. For example, traditional fishing methods are prohibited under the pretext that they endanger other aquatic species, certificates are not readily issued for traditional boats and dinghies of local communities, and the aquaculture industry is a competing development.

Desert ecosystems

Most of Iran is covered by deserts, thus historically, people have learned how to cope with water scarcity. One of the ingenious ways of collecting and managing water resources was formed around Qanat, a complex tunnel system that extracts groundwater from mountain basins. Qanats are still counted as one of the main ways of procuring water for irrigation and agricultural development in the internal plateau of Iran. In most cases, however, Qanats are more than just a way of using groundwater. They represent a unique and integrative system illustrating the use of Indigenous knowledge and wisdom in the sustainable management of land, water and agricultural biodiversity.

Several issues are affecting these water management systems in the desert. Construction, maintenance and management of Qanats require strong collaborative

Examples of territories of life in Iran

Marine ecosystems

Iran borders three major marine bodies: the Caspian Sea in the north, and the Persian Gulf and the Oman Sea in the south. Traditional fishing methods have been practised on both coasts for thousands of years and fisheries were managed through customary rights and regulations. For example, the *Damgostar* or *Parreh*⁵ fishing method is practised by local fishermen in the north, allowing them to benefit from rich fish resources of the Caspian Sea, namely, sturgeon. The nets used ensure only adult fish are caught and juvenile fish can continue to grow. Similarly, in the south, small traditional fisheries (e.g., *Moshta*) that

Bactrian Camel (two-humped) in Shahsevan territories (Northwest of Iran). Photo: Fatma Zolfaghari



Camel caravan, Lut desert, territories of Balouch nomadic tribes. Photo: Ramin Rohani

work. The lowering of water tables, partially caused by an increase in the number of wells, has led to the decline of many Qanats. There are now few skilled workers (*Moghanees*) and the former wealth of knowledge on water management in dry regions of Iran is fast disappearing.

Rangeland ecosystems

Some of the most important ICCAs in Iran belong to the tribal communities. There are many different tribes, including Qashqai, Shahsavani, Bakhtiari and Balouch,⁷ spread all over Iran. Tribal communities are highly organised in terms of social structure. Customary territories of tribal communities consist of summer and winter territories as well as migratory corridors. In the past, decisions about the timing of migration were taken by the elders who were appointed based on merit



Sustainable use of mangrove forest in Qeshm Island. Photo: Ramin Rohani



Seasonal migration of Qashqai, Fars. Photo: CENESTA

⁵ Fishing method *Parreh* or *damgostar* is one of the oldest methods of catching bony fish, including whitefish, on the southern shore of the Caspian Sea (Gilan and Mazandaran provinces). In this method, usually a 1000-meter long and 7- to 10-meter high net is extended in a U-shape by a large wooden boat in the sea, and the end of the net returns to the shore at a distance of about one hundred meters from the starting point. The diameter of the fin nets is large enough (between 30 and 40 mm) to catch only adult fish and is therefore very effective in conserving aquatic stocks. After a while, the net is pulled into the shore from the end by the force of a tractor winch and is collected. As a result, the fish trapped inside the net are gradually directed to the shore and collected by fishermen. In previous times, fishing was carried out by fishermen with the help of animals, and fishermen created a special cohesion and passion by reciting local poems.

⁶ *Moshta* is a traditional method of fishing in the Hormozgan province in southern Iran, which is done using the tide. In this method, sticks are placed on the shore and a fence is created using the fishing net; when the water rises, the fish enter it and when the water goes down, they are caught by the owners of *Moshta*. In this method, a lot of attention is paid to releasing and not trapping other aquatic animals such as dolphins and turtles.

⁷ See territory of life Chahdegah, Iran, in this report.



Rice cultivation along the forest and river provide soil protection and efficient water utilization in Mazandran Province. Photo: Soheil Hoaseinzadeh



Kushk-e Zar wetland, Qashqai territories of life, Fars province. Photo: CENESTA



Hawraman. Photo: CENESTA

and trust. The degradation of rangelands is caused by the loss of customary rights, migration routes being cut by so-called development projects, and the erosion of social structures since migration starts earlier to get better access to resources.

Forest ecosystems

There are at least three forest types in Iran: Hyrcanian (Caspian) forests in the north, oak forests of the Zagros mountains, and mangrove forests along the southern coasts. Local communities living in the forests have always had the knowledge to manage them and their resources. Talesh tribes have also been practising their customary rights in managing the Caspian forests. Despite these efforts, forest social-ecological systems are in rapid decline due to population increase, pressure on forest dwellers to abandon their villages, lack of grazing permits and economic poverty.

Wetland ecosystems

Wetlands have always attracted people to this source of water for agriculture, fisheries, tourism and other services. Many of Iran's territories of life are formed in and around these wetlands and their resources. Communities have developed ingenious ways of sustaining wetland resources because of their importance in supporting livelihoods.

One example of ingenuity comes from the Anzali wetland (measuring approximately 193 km²), a Ramsar

site on the southern coast of the Caspian Sea. The system of customary management practiced among the communities surrounding the wetland is known as *Abbandan-dari*. An *abbandan* is a type of shallow, man-made reservoir found in the southern Caspian lowlands and used both for aquaculture and to supply water for rice farming. A specific form of *abbandan* occurs within the Anzali wetland, where they range in size from 10 to 100 hectares. The customary *abbandan-dari* system is practised by a group of local people referred to as *abbandan-dar*. Since 1971, however, *abbandan-dari* practices have been undertaken in a new way under the supervision of the Department of Environment. Areas are rented to local communities for a period of six months (6 September to 6 March, to cover the fishing and hunting seasons), and conservation conditions are built into the rent agreements.

Mountain ecosystems

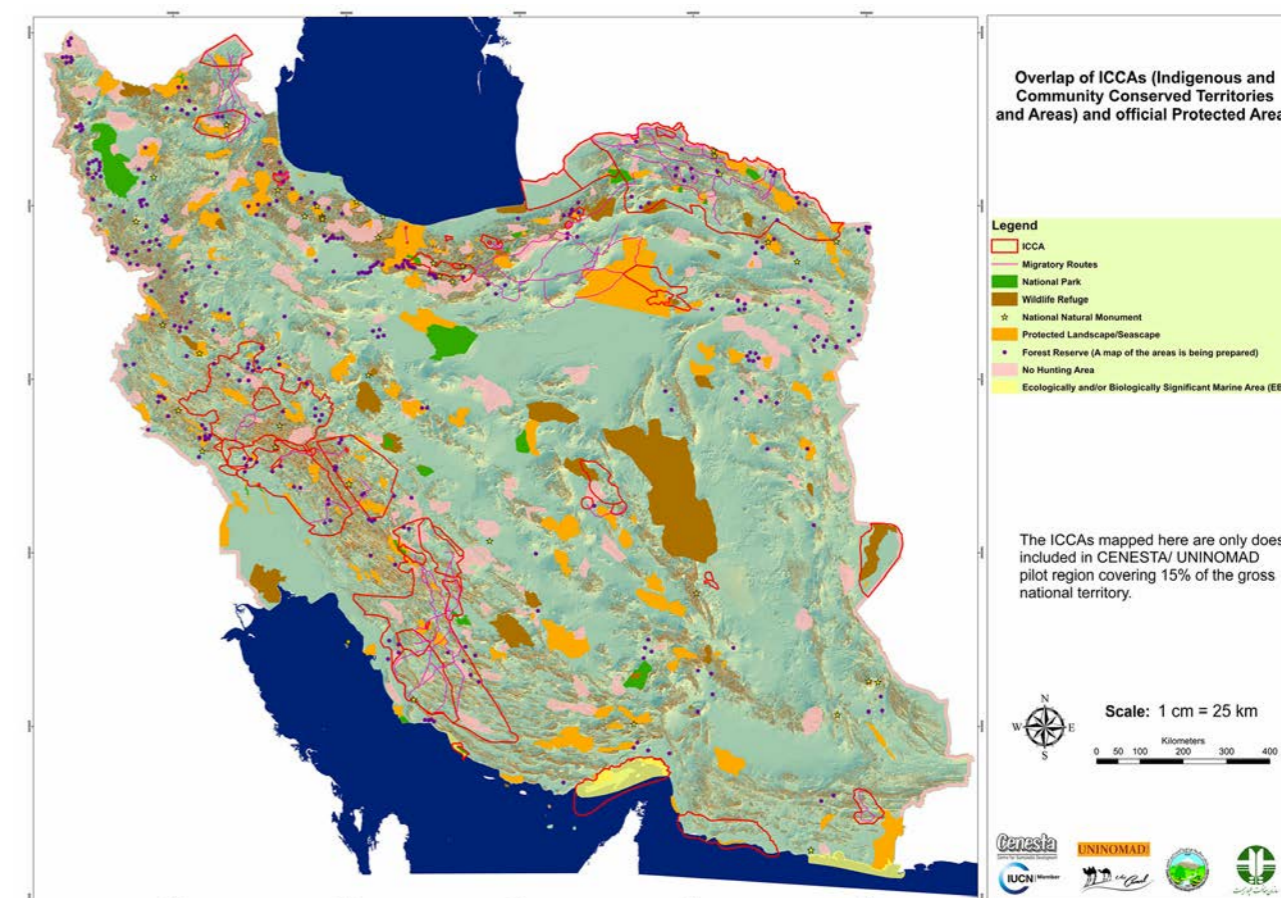
Iran's two mountain ranges, Zagros and Alborz, have cold and dry climates that created unique territories of extraordinary beauty, especially in the west and northwest of Iran. Geographical isolation and limited natural resources, especially the lack of arable lands, led to the development of clever management of soil and water resources based on a specific form of social organisation. Using local materials, Indigenous peoples of the region have learned to make best use of the scarce available resources, by building terraces for gardens and enriching them with good soil for agriculture from other parts of the territory such as riverbanks.

A remarkable example is Hawraman, a mountainous region extended through western Iran (Kurdistan and Kermanshah provinces) and eastern Iraq. The climate and environmental conditions of Hawraman have caused the people of this region to live in different parts of their territory in different seasons of the year. Each village has one or more summering settlements called "Ha'var", most of which are located in flat terraces or mountain ranges around the springs.

National policy and legal context of territories of life in Iran

Despite the long history of nature conservation by Indigenous peoples and local communities, the establishment of the centralised modern nation-state and the influence of Western concepts in protection and exploitation of nature have jeopardised local capacities in caring for nature. Since 1921, almost all Iranian governments have attempted to replace the customary institutions of natural resource management and livelihood systems of Indigenous peoples and local communities. This was further entrenched beginning in 1963 with the nationalisation of natural resources, and later in the 1970s with land reform policies for agricultural modernisation. Agricultural policies after the 1979 revolution again led to widespread destruction of natural resources and had severe negative effects on the culture, traditions, and biocultural systems of Indigenous peoples and local communities. The disintegration of territories of life worsened further due to protected area laws and regulations that expelled Indigenous nomadic peoples from these areas. Such top-down policies and laws

Overlap of ICCAs and official protected areas. Map: CENESTA and UNINOMAD





Elders of Bakhtiari during participatory mapping workshop. Photo: Ramin Rohani



Field visits and holding participatory meetings with members, elders and trustees of the community. Photo: CENESTA



Ecological assessment. Photo: CENESTA

have severely damaged both the social and ecological aspects of the territories of Indigenous peoples and local communities and weakened customary governance systems.

In addition to policy changes, large-scale infrastructure and industrial developments have been increasing noticeably in Iran and impose new threats for territories and culture of Indigenous peoples and local communities. Some examples include: (1) the areas of Makoran, in the core of Balouch territories, which are occupied by a large industrial development called Chabahar Free Commercial Zone; (2) the recent development of the petrochemical industry along the coast; (3) the dams in the Bakhtiari's territories of life, which submerged many settlements and led to forced migration; and (4) a land change programme (pasture to farm) for Shahsavan's territories of life related to the Khoda-Afarindam.

In the face of threats and challenges over the past decades, the resilience of Indigenous peoples and local communities and their deep sense of belonging to their territories and their efforts to preserve spiritual, economic, socio-cultural and environmental values of their territories of life is remarkable. Fortunately, there is an increased awareness about the territories of life of Indigenous peoples and local communities and their values for nature conservation due to valuable actions by civil society organisations and grassroots movements as well as local discourses regarding newer approaches to development.

One example of a strong, resilient local organisation is Iran's **Centre for Sustainable Development and Environment** (Cenesta), which has been working on re-empowering communities and restoring tenure rights on their territories of life for over thirty years. Cenesta's priority has been to help communities re-establish their customary governance institutions and rebuild their resilience in the face of social, political and environmental changes. Engaging in a participatory process with Indigenous peoples and local communities through traditional councils of community elders and their associated community investment funds (*sanduqs*) is the primary means of implementation of Cenesta's work.

One of the most important programs of Cenesta aims for the appropriate recognition of territories of life through their documentation and registration. This effort involves field visits and holding participatory meetings with members, elders and trustees of the



Determining the scope of territories of life through participatory mapping. Photo: CENESTA

community. It also requires determining the scope of territories of life through participatory mapping,⁸ as well as preparing and compiling assessment reports in the fields of ecology, governance and livelihoods. These reports and participatory maps are used in litigation processes and negotiations with governmental authorities. Since 2003, Cenesta has been facilitating the organisation and registration of various councils of tribal elders and their associated community investment funds (*sanduqs*). These efforts culminated in 2010 in the creation of the Union of Indigenous Nomadic Tribes of Iran (UniNomad), a national federation whose members are registered tribal confederacies and independent tribes of Iran.

As a result of Cenesta's many efforts, improvements have been made in recent years in policies of natural resource management and environmental conservation. A participatory approach has been adopted in some of the relevant policies, which could have positive impacts on the status of territories of life in Iran. The most



⁸ In participatory mapping, people gather around and participate in making a map by sharing their knowledge and spatial vision. This is an opportunity for nomadic pastoralists, especially since many of them cannot read or write and had never used paper maps. Through participatory mapping (and PGIS in further steps) communities will be able to transfer their knowledge of the landscape and ecosystems to paper maps. After creating paper maps with a facilitator and the people in the communities, she/he works to move on to developing maps using computer software.

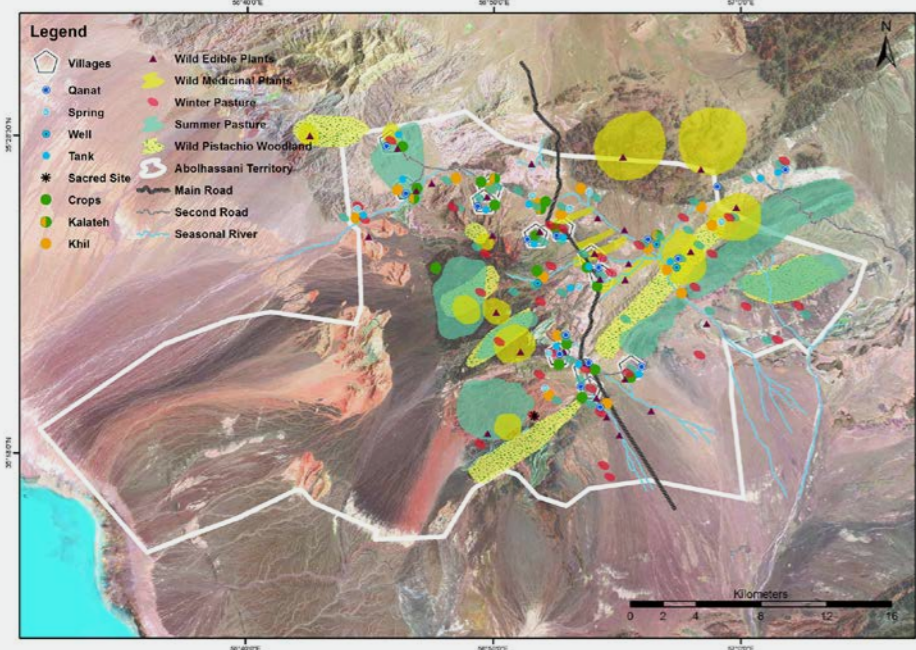
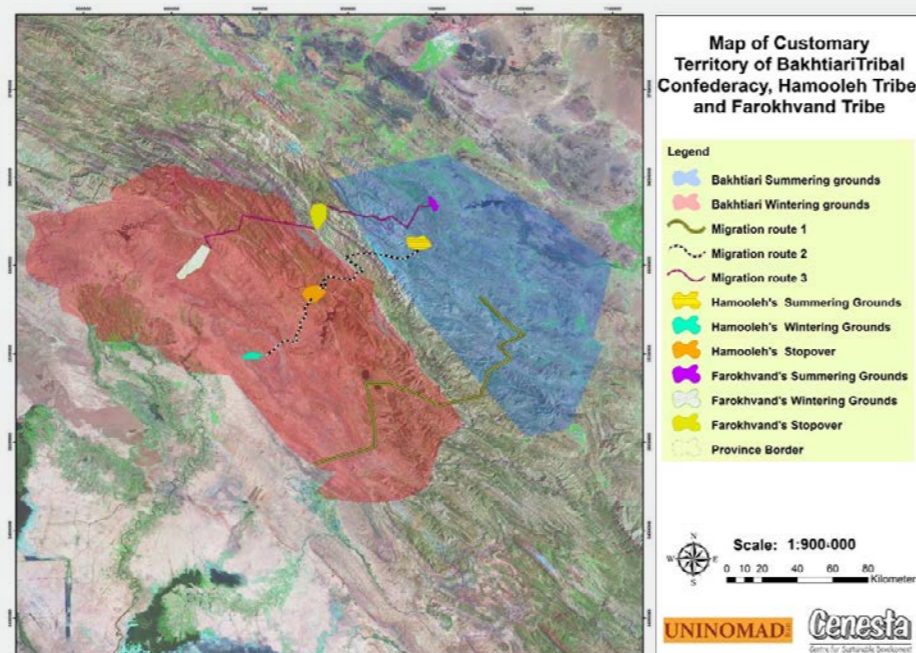
transformative action has been represented in Article 38 of the “Law on the Sixth Five-Year Economic, Cultural, and Social Development Plan for 1396-1400 (2016 – 2021) (the Sixth Development Plan)”, specifically in paragraphs L, S, and T.

According to this article: “The government is obliged to take the following measures to protect the environment [emphasis added]:

- L – Improving the protection of forests, rangelands and national and government lands and four environmental protected areas⁹ with the

- participation of local communities;
- S – Preparing, compiling and implementing an action plan to protect and manage the four environmental areas and endangered species of the country’s wildlife through using voluntary and participatory capacities of natural and legal persons with priority given to local communities and NGOs by the Department of Environment;
- T – Revision of the scope of the four environmental protected areas, as well as the new definition and division of the areas according to the new divisions of the International Union for Conservation of Nature (IUCN) by the Department of Environment.”

Customary territory of the Bakhtiari tribal confederacy, Hamooleh Tribe and Farokhvand Tribe. Map: CENESTA and UNINOMAD



Territories of life of the Abolhasani tribal confederacy. Map: CENESTA and UNINOMAD



An Uba (smallest social unit in Shabsavan tribal structure) in their summering ground. Photo: CENESTA

Recommendations and hopes for the future

There are several recommendations that come from Iran’s experience with territories of life:

- Indigenous peoples and local communities require appropriate recognition of their customary rights to their territories, their Indigenous and local knowledge, skills, institutions and rules for their governance and management;
- The governing institutions of Indigenous peoples and local communities need active participation in policy- and decision-making processes related to their territories of life and natural resources as key rights-holders;
- Participatory planning and implementation of programmes should improve, strengthen and revitalise the relational structures between Indigenous peoples and local communities and nature within the territories of life and enhance the sense of community ownership of territories;
- The intellectual property rights of Indigenous peoples and local communities and their collective governance and knowledge systems should be respected and recognised;
- Efforts should be made to review and reverse inappropriate policies and programmes for natural resource management such as nationalisation of natural resources as well as top-down policies and programmes;

- The legally established rights on the protection of the migration routes of nomadic tribes as part of their territories of life should be respected, protected and fulfilled, especially in light of the absolute legal prohibition for any transfer and change of their use; and
- Participatory conservation of national plant and animal genetic resources should be promoted and based on the combination of Indigenous knowledge and modern science with the active participation of Indigenous peoples and local communities in their territories of life (*in situ* conservation).

⁹ Iran’s protected area system uses only four categories:

- 1) National park: relatively vast natural areas having specific characteristics and national significance from the geological, ecological and bio-geographical points of view that are selected with the purpose of protection and improvement of the population of animal species and vegetation sites. National parks are suitable places for educational and research activities as well as for ecotourism.
- 2) National natural monument: relatively small, unique, exceptional, unconventional and irreplaceable phenomena having significance from a protection, scientific, historic or natural point of view.
- 3) Wildlife refuge: representative wildlife habitats selected with the purpose of preserving the population of animal species and improving their level of quality. These areas are appropriate places for educational and research activities. Compatible use and controlled tourism are allowed in refuges.
- 4) Conservation area: relatively vast areas of high protection significance are selected with the purpose of preserving and restoring plant sites and animal habitats. Controlled tourism and economic uses under the management plan are allowed.





Photo: MIHARI



Madagascar

A national analysis on the status of territories of life

Author(s):¹ Jazzy Rasolojaona, Stefana A. Raharijaona, Jenny Oates, Rupert Quinlan, Vatosoa Rakotondrazafy, Toky Mananoro and Vololoniaina Rasoarimanana

The island of Madagascar is well known for its natural and cultural diversity. Madagascar shelters about 5 per cent of global biodiversity² and 80 per cent of the country's plant and animal species are found nowhere else. There are 18 ethnic groups, each with their own dialect. The traditional form of the Malagasy community is called *Fokonolona*; each ethnic group identifies with this despite their diversity. Many of the country's landscapes, territories and areas have been conserved by these communities for generations because they are vital to their ways of life. Often, they are the very symbol of a community's history and identity, the result of collective awareness that evolved over long periods of time and a shared effort to ensure the integrity of nature. Communities and their territories of life sustain each other. This is the space where communities continuously develop their knowledge about plants, the way of life of animals and the ecosystem in general.

A process underway since 2015³ has identified 14 so-called emblematic Indigenous and Community Conserved Areas⁴ (ICCAs) in Madagascar. The communities self-identified in relation to the three general characteristics of ICCAs, namely: (a) strong links between the community and their territory; (b) a legitimate and effective legal or de facto community governance structure; and (c) contributions to conservation and sustainable use of nature with positive results for livelihoods and well-being. ICCAs like **Etrobeke** (in the southwest part of Madagascar) have had these characteristics for generations. Others have not always exhibited these characteristics but have acquired them over time or are in the process of acquiring them through the efforts of communities. And for some of them, various external factors (e.g., impacts of the evolution of the legal framework at the national level, industrial projects, etc.) and internal



The ICCA of Tsiafajavona. Photos: TAFO MIHAAVO

factors (e.g., internal conflicts, disinterestedness of traditional values by youth, etc.) have disrupted some of these characteristics, a situation the communities are committed to redress.

These 14 emblematic ICCAs also differ according to their respective histories and the ways of life of the custodian communities. They all encompass rich and diverse natural, spiritual and/or socio-cultural components. Some are in coastal areas, others are on rangelands, in forests or within protected areas, and some take or aspire to take the form of a Community Protected Area. Apart from spiritual practices, the intimate link between communities and their territories comes also from their subsistence activities. They are mostly farmers and small-scale fishers but there are also pastoralists, suppliers of raw materials from nature and artisans. The spatial extent of these 14 ICCAs also varies, ranging from a few hectares to several thousand hectares. For example, the ICCA of Salary in the southwest of the island is a marine area of 38,293 ha with exceptional biodiversity, while the **ICCA of Sakatia Island** with its idyllic landscape and seascape in the north-west encompasses a total area of 1,230 ha, including a mangrove area of 10.5 ha, a natural forest of 12.4 ha, sandy beaches (7.2 ha) and a traditional fishing zone of 110 ha that is home to two protected species of sea turtles.⁵

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Toky Mananoro is the head of culture constituent of Tambazotran'ny Fokonolona Mitantana Harena Voanjanahary eto Madagasikara (TAFO MIHAAVO, ICCA Consortium Member), a network of around 600 associations and federations of local communities managing natural resources in all 22 Regions of Madagascar.

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² Madagascar's **National Biodiversity Strategy and Action Plans 2015-2025**.

³ This is a process initiated in 2015 by the NGO RAVINTSARA with support from the UNDP GEF Small Grants Programme in Madagascar within the framework of the Global Support Initiative for ICCAs.

⁴ The formulations and abbreviation of this term have changed over several years and are slightly different in different contexts. Internationally, the formulation used by the ICCA Consortium at the time of publication (early 2021) is "territories and areas conserved by Indigenous peoples and local communities", which is abbreviated as "ICCAs—territories of life".

⁵ Statistics from NGO RAVINTSARA, 2020.



At the national level, Tambazotran'ny Fokonolona Miaro ny Harena Voanjanahary (**TAFO MIHAAVO**), the national network of local communities managing natural resources, brings together nearly 600 communities supporting the customary governance of around 30,000 km² of Madagascar's forests across all 22 regions of the country.⁶ Since 1998, more than 200 Locally Managed Marine Areas (LMMAs)⁷ have been self-identified or established, covering approximately 17,500 km² or 17 per cent of Madagascar's coastal and marine areas.⁸

The national framework for community rights and nature conservation

Although they exist in practice, there is not yet a conventional term for ICCAs and their diversity in all contexts in Madagascar. The French equivalent, "Aires et territoires du patrimoine autochtone et communautaire (APAC—territoires de vie)", is used in some contexts, but is not yet part of the national legal frameworks. However, communities do have opportunities to assert their rights over their territories.

Fokonolona (the Malagasy name for local communities) have long played an important and even vital role in the conservation of nature and the development of their territories. The country's Constitution rightly considers the Fokonolona to be the basis for development and socio-cultural and environmental cohesion. The extent of recognition of the Fokonolona's rights vary, however,

according to the specific legal framework governing each element of their territory (water, forest, land, mineral resources, etc.).

Madagascar's Environmental Code recognises natural resources as the common heritage of the nation. The country is one of the first in Africa to have legally endorsed the rights and responsibilities of the Fokonolona in this area through a decentralised system of natural resources management. These rights can be established through the following:

- A fixed-term contract by which the state transfers the management for a specific area or set of resources to a legally constituted association of local communities, in which any member of the larger community Fokonolona can integrate voluntarily, and which may also include local authorities.⁹
- The establishment of a Community Protected Area or a Marine Protected Area (managed by the local community), which is, according to the Code of Protected Areas,¹⁰ dedicated to the conservation of nature through customs and associated cultural and spiritual heritage as well as traditional sustainable practices and uses.

Experiences of Locally Managed Marine Areas (LMMAs)¹¹ also show that coastal and marine areas managed by local communities can be established a priori through a *dina*,¹² which is a social convention



The ICCA of Ranomay (Atsimo andrefana). Photo: NGO RAVINTSARA



Community managed fishery closure in Andavadoaka, southwest Madagascar. Photo: Blue Ventures / Louise Jasper

developed and used for generations by the Fokonolona, including for access to and use of a territory's resources on a consensual basis. Once developed by the community, a *dina* must be legally recognised by the administration on condition that it respects public order and is subject to state control.

Other *in situ* conservation measures exist but are not yet officially recognised. This is the case for village reserves created by associations of communities bordering natural resources or tourist sites. Local communities often form associations to facilitate administrative and fiscal management and they implement conservation actions through these associations. An example is the Anjà village reserve in the central highlands of Madagascar, which implements *de facto* protection measures. There is also the case of areas like the abovementioned ICCA of Etrobeke, which has no official status but has been well conserved for generations by communities through their customary values, practices, and rules through unwritten *dina*.

Management and governance of community conserved areas in Madagascar

Fokonolona traditionally exercise their responsibility for the sustainable management and development of their territories through unwritten, *de facto* systems of rules with a wide range of local specificities. However, certain similarities can be identified; most of all, the

management of the common heritage is collective and regulated by social values like the *teny ieràna* or prior consent that precedes any decision or action.

Decisions on important matters are debated in inclusive general assemblies, which may create management

⁶ UNDP GEF SGP. 2019. **TAFO MIHAAVO: A national social movement to support the customary governance of natural resources in Madagascar.**

⁷ A Locally Managed Marine Areas (LMA) is an area of nearshore waters and its associated coastal and marine resources that is largely or wholly managed at a local level by coastal communities, sometimes along with partners, who reside or are based in the immediate area. LMMAs are characterised by local ownership, use and/or control, and in some areas follow traditional tenure and management practices. LMMAs can vary widely in purpose and design, but two aspects remain constant: (a) a well-defined or designated area; and (b) substantial involvement of communities and/or local governments in decision-making and implementation. LMMAs do not necessarily share the three general characteristics of ICCAs—territories of life but there are often significant overlaps and synergies. LMMAs are not yet legally recognized as such in Madagascar. For more information, see Immanetwork.org

⁸ MIHARI Network. 2020. **Public database of LMMAs.**

⁹ This system is established by Law No. 96-025 of 30 September 1996 on the local management of renewable natural resources, commonly referred to as the GELOSE Law. Specifically for coastal and marine resources, also relevant is the Transfer of Fisheries Resource Management established by Decree No. 2016-1352 of 08 November 2016 and Interministerial Order No. 29211-2017.

¹⁰ Law 2015-005 on the recasting of the Protected Areas Code.

¹¹ Refer to footnote 6.

¹² *Dina* is legally established by the Law No. 2001-004 of 25 October 2001.



Traditional leaders of the Tsimbahambo ICCA. Photo: NGO RAVINTSARA

units for the different resources of the territory, each of which has an obligation to report back to the assembly. The settlement of disputes is often carried out according to local customary practices, usually with the mediation of the *Raiamandreny*¹³ or a council of elders in the name and on behalf of the community, with the witness of third parties. The sanction for their transgressions varies from one Fokonolona to another, but generally consists of a social penalty (leading to the ostracism of the member and the restriction of access to services) or a sentence to repair the damage suffered (payment of a fine to the injured party or performance of an expiatory rite).

In effect, the customary system and the state legal framework continue to coexist, albeit not without tensions. This conciliation has led to the recognition of the *dina* (local collective agreement) in the system of management and governance of resources and territory in general. However, the legal framework requires that Fokonolona organise themselves into a legally constituted structure to count as a “legal personality” and participate as such in the conservation or development of the various elements of their territory. This can be an association of a local community, an association of small-scale fishers, a cooperative of

seed farmers or any other form of structure with legal personality. This applies both to land resources and coastal and marine resources. Several observations show that such organisation through associations is not always legitimate for the Fokonolona, especially when the association’s constitution has not considered the existing local customary structure and rules.

Apart from communities, other actors also have interests in their territories, with implications for the extent of community power in decision-making processes. Often communities are involved in co-management agreements for certain areas and share governance with other actors (e.g., state or local government, conservation NGOs). Aside from the ICCAs that do not yet have official status, the areas that benefit from a delegation of management by the state (as is the case with Community Protected Areas) seem to give more latitude to the Fokonolona in the decision-making process. However, the balance of power of communities with the other actors in the context of co-management often depends, on the one hand, on their negotiating capacities, the knowledge of their rights, their leadership and, on the other hand, on the willingness of local authorities or some local organisations to support the community interests.

Building the knowledge base from the ground up

Information on community-governed and -managed areas is scattered among the various public institutions and organisations working with them. The **MIHARI Network**, for example, manages a database on **Locally Managed Marine Areas** that is available on its website; access to specific data is subject to specific rules and conditions established by the members of the network¹⁴ who own it. **TAFI MIHAOVO**, the national network of local communities managing natural resources, is also planning to set up a digital library to integrate information on the areas managed by their members,¹⁵ including the abovementioned 14 emblematic ICCAs. The aim is to facilitate their recognition by showing their contributions to the conservation of nature, livelihoods and community well-being. It is also a way for communities to revitalise and disseminate the knowledge and wisdom that the elders acquired and developed over time, especially to younger generations.

At the national level through the relevant Ministry, the government centralises and manages information on all natural areas in Madagascar, including those managed by communities. This includes the Madagascar Protected Areas System, a national

platform set up to integrate information on protected areas. However, there is not yet a harmonised system specifically dedicated to documenting ICCAs—territories of life in Madagascar.

Factors contributing to the power and success of Fokonolona and ICCAs in Madagascar

Several Fokonolona have already received international awards for their contributions to sustainable management of nature, including the prestigious UNDP Equator Prize. **One of these Fokonolona** manages one of the 14 emblematic ICCAs mentioned. Overall, the dynamics of ICCAs’ contributions to nature conservation

¹³ Raiamandreny can be literally translated as “father and mother” or, more generally, “parents”. In its broadest sense, it includes the village elders and authorities, who are the parents of the community.

¹⁴ More than 200 LMMAs have been set up since 1998 in Madagascar, and these are supported by 25 NGO partners (MIHARI, 2021).

¹⁵ TAFI MIHAOVO brings together around 600 associations and federations of local communities spread over the 22 Regions of the island (TAFI MIHAOVO, 2021).



LMMA representatives at an awareness raising event. Photo: MIHARI



and community well-being in Madagascar seem to be determined by several factors. Among others, the following stand out:

- **The synergy and leadership of communities** in developing their own initiatives for their ICCAs is a crucial element. This often also involves the ability to mobilise community members in an inclusive manner. At the local level, communities have taken diverse actions such as voluntary patrols for the control of forests and reinvestment of monetary benefits from the management of their territories in reforestation and other conservation activities. At the national level, representatives from emblematic ICCAs participate in advocacy for the revision of legal texts and policies to recognise and strengthen communities' traditional governance and management of their territories and the resources within it. The national networks of TAFO MIHAARO and MIHARI Network also have significant convening power and growing social and political capital.
- **The strengthening of collective values and rules linked to their ways of living together and to their territory** often allows the Fokonolona to better face challenges (such as the integration of new migrants, the perpetuation of values, rules and customary practices, the hosting of external projects, etc.)



LMMA leaders bringing together to decide their future in MIHARI forum. Photo: MIHARI

and opportunities (such as collaboration with an external organisation or entity for the valorisation of traditional knowledge or local resources under fair conditions).

- While advocating for an appropriate form of legal recognition at the national level, **the integration of community-governed and -managed areas into territorial development schemes and plans at the communal and regional levels** is an important way to initiate their bottom-up recognition and above all to harmonise territorial development interventions. In addition, it can also be a way to ensure the support of local authorities.
- **The availability of resource persons and organisations that can facilitate and support communities** in their self-strengthening processes is a considerable asset. A group of individuals and organisations working on community governance and management meets regularly to harmonise their support for and with communities. This support often takes the form of technical and/or legal or even financial advice and assistance, according to priorities defined by the communities themselves. Communities might be supported by an external organisation to help define and formulate these priorities according to their needs.



MIHARI members learning together 2017. Photo: MIHARI

- **The orientation of political decisions towards greater recognition of communities and their rights** strengthens communities' sense of ownership of their territories "Make Madagascar green again" is the ambition coordinated by the current government and shared by all national actors. The political discourse in this sense places local communities as key partners. This is the case, for example, with the implementation of social and environmental safeguards favourable to the interests and rights of communities in and around protected areas and the development of a legal framework for securing community land tenure. This orientation favours opportunities to assert the rights and good practices of communities.

Remaining challenges

Some challenges are specific to individual ICCAs or groups thereof, often relating to their internal dynamics. But there are also shared challenges, mostly arising from their interactions with their external context and the broader systems that affect them.

From the perspective of many communities, it can be difficult to manage policy and legal frameworks that separately and differently address their rights over different parts of their lives and territories, including forests, agriculture and community land, water and traditional knowledge. These elements are often

inextricably linked at the community level, with each part depending on the others. This requires appropriate consideration of and respect for communities' holistic worldviews, but it is not easy to communicate this in an understandable way to external actors. Furthermore, without being sufficiently informed about their rights under national and international frameworks, communities often have limited capacities to negotiate with other actors with different interests.

The place and role of communities in "who decides and how" on matters concerning their territory is not always clear. This sometimes calls into question the social acceptability of decisions when they have not been sufficiently debated in an inclusive manner. In addition, there is the question of representation of the communities. It is often not clear who can speak on behalf of the whole community and how to approach them. For example, until now, the state decision to create protected areas is usually accompanied by public meetings with local communities, but there are no prescriptions of how to hold these public meetings, nor is there any guarantee that the communities' views are respected in the final decision.

Many communities in Madagascar still directly depend on nature's resources for their livelihoods. However, the availability and the benefits arising from the management of resources may not always be sufficient to meet this vital need, often due to broader pressures on ecosystems and land outside of communities'



Workshop for the identification of the Tuléar ICCA. Photo: NGO RAVINTSARA

control. The vulnerability of the socio-economic living conditions of the communities then sometimes limits their access to essential services (such as education, food and health), which can in turn negatively impact their motivation and their dynamics in the management of their territory.

The legal framework does not yet consider the ways in which communities' land is secured on a customary basis. Although there is a law recognising collective land registration (see Law No. 2006-031 on non-titled private property), this does not apply to land with specific status in which certain ICCAs are located such as protected areas, forest areas, land under natural resource management transfer, etc. However, a legislative process currently underway and initiated by the state relates to the protection of community land and other land with specific status in a way that could be affordable and accessible for communities.

The way forward

Recognising and supporting the Fokonolona and their practices, innovations and knowledge has significant implications for the conservation and sustainable use of nature and for human well-being in Madagascar. It is primarily an act of political will that would lead to strengthening collective responsibility and to rethinking how we relate to and interact with nature. This is

particularly relevant in the current situation, where making the economy 'greener' and more humane has become critical, especially regarding extraction and exploitation of natural resources. The following actions in support of ICCAs, among others, appear to be a priority in this context:

- **Continuing the process of self-identification and self-documentation of ICCAs and encouraging the establishment of an ICCA federation in a mutually supportive movement.** Custodians of ICCAs recognise themselves and each other; this can take the shape of a peer-to-peer approach where emblematic ICCAs pair up with their counterparts and in the process, build an increasingly compelling case to convince others of their importance for humans and nature and the need for their appropriate recognition and support.
- **Continuing efforts to support the self-strengthening of ICCAs** to maintain their integrity and to seize opportunities and address external and internal threats. This may involve developing community protocols, strategies and land use plans that articulate communities' visions, priorities and needs in relation to their ICCAs. The valorisation and intergenerational transmission of values and good practices is central to this process.
- **Developing and granting appropriate forms**

of legal recognition for ICCAs as physical territories and areas imbued with deep social, cultural, spiritual and environmental values and relations. This includes supporting ICCAs both through the diversity of community decision-making systems and customary laws and through the state legal system (e.g., as Community Protected Areas, collective properties, etc.) where appropriate to do so. In efforts to reconcile and harmonise different legal systems, it is necessary to prioritise and centre communities' customary

laws and worldviews, given the continuing dominance of national and international legal frameworks.

- **Integrating Fokonolona's rights to self-governance and to give or withhold free, prior and informed consent into all legal frameworks and sectoral policies that affect them,** including systems that enable them to follow up on their decisions and recommendations and address violations such as through appeal and grievance mechanisms.

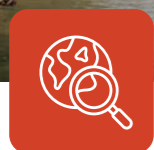


Nosy Manandra - a sandbar in the Barren Isles, western Madagascar. Traditional migrant fishers live here for as long as the weather permits, leaving only during the cyclone season. They free dive for sea cucumbers and fish for sharks on the reefs farther out into the Mozambique Channel. It is only in remote areas such as this that fishers can still find sea cucumbers and catch large sharks. Despite having fished some of these areas for generations, traditional fishermen have no formal claim to them. Far offshore they occasionally cross foreign industrial longliners; illegal, industrial-scale teams use scuba to dive for sea cucumber and have stripped out the same reefs Vezo free-dive on; closer to shore there are industrial shrimp trawlers scouring the seabed. While these newcomers severely undermine the resources traditional fishers survive on, the Vezo have no voice in trying to stop them. Marine Protected Areas and hotel developments have deprived migrant fishers of their fishing grounds and coerced them into leaving islands. Photo: Blue Ventures / Garth Cripps





Photo: Glaiza Tabanao



The Philippines

A national analysis on the status of territories of life

Author(s):¹ The Philippine ICCA Consortium

The Philippines is the world's second largest archipelago of 7,641 islands² covering 30 million hectares of land territory. On a per-hectare basis, it harbours more diversity of life than any country on Earth.³ It ranks highest in the Southeast Asian region in terms of native tree species⁴ and is the fourth in the world in terms of bird endemism, making it a top global conservation priority area. There are an estimated 14-17 million Indigenous peoples in the Philippines (between 10-20 percent of the total population), coming from 110 distinct Indigenous ethno-linguistic groups. There are approximately 175 different spoken languages in the country, some influenced by the 300-year regime of the Spaniards, some entirely distinct (especially those in the heights of the mountains) and most developed through Austronesian roots.⁵ They practice diverse livelihood strategies across the country, from coastal fisheries⁶ and gathering of forest products⁷ to shifting cultivation and

the famous rice terraces of the Cordilleras.⁸ Indigenous peoples' customary territories are known as ancestral domains and comprise the lands, inland waters, coastal areas and natural resources within their territory.⁹ Ancestral domains are considered private lands but are community-owned and held under long-term possession or since time immemorial under the concept of Native Title.^{10, 11}

Recognition of Indigenous peoples' rights in the Philippines

The Philippines' cultural diversity is recognised by the 1987 Constitution with at least six provisions ensuring the rights of Indigenous peoples. Further, the declaration of the Indigenous Peoples Rights Act¹² expressly guarantees the rights of Indigenous peoples

to their ancestral domains through five bundles of rights: (1) right to ancestral domains; (2) right to cultural integrity; (3) right to self-governance and empowerment; (4) right to social justice and human rights; and (5) right to enter into and execute peace agreements.

Under the Indigenous Peoples Rights Act, two titles can be issued: Certificate of Ancestral Domain Title (CADT), which typically covers the entire ancestral domain and can span across multiple communities; and Certificate of Ancestral Land Title, which usually covers lands owned by certain clans and is therefore smaller than a CADT. The process to secure a CADT by evidence of a Native Title is relatively complicated, tedious and has become ministerial to the extent that it actually counters the original intention of the law, which is to protect the rights of Indigenous peoples.

State recognition of Native Title resulting in a Certificate of Ancestral Domain Title (CADT) begins when a concerned Indigenous community solicits the same with the National Commission on Indigenous Peoples.¹³ The process of formal recognition of an ancestral domain includes self-delineation, sworn statement of elders as to the scope of traditional territories, written accounts of customs and traditions, political structure and institution, pictures showing long-term occupation such as those of old improvements, burial grounds, sacred places and old villages, historical accounts, plant survey and sketch maps, anthropological data, genealogical surveys, descriptive histories of traditional communal forests and hunting grounds, landmarks such as mountains, rivers, creeks, ridges and hills, and write-ups of names and places derived from the native dialect of the applicant community. When perimeter maps are complete with technical descriptions, these are published in a newspaper of general circulation once a week for two consecutive weeks to allow other claimants to file opposition within 15 days from date of publication. Once certified by the Chairperson of the National Commission on Indigenous Peoples, the secretaries of the Department of Agrarian Reform, Department of Environment and Natural Resources, Department of Interior and Local Government, and Department of Justice, the Commissioner of the National Development Corporation and any other agency claiming jurisdiction over the area shall be notified. This notification terminates any legal basis for the jurisdiction previously claimed. The CADT is then issued in the name of the community concerned.¹⁴

¹ The **Philippine ICCA Consortium**, also known as **Bukluran ng mga Katutubong Samahan Para sa Pangangalaga ng Kalikasan ng Pilipinas** (*Bukluran*) was born out of the Indigenous peoples' desire to contribute through conservation projects using their historical role in protecting natural ecosystems, focusing on Indigenous Peoples' Community-Conserved Territories and Areas (ICCAs) within ancestral domains.

The Philippine ICCA Consortium's defence of Indigenous peoples' and community conserved territories and areas utilises Indigenous knowledge, systems and practices and sound scientific methods of mapping, inventory of resources and community conservation planning. It envisions transformational change where Indigenous peoples and communities learn from science-based approaches, while science-based institutions learn from Indigenous knowledge.

² National Mapping and Resource Information Authority, Philippines as quoted in WorldAtlas.com. 2019.

³ Heaney, as cited in Ong, P.S., L. E. Afuang, and R.G. Rosell Ambad (eds). 2002. *Philippine Biodiversity Conservation Priorities: A Second iteration of the National Biodiversity Strategy and Action Plan*. Quezon City, Philippines: Protected Areas and Wildlife Bureau, CI-Philippines, University of the Philippines, and Foundation for the Philippines Environment.

⁴ Association of Southeast Asian Nations (ASEAN) Center for Biodiversity. 2010. ASEAN Biodiversity Outlook.

⁵ Llamazon, T. 1966. **The Subgrouping of Philippine Languages**. *Philippine Sociological Review*, 14(3): 145-150.

⁶ The Molbog of Balabac Palawan lives on an island where sea crocodiles are found. Their main sources of living are fishing, swidden farming, boat making and barter trading, among others.

⁷ Indigenous communities in the Philippines, having an abundant forest ecosystem, rely a lot on timber and non-timber forest resources from their forests. See, Ong, H.C., Kim, Y.D. 2017. **The role of wild edible plants in household food security among transitioning hunter-gatherers: evidence from the Philippines**. *Food Sec.* 9: 11-24.

⁸ The Ifugao Rice Terraces has been declared as one of the UNESCO World Heritage Sites by the World Heritage Convention United Nations Educational, Scientific and Cultural Organization. See **UNESCO WHC website**.

⁹ Paragraph (a), Section 3, Definition of Terms, Chapter II, Indigenous Peoples Rights Act (RA 8371).

¹⁰ Giovanni Reyes and Joji Cariño in an exchange of comments contextualizing the term "Indigenous Peoples and Local Communities" during a consultation meeting on 10 February 2021 for the Draft Technical Report on the State of Indigenous Peoples' and Local Communities' Lands.

¹¹ Under Section 3 of Republic Act 8371 commonly known as the Indigenous Peoples Rights Act, "Native Title" refers to pre-conquest rights to lands and domains which, as far back as memory reaches, have been held under a claim of private ownership by Indigenous Cultural Communities/Indigenous peoples, have never been public lands and are thus indisputably presumed to have been held that way since before the Spanish Conquest.

¹² Republic Act 8371 enacted in 1997, House of Representatives and Senate, Republic of the Philippines.

¹³ An independent body under the Office of the President mandated under the Indigenous Peoples Rights Act as primary government agency through which indigenous peoples can seek government assistance.

¹⁴ Section 52 and Section 53 of the Indigenous Peoples Rights Act (RA 8371).



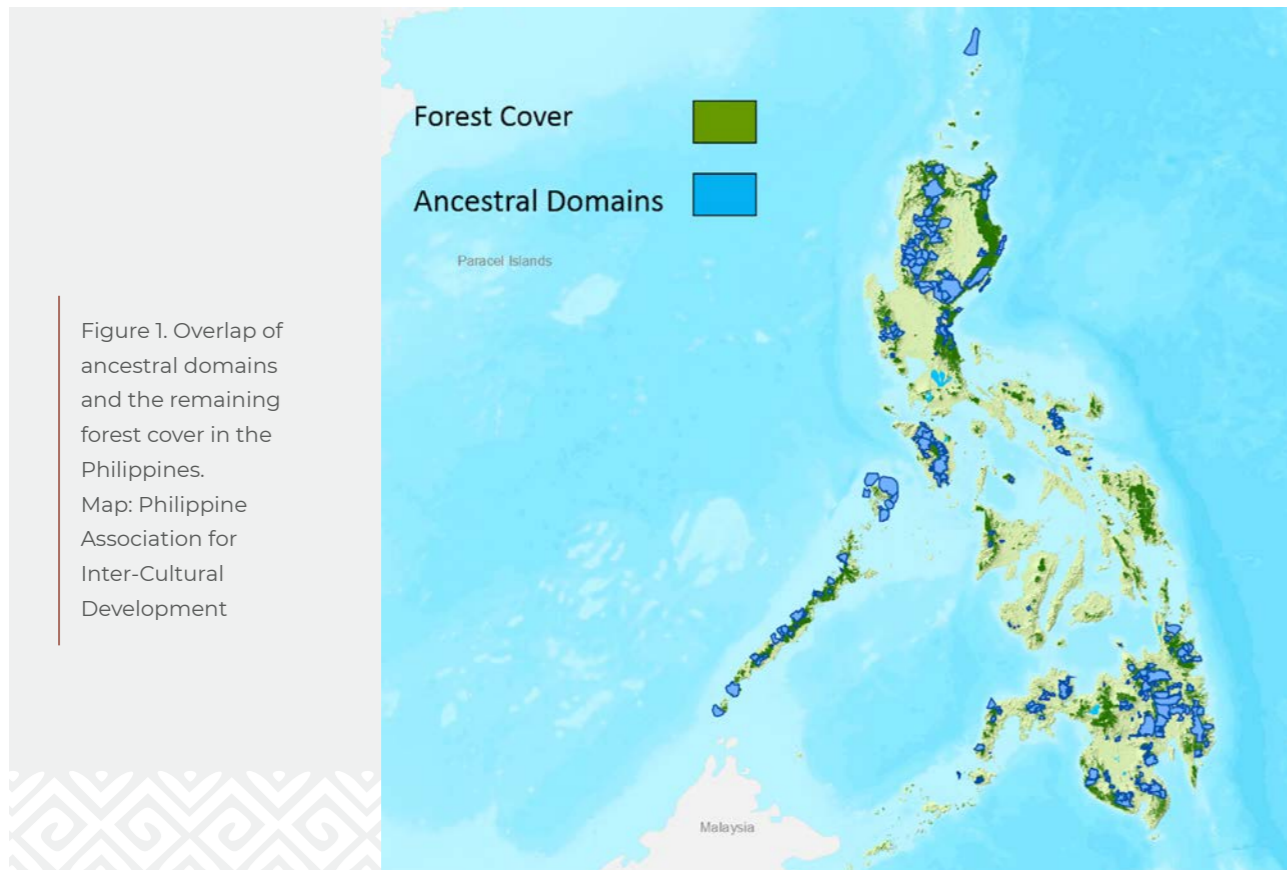


Figure 1. Overlap of ancestral domains and the remaining forest cover in the Philippines.
Map: Philippine Association for Inter-Cultural Development

Biodiversity and protected areas in the Philippines

The country's biodiversity is spread out in 15 biogeographic zones and 228 Key Biodiversity Areas (KBAs). Since 2018, 240 protected areas have been established, covering 5.45 million hectares or 14.2 per cent of the country's territory. Of this total number, 94 have been legislated under the Expanded National Integrated Protected Areas System Act of 2018 and 13 under the previous National Integrated Protected Areas System Act of 1992 for a total of 107 legislated Protected Areas.¹⁵ Of the total protected area coverage, 4.7 million hectares are terrestrial and 1.38 million hectares are marine areas. Protected areas form the main government strategy¹⁶ in biodiversity conservation but have historically suffered constraints, ranging from lack of representation of communities, policy conflict, and lack of funding, which hamper decision-making.¹⁷

Huge gaps in protected area coverage include large tracts of high conservation value areas found outside of Protected Area boundaries, while the more disturbed and low biodiversity value areas are within Protected Areas. This points to a "lack of consideration for other effective governance system in areas of high

conservation value."¹⁸ For instance, the country's remaining forests coincide with ancestral domains, suggesting that traditional governance systems of Indigenous peoples are the reason for their effective conservation.

Overlaps between ancestral domains, key biodiversity areas and Protected Areas

The overlap of ancestral domains and Protected Areas is 1,440,000 hectares, while the overlap between KBAs and ancestral domains with CADTs is 1,345,198 hectares (96 CADTs out of 128 KBAs). This means 29 per cent of KBAs requiring protection fall within territories occupied by Indigenous peoples, thereby confirming the inherent inter-dependency of nature conservation with the recognition and respect for the traditional governance systems of Indigenous peoples. Furthermore, spatial analysis shows that in KBAs not covered by Protected Areas, Indigenous community conservation serves as a de facto governance regime, contributing significantly to the protection of forest cover despite absence of a declared protected area. About 75 percent of areas with forest cover are within ancestral domains, as shown in Figure 1.

No.	ICCA	MgC	MgC/Ha
1	Balabac	1,370,256	39
2	Bislig	1,021,623	147
3	Dipaculao	2,141,690	134
4	Esperanza	722,494	74
5	Impasug-ong	1,636,616	152
6	Morong	608,288	153
7	Mt. Apo	1,171,224	135
8	Mt. Taungay	306,445	109
9	Talakag	890,281	80
10	Tinoc	638,741	139
	Total	10,507,658	1,162

The 10 ICCA Pilot sites store Carbon that is equal to the emissions of at least 7 Million Cars per annum.

Results

- 10.5 Million Tons of Carbon stored by 10 ICCA Pilot sites
- Average of 116.2 Tons/hect. of the ICCA

Figure 2. Result of World Resources Institute assessment of 10 ICCAs in the Philippines.

The large extent of high value conservation lands found outside Protected Areas and the stewardship stalemate between them and ancestral domains necessitates diversifying recognition of different governance systems to include Indigenous Peoples' Community Conserved Territories and Areas (ICCAs) to ensure effective protection of these areas. ICCAs coincide with areas of greatest surviving endemism, a finding that was confirmed with evidence from sixteen sites covering a total area of 349,422 hectares. These were mapped, inventoried, documented and declared from 2011-2014 under two projects funded by the Global Environment Facility: (1) the New Conservation Areas in the Philippines Project implemented from 2011-2014, and (2) the Philippine Indigenous Peoples Community Conserved Territories and Areas Project implemented from 2016-2019. Both projects included the identification and mapping of ICCAs utilising traditional knowledge and science, documentation of Indigenous knowledge systems and practices, inventory of resources to determine the state of health of forests, and utilising the findings in the formulation of Community Conservation Plans. Besides leading the Asian region as an example of the national process required for inclusive conservation and positive outcomes, the 2016-2019 project is a recipient of the Development Aid of the Year Award 2019.¹⁹

An assessment of 10 ICCAs involved in this project (Figure 2), completed by the World Resources Institute using the custom analysis tool LandMark Platform, found that they store 10.5 million tons of carbon, equivalent to gas emissions of at least 7 million cars

per annum.²⁰ The resulting data on the carbon storage capacity of these ICCAs clearly shows the critical role they play in mitigating the impacts of climate breakdown, not only in the Philippines but also in the broader Asian region.

¹⁵ Note the distinction, 'Protected Areas' refer to the legislated sites and 'protected areas' refer to those protected areas in general, areas protected by Indigenous and non-Indigenous Peoples and those legislated and non-legislated but community declared. Protected Areas are co-managed with a Protected Area Management Board. These sites receive an annual appropriation from the National budget.

¹⁶ National Integrated Protected Areas System Act of 1992 (Republic Act 7586) amended by the Expanded National Integrated Protected Areas System Act of 2018 (RA 11038).

¹⁷ A Protected Areas Management Board is composed of representatives from local government units from barangay, municipal and provincial levels, civil society, Indigenous communities, academe, other government agencies and private sector. The Regional Director serves as Chair of the Management Board.

¹⁸ A USAID-funded study. "Biodiversity and Watersheds Improved for Stronger Economy and Ecosystems Resilience (B+Wiser)."

¹⁹ Biodiversity at the Mission: PHL Envoys & Expats Recognition Awards on 4 April 2019.

²⁰ LandMark, the first global platform to provide maps of land held by Indigenous peoples and local communities, released new carbon storage, tree cover loss, natural resource concessions, dam locations and other data layers that shed light on the environment in which these lands exist. Computations of Carbon Storage Capacity use the following: ABOVEGROUND LIVE WOODY BIOMASS DENSITY (0.00025 degrees, Global, Zarin/Woods Hole Research Center); SOIL ORGANIC CARBON DENSITY (FAO/IIASA/ISRIC/ISSCAS/JRC, 2012. Harmonized World Soil Database version 1.2. FAO, Rome, Italy and IIASA, Laxenburg, Austria); INTACT FOREST LANDSCAPES (Potapov, P., M. C. Hansen, L. Laestadius, S. Turubanova, A. Yaroshenko, C. Thies, W. Smith, I. Zhuravleva, A. Komarova, S. Minnemeyer, and E. Esipova. 2017. "The last frontiers of wilderness: Tracking loss of intact forest landscapes from 2000 to 2016." Science Advances 3: e1600821).



National and international legal context

As noted above, Indigenous peoples' rights are recognised in the 1987 Philippines Constitution and 1997 Indigenous Peoples Rights Act. Under the latter, currently, 221 CADTs have been issued, benefitting 1,206,026 Indigenous peoples and covering a total area of 5,413,772 hectares of ancestral lands and waters, equivalent to 16 per cent of the total land area of the Philippines. This does not include areas without CADTs or areas under claims of Native Title²¹ that, when combined, are estimated to be 7-8 million hectares, or a quarter of the territory of the country.

The Wildlife Resources Conservation and Protection Act of 2001 (RA 9147) provides for the conservation, preservation and protection of wildlife species and their habitats. While the Act recognises the rights of Indigenous peoples in the collection of wildlife for traditional use, it imposes control and regulation of wild animal hunting, wild foods gathering and trade.

As an amendment to the former National Integrated Protected Areas System Act of 1992, the Expanded National Integrated Protected Areas System Act of 2018 in its text secures the perpetual existence of all native plants and animals. Wildlife and KBAs are found mostly in ancestral domains. Thus, Section 13 of the 2018 Act

expressly guarantees respect for Indigenous peoples' rights to self-governance.

There is also an ICCA Bill²² currently in legislation²³ and is moving fast in Congress.²⁴ The core features of the bill is the institution of a National ICCA Registry and establishing legal protections imposing sanctions for violations against ICCAs. It also aims to clarify provisions in the Indigenous Peoples Rights Act and the Expanded National Integrated Protected Areas System Act in terms of acknowledging the contribution of Indigenous peoples in biodiversity conservation. This will provide a system that would effectively support and recognise ICCAs on par with protected areas in the latter legislation, resulting in respect for and promotion of traditional governance and exercise of long-held Indigenous knowledge, systems and practices.

The Philippine ICCA Consortium or the Bukluran ng mga Katutubo Para sa Pangangalaga ng Kalikasan ng Pilipinas was formally established in 2013²⁵ to stand as a representation of the ICCAs in the country. It aims to promote the appropriate recognition of and support to ICCAs in the Philippines and has grown its network through the years by partnering with programmes advocating for the environment and upholding the rights of its protectors. The Consortium actively participates in calls against the Kaliwa Dam and



Hawudon Tinuy-an Alfredo Domogoy, a chief of the Manobo in Mindanao, received his name from iconic falls behind him. Photo: Glaiza Tabanao



Egongot in Dipaculao, Aurora. Photo: Orange Omengan

other mega projects detrimental to the environment and Indigenous peoples' rights, as well as against criminalisation of and attacks against Indigenous peoples and their ancestral domains.

Moreover, the Philippine government is signatory to the UN Declaration on the Rights of Indigenous Peoples (2007) and party to the UN Framework Convention on Climate Change (1992) and Paris Agreement (2015), the UN Convention on Biological Diversity (1992), the International Covenant on Economic, Social and Cultural Rights (1976) and the International Covenant on Civil and Political Rights (1976), among others.

Challenges

Policy and legal conflicts

Many of the sacred sanctuaries and forests collectively managed by Indigenous peoples overlap with "core zones" or "strict protection zones" of Protected Areas where state law declares no activities should take place. These are the same areas most important to Indigenous peoples as they sustain culture and livelihoods. It is in these areas that conflicts between nation-state and customary laws have historically emerged. These conflicts are exacerbated by implementation rules²⁶ where ancestral domains without CADTs that share

common areas with Protected Areas will not be recognised under the Expanded National Integrated Protected Areas System Act of 2018. Challenges will persist as Indigenous peoples' rights to exercise traditional governance over their territories will be

²¹ Refers to areas where Indigenous communities opt not to solicit formal government recognition of ancestral domains into CADTs.

²² The principal authors of the Bill are Senator Hontiveros, Congresswoman Legarda, and Congresswoman Acosta-Alba. The Philippine ICCA Consortium, along with other support groups, is an active member of the technical working group of both Houses of Congress. Read the proposed Bill [here](#).

²³ The Bill has been deliberated twice in the Senate, which called for the consolidation of the two versions submitted by Senator Revilla and Senator Hontiveros. The Bill passed first reading in the House of Representatives and (at the time of publication in April 2021) is currently being reviewed by the House Committee on Appropriations.

²⁴ Philippine News Agency, 3 December 2020. [House panel OKs bill recognizing conserved IPs' communities](#).

²⁵ The Philippine ICCA Consortium was established in February 2013, fulfilling the express call in the Manila Declaration developed and signed by Indigenous peoples during the First National Conference on ICCAs in the Philippines held from 29 – 30 March 2012. See: [The Philippines establish the first national ICCA Consortium, Quezon City, 19 – 22 February, 2013](#).

²⁶ The qualifications and language of the Expanded National Integrated Protected Areas System Act of 2018 (RA 11038) is inconsistent with the implementing rules and regulations of the Act (DENR Administrative Order 2019-05). See: [Implementing Rules and Regulations](#).

disenfranchised. These rules could be used by the state government to displace Indigenous communities from their territories or to criminalise their traditional access to and use of resources within their territories that are overlapped by the Protected Areas. For example, the Manobos' rescue of a Philippine Eagle was not commended but instead they were accused of illegal hunting of wildlife. The Manobos consider the Philippine Eagle as a key stakeholder and guardian,²⁷ hence, the need to protect and conserve its habitat in return.

Similarly, the Wildlife Act could prevent intruder migrants from wildlife collection and trading for purely profiteering purposes. However, for Indigenous peoples, the collection of herbal plants, wild honeybees and hunting wild boar is important for sustaining health and livelihood and has been a part of a culture-based resource management system that provides sanctuaries for wildlife in the first place. Policies acknowledging and respecting this relationship would help ensure protection of species and ecosystems while also upholding Indigenous peoples' rights and dignity.

More broadly, there are also conflicts between governmental agencies responsible environmental matters and those responsible for economic growth and extractive industries such as mining,²⁸ with the latter generally trumping the former. Inconsistencies between agencies working on ground not only confuse key rights-holders and stakeholders but also put protection and conservation of the environment in jeopardy. The implementation of policies and legislations contrary to existing laws have highlighted the vulnerability of ICCAs in the face of such institutionalised threats and continuously threaten the Indigenous peoples whose lives are intertwined with the protection of their cradled lands and territories.

Human rights violations

The violation of human rights occurs often in the form of development aggression, including large-scale mining operations and dam projects, and encroachment of migrants who stake claims or possession over lands within traditional territories. In the context of the COVID-19 pandemic and restriction rules, violations of Indigenous peoples' right to provide or withhold free, prior, and informed consent have become rampant. Before the pandemic, 126 incidents of forcible entry into ancestral domains by businesses without free, prior and informed consent have been documented; 78 per cent of these incidents occurred in the island of Mindanao.²⁹ As the rush for land and



natural resources scales up, asserting Indigenous peoples' rights has led to criminalisation of these rights and the weaponisation of law itself.³⁰ As of August 2019, 86 Indigenous persons have fallen victim to extrajudicial killings.³¹

On 30 December 2020, nine Tumandok Indigenous leaders were killed and 16 arrested. More recently, on 7 March 2021, a day of infamy dubbed the "bloody Sunday massacre," two Indigenous Dumagats of Rizal, Tanay, were killed together with seven activists.³² This was immediately condemned by the UN Office of the High Commissioner for Human Rights.³³

Recommendations and conclusions

There is a critical need for support of the Philippine ICCA Consortium's efforts in expanding and mainstreaming community mapping, resource inventory and documentation and implementation of Indigenous knowledge, systems and practices to address tropical deforestation and impacts of climate breakdown. This can be done through expansion of and capacity to

develop and implement Community Conservation Plans, priority livelihood projects and establishment of appropriate financing mechanisms (in some cases, for example, **Payment for Ecosystem Services**).

It is also important to establish partnerships with global conservation and environmental groups that adhere to internationally recognised Indigenous peoples' rights, providing an additional layer of protection against the criminalisation of these rights.

The rapid decimation of Philippine forests from the 1950s to 1990s stopped at the very doorstep of Indigenous peoples' territories. Indigenous peoples offer a counterpoint of resistance and hope so that today's remaining forests and endemic plants and animal species can be protected within these community conserved areas. Despite passage of progressive laws and global recognition of the role of Indigenous peoples, it is still possible for the state government to exercise mandates for efforts that are already effectively being practiced by Indigenous peoples. As a result, Indigenous peoples call for respect and recognition of their rights, which in turn provides a clean and healthy environment now and for generations to come.

According to the Manobo, the sacred lake Danao used to be completely surrounded by a thick forest but migrant farmers have encroached the area. The Manobo requested they do not continue farming in the area as this is within their territory and is considered sacred. The migrants refused to leave, accused the Manobo of harassment and went to the local government office to file a complaint (see also the **case study Pangasananan** in this report. Photo: Glaiza Tabanao

²⁷ The Philippine Eagle is considered a key stakeholder among Evu Menuvos of North Cotabato due to messages it sends through sounds that community members only can interpret including impending calamities, disasters and attacks on an individual member by an outsider or attacks to the community by external forces. See also the **case study of the Pangasananan of the Manobo people** in this report.

²⁸ The Tampakan mining project has long been protested by the Bl'aan community of South Cotabato, the Local Government Unit and other support sectors, but attempts to exploit what is touted to be Southeast Asia's largest untapped copper and gold minefield are still ongoing amidst alleged environmental and human rights violations.

²⁹ Salomon T., 2019. Land Conflicts and Rights Defenders in the Philippines. In **In defense of land rights: A monitoring report on land conflicts in six Asian countries**. Quizon, A., Marquez, D., Pagsanghan, J. (eds). Quezon City: ANGOC, pp. 106-123.

³⁰ The Anti-Terrorism Act of 2020 (RA 11479) is facing several petitions challenging its constitutionality before the Supreme Court. The law is believed to curtail the Greater Constitutional Freedoms, which refer to the rights of the accused, rights to privacy, freedom of expression and freedom of liberty, among others.

³¹ Mamo, Dwayne. 2020. *The Indigenous World 2020*. Copenhagen, Denmark: International Working Group on Indigenous Affairs.

³² IDEALS, Incorporated, 11 March 2021. "Official Statement on Bloody Sunday." Karapatan, Timog Katagalugan.

³³ Press Briefing Notes on the Philippines. Spokesperson for the UN High Commissioner for Human Rights: Ravina Shamdasani. Available in writing at [ohchr.org](https://www.ohchr.org) and video at: <https://youtu.be/KRBzhjV8d18>.





Photo: Felipe Rodriguez



East and Southern Africa

A regional analysis of the status of territories of life

Author(s):¹ Fred Nelson

Eastern and southern Africa comprises an extremely diverse set of countries spanning the area from the Horn of Africa to the Cape of Good Hope in South Africa. Within this geographically, socially and politically diverse region, certain commonalities exist. Most notably from an ecological standpoint is the prevalence of arid and semi-arid ecosystems, which range from deserts in both the south (Namib and Kalahari) and the northern Horn region to a wide range of savannahs, grasslands and the relatively dry Miombo woodlands that predominate in much of Zambia, Zimbabwe, Mozambique and western Tanzania.

These ecosystems support tremendous biological and cultural diversity. Anthropologically, the savannahs of eastern Africa are most famous as the evolutionary home of early humans, with Ethiopia, Kenya and Tanzania all containing key sites for early hominid discoveries. Over the past several million years and up

until the present day, humans living in the region's savannahs and grasslands have lived alongside some of the greatest assemblages of wildlife found anywhere on earth. Today, landscapes in areas such as the Okavango Delta, greater Serengeti ecosystem, Luangwa and Zambezi Valleys and other sites are key locations for wildlife conservation, national parks and other protected areas, and multi-billion dollar (USD) wildlife tourism industries that form a major part of national economies from Botswana to Kenya.

These landscapes also support a tremendous diversity of resident and Indigenous communities, including pastoralists who own and manage tens of millions of livestock and whose livelihoods depend on the ecological productivity of savannah rangelands. Indigenous hunter-gatherers, most famously the San peoples of southern Africa, the Hadza of northern Tanzania and the Ogiek of Kenya's montane forests,

continue to maintain traditional lifestyles dependent on wild resources. Along the long Indian Ocean coastline, millions of people depend on coastal fisheries and other resources in a region with some of the highest coral reef and related marine biodiversity of anywhere in the world.

Within such a diverse and rich region, it is an inherent challenge to synthesise the status and trends related to community conservation and natural resource governance. Nevertheless, some important generalisations are possible that can help inform an understanding of the key dynamics within the region as well as inform wider global trends and initiatives in community conservation.

Importantly, the region's diverse traditional natural resource governance systems, arising from Indigenous cultures and livelihoods, exist alongside many more recent formal experiments with community-based conservation. Since the 1980s, eastern and southern Africa has been at the forefront of community-based approaches to conservation, influencing global ideas and practice as they have evolved since that time.² Today, countries like Namibia and Kenya are global leaders in developing policy and legal approaches for community conservation areas (termed 'conservancies' in both countries), having scaled their local models to encompass areas of land greater than their national parks estates,



and involving hundreds of local communities around the country. These models of community conservation at scale possess major lessons for current efforts to expand formal global conservation coverage and ambitions, particularly highlighting the importance of enabling national policy and legislation, strong local

¹ Fred Nelson is the Chief Executive Officer of **Maliasili**. He has been working for 20 years in African conservation to develop effective strategies and lasting solutions, support innovative local organisations and build diverse partnerships. He has lived and worked with Maasai communities in Tanzania, designed and led research on the politics of conservation in Africa and played a leading role in global networks and collaborations that span land rights, wildlife conservation and ecotourism.

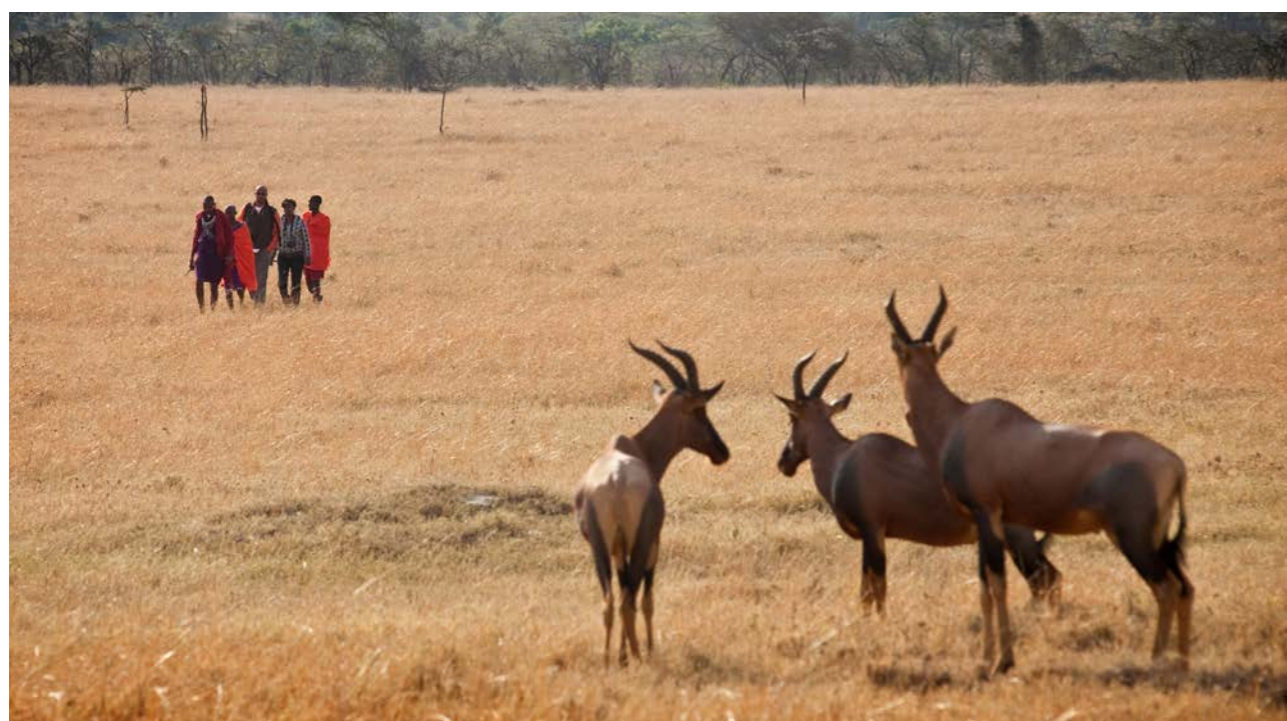


² See, for example, Western, David, and R. Michael Wright (eds.). 1994. *Natural connections: perspectives in community-based conservation*. Island Press, Washington, DC.



and national civil society leadership, and long-term investments in strengthening local institutions.³

At the same time, the wider institutional and governance context in the region creates both opportunities and enduring challenges for community engagement in conservation. The historical context of natural resource management – dominated as it is by the legacy of colonialism, and post-colonial state development that tended to centralise political and economic power across much of sub-Saharan Africa – has left a legacy of highly centralised ownership and control over land, forests, wildlife and other natural resources. Most forests and customary communal lands remain formally under the control of the central state.⁴ As a result, sub-Saharan Africa as a whole lags well behind Latin America and Asia in recognising local communities' and Indigenous peoples' customary rights to their lands and natural resources, creating insecurity in tenure, weakening local governance institutions and often undermining opportunities for both traditional and more formal local conservation initiatives.⁵ Contemporary struggles over land rights and resource use operate within a wider political environment that often remains characterised by high levels of corruption, fragile or emerging democratic institutions and increasing social pressures resulting from high levels of poverty and social transformation.



Conservancies that generate benefits from wildlife for local landholders and pastoralist communities have spread rapidly in Kenya over the past decade. Photo: BaseCamp

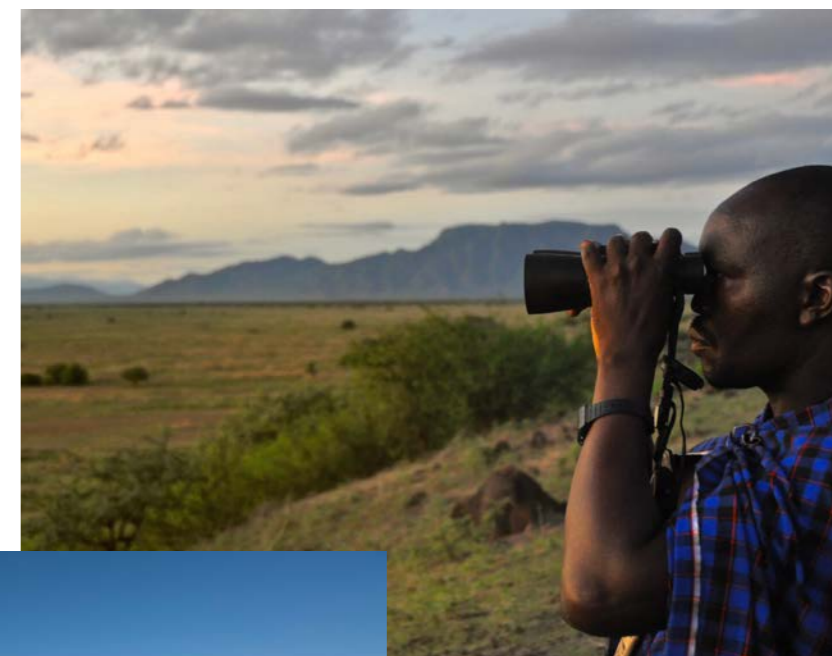
Amidst these tensions and legacies, the future of the region's biological diversity and human well-being are closely tied to developing effective systems for community natural resource governance and management, both by introducing new legal reforms to enable those and by strengthening traditional systems, values and institutions.

Key regional trends

Livestock, people and wildlife

A core feature of landscapes across eastern and southern Africa is the co-occurrence of large numbers of domestic livestock alongside wildlife and other forms of biodiversity. In eastern Africa in particular, traditional pastoralist communities and land use systems have long shaped – through fire, grazing and settlement patterns – the savannah and grassland ecosystems that support exceptionally large migratory wildlife populations. This wildlife continues to move across largely unfenced landscapes and a mosaic of state, community and private lands in places like northern Tanzania and most of Kenya.⁶ With both livestock production (with most stock held by small-scale pastoralist producers) and wildlife tourism being multi-billion dollar economic engines in these countries, conservation increasingly focuses on how to

Community management and Indigenous knowledge are central to many ICCAs in Kenya and other parts of East Africa. Photo: Guy Western



East Africa's savannah landscapes support pastoralist livelihoods and migratory wildlife populations. Photo: Honeyguide



establish seasonal grazing reserves based on traditional transhumant pastoralism, which restricts livestock access to dry season grazing reserves. This effectively protects forage and habitat for wildlife, benefiting wild grazers such as zebra and wildebeest while also improving the availability of dry season forage for livestock during periods of drought.

effectively integrate pastoralism and wildlife conservation. These efforts tend to focus on strengthening pastoralist communities' tenure rights over their communal rangelands and supporting traditional land use systems based on seasonal reserves of grazing areas. It also entails creating improved economic opportunities from both livestock and wildlife in these areas.

For example, the **South Rift Association of Land Owners** is a leading Kenyan grassroots organisation that represents about 16 communities of pastoralists in southern Kenya, working with them to integrate customary land use systems with modern opportunities from tourism, livestock markets and other activities. They support communities to formalise and strengthen traditional multi-use grazing reserves as core to their overall land management systems in ways that also provide high-quality seasonal habitat for wildlife. In turn, this helps to restore species like giraffe, zebra and lion within this landscape.⁷ These Maasai communities

Similarly, in northern Tanzania, the Ujamaa Community Resource Team (UCRT) focuses on securing communal land rights for pastoralist and hunter-gatherer communities as the foundation for protecting their

³ Nelson, F., Muyamwa-Mupeta, P., Muyengwa, S., Sulle, E., & Kaelo, D. 2021. Progress or regression? Institutional evolutions of community-based conservation in eastern and southern Africa. *Conservation Science and Practice*, e302.

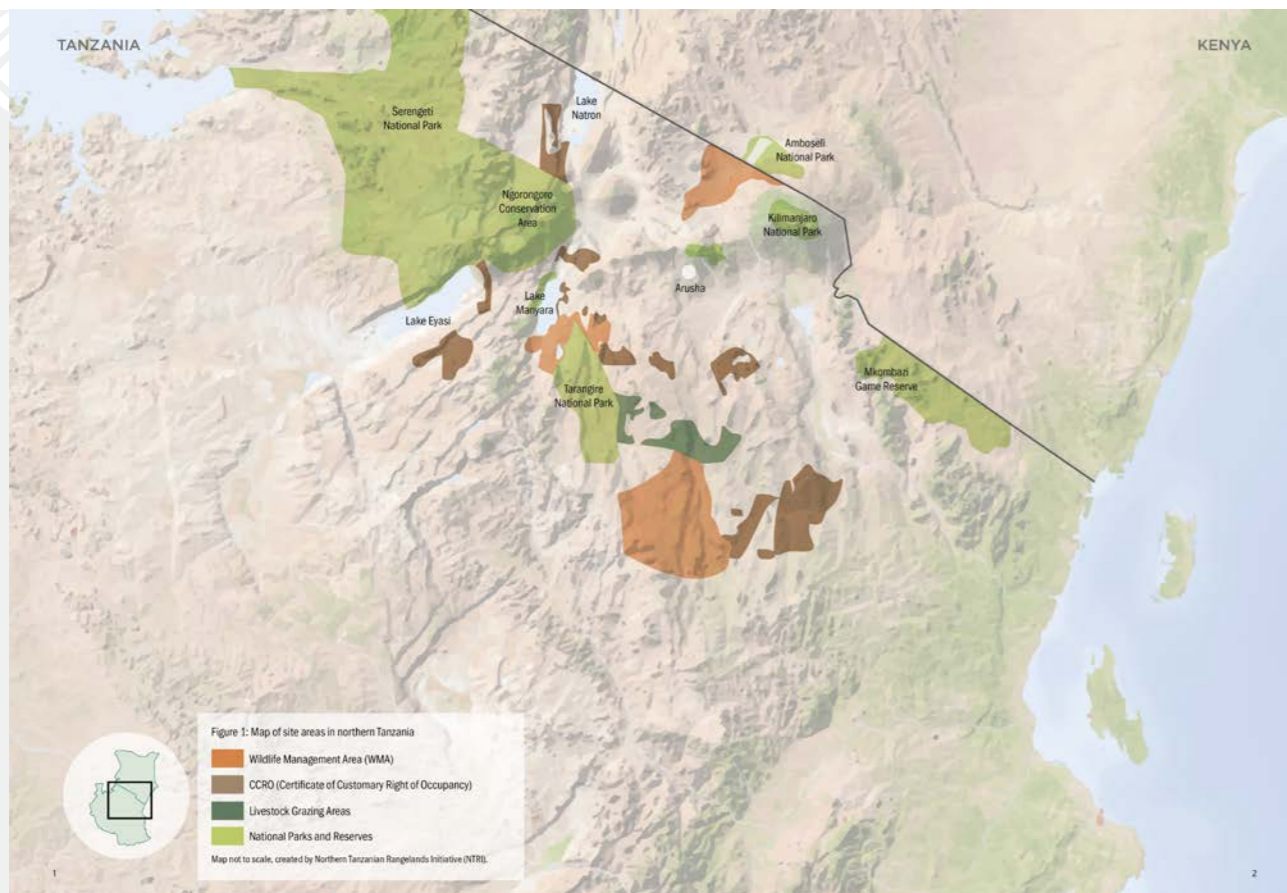
⁴ Wily, L. A. 2011. 'The law is to blame': The vulnerable status of common property rights in sub-Saharan Africa. *Development and change*, 42(3), 733-757.

⁵ Nelson, F. (Ed.). 2012. *Community rights, conservation and contested land: the politics of natural resource governance in Africa*. Routledge.

⁶ Reid, R. S. 2012. *Savannas of our birth: people, wildlife, and change in East Africa*. Univ. of California Press.

⁷ Russell, S., Tyrrell, P., & Western, D. 2018. Seasonal interactions of pastoralists and wildlife in relation to pasture in an African savanna ecosystem. *Journal of Arid Environments*, 154, 70-81.





Wildlife Management Areas (red), CCROs (brown), livestock grazing areas (dark green) and National Parks (light green) in northern Tanzania. Map: Northern Tanzanian Rangelands Initiative

territories from the threat of land fragmentation and encroachment. This approach safeguards key seasonal habitat and migration corridors for both wildlife and livestock. This work has helped communities secure over 940,000 hectares of land in these communal customary titles (called Communal Customary Rights of Occupancy, CCRO) across northern Tanzania over the past decade, including the last remaining traditional lands of the Hadza and Akie hunter-gatherers, cultures unique to northern Tanzania's savannahs. This tenure security creates new economic opportunities for marginalised communities such as ecotourism and a novel **carbon crediting project** carried out in partnership between the Hadza and Carbon Tanzania, a local social enterprise. This project was awarded an Equator Prize in 2019.

Scaling up Community Conservation Areas: Kenya and Namibia

Over the past 20 years, following their own unique paths and circumstances, Namibia and Kenya have emerged as notable leaders in the region, and indeed the world,

in taking community conservation models to a scale of large and growing national impact. Importantly, while there have been many calls and policy statements across the region to devolve greater rights over wildlife and other natural resources to local communities, Namibia is the only country in the region that has actually created a clear legal framework that does this. Its wildlife and conservation laws enable the creation of communal conservancies where local bodies have broad management rights and are entitled to retain 100 per cent of the revenue from wildlife utilisation.

After the passage of the reforms that created conservancies in Namibia during the mid-1990s, these areas have spread dramatically. They now cover over 16 million hectares and encompass **roughly 20 per cent of Namibia's land area**. State protected areas, community conservancies, and private conservancies account for roughly 43 per cent of the total land area under some form of conservation management. Wildlife numbers across conservancies have widely recovered alongside the spread of conservancies. For example, the country's elephant population has tripled since the mid-1990s and

lions and black rhinos have recovered in the region of north-western Namibia.

In Kenya, conservancies started to emerge in the 1990s through local initiatives, often involving tourism companies and groups of landowners or pastoralist communities, in key ecosystems such as Amboseli or the Maasai Mara. In 2013, following the passage of the new Kenyan constitution in 2010, the government passed a new wildlife law that formalised a definition of conservancies for the first time, giving them state sanction and support. Since then, the number of conservancies has taken off, with over 160 now covering an area around 6 million hectares, **roughly 11 per cent of the country's land area**. As in Namibia, this has had the effect of approximately doubling the area of land under conservation management beyond that contained within state protected areas. Conservancies in Kenya provide critical habitat for a wide range of endangered species, including the near-endemic Grevy's Zebra, hirola antelope and more widespread species such as elephant, lion, cheetah and giraffe.

Keys to the changes and progress made in scaling up community conservation models in both Kenya and Namibia include the following factors:⁸

- The creation of clear and supportive legal and policy

frameworks for community-based conservation, which took place in Namibia in the mid-1990s after independence from South Africa, and in Kenya more recently after the adoption of the 2010 Constitution and its important provisions around devolution of authority.

- Critical leadership from government and civil society, including relatively strong collaboration between those two spheres, as well as from many private sector tourism operators in Kenya in particular. Innovative locally-based organisations like Integrated Rural Development and Nature Conservation in Namibia and the Northern Rangelands Trust in Kenya, as well as key associations such as the Kenya Wildlife Conservancies Association and Namibia Association of Community Based Natural Resource Management Support Organisations (NACSO), have been critical to the developments in these countries.
- Significant large-scale financing for conservancy development in both countries, from USAID and other external funders as well as international

⁸ See Nelson et al. (2021) for discussion.



Integrating pastoralist livestock husbandry and conservation of wildlife is central to community conservation in Kenya and northern Tanzania. Photo: Nicholas Lapham



conservation organisations. Notably, the current crisis brought on by the COVID-19 pandemic, which has caused the loss of millions of dollars in tourism revenue to these countries, including to local conservancies, is **causing governments in both Kenya and Namibia to step up their financial support to conservancies**. For example, the Community Conservation Fund of Namibia, set up with government, conservationist and local civil society support as a long-term financing vehicle for conservancies, has received critical investment to support conservancies during the pandemic, accelerating its growth as a long-term support vehicle. These developments are potentially significant for the long-term financing of community conservation, born in part from a mainstream recognition of how important conservancies now are for conservation and for the tourism industries in both countries.

Community Forest Management

While many conservation initiatives in the region focus on wildlife in savannah ecosystems, community forest management represents another area of action and investment, both important innovations and entrenched challenges.

Tanzania has been a regional leader in community-based forest management since the early 1990s. The country's village-based local governance system, combined with land and forest law reforms in the late 1990s and early 2000s, led to the creation of over 2.5 million hectares of Village Land Forest Reserves. These areas have created new economic opportunities for communities from sustainable timber and charcoal harvesting, carbon credits and for securing rights over locally valued resources.⁹ However, in recent years the spread of these areas has stalled and government support for community-based approaches seems to have retrenched.

In neighbouring Kenya, the dominant theme related to community involvement in forest conservation has been conflicts over the rights of Indigenous peoples to their customary territories in highland forests. Groups such as the Sengwer and Ogiek have struggled to receive recognition of their rights, even after the Ogiek won a landmark case before the African Court on Human and Peoples' Rights in 2017, and there have been recurrent conflicts and in some cases violent evictions.¹⁰

By contrast, recent forestry governance reforms in Zambia have created important new opportunities for local communities to secure legal recognition of



In northern Tanzania, the Ujamaa Community Resource Team has led efforts to secure Indigenous communities' land rights through legal titles, in areas such as the Yaeda Valley and other savannah landscapes. Photo: Felipe Rodriguez



Community land use planning based on traditional rangeland management systems is central to many ICCAs in East Africa. Photo: Roshni Lodhia

communal rights to manage and benefit from forests, and also created new opportunities for developing locally-based conservation models through forestry regulations. The 2015 Forests Act provides for the establishment of Community Forest Management Groups/Community Forest Management Areas (CFMAs), which can secure rights to manage and capture revenues from locally established forests. Since supporting community forestry regulations were passed in 2018, **over one million hectares have already been established as CFMAs**. A number of entrepreneurial organisations such as BioCarbon Partners and COMACO are using this framework to collaborate with communities to establish and secure large areas of community-managed forest in key wildlife areas and to generate new sources of revenue for local communities from carbon credits and other forest products.¹¹ This creates one of the most notable opportunities for strengthening community rights over forests, in a country with some of the region's most extensive forests and woodlands, as well as high levels of deforestation.

⁹ See: Blomley et al. **IIED brief April 2019**.

¹⁰ See: **Mongabay, 24 Sept. 2018** and **IWGIA.org**.

¹¹ While there are important debates about carbon credits and REDD+ (Reduced Emissions from Deforestation and Forest Degradation) in relation to their interaction with Indigenous and community land and forest tenure, the experiences in Tanzania and Zambia over recent years suggests that approaches are possible – and in fact indispensable – that both strengthen local rights to manage forests and control customary lands as well as generate new economic opportunities from carbon credit markets. See the following reviews for detailed discussions of these case studies, within the wider national policy and legal context around community forest management: Davis et al. 2020. **Community-based Natural Resource Management in Zambia**; and Trupin et al. 2018. **Making Community Forest Enterprises Deliver for Livelihoods and Conservation in Tanzania**.



Locally Managed Marine Areas

Millions of people living along the region's long Indian Ocean coastline depend on fisheries and other marine resources for their livelihoods. Marine ecosystems here also contain exceptional levels of biodiversity, from coral reefs to mangroves and estuaries.

A key focus of environmental conservation efforts in the Western Indian Ocean (WIO) over the past two decades, which also reflects global trends, has been strengthening local management institutions. Locally Managed Marine Areas (LMMAs), whereby near-shore ocean zones and fisheries are managed through community-level institutions, have spread across different countries, covering around 1,100,000 hectares in the WIO region by 2014.¹² In Kenya, for example, where 25 LMMAs had been set up by 2015, these areas are managed through Beach Management Units that comprise fishery users and other local stakeholders.¹³ They are responsible for developing management plans, monitoring and enforcing local rules to govern the LMMA in collaboration with government authorities. Evidence of fish biomass and diversity increases have been recorded in areas such as the **Kuruwitu LMMA**, one of the earliest of these LMMA sites in Kenya, which was awarded an Equator Prize in 2017.

The movement towards LMMA establishment in eastern Africa is creating important opportunities to strengthen local marine management and conservation institutions, potentially improving food security, the sustainability of fisheries and conservation of marine ecosystems through these models. Like other forms of community conservation, LMMAs generally remain constrained by a combination of regulatory or policy barriers and limited local capacity and resources. In particular, local collective rights to govern territorial waters and marine resources are critical and need to be clearly recognised and enforced. Continued improvement of this policy and legal environment, while strengthening Beach Management Units and other local institutions, is a key priority across the region. A recent example of reform is the passage of an important **new fisheries law in Mozambique**.

Conclusions and recommendations

Community-based approaches to conservation and

natural resource governance and management in eastern and southern Africa face new opportunities and entrenched challenges. There is significant momentum behind some new formal community-based approaches, such as conservancies in Kenya and Namibia, as well as new reforms such as Zambia's new community forestry law and regulations. Importantly, the COVID-19 pandemic has thrown a spotlight on the critical role of local communities in supporting conservation, including through traditional resource management institutions, at a time when many government agencies and external initiatives have been shut down or slowed down due to the crisis or loss of revenue. The pandemic may actually lead to important new opportunities to invest in community institutions, develop stronger partnerships and expand support for community conservation.

In the context of the emerging global conservation policy agenda being developed in 2021 and implemented over the next critical decade for the earth's biodiversity and living systems, there are two key and general priorities across this diverse region.

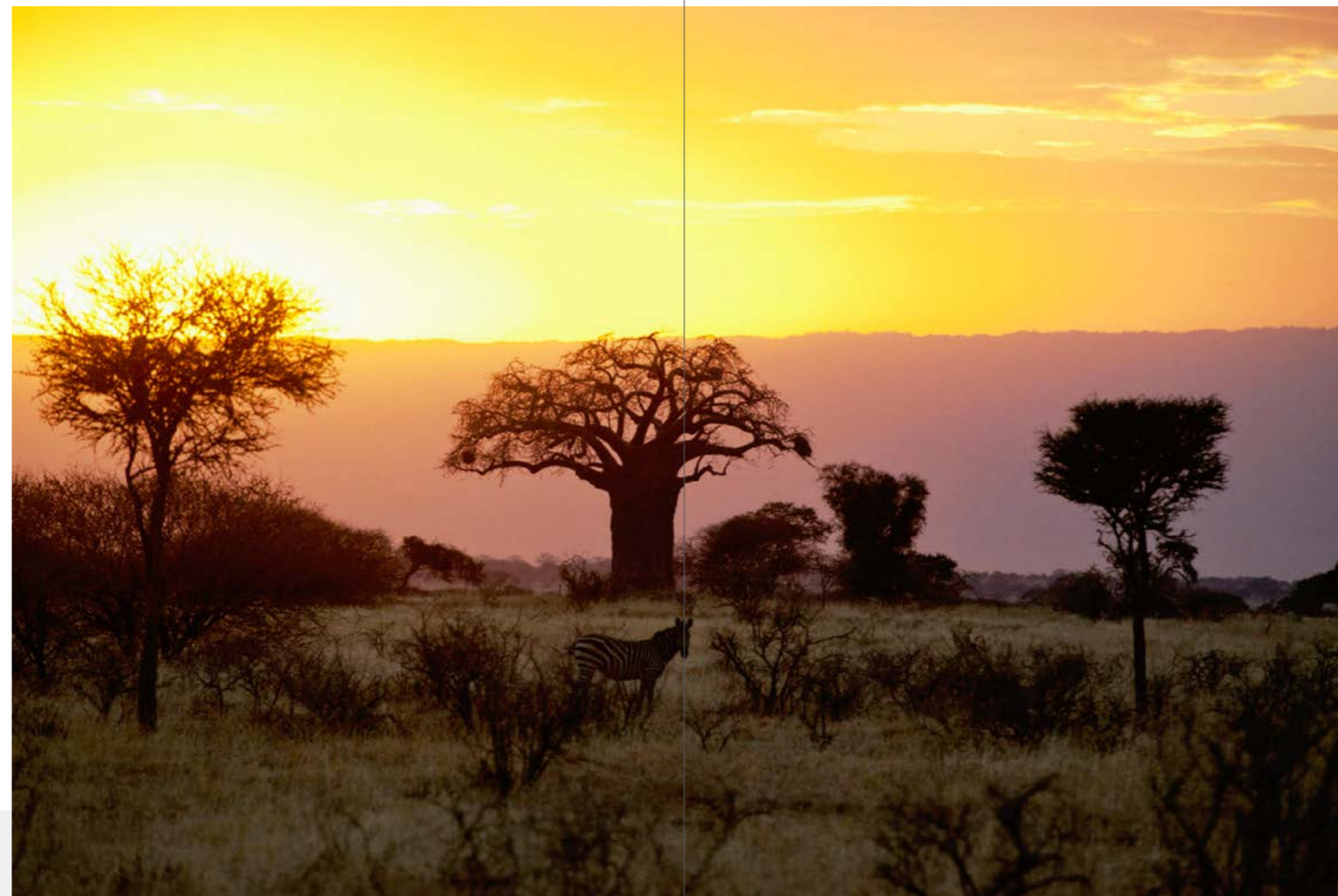
First, where new models and community-based approaches have momentum and greater demand for uptake, with the right combination of community demand and government support, international efforts need to prioritise scaling such models. This applies, in different ways, to conservancies in Kenya and Namibia, CFMAs in Zambia and legal mechanisms (called Certificates of Customary Right of Occupancy, CCROs) for securing community rights over pastures in northern Tanzania. These offer some of the best opportunities for expanding spatial conservation coverage and impact, particularly in ways that also support communities' resource rights, livelihoods and economic opportunities. Similar opportunities also exist with LMMAs in East Africa, which also have momentum and are critical to reconciling conservation, food security and local economic interests throughout the Western Indian Ocean.¹⁴

Second, the single greatest barrier to making progress and supporting the ability of communities to secure and protect their territories and resources lies in the continued struggles around local land and natural

resource rights and tenure. While community land rights reform has achieved much greater prominence as a development and environmental priority around the world over the past decade, the pace and scope of reforms in this region, as in all of sub-Saharan Africa, remains insufficient. Communal and customary rights over land, forests and marine resources need greater recognition both in the law and in the enforcement of legal provisions that recognise those rights. There is an enduring gap in the institutional foundations needed for community conservation action, including expanding protections of valued local resources and territories, and the ability to enforce traditional conservation rules and customs. Tenure reforms, such as the recent land and forest reforms that have taken place in the Democratic Republic of Congo, are critical to the conservation agenda and greater collaboration, attention and investment are needed. Strengthening local rights to not only manage, but govern and exercise tenure over, forests, lands and other natural resources, is critical to any support to community-based approaches to conservation in the region.

To achieve both of these priorities, international conservation efforts need to prioritise enabling support and investments in the grassroots initiatives and local organisations that are often the key agents of change in their communities and societies. Countries that have adopted frameworks for new community conservation approaches, such as Namibia and Kenya, have done so based on strong local civil society leadership, national advocacy networks and strong collaborations between NGOs, grassroots groups, government and the private sector. National associations such as the Kenya Wildlife Conservancies Association foster learning, exchange and collective action at a national scale, as well as links to initiatives in other countries in the region. Accelerated support to these groups and the collaborations that are needed to bring about change must be a priority if conservation solutions are to be expanded on the ground.

Photo: Honeyguide



¹² Rocliffe, S., Peabody, S., Samoilys, M., & Hawkins, J. P. 2014. Towards a network of locally managed marine areas (LMMAs) in the Western Indian Ocean. *PLoS one*, 9(7), e103000.

¹³ Kawaka, Joan A., et al. 2017. Developing locally managed marine areas: lessons learnt from Kenya. *Ocean & Coastal Management* 135: 1-10.

¹⁴ Rocliffe et al. 2014.



Photo: Roshni Lodhia

Global spatial analysis





Ghanimat Azhdari. Photo: ICCA Consortium

Dedication

Territories of Life: 2021 Report is dedicated to **Ghanimat Azhdari** (1983-2020), a young and passionate leader from the Qashqai tribal confederacy in Iran. Ghanimat was a specialist in Geographic Information Systems (GIS) and community mapping, working tirelessly to support the participatory documentation of territories of life with the national federations and unions of nomadic tribes in Iran (UNINOMAD and UNICAMEL). She was contributing her deep knowledge, skills and passion to the development of this report when her life was unjustly cut short on 8 January 2020. Ghanimat played important roles in the Centre for Sustainable Development and Environment (CENESTA) in Iran and the ICCA Consortium globally and was pursuing her PhD at the University of Guelph at the time of her passing. She is dearly missed. Her legacy will continue through the work of the many people whose lives she touched during her short time on Earth.



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About this report

This technical report is part of an ongoing process to develop the knowledge base on territories and areas conserved by Indigenous peoples and local communities (sometimes abbreviated as “ICCAs—territories of life”). It draws on the best available information at the time of analysis and is expected to be developed on a continuing basis; as such, the authors invite feedback and expressions of interest in collaboration (for correspondence, please email: iccaregistry@unep-wcmc.org). It is part of the ICCA Consortium's “Territories of Life: 2021 Report”, which also includes 17 case studies of territories of life, six national and regional analyses and an executive summary of the full report. The global spatial analysis and other components, as well as the report in its entirety, are available at: <https://report.territoriesoflife.org/>.





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The contents of this report do not necessarily represent the views of the ICCA Consortium in its entirety or of its funding partners.

A modified version of the potential ICCAs dataset developed for this report is available, subject to specific terms of use, from UNEP-WCMC. Please contact iccaregistry@unep-wcmc.org



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Box 1.**Key terms and abbreviations**

Indigenous peoples: There is no formal or universally agreed definition of Indigenous peoples, but the most cited description is in **Cobo (1981)** including the following excerpt: “Indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing on those territories, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions, and legal system.”

Local communities: There is no clear description or definition for this concept; a **2013 note by the CBD** explains: “Many communities may be considered local and may also be described as traditional communities... They are culturally diverse and occur on all inhabited continents.” In this report, local communities refer to communities whose identities, cultures, knowledge systems, practices and livelihoods are closely linked to and embedded in their collective lands and areas.

Indigenous peoples' and local communities' lands: Lands (which can include freshwater) where Indigenous peoples or local communities have ownership and/or governance authority through a complex mix of individual, family and communal tenures, regardless of state legal recognition. These lands are not necessarily governed and managed by customary or culturally embedded institutions and systems. Nor are they necessarily conserved or sustainably used over the long-term.

ICCAs—territories of life: These are a subset of Indigenous peoples' and local communities' lands,

which are governed with conservation outcomes. ICCA is an abbreviation for territories and areas conserved by Indigenous peoples and local communities and are often referred to as territories of life. Both ICCAs and territories of life are umbrella terms and concepts used widely, including in this report, and are intended for communication across inherently diverse contexts; they are not intended to replace local concepts or place names. They generally have three characteristics (**ICCA Consortium, 2021a**):

- There is a close and deep connection between a territory or area and its custodian Indigenous people or local community. This relationship is usually embedded in history, social and cultural identity, spirituality and/or people's reliance on the territory for their material and non-material wellbeing;
- The custodian people or community makes and enforces (alone or together with other actors) decisions or rules about the territory or area through a functioning and self-determined governance institution, which may or may not be recognised by outsiders or by statutory law of the relevant country; and
- The governance decisions and rules and the management efforts of the concerned people or community overall positively contribute to the conservation of nature and to community livelihoods and wellbeing.

Indigenous peoples' and local communities' lands may have one or more of these characteristics but would not typically be considered ICCAs (in the broad sense, and subject to their free, prior and informed consent) unless they have all three.

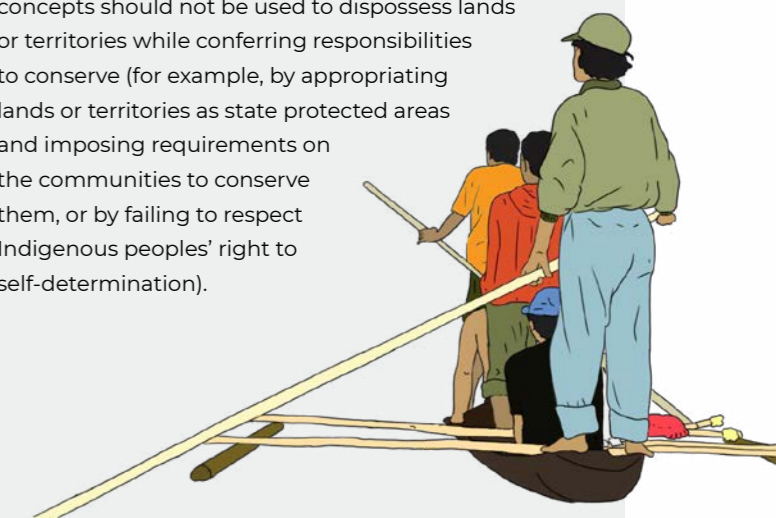
Potential ICCAs: Based on the spatial data used in this report, these are estimated areas of potential

ICCAs. They are in good ecological condition and appear to be consistent with the main characteristics of ICCAs (see above). They could be considered ICCAs in reality if self-identified as such by their custodians (with their local names always being recognised and taking precedence). The 'Potential ICCAs layer' refers to the spatial data layer of potential and known ICCAs, created specifically for this analysis. It is referred to as “potential” because the vast majority of the data layer was not self-reported as ICCAs by custodian Indigenous peoples and local communities (only 119 sites were self-reported as ICCAs¹). Therefore, this data layer is used as an estimation of where ICCAs—territories of life might occur based on the best available data and methods at this point in time (limitations of this method are outlined in detail in Annex 1).

State and privately governed protected and conserved areas: In this report, this term refers to all protected and conserved areas that are not under the governance of Indigenous peoples and local communities² (as those sites were added to the Potential ICCAs layer). It includes sites under state and private governance as well as shared governance (**Borrini-Feyerabend, 2013**). Although shared governance can include arrangements with Indigenous peoples and local communities, the detail of which parties are involved in the shared governance is not recorded in the Protected Planet Initiative databases used here. Therefore, it was not possible to assess in this report. Sites with shared governance comprise a small portion of these data; only 2% of all the records in the Protected Planet Initiative data.

Conserved areas: Although 'conserved area' is a term used in different ways to describe a range of area types and outcomes (**Jonas & Jonas 2019**), in this report, this term refers specifically to “other effective area-based conservation measures” (OECMs) as defined by the CBD³. These areas achieve conservation outside of protected areas.

Custodians/stewards: In this report, these terms refer to Indigenous peoples and local communities who are 'taking care of' their collective lands, territories and areas through their cultural, spiritual and social systems and practices. Custodianship and stewardship are used in a similar way, referring in general to Indigenous peoples' and local communities' cultural and other systems that enable them to 'take care of' and live within the means of their territory or area (**ICCA Consortium, 2021b; ICCA Consortium 2021c**). Both are necessarily embedded within customary or community laws, rights, governance systems and cultural practices and any recognition of communities as custodians or stewards should recognise the fullness of these systems. These concepts should not be used to dispossess lands or territories while conferring responsibilities to conserve (for example, by appropriating lands or territories as state protected areas and imposing requirements on the communities to conserve them, or by failing to respect Indigenous peoples' right to self-determination).



¹ Anything pertaining to ICCAs—territories of life must be considered, discussed and verified by their custodian Indigenous peoples and local communities in accordance with their rights, protocols, local knowledge systems and free, prior and informed consent.

² As per the January 2021 versions of the Protected Planet Initiative's World Database on Protected Areas (WDPA) and World Database on Other Effective Area-Based Conservation Measures (WD-OECM).

³ Decision 14/B of the CBD defined OECMs. **CBD (2018)**.



Executive Summary

We have reached a critical juncture in shared human history. We have seen all too clearly since the rise of the COVID-19 pandemic how people and nature are interdependent, how our health and wellbeing are intimately connected with that of the rest of the planet and how the climate, biodiversity and social crises are deeply interlinked. There is growing global consensus around one of the best opportunities to turn the tide and ensure that our species and the billions of others with whom we share the planet continue to co-exist and thrive well into the future. It includes listening to, respecting and appropriately recognising and supporting Indigenous peoples and local communities whose cultures and governance systems have shaped and nurtured the diversity of life on Earth for generations and millennia, and who continue to do so today even in the face of significant threats. From local to global levels, all actors and duty-bearers in the conservation sector should prioritise strengthening the deep connections between cultural and biological diversity, while respecting, protecting and fulfilling the rights of Indigenous peoples and local communities.

This global analysis is the first of its kind to analyse the estimated extent and conservation values of territories and areas conserved by Indigenous peoples and local communities (abbreviated as ICCAs—territories of life). It builds upon a companion report produced over a similar timeframe (WWF et al., 2021, forthcoming) that assessed Indigenous peoples' and local communities' lands more broadly; it refines the dataset created in that report to focus specifically on the estimated extent of ICCAs—territories of life. The analysis provides technical and scientific evidence to strengthen key aspects of the post-2020 global biodiversity framework and its implementation. It illustrates that fulfilling the Convention on Biological Diversity's proposed 2050 vision of "living in harmony with nature" can only be achieved through a human rights-based approach that respects Indigenous peoples and local communities as rights-holders and holds governments, conservation organisations and private actors accountable as duty-bearers.

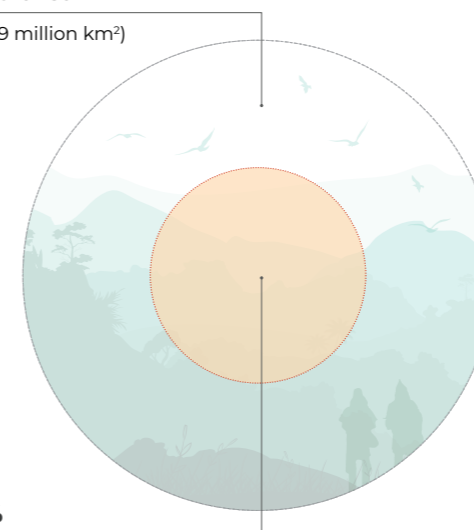
Key Findings

• **Indigenous peoples and local communities play an outsized role in the governance, conservation and sustainable use of the world's lands and biodiversity.** It is estimated that potential ICCAs cover more than one-fifth (21%) of the world's land (approximately the size of Africa), and over one-fifth (22%) of the extent of the world's terrestrial Key

Biodiversity Areas. As custodians of such a large proportion of the world, they must be acknowledged and respected as rights-holders, protagonists and leaders in relevant decision-making processes, and their rights to self-determination and collective lands and territories recognised and upheld so they can protect themselves from threats.

Total global land area

(134.9 million km²)

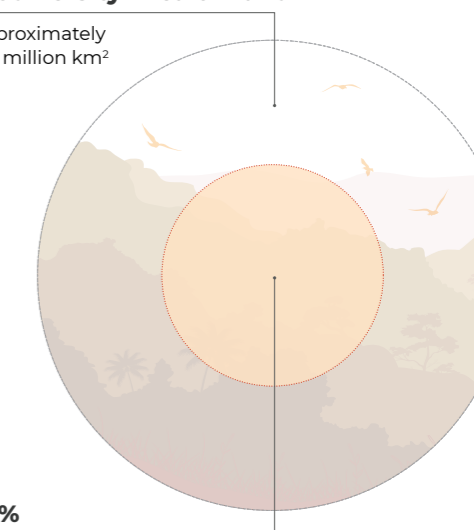


21%

Potential ICCAs
28 million km²
(approximately the size of Africa)

Total extent of Key Biodiversity Area on land

Approximately 11.6 million km²

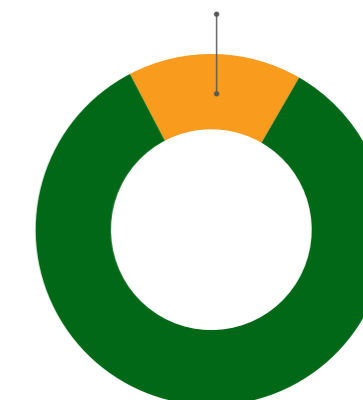


22%

Potential ICCAs
2.6 million km²

• **At least 16% of the extent of potential ICCAs faces high exposure to future development pressure from commodity-based and extractive industries.** Although these high industrial pressures are not inevitable, it is important to be prepared for this possibility, including proactively and urgently supporting Indigenous peoples and local communities to secure their rights to their collective lands and territories and governance systems. This 16% includes areas under high pressure, but the other 84% of the extent should not be considered free from development pressure. Given the significant linkages between potential ICCAs and areas of crucial importance for biodiversity and a healthy climate, supporting Indigenous peoples and local communities to secure their rights and protect and defend their territories and areas against industrial pressures should also be a priority for all actors in the conservation sector.

At least **16%** of the extent of potential ICCAs faces high exposure to potential future development pressure from commodity-based and extractive industries.



Extent of potential ICCAs

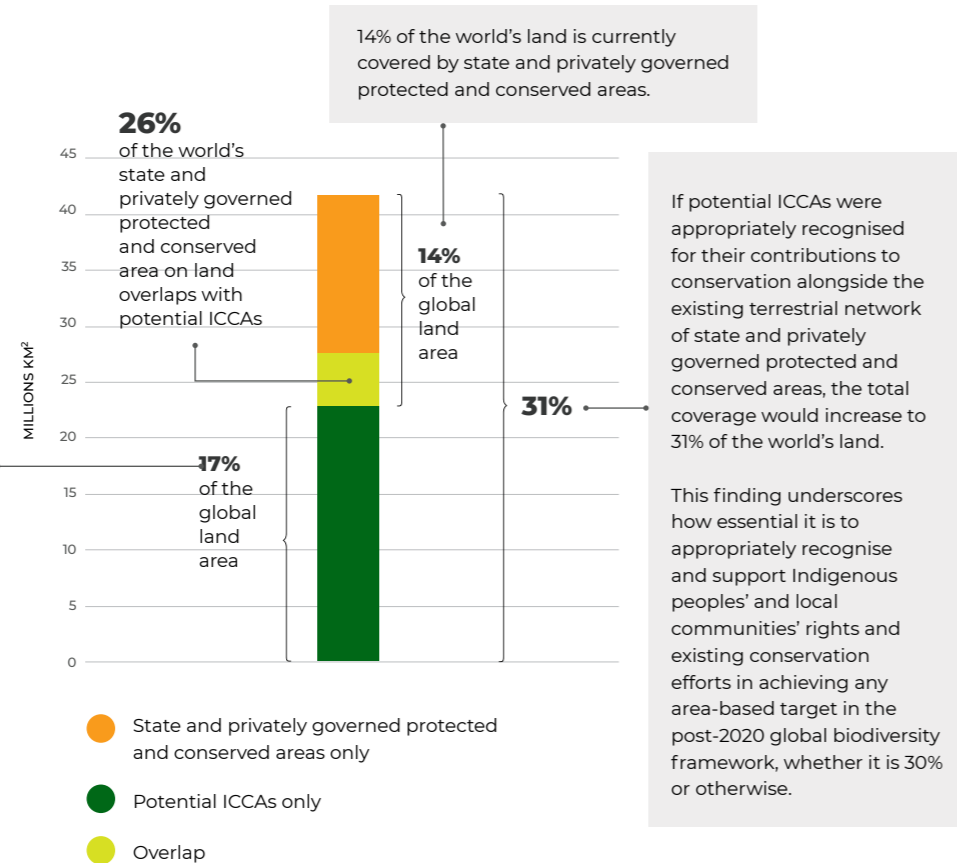


• **At least one-quarter (26%) of the world's state and privately governed protected and conserved area on land overlaps with potential ICCAs.** Therefore, Indigenous peoples and local communities are likely the *de facto* custodians of many existing protected and conserved areas, without being formally recognised as such. In many cases, it is precisely because of Indigenous peoples' and local communities' actions and contributions to biodiversity that these sites have been deemed 'suitable' for formal protection. This overlap also raises significant concerns with both the historical and continuing human rights implications of protected and conserved areas for Indigenous peoples and local communities, including potential forced displacement, undermining of customary and local governance and management systems and criminalisation of cultural practices.

• **Almost one-third (31%) of the world's land may already be covered by areas that are dedicated to**

conservation and/or maintaining the land in good ecological condition. If potential ICCAs were recognised for their contributions to conservation alongside the existing state and privately governed protected and conserved area network (14% of the world's land), the total coverage would increase to 31%. This finding underscores how essential it is to appropriately recognise and support Indigenous peoples' and local communities' rights and existing conservation efforts in achieving any area-based target in the post-2020 global biodiversity framework, whether it is 30% or otherwise. Indigenous peoples and local communities and civil society organisations have expressed serious concerns with the current draft's Target 2. This analysis illustrates both the opportunity and need to explicitly incorporate human rights, governance diversity and equity into the target, and ensure that its implementation respects Indigenous peoples and local communities as rights-holders.

Potential ICCAs cover an area greater than the terrestrial state and privately governed protected and conserved area network. Outside of this network (which currently covers 14% of land), potential ICCAs cover 17% of land.



• **Potential ICCAs cover at least one-third (33%) of intact forest landscapes globally.** They also cover at least one-third (32%) of areas that are considered key to reversing biodiversity loss, preventing CO₂ emissions from land conversion and enhancing natural carbon sinks. This finding indicates that in addition to being rights-holders to these territories and areas, Indigenous peoples and local communities are also the protagonists and agents of change in local-to-global efforts to protect forest landscapes, halt further biodiversity loss, reduce wildfires and mitigate climate breakdown.

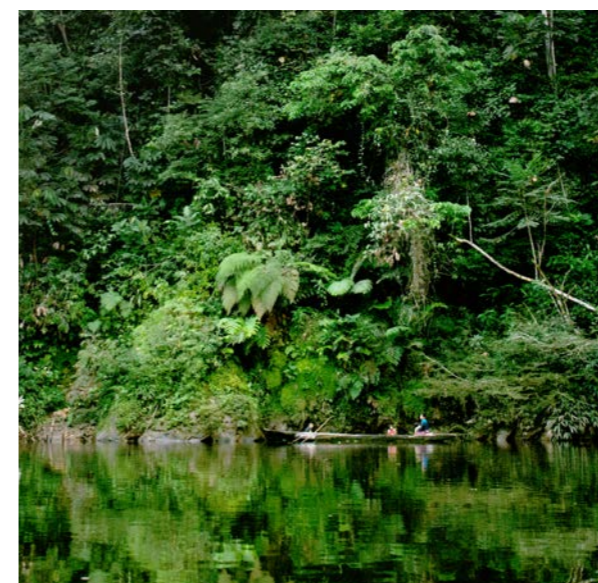
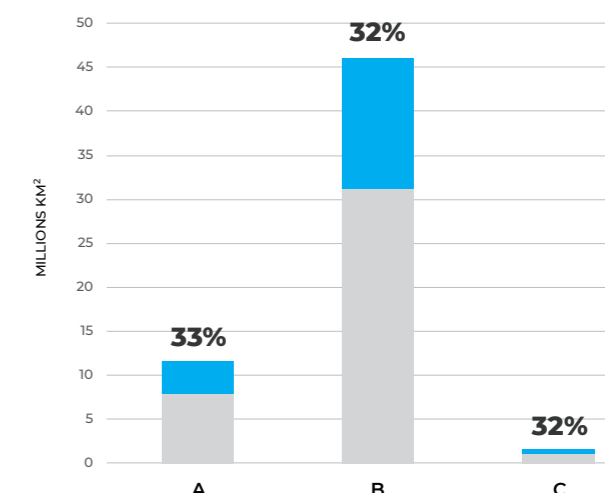


Photo: Jacob Balzani Lööv

• **Some areas governed by Indigenous peoples and local communities are recognised by UNESCO as natural sites of outstanding universal value.** Almost one-third (32%) of the extent of UNESCO's Natural and Mixed World Heritage sites on land overlaps to some extent with potential ICCAs. This role should be acknowledged and supported, with subsequent conservation efforts aiming to reinforce and support the deep connections between cultural and biological diversity in Indigenous peoples' and local communities' lands and territories and the social, cultural and spiritual practices that nurture and sustain them.

Extent covered by potential ICCAs



- Extent covered by potential ICCAs
- A: Intact forest landscapes
- B: Areas that are considered key to reversing biodiversity loss, preventing CO₂ emissions from land conversion and enhancing natural carbon sinks*
- C: Terrestrial UNESCO World Heritage sites

*outside the state and privately governed protected and conserved area network



Photo: Lopsang Chiring Lama



Part I

Introduction, Purpose and Methods

Introduction

Indigenous peoples and non-Indigenous local communities⁴ (hereafter referred to as Indigenous peoples and local communities) are increasingly recognised for their contributions to a healthy planet. With growing attention placed on the nexus of these interconnected issues, it is more important than ever to better understand the diverse contexts in which Indigenous peoples and local communities are living and asserting their rights, including to their collective lands and territories⁵. Respecting, protecting and upholding these rights is expected to become a determining factor for equitable and effective conservation in the coming years (RRI, 2020a). As Parties to the UN Convention on Biological Diversity (CBD) negotiate and eventually implement the post-2020 global biodiversity framework⁶, this report aims to shine a light on Indigenous peoples' and local communities' outsized role in nature conservation around the world. It analyses the estimated global extent of territories and areas conserved by Indigenous peoples and local communities (abbreviated as "ICCAs—territories of life"), thereby contributing to the technical and scientific evidence base required to strengthen key aspects of the post-2020 framework and its implementation.

Around the world, Indigenous peoples and local communities have deep relationships with their customary and collective territories and areas and the nature within them. These relationships are intertwined with their self-determined visions for the future, and include guiding principles such as reciprocity, respect and responsibility (Artelle et al., 2018, Ayers et al., 2012, Gauvreau et al., 2017). Such communities make and uphold decisions about their territories and areas through their own governance systems, sometimes in collaboration with others, and regardless of whether they are formally recognised by state governments. Their decisions and actions contribute to community wellbeing and nature conservation in diverse ways and for varying reasons – often rooted in their cultural and spiritual practices and their desire to sustain their

territories and areas in honour of their ancestors, and for generations to come.

Such territories and areas have been recognised as "ICCAs" in a wide range of resolutions and recommendations of the International Union for Conservation of Nature (IUCN) and decisions of CBD Parties since 2003 and 2004, respectively (Jonas, 2017). Earlier estimates suggest that ICCAs may cover an equal or greater area than government-designated protected areas, despite having little if any formal or appropriate⁷ recognition or support for their contributions to nature conservation (Kothari et al., 2012). However, this knowledge base is likely to significantly underestimate the actual diversity, extent and breadth and depth of these territories and areas. This global analysis is part of a broader initiative to strengthen the evidence and knowledge base of ICCAs. Along with 17 community level and six national and sub-regional level analyses, this global analysis is part of a 2021 report produced by the ICCA Consortium and is expected to be updated and revised over time (<https://report.territoriesoflife.org/>).

Purpose of the analysis

This is the first global analysis to bring together the best available information to create a global data layer that represents the estimated spatial extent of potential ICCAs. It builds on and complements a companion report on the biodiversity and ecosystem service values of Indigenous peoples' and local communities' lands (WWF et al., 2021, forthcoming), referred to hereafter as the 'IPLC Technical Report'. By adapting the dataset generated for that report (see methods in subsequent section), the present analysis created a dataset of "potential" ICCAs.

This analysis identifies spatial overlaps between estimates of potential ICCAs and areas identified as important for biodiversity and planetary health using existing global datasets (including Key Biodiversity Areas, Intact Forest Landscapes and the "Global Safety Net"⁸).

Box 2.

Supporting Indigenous peoples and local communities to map their ICCAs

This analysis highlights, with available spatial data, the crucial role ICCAs play in global conservation. However, it also highlights the current paucity of data on documented (known) ICCAs. Estimating coverage through the compilation of various datasets has inherent limitations. The only way to truly know about ICCAs, including their location, extent and diverse values, is to support Indigenous peoples and local communities to document and map their own ICCAs on their own terms, including through collective and collaborative efforts with other communities and related initiatives.

Indigenous peoples and local communities, if they so choose, should be supported to map their ICCAs and have opportunities to share their data following a self-determined process of free, prior and informed consent from the communities themselves (Doyle et al., 2019).⁹ During this process Indigenous peoples and local communities have an opportunity to reflect on the importance of their ICCAs, discuss threats, and collectively decide on how their data should be shared and used. It is critical that during this process Indigenous peoples and local communities are fully aware of and consider some the potential benefits and considerations associated with sharing their mapped data (UNEP-WCMC, 2021a).

Enabling Indigenous peoples and local communities to self-report the digital boundaries of their ICCAs could facilitate their efforts to gain appropriate recognition and defend their territories. From a global perspective, mapping ICCAs can result in their collective conservation values being better understood; the areas can be counted towards global conservation targets if the ICCAs' custodians so choose; and they can be factored into decision-making across multiple sectors.

The authors recognise the complexities of gathering and sharing such sensitive data, and support following the lead of Indigenous peoples and local communities to decide if or how their data should be shared, including whether the data is available for use.

- ⁴ Although these two groups are only considered together in the context of their close relationships between their cultures and territories and areas; the authors recognise the clear differences between them under international law. See Annex 3 for an Overview of the legal distinction between Indigenous peoples' rights and local communities' rights.
- ⁵ Land rights are rights held to land and related natural resources. They may be recognised under customary law and/or state law, which can sometimes lead to overlapping claims and conflicts between legal systems.
- ⁶ The post-2020 global biodiversity will replace the Strategic Plan for Biodiversity 2011-2020, which included the Aichi Biodiversity Targets. The zero draft of the post-2020 framework is contained in document **CBD/POST2020/PREP/2/1**.
- ⁷ By using the word 'appropriate', this report acknowledges that recognition and support should be adequate to meet the needs of ICCAs, and appropriate to the ecological, cultural, political and economic conditions of the respective Indigenous people or local community (Kothari et al., 2012; ICCA Consortium, 2021a; ICCA Consortium 2021b). Recognition or support provided should be determined and requested by Indigenous peoples and local communities themselves.
- ⁸ Areas of the world that (according to Dinerstein et al. 2020) if conserved, would reverse further biodiversity loss, prevent CO₂ emissions from land conversion, and enhance natural carbon removal.
- ⁹ The rights to give or withhold free, prior and informed consent is recognised in the UN Declaration on the Rights of Indigenous Peoples (2007). Although this right has been recognized in principle in various contexts – such as academic research, conservation and private sector activities – its application has been inconsistent at best. In some contexts, perhaps most notably in the Philippines where it is legally recognized under the Indigenous Peoples Rights Act, external actors have used the concept of free, prior and informed consent as a box-ticking exercise to do what they were already planning to do. See: **Philippine ICCA Consortium, 2021**. Indigenous peoples' own protocols and procedures for consultation, consent, decision-making and self-determination should be the basis for engagement and seeking their free, prior and informed consent. See Doyle et al., 2019.

Photo: KESAN



It explores the role that ICCAs might play in the UN CBD, including the draft post-2020 global biodiversity framework and Target 2 therein¹⁰ (CBD, 2020), and highlights the need for appropriate recognition and support to achieve this.

Furthermore, it illustrates linkages between cultural and biological diversity, including the spatial overlap between potential ICCAs and Natural and Mixed UNESCO World Heritage sites, while also considering the external industrial, extractive and commodity-based development pressures that might affect ICCAs in the future. The spatial analysis in each section is contextualised in the broader knowledge base with a brief discussion of the relevant literature.

The statistics provided in this report are global estimates that add to the evidence that ICCAs are a vital component of global conservation efforts, and that Indigenous peoples and local communities should be supported to build this evidence base in a participatory way. This means that Indigenous peoples and local communities should be supported

to map their ICCAs and share their data on their own terms following a process of free, prior and informed consent (Box 3). In this way, the estimated spatial layer presented here can gradually be replaced with an accurate dataset of self-identified, self-reported and peer-reviewed¹¹ ICCAs.

Challenges associated with global documentation of ICCAs

A number of studies have tried to illustrate the extent of Indigenous peoples' and local communities' lands (e.g., RRI, 2015; Garnett et al., 2018; WWF et al., 2021, forthcoming), using a range of methods and geographic scopes. Furthermore, initiatives such as LandMark, Mapping Back and Native Land are among efforts directed and guided specifically by Indigenous peoples in mapping their territories, cultural and sacred sites, languages and more.

However, the range of scopes and methods make it difficult to understand how they relate to one another, to

extrapolate and to replicate. For instance, Indigenous and tribal peoples' governance of forest systems is relatively well researched in the Amazon Basin (e.g. FAO & FILAC, 2021) but less attention has been paid to tropical and other forests in other regions. Furthermore, academic research on Indigenous peoples' and local communities' conservation governance is dominated by terrestrial territories and ecosystems with limited attention to coastal and marine territories of life (Reid et al., 2020; Ryks, 2014). Despite this, collaborative research, including initiatives supporting co-creation of knowledge, is gaining traction in certain regions and biomes such as the Arctic (Brooks et al., 2019; Dale & Armitage, 2011) and Australia (Gould et al., 2021; Rist et al., 2019).

The paucity of consistent, global data is complicated by tenure insecurity, boundary disputes, lack of rights, lack of recognition, and community conflicts, which make it difficult to create maps that are agreed upon by all relevant rights-holders and stakeholders (WWF et al., 2021, forthcoming). Furthermore, many territories and areas rely on oral methods and history to document ancestral ownership, land tenure, traditional knowledge, and customary laws, adding further complications to documentation (Gafner-Rojas, 2020; McIvor, 2020)

Although there are many dedicated locally led initiatives that can and should be integrated into global efforts, with free, prior and informed consent from the concerned Indigenous peoples and local communities, managing and monitoring data in a globally consistent way also has its challenges as it can be difficult to incorporate the level of diversity and complexity found at a local and national scale (Hirt, 2012; Reid et al., 2020; WWF et al., 2021, forthcoming). The WWF et al., forthcoming (2021) was the first report to map the global extent of lands under the custodianship of both Indigenous peoples and local communities using the best available datasets. Nevertheless, the dataset produced was acknowledged to be an underestimate due to the lack of available data for many locations.

Methods

This report is focused on a range of global spatial analyses, using an estimated spatial layer of potential ICCAs that was created specifically for use in this report, building on the dataset created in WWF et al., forthcoming (2021) (see detailed methods in Annex 2). Although the method for creating this spatial layer has its limitations (see Annex 1), it provides an indication of the estimated extent of ICCAs based on data provided by the ICCA Registry, partners of the Global Support Initiative to ICCAs (an initiative managed by UNDP-implemented GEF Small Grants Programme), LandMark (2020), Garnett et al. (2018), Conservation International (2020), the Protected Planet Initiative and the ICCA Registry¹². This analysis only focuses on the terrestrial environment, due to shortcomings in quality and access to available data for the marine environment. These analyses are complemented by a comprehensive literature review to provide context to the analyses and to the discussion.

Box 3. Note on map visualisation

Boundaries of potential ICCAs have been obscured in some of the maps. This is due to the uncertainty in the boundaries and whether all data in the Indigenous peoples' and local communities' lands base layer (WWF et al., 2021, forthcoming) were gathered in accordance with Indigenous peoples' right to provide or withhold free, prior and informed consent. Due to these limitations these maps should not be used as means for identifying these areas as ICCAs.

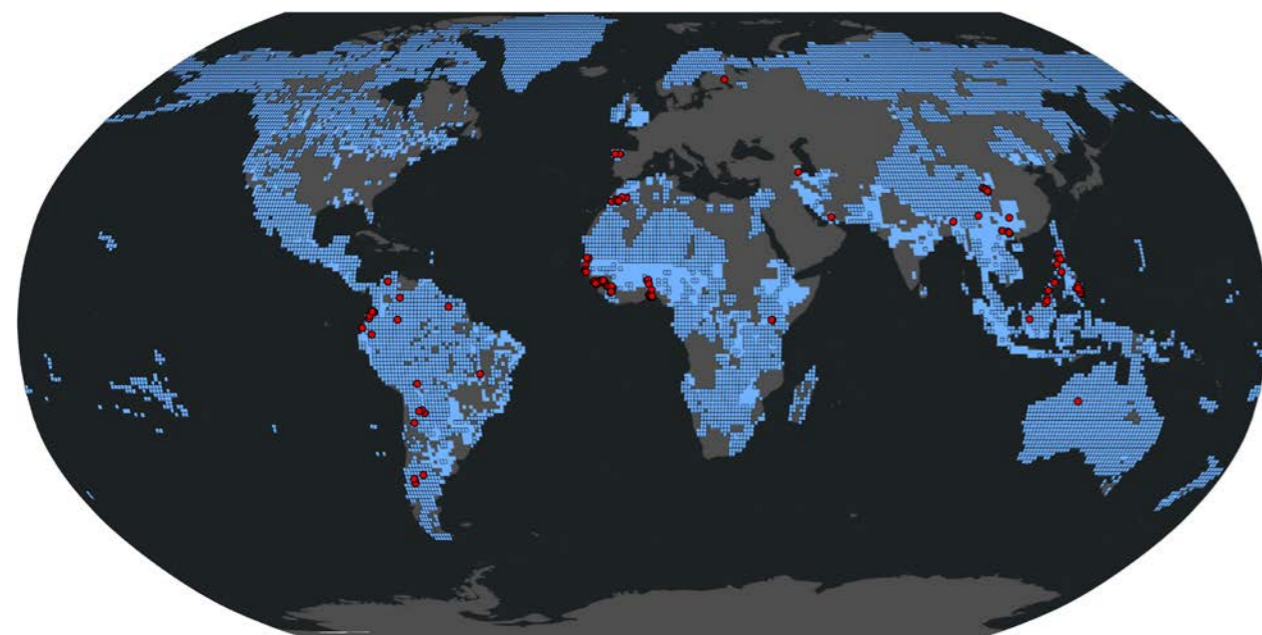
Boundaries have been obscured by intersecting the datasets with a 1-degree grid and scaling up coverage in each 1-degree grid cell. Each cell is covered to some extent with the dataset it is representing. Although each grid cell is not completely covered by dataset, it is visualised in this way to obscure the boundary, and therefore visually overestimates the coverage.

In maps that show the overlap between two datasets, sometimes the boundary is shown without grid cells, as the map does not show the boundary of potential ICCAs. It only shows the extent of the potential ICCAs layer that overlaps with the second dataset.

¹⁰ This target is being negotiated by CBD Parties and it will act as a successor to Aichi Target 11, focusing on protected and conserved area networks.

¹¹ The purpose of peer review of ICCA data is to: (1) raise any concerns regarding the data or how it was collected, including issues of free, prior, and informed consent, (2) check the accuracy of the data, and (3) check for alignment with definitions. More broadly the ICCA peer-review networks should play an important support role that supports self-strengthening within and between ICCA custodian communities, and facilitates mutual support (UNEP-WCMC, 2020).

¹² See Table 1 in Annex 1 for full descriptions of all the datasets used, including what they contain, their limitations and citations. See Annex 2 for detailed methods.



The extent of Indigenous peoples' and local communities' lands overlaid with potential ICCAs, scaled up to 1-degree grid cells to obscure boundaries

- Indigenous peoples' and local communities' lands
- Potential ICCAs
- Known ICCAs

Figure 1. The extent of Indigenous peoples' and local communities' lands in light blue (from WWF et al., 2021, forthcoming), overlaid with potential ICCAs in blue, with grid lines (from the present analysis). The potential ICCAs layer comprises a subset of the former. This is due to ICCAs having the additional characteristic of contributing to conservation (see Box 1 for more information). Areas not covered should not be assumed to lack Indigenous peoples' and local communities' lands or ICCAs.

Generating the layer of potential ICCAs

A combination of datasets was used to create the estimated spatial layer of potential ICCAs. Firstly, it used the spatial layer of Indigenous peoples' and local communities' lands that was created for WWF et al., forthcoming (2021). This spatial layer is a combination of datasets where Indigenous peoples and local communities have ownership and/or governance authority of the land. It overlaps to some extent with 132 countries and territories.

Secondly, to identify areas that might be potential ICCAs, it was intersected with areas of low human modification from the Global Human Modification (GHM) layer (Kennedy et al., 2018), which was used as a proxy for good ecological condition. Potential ICCAs were identified in this way on the assumption that Indigenous peoples' and local communities' lands that are in good ecological condition are likely to meet at least two of the three characteristics of an ICCA, namely, governance by Indigenous peoples and local communities and positive conservation outcomes (see Box 1).

The final step involved adding documented (known) ICCAs to the spatial layer. This data had two key sources: (1) **ICCA Registry** (67 records); and (2) partners of the Global Support Initiative to ICCAs (52 records). In total, 119 known ICCAs were added to the potential ICCAs layer. The final potential ICCAs layer overlapped, to some extent, with 113 countries and territories. Although this layer contains a small number of known ICCAs, the layer is referred to as the potential ICCAs layer. See Figure 1 for the difference between spatial layer of Indigenous peoples' and local communities' lands that was created for WWF et al., forthcoming (2021), and the potential ICCAs layer that was created in this present analysis (also see Box 3 on map visualisation).

Finding spatial overlaps between potential ICCAs and other datasets

Spatial intersections were performed to calculate the area of overlap between the potential ICCAs layer and a range of other global datasets¹³, which are listed with brief descriptions in Box 4, and with full descriptions and limitations in Annex 1. Due to many instances of protected and conserved areas overlapping ICCAs (see Box 5 later in this document) this analysis differentiates the findings by dividing the

potential ICCAs layer into areas covered by, and not covered by, state and privately governed protected and conserved areas. Protected and conserved areas recorded as governed by Indigenous peoples or local communities were included in the layer of potential ICCAs. The considerations listed in Box 5 must be noted when interpreting the results.

¹³ Finer resolution data, such as that at national or local scales, could improve understanding further, but was outside the scope of this global analysis

Box 4. Snapshot of global datasets intersected with the potential ICCAs layer

Key Biodiversity Areas:

Sites of significance for the global persistence of biodiversity (IUCN, 2016). Over 16,000 have been identified in terrestrial, marine and freshwater environments in all countries worldwide (BirdLife International, 2020). These areas encompass, among others, Alliance for Zero Extinction sites and Important Bird and Biodiversity Areas (IUCN, 2016).



Photo: Martin Harvey, WWF keybiodiversityareas.org

World Heritage sites (Natural and Mixed):

The World Heritage List comprises 1121 properties of Outstanding Universal Value (IUCN, 2021); 249 Natural and Mixed sites were used in this analysis.



Baby elephant, Sangha Trinational. Photo: Andréa Turkalo whc.unesco.org/en/list/1380

Global Safety Net: Terrestrial areas that are considered essential for biodiversity and climate resilience, creating a 'blueprint' for saving life on Earth according to Dinerstein et al., 2020. They cover 50% of the global land surface, and (according to the authors) if conserved could prevent further biodiversity loss, prevent CO₂ emissions from land conversion, and enhance natural carbon removal.



Puerto Rican moist forests. Photo Gregoire Dubois www.globalsafetynet.app



Photo: Jacob Balzani Lööv

Intact Forest Landscapes:

An Intact Forest Landscape is a seamless mosaic of forest and naturally treeless ecosystems with no remotely detected signs of human activity, and a minimum area of 500 km². They are large enough to maintain all native biodiversity and are crucial for carbon storage and regulating hydrological regimes, as well as other ecosystem functions (Potapov et al., 2017).

Cumulative Development Potential Index (DPI):

This index is a cumulative development pressure map created by combining previously published Development Potential Indices (DPIs) (Oakleaf et al., 2019) for renewable energy (concentrated solar power, photovoltaic solar, wind, hydropower), fossil fuels (coal, conventional and unconventional oil and gas), mining (metallic, non-metallic), agriculture (crop, biofuels expansion) and urban pressure map based on global urban growth projections from 2020 to 2050 (Zhou et al., 2019).

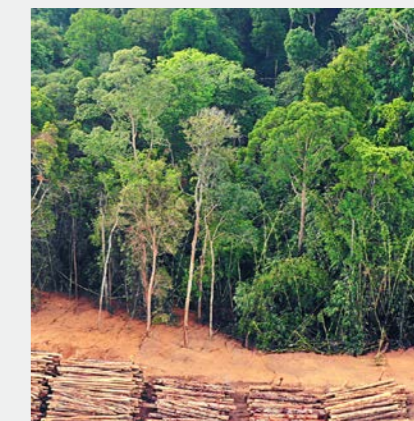
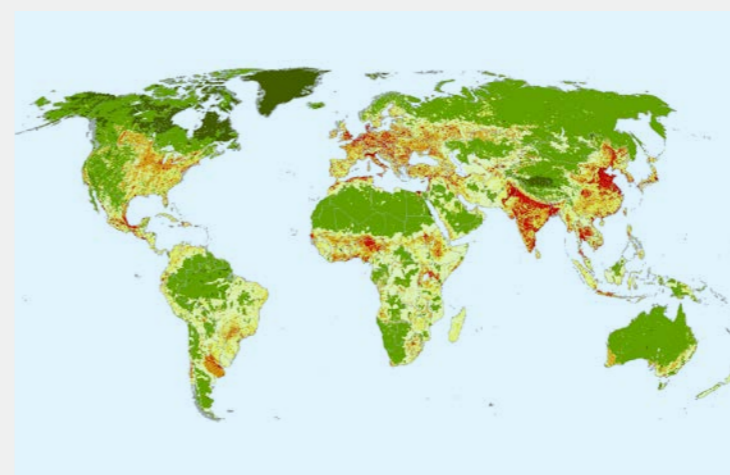


Photo: Unsplash.com

Human Modification:

The Global Human Modification (GHM) layer provides a measure of the ecological condition of terrestrial lands globally (at a 1-km resolution circa ~2016) based on the extent of human modification by activities, ranging from human settlement, agriculture, transportation, mining, and energy production (Kennedy et al. 2018). Low GHM were selected following Kennedy et al. (2018) and intersected with the Indigenous peoples' and local communities' lands layer.

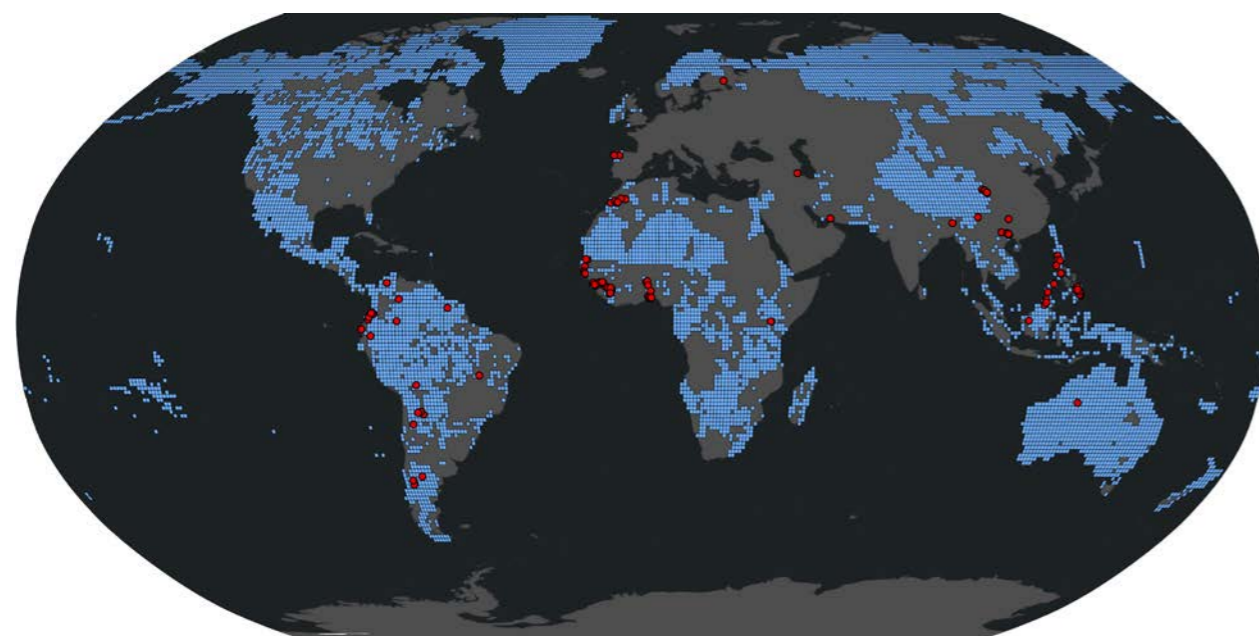


Part II Findings

According to WWF et al., forthcoming (2021), Indigenous peoples' and local communities' lands cover at least 43 million km², which is one-third (32%) of the world's land. They are found to overlap to some extent with 132 countries and territories. This analysis highlights builds on this to find the overlap specifically between potential ICCAs (i.e., Indigenous peoples' and local communities'

lands which have good ecological condition) and areas of importance for biodiversity, intact forest landscapes, and areas considered globally important for carbon storage and climate resilience. Furthermore, it highlights what proportion of this area is not already covered by state and privately governed protected and conserved areas.

Section 1: Global coverage of potential ICCAs



Distribution of potential ICCAs globally, scaled up to 1-degree grid cells to obscure boundaries

■ Potential ICCAs ● Known ICCAs

Main findings and their implications

This analysis finds that potential ICCAs cover at least 28 million km², which is over one-fifth (21%) of the world's land surface (see Figure 2), and an area approximately the size of the African continent. They overlap to some extent with at least 113 countries and territories, and all the world's 14 biomes.

Figure 2. The estimated distribution of potential ICCAs globally based on available data, scaled up to 1-degree grid cells to obscure specific boundaries. Red dots represent the actual locations of known ICCAs that have been self-reported by the ICCAs custodians. Areas of dark grey are areas of land that are not covered by potential ICCAs according to the analysis. Areas not covered should not be assumed to lack ICCAs.

Furthermore, 83% (23 million km²) of the extent of potential ICCAs lies outside of state and privately governed protected and conserved areas. This equates to 17% of the world's land being covered uniquely by potential ICCAs (i.e., this land is not also covered by state and privately governed protected and conserved areas).

This analysis also finds that 14% of the world's land is covered by state and privately governed protected and conserved areas together, so state coverage alone would be less than 14% of the world's land¹⁴. Therefore the finding supports previous estimates (e.g., in [Kothari et al., 2012](#)) that ICCAs might cover an area equal to or greater than state protected areas.

These analyses, along with others such as [RRI \(2020b\)](#), show that Indigenous peoples and local communities are contributing extensively to nature conservation around the world. Appropriately

recognising and supporting their rights, including to collective lands, territories and resources, would bolster their custodians' capacities to sustain their ICCAs in the long-term as well as respond to threats such as industrial activities. The legal recognition and protection of Indigenous peoples' and local communities' collective lands and territories is one of the most equitable, reliable and efficient ways to ensure sustainable stewardship of nature ([RRI, 2020c](#); see also [Ban et al., 2020](#); [Oktavia et al., 2018](#); [Rist et al., 2019](#)).

The next section details how this potential coverage of ICCAs could contribute to the post-2020 global biodiversity framework's proposed target on protected and conserved areas, including how potential ICCAs already contribute to conservation inside and outside state and privately governed protected and conserved areas.

Section 2: Potential ICCAs and the post-2020 global biodiversity framework

In 2021, CBD Parties are negotiating the post-2020 global biodiversity framework ([CBD, 2020](#)). This will be the successor to the Strategic Plan for Biodiversity 2011-2020 and associated Aichi Targets, and is expected to be adopted at the 15th meeting of the Conference of the Parties to the CBD. The draft framework includes 20 Targets. Target 2 focuses on area-based conservation, including percentage coverage (and other aspects) of protected areas and other effective area-based conservation measures (abbreviated as "conserved areas" in this present analysis) ([CBD, 2020](#)). Given that potential ICCAs cover over one-fifth (21%) of the world's land, they could play a major role in achieving aspects of this target if their custodian Indigenous peoples and local communities wish to be recognised in this way, and if they are appropriately recognised and supported in doing so¹⁵.

Findings in the Protected Planet Report ([UNEP-WCMC, IUCN & NGS, 2021](#)) show that progress has been made over the past ten years in expanding the world's protected and conserved area network in line with Aichi Target 11 in the 2011-2020 Strategic Plan for Biodiversity. However, the report also highlights significant gaps in ecological representation, connectivity, and coverage

of areas of importance for biodiversity. Furthermore, there is not yet adequate data to fully assess whether the world's protected and conserved areas are generally effective in achieving positive conservation outcomes, or whether they are equitably governed. Within the post-2020 global biodiversity framework, there is active debate about equitable conservation and potential implications for Indigenous peoples and local communities whose rights and ways of life could be harmed if it is implemented through government-centric or exclusionary forms of protected and conserved areas (e.g., [Agrawal et al., 2020](#)). This is of particular concern as many existing protected areas already overlap with ICCAs (see Box 5).

¹⁴ Using the January 2021 version of the Protected Planet Initiative's World Database on Protected Areas (WDPA) and the World Database on Other Effective Area-Based Conservation Measures (WD-OECM), having removed areas under the governance of Indigenous peoples and local communities.

¹⁵ Including support to self-report their ICCA data (with free, prior and informed consent) to the Protected Planet Initiative so that their ICCAs are counted when tracking progress towards area-based conservation targets.

Box 5.**ICCAs overlapped by protected and conserved areas***(adapted from WWF et al., 2021, forthcoming)*

In many cases, Indigenous peoples and local communities manage their lands in ways that are consistent with the definition of a protected area (Borrini-Feyerabend et al., 2013) or conserved area (CBD, 2018; Jonas et al., 2017). However, although ICCAs can also meet the definition of a protected or conserved area (if the custodian Indigenous peoples and local communities choose to assign one of these terms) the status of these lands is often not formalised by states.

In many cases, protected areas under different governance types (government, shared, private) have been designated over areas that the Indigenous peoples and local communities have self-declared as ICCAs or otherwise self-recognise as their collective lands and territories. Indigenous peoples' and local communities' lands and territories are sometimes considered to be 'suitable' or prioritised for formal protection by states precisely because they have conserved and sustained the nature within them. Protected areas have been designated on their

lands and territories, and specifically on de facto ICCAs, for many years. The designation process has sometimes been conducted in a way that is not only disempowering and damaging to Indigenous peoples and local communities, but also violates their rights, including by removing them from their lands and territories and preventing their access to and use of resources (Stevens et al., 2016; Tauli-Corpuz et al., 2020). This is a key reason for concerns with the current formulation of Target 2 in zero draft of the post-2020 global biodiversity framework.

In other contexts, the designation of a protected area that overlaps with an ICCA may have little influence over how the ICCA is governed and managed, meaning that Indigenous peoples and local communities are the de facto (but unrecognised) custodians. As national and local contexts are highly diverse, the relationships between Indigenous peoples and local communities and protected and conserved areas vary widely across the world.

As noted elsewhere (ICCA Consortium, 2021d; Participants of the Thematic Workshop on Human Rights in the Post-2020 Global Biodiversity Framework, 2021), the lack of reference to human rights or to Indigenous peoples and local communities specifically in Target 2 raises concerns for the potential of this target to exacerbate negative impacts of conservation measures for communities (Tauli-Corpuz et al., 2020) and further entrench inequalities within the global conservation regime. The proposed "30x30" target (CBD, 2020) and related area-based conservation proposals such as "Half Earth" (Locke, 2014; Wilson, 2016) have been the subject of debates and critiques in academic literature and media commentaries in recent years (e.g., Büscher et al., 2016; Ellis & Mahrabi, 2019). Although most of the academic debates have been around the scientific basis of such proposals, a growing chorus of critics are concerned about the potential human rights implications of Target 2 if its language is not improved, and if it is implemented in a top-down and exclusionary manner (e.g., Jonas & Dixon, 2020; Kothari, 2021). This is of particular concern for Indigenous peoples and local communities who could be subjected to eviction, dispossession or exclusion from their customary and collective lands and territories, and criminalisation for their ways of life and cultural practices, among other human rights violations.

The proposed Target 2 could also place a disproportionately heavy burden on rural people in low and middle-income countries, raising issues with geographical, class and economic inequality and implications for the international law principle of common but differentiated responsibilities¹⁶. An estimated 1.65 billion - 1.87 billion Indigenous peoples and local communities live in important biodiversity conservation areas¹⁷, of which 363 million inhabit existing protected areas. Furthermore, people in high-income countries comprise just 9% of the total population who inhabit important biodiversity conservation areas globally (RRI, 2020c). The same report estimates that the financial cost of resettling 1% of the people in a country's important biodiversity conservation areas is more than the cost of recognising all tenure rights in that jurisdiction.¹⁸ Human rights and equity are therefore urgent and critical areas for improvement in the zero draft of the post-2020 framework, with recognition of Indigenous peoples' and local communities' collective lands and territories as a clear and effective way forward (RRI, 2020c).

Although Indigenous peoples and local communities arguably have a crucial role to play in the development and implementation of the entire post-2020 framework, this analysis focuses on their potential contributions to area-based conservation, specifically, ecological

representation and coverage of important areas for biodiversity as some of the key elements of Target 2. Both ecological representation and areas of importance for biodiversity can be measured using global datasets that are commonly used in analyses on protected and conserved areas.

2.1. Terrestrial protected and conserved area coverage

Protected and conserved areas are a major component of national and international efforts to conserve nature (Dudley et al., 2018). Given that the conservation of nature is one of the defining characteristics of ICCAs, they can also meet the definition of a protected or conserved area if the custodian Indigenous peoples and local communities choose to assign one of these terms (Jonas et al., 2017; UNEP-WCMC, 2020).

Global protected and conserved areas coverage is tracked by the **Protected Planet Initiative** (see Box 6), which provides the basis for monitoring and reporting on progress towards international targets such as the **Aichi Biodiversity Target 11** and the 2030 **Sustainable Development Goals 14 and 15**. However, only approximately 1% of the data has been reported as under the governance of Indigenous peoples or local communities. Given this lack of information, there is a need to support Indigenous peoples and local communities to document and map their ICCAs on their own terms (Louis et al., 2012; Bryan & Wood, 2015), and to self-report them (see Boxes 2 and 6), so that the Protected Planet Initiative can better reflect the governance diversity that exists in reality. Progress had been made through the Global Support Initiative on ICCAs, and the documentation of ICCAs in the global **ICCA Registry** (see Box 6).

¹⁶ The principle of common but differentiated responsibilities was recognised in Principle 23 of the Stockholm Declaration (1972) and enshrined in the UN Framework Convention on Climate Change (UNFCCC) in 1992. It stipulates that all states have a shared obligation to address environmental destruction but denies equal responsibility of all states with regard to environmental protection (UNFCCC, 1992), i.e., placing more responsibility on states that have contributed more to environmental harm.

¹⁷ These areas include existing protected areas, KBAs, Wilderness areas, and the prioritization scenarios. Existing protected areas are also important biodiversity conservation areas and continue to require conservation attention as formal protection is not enough to guarantee continued conservation effectiveness (RRI 2020c).

¹⁸ A conservative calculation of "notional compensation cost" was used only as a "thought exercise" to convey to the conservation community the huge costs in trying to expand protected areas through resettlement and exclusionary conservation (RRI 2020c).

Box 6.**The ICCA Registry and Protected Planet Initiative**

The UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) collaborates with ICCA custodians and their supporting organisations to document ICCAs as part of a broader global effort to highlight the vital contributions that Indigenous peoples and local communities have made to conservation throughout history, and continue to make today. Supporting communities to submit their data to the ICCA Registry and Protected Planet Initiative provides an avenue for greater awareness of their contributions to conservation at the local and international levels and documentation to assist in seeking legal and other forms of recognition and support within their countries. Both the ICCA Registry and Protected Planet Initiative are managed by UNEP-WCMC.

The ICCA Registry: The global **ICCA Registry** was established in 2008 to raise awareness of the significance of Indigenous peoples' and community-led conservation practices. It is a global registry of territories and areas that are self-identified and conserved by Indigenous peoples and local communities. The data in the ICCA Registry is voluntarily provided by ICCA custodians, or through their supporting organisations with their free, prior and informed consent. At the time of writing, it included approximately 250 ICCAs, but it continues to grow each year, providing a much-needed evidence base to promote recognition and support for ICCAs worldwide.

The Protected Planet Initiative: The ICCA Registry is closely linked to the **Protected Planet Initiative**, the online platform of the World Database on Protected Areas (WDPA) and the World Database on Other Effective Area-Based Conservation Measures (WD-OECM). The Protected Planet Initiative is used to track progress towards the Sustainable Development Goals, Aichi Biodiversity Targets and other international targets. It is also used by scientists, decision-makers and companies that want to minimise their impact on the environment. It stores information on both protected and conserved areas, some of which are ICCAs.



2.1.1. Main findings and their implications

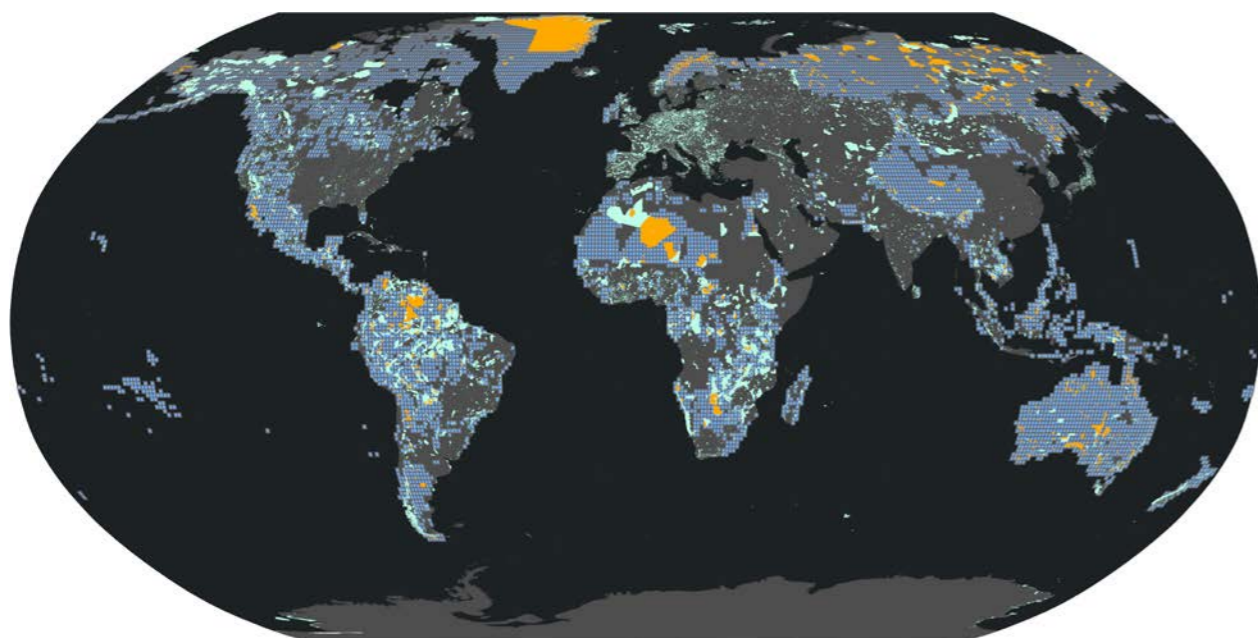
As described in the previous section, the world's state and privately governed protected and conserved areas currently cover approximately 14% of the world's land. This analysis finds that more than one-quarter (26%) of that network overlaps with potential ICCAs (see Figure 3).

On the one hand, this underscores the key role of Indigenous peoples and local communities in sustaining the biodiversity and nature within the existing protected and conserved area network, despite not necessarily being formally recognised for doing so. On the other hand, the extent of overlap also highlights the potential historical and continuing human rights violations associated with the designation, governance and management of protected and conserved areas by state and private entities in Indigenous peoples' and local communities' lands and territories.

If potential ICCAs outside of state and privately governed protected and conserved areas (covering 17% of the

world's land) were recognised for their contributions to conservation alongside the existing terrestrial state and privately governed protected and conserved areas (covering 14% of the world's land), it would equate to 31% (over 41 million km²) of the world's land. This is a significant finding that means that nearly one-third of the world's land may already be covered by areas that are dedicated to conservation and/or maintaining the land and nature in good ecological condition through a mixture of legal, governance and management systems, implemented through state, private and community entities. However, the Indigenous peoples and local communities who are governing, managing and conserving more than half of this area are not currently recognised or supported for their contributions to nature conservation. Furthermore, in some cases, they are actually criminalised for doing so under the imposed laws and institutional arrangements of overlapping state and privately governed protected and conserved areas (Tauli-Corpuz et al., 2020).

Therefore, there is a clear opportunity within the post-2020 global biodiversity framework to not only



- State or privately governed protected and conserved areas that overlap with potential ICCAs
- State or privately governed protected and conserved areas that do not overlap with potential ICCAs
- Extent of potential ICCAs, scaled up to 1-degree grid cells to obscure boundaries

Figure 3. The estimated extent of potential ICCAs, illustrating those that do, and do not overlap with state and privately governed protected and conserved areas. Although the extent of potential ICCAs has been scaled up to 1-degree grid cells to obscure boundaries, the protected and conserved areas have their true boundaries shown.

recognise the conservation contributions of Indigenous peoples and local communities but also to proactively safeguard against human rights violations. The finding above adds to a growing evidence base that legal recognition of human rights in general and of collective lands, territories and governance systems specifically is a central component of any global area-based conservation target that could even help exceed the 30% target (RRI, 2020c).

In this light, scientific and political concerns about how to achieve an area-based conservation target under Target 2 – whether 30% or otherwise – could be redirected from debates about where and how to designate new protected and conserved areas to a concerted and collective focus on appropriately recognising and supporting Indigenous peoples' and local communities' existing conservation efforts – primarily through legal recognition of their rights, especially to their collective lands and territories and governance systems. Thus, this analysis illustrates both the need and the opportunity to explicitly incorporate human rights, governance diversity and equity into Target 2, and ensure that its implementation respects Indigenous peoples and local communities as rights-holders and ensures the accountability of governments, conservation organisations and private actors as duty-bearers. Supporting Indigenous peoples and local communities to document and map their territories and areas on their own terms (see Box 2) is a practical step with which conservation organisations and others could usefully offer assistance.

2.2. Ecologically representative

In the 2011-2020 Strategic Plan for Biodiversity, Aichi Target 11 called for an ecologically representative protected and conserved area network, which is often interpreted to mean that the 17% coverage target should be applied to each of the world's terrestrial ecoregions¹⁹ (and 10% of each marine ecoregion). Achieving this aim would help to provide some protection to the full diversity of life on Earth. Although the world's network of protected and conserved areas covers a more representative sample of ecoregions than it did 10 years ago, over half of terrestrial ecoregions do not yet have 17% coverage, and some have no coverage at all (UNEP-WCMC, IUCN & NGS, 2021). The present spatial analysis is a first step in understanding how ICCAs might be contributing to ecological representation outside the current protected and conserved area network.



Photo: Roshni Lodhia

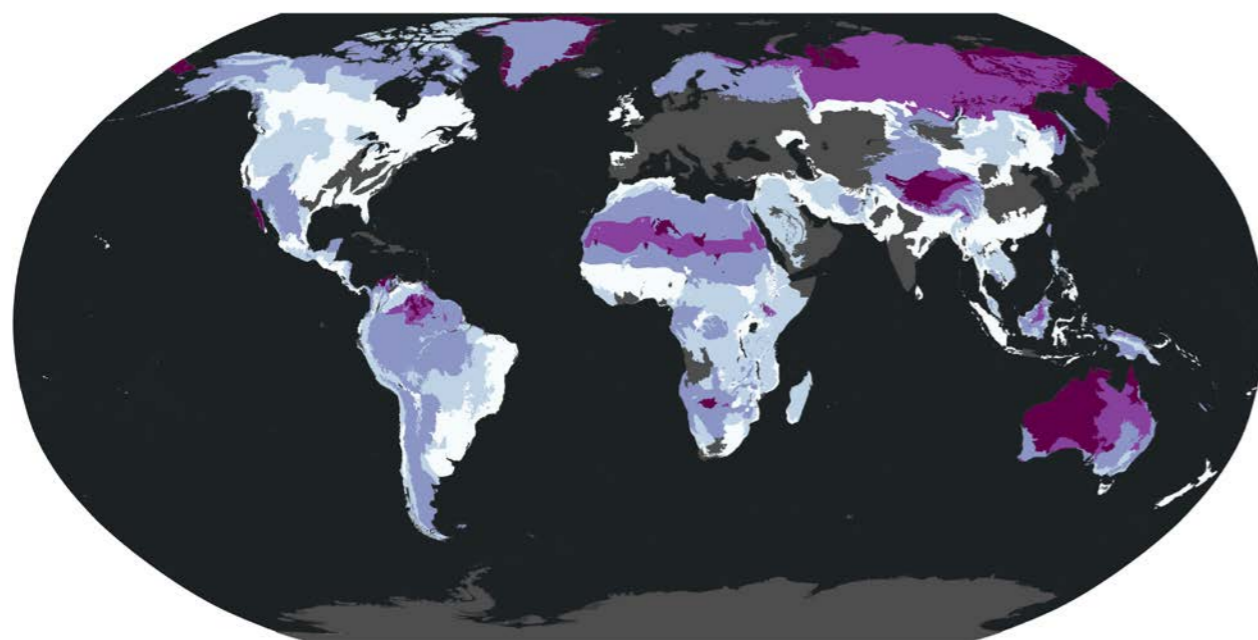
2.2.1. Main findings and their implications

Potential ICCAs overlap to some extent with 561 (66%) of the 847 existing global terrestrial ecoregions (including rock and ice). Within this, almost one-fifth of ecoregions meet the target of 17% coverage applied to protected and conserved areas, 70 are more than 50% covered, and 38 are more than 75% covered (see Figure 4).

Although some of this area is already covered by state and privately governed protected and conserved areas, in many cases potential ICCAs are providing coverage outside of such areas. For example, the estimated coverage of potential ICCAs in 94 of the ecoregions does not overlap at all with state and privately governed protected and conserved areas. This indicates that potential ICCAs may play an important part in ensuring representation of ecoregions by conserving parts of these particular ecoregions that are currently (according to available data) not covered by state and privately governed protected and conserved areas.

¹⁹ The most common classification for biogeographical regions is ecoregions, which are units of land, ocean or freshwater that share the same biological characteristics (Olson et al., 2001; Dinerstein et al., 2017).





Percent coverage of global terrestrial ecoregions by potential ICCAs

□ >0 - 1%	□ >1 - 10%	□ >10 - 50%	□ >50 - 75%	□ >75 - 100%
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Figure 4. The percentage coverage of global terrestrial ecoregions by potential ICCAs. The higher the percentage, the higher the coverage of that ecoregion by potential ICCAs. Areas not covered should not be assumed to lack ICCAs.

2.3. Areas of importance for biodiversity

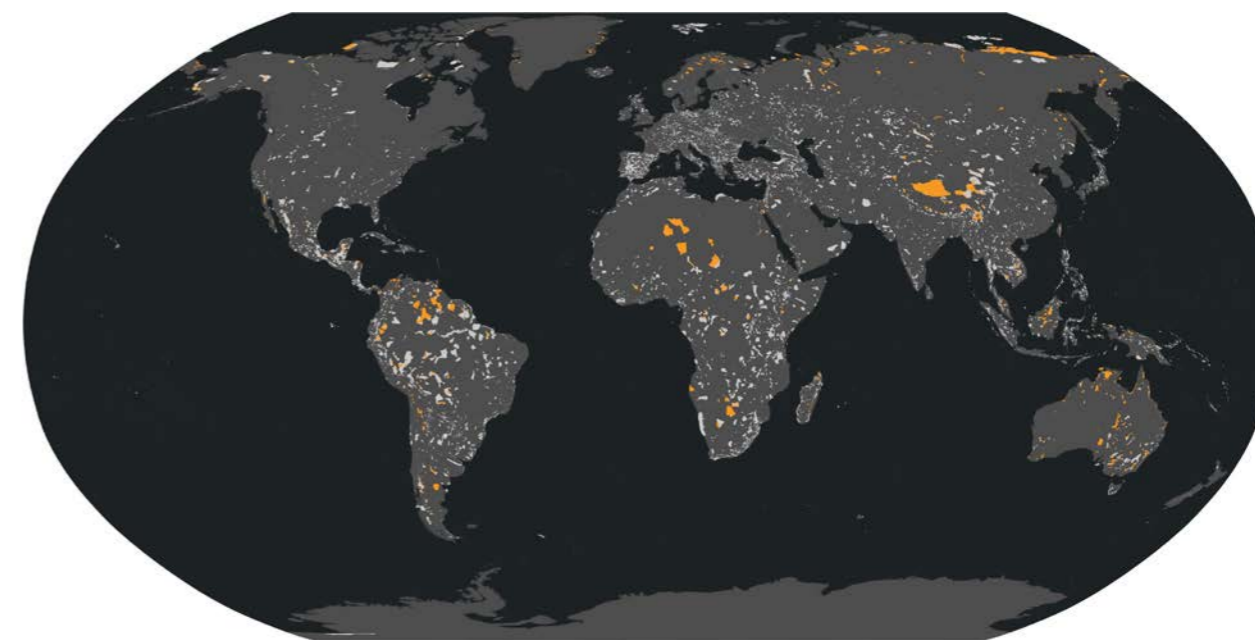
The most comprehensive and commonly used global dataset for measuring the coverage of areas of importance for biodiversity is the World Database of Key Biodiversity Areas (BirdLife International, 2020). These are sites of significance for the global persistence of biodiversity²⁰ (IUCN, 2016), and over 16,000 of them have been identified in terrestrial, marine and freshwater environments, with coverage in all countries worldwide (BirdLife International, 2020). They encompass Alliance for Zero Extinction sites and Important Bird and Biodiversity Areas (IUCN, 2016). At present, only one-fifth (19.9%) of terrestrial and inland water Key Biodiversity Areas are completely covered by protected and conserved areas (of all governance types), and one-third (33.6%) of sites are not covered at all (UNEP-WCMC, IUCN & NGS, 2021). Key Biodiversity Areas falling outside of networks of protected and conserved areas should be safeguarded to ensure the persistence of the biodiversity elements for which they are important, for example, through the designation of new or expanded protected areas, recognition of new or existing protected and conserved areas, or

appropriate broad-scale policy mechanisms. ICCAs may be relevant to all three of these options.

2.3.1 Main findings and their implications

This analysis finds that potential ICCAs cover at least one-fifth (22%) of the extent²¹ of currently identified Key Biodiversity Areas on land (see Figure 5). If ICCAs are managed in ways that benefit the species, ecosystems and other aspects of biodiversity for which the Key Biodiversity Areas have been identified (IUCN, 2016), they could play an important role in conserving the biodiversity in a significant number of sites. ICCAs are by definition governed in ways that achieve positive conservation outcomes at the site-level, so this finding shows that these site-level actions could in fact contribute to the global persistence of biodiversity far beyond the local boundaries of their ICCA.

Furthermore, over half (52%) of the extent of terrestrial Key Biodiversity Areas is not currently covered by state and privately governed protected and conserved areas. Potential ICCAs are found to cover one-fifth (20%) of this area. This means that potential ICCAs already *de*



Extent of terrestrial KBAs that overlap with potential ICCAs
Extent of terrestrial KBAs that do not overlap with potential ICCAs

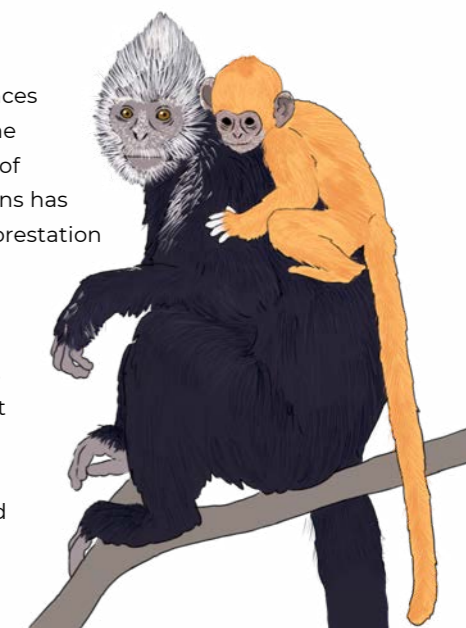
Figure 5. The extent of overlap between Key Biodiversity Areas (KBAs) and potential ICCAs. Precise boundaries of the overlap are shown since the original boundaries of potential ICCAs are not discernible. Areas not covered should not be assumed to lack ICCAs.

facto contribute significantly to the protection and conservation of Key Biodiversity Areas outside of the state and privately governed protected and conserved area network, further underscoring their globally significant role in conservation.

Importantly, the current data on Key Biodiversity Areas may significantly underestimate their extent, as areas have not been comprehensively identified across all taxonomic groups, ecosystems and sites of ecological integrity. In particular, sites that qualify under Key Biodiversity Area 'criterion C' for ecological integrity may be more likely to overlap with ICCAs, although guidelines for identifying sites under this criterion are still being developed. This means that ICCAs could be making an even greater contribution to the conservation of Key Biodiversity Areas in reality than this analysis suggests.

The focus of the next section of this analysis moves away from global area-based conservation targets to instead focuses on the role of Indigenous peoples and local communities in the management and conservation of Intact Forest Landscapes and forests more broadly, including how their historic and

traditional management actions can reduce instances of wildfire. It highlights the value that the protection of forests and their custodians has in preventing further deforestation and associated climate breakdown, and looks at the overlap between potential ICCAs and areas that could help to prevent further biodiversity loss, prevent CO₂ emissions from land conversion, and enhance natural carbon removal.



²⁰ Wherever possible, the process of applying the Key Biodiversity Area Standard should be led nationally with the involvement of relevant local stakeholders. Some countries/regions may also want to apply the criteria with less stringent thresholds to identify sites of national/regional significance (IUCN, 2016)

²¹ This analysis looked at the total extent (area) of overlap rather than the overlap per individual site, which was the method used in other cited analyses



Section 3: Potential ICCAs, forests and climate stabilisation

There is growing international recognition of the role that forest-dependent communities play in conserving the world's most important forests (e.g., **FAO & FILAC, 2021**, in the context of Latin America). At the Global Climate Action Summit at the end of 2018, a group of 17 philanthropic foundations committed over \$US 459 million until 2022 in support of land-based solutions to climate change, including forest conservation and restoration, as well as the recognition of Indigenous peoples' and traditional communities' collective land rights (**Mongabay, 2018**). However, many communities are actively resisting external threats to their forests and are seeking to secure land rights, funding and respect for their Indigenous and local knowledge systems (**Guardians of the Forest, 2021**).

Many of the forests found within Indigenous peoples' lands are considered intact expanses of forest, important for biodiversity and carbon storage. A study covering 50 countries has shown that at least one-third (36%) of Intact Forest Landscapes are within Indigenous peoples' lands and territories, and only 12% of the extent of Intact Forest Landscapes is currently covered by protected areas (of all governance types) (**Fa et al., 2020**). The same study showed that rates of loss of Intact Forest Landscapes (largely due to industrial logging, agricultural expansion, fire, and mining/resource extraction) are considerably lower on Indigenous lands, although these forests are still vulnerable to clearing and other threats.



3.1. Intact Forest Landscapes

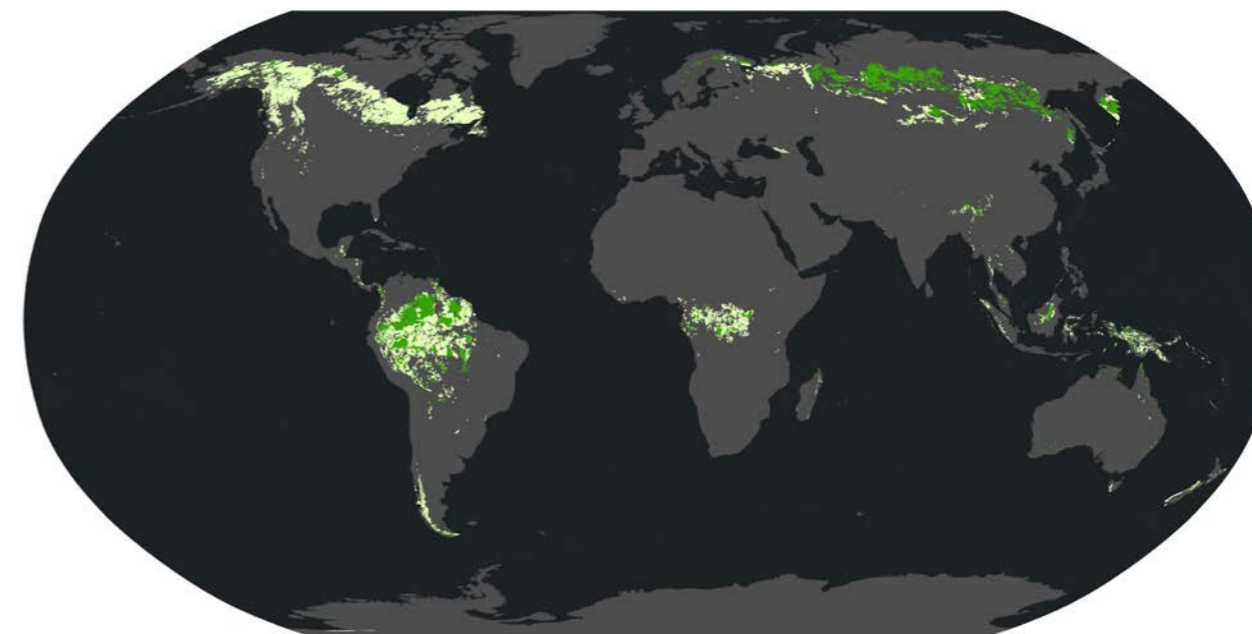
Potapov et al., 2017 define an Intact Forest Landscape as a seamless mosaic of forest and naturally treeless ecosystems with no remotely detected signs of human activity, and a minimum area of 500 km². They are large enough to maintain all native biodiversity and are considered crucial for carbon storage and regulating hydrological regimes, as well as other ecosystem functions (**Potapov et al., 2017**).

Subsistence and small-scale livelihoods of Indigenous peoples and local communities might not be "detectable" remotely but nonetheless exist in reality. Modification of some sort by Indigenous peoples and local communities can change the environment for the better, protecting biodiversity and providing environmental services (**IPBES, 2019**). Furthermore there are questions around how "intact" or "natural" any areas of land can be considered, when even 12,000 years ago, almost three quarters of the world's land was inhabited and altered by humans, including over 95% of temperate and 90% of tropical woodlands (**Ellis et al., 2021**). With these considerations in mind, the present analysis looks at the spatial overlap between potential ICCAs and the dataset of Intact Forest Landscapes.

3.1.1. Main findings and their implications

This analysis found that potential ICCAs cover at least one-third (33%) of the global extent of Intact Forest Landscapes (Figure 6), 79% of which is outside state and privately governed protected and conserved areas. The way in which Indigenous peoples live in and utilise the Intact Forest Landscape with limited negative impact is evidenced through the fact that the rate of loss of this landscape is lower on areas of Indigenous peoples' lands than in other areas. This is further illustrated at the national scale by **Schleicher et al. (2017)** who found that in the Peruvian Amazon Indigenous territories avoided forest degradation more effectively than protected areas (**FAO & FILAC, 2021**). In addition to reducing forest degradation, Indigenous land management is also found to reduce the risk of wildfires, with studies of Brazil and the Latin American regions finding fewer forest fires in Indigenous areas than protected areas (**Nelson & Chomitz, 2011**).

Forests are also major carbon sinks, and their continued



■ Extent of Intact Forest Landscapes that overlap with potential ICCAs
■ Extent of Intact Forest Landscapes that do not overlap with potential ICCAs

Figure 6. Extent of overlap between Intact Forest Landscapes and potential ICCAs. Precise boundaries of the overlap are shown since the original boundaries of potential ICCAs are not discernible. Areas not covered should not be assumed to lack ICCAs.

existence is critical in mitigating the impact of climate breakdown (**Diele-Viegas & Rocha, 2020; Lyons et al., 2020**). In **Walker et al., (2020)**, Indigenous territories in almost all countries studied account for a higher carbon density compared to all other land uses, and deforestation and consequential carbon losses were visibly lower in the countries with some form of Indigenous rights recognition. This shows that Indigenous governance of territories can potentially be a major mechanism for achieving global goals for reducing carbon emissions. For example, Indigenous governance of the Amazon forest in Ecuador, Brazil, Colombia and Bolivia is correlated with reduced deforestation and consequentially reduced carbon emission from forests (**Blackman & Veit, 2018**). Conversely, a lack of recognition of Indigenous peoples' rights, governance and land tenure systems, and persistent industrial threats such as mining, agroforestry and cattle ranching, are contributing factors in the loss of forests in Indigenous territories (**Constantino et al., 2018; Diele-Viegas & Rocha, 2020**).

3.2. Fire and Forest Governance

Bushfires are not a new phenomenon in many forest

ecosystems and various biomes (e.g. **Durigan & Ratter, 2015; Archibald, 2016**). For instance, research shows that the Aboriginal peoples of Australia purposefully modified landscapes with fire, as part of their land management regime (**Smith et al., 2021**). Indigenous fire governance in Australia has been constant and ongoing in some territories, despite wider government policies that contravene their practices. Reviving fire governance through cultural burning practices of Aboriginal communities has been highly recommended as an effective method to control bushfires, yet it has been difficult to implement in reality (**Smith et al., 2021**). Policies that suppress fire are still dominant despite mounting evidence that controlled burning reduces the flammability of wildlands and therefore the risk of wildfire (e.g. **Eloy et al., 2019; Parisien et al., 2020**). Recognition of land rights may increase the possibility for Indigenous knowledge to guide land management that can lead to less severe bushfires (**Mistry et al., 2016; Smith et al., 2021**).

Indigenous peoples and local communities therefore play a critical role in the global management (including fire) and conservation of forests and as demonstrated here, potentially a large proportion of Intact Forest Landscapes. Without appropriate recognition and

tenure security, these forests are vulnerable to being destroyed (FAO & FILAC, 2021), which could further exacerbate the climate and biodiversity crisis beyond the Earth's limits. Furthermore, strengthening Indigenous peoples' and local communities' rights to their lands and forests is seen as a crucial solution to the climate crisis (IPCC, 2019). Over the last 15 years, legally recognised community forests have increased by 40%, and in many places, the legal infrastructure is already present to recognise these rights but remains unimplemented (RRI, 2019). Given the existing and projected severity of the climate crisis and the outsized role that Indigenous peoples and local communities and forests play in mitigating it, continuing to fail to recognise their rights and support their contributions to conservation could be globally catastrophic.

3.3. Global Safety Net

To tackle conservation issues with limited resources worldwide, some have called for a prioritisation of certain areas that, if conserved, could help to ensure a habitable planet in the future. The Global Safety Net is one such global-scale analysis of terrestrial areas, providing a partial view of what is a complex reality²². Although it only focuses on the terrestrial realm and relies on global datasets (which always have some limitations), this analysis provides a starting point for discussions on where the most important areas for planetary health might be. Further analyses undertaken at the national and local level (with nationally relevant datasets and with the inclusion of rights-holders and relevant stakeholders) would help to collectively decide the importance of the

areas identified and agree on how best to ensure they are cared for in the long term by rights-holders and relevant stakeholders.

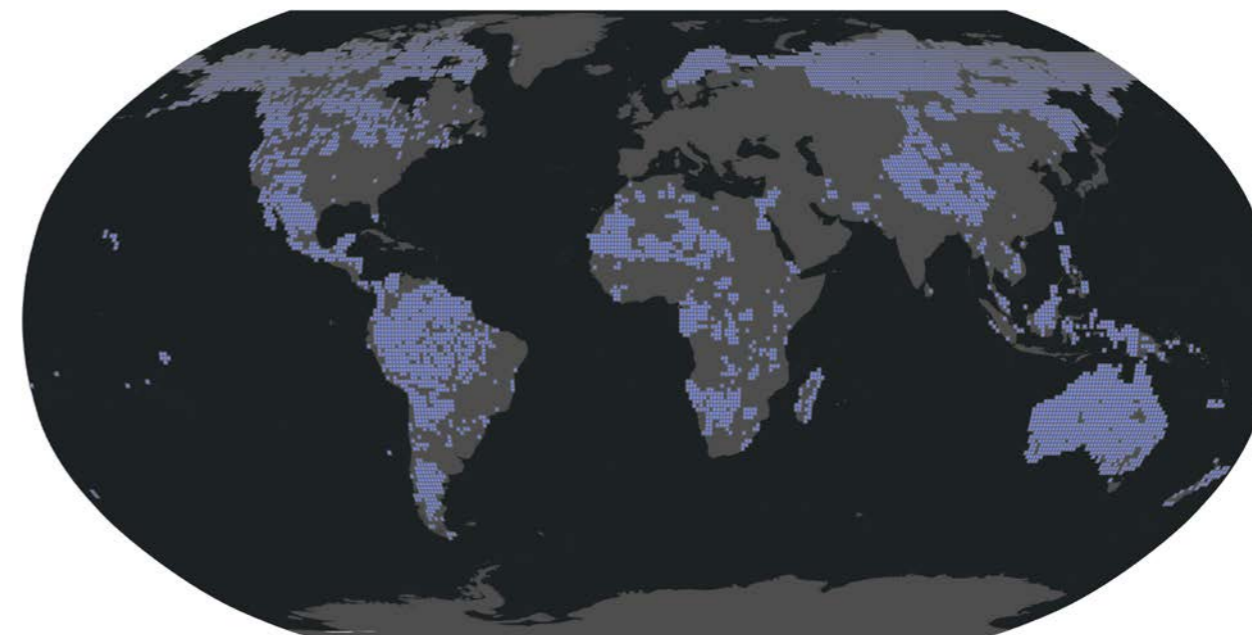
The Global Safety Net covers 50% of the global land surface and, according to the authors, if given conservation attention, could help to prevent further biodiversity loss, prevent CO₂ emissions from land conversion, and enhance natural carbon removal (Dinerstein et al., 2020). It is underpinned by the existing protected area network, in addition to targeting elements of biodiversity and carbon storage that need further conservation attention outside of that network. The study suggests that the whole protected area network²³ (under all governance types) made up about 30% of the Global Safety Net area.

The authors also found that approximately 34% of the Global Safety Net area outside of the protected area network is covered by Indigenous land. They suggest that addressing Indigenous land claims, upholding existing land tenure²⁴ rights, and resourcing programs on Indigenous-managed lands could help achieve biodiversity objectives on as much as one-third of the area required by the Global Safety Net. The authors make it clear that the formulation of the Global Safety Net is not based on and does not advocate removing Indigenous or other people from their lands and in no way intends to contribute to the same.

The present analysis uses up-to-date and additional data²⁵ to look specifically at the role that potential ICCAs (not just Indigenous lands) might be playing in the Global Safety Net, inside and outside of state and privately governed protected and conserved areas.



A Madagascar's small-scale fisher in a boat. Photo: MIHARI



Potential ICCAs that overlap with the Global Safety Net, scaled up to 1-degree grid cells to obscure boundaries

Overlap between potential ICCAs and the Global Safety Net

Figure 7. The extent of potential ICCAs overlapping with the area of the Global Safety Net that is outside of state and privately governed protected and conserved areas. The data are scaled up to 1-degree grid cell to obscure specific boundaries of potential ICCAs. Areas not covered should not be assumed to lack ICCAs.

3.3.1. Main findings and their implications

Potential ICCAs cover almost one-third (32%) of the Global Safety Net area outside of the existing state and privately governed protected and conserved area network (Figure 7), which is a very similar finding to Dinerstein et al.'s (2020) analysis of Indigenous lands only.

The high overlap of potential ICCAs with the Global Safety Net area highlights further the outsized role of Indigenous peoples and local communities in mitigating the biodiversity and climate crisis. Furthermore, as illustrated in previous sections, potential ICCAs already overlap with over one-quarter of the existing state and privately governed protected and conserved area network. Given this network already covers approximately 30% of the Global Safety Net, this suggests that potential ICCAs overlap with over one-third of the total Global Safety Net area.

The next section draws on a range of literature to explore the co-occurrence of biological and cultural and linguistic diversity, and the importance of fostering these connections in future conservation efforts. Using a study on the overlap of potential ICCAs and Natural

and Mixed UNESCO World Heritage sites, the section shines a light on the role that Indigenous peoples and local communities play in natural areas of outstanding universal value, giving rise to the question of why people (with their diverse cultural and linguistic values) are so often be considered separately to nature and its values in mainstream conservation narratives and policies.

²² The framing of 'nature' that underpins most such global spatial analyses has been critiqued for overall conceptualisation and processes underlying their design, implementation and evaluation. E.g., in Woroniecki et al., 2020.

²³ Dinerstein et al., (2020) used a 2018 version of the Protected Planet Initiative's World Database on Protected Areas (WDPA)

²⁴ Land tenure is the relationship among people (as individuals or groups) with respect to land and associated natural resources; it may be categorised as customary, communal, private, state or otherwise. Land tenure systems regulate behaviour through rights and associated responsibilities to use, control, and transfer of land (FAO, 2002). Customary land tenure remains the dominant form of *de facto* land ownership around the world, with a mixture of individual, family and communal tenures. These tenure systems have uneven degrees of recognition under state legal systems (RRI, 2020a).

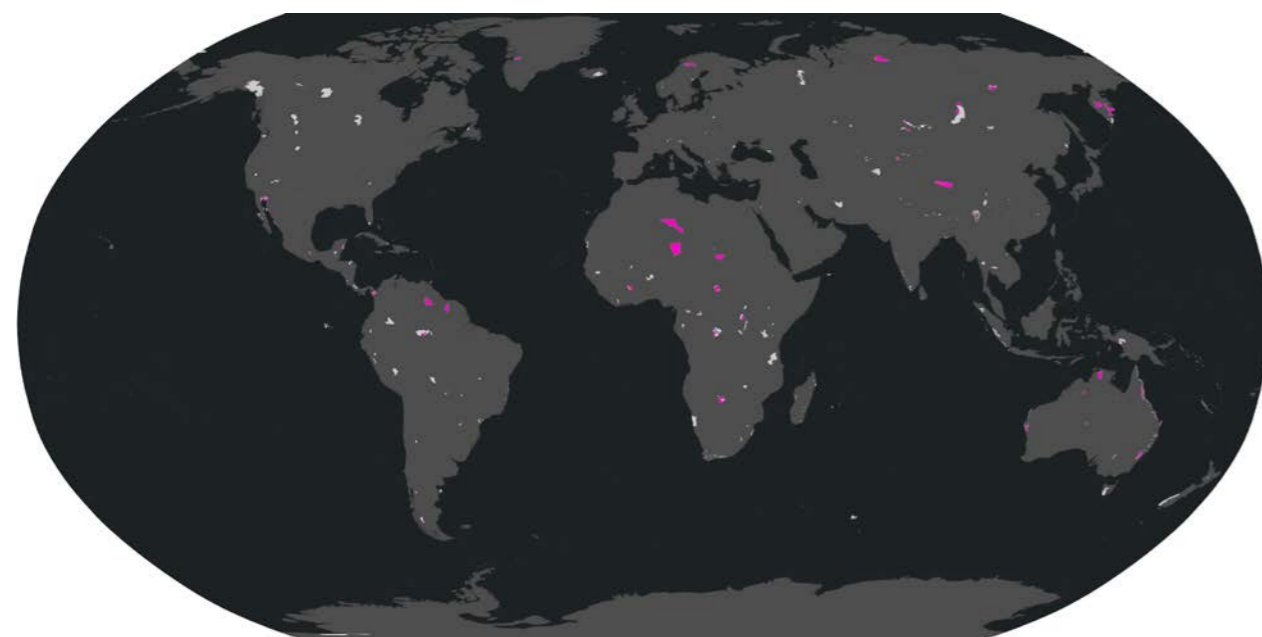
²⁵ An updated version of the Protected Planet Initiative's World Database on Protected Areas (WDPA) and World Database on Other Effective Area-Based Conservation Measures (WD-OECM). Furthermore, this study included non-Indigenous local communities in addition to Indigenous peoples, which Dinerstein et al., 2020 did not do.

Section 4: Conserving biological and cultural diversity together

Indigenous peoples and local communities have unique relationships with the environments on which they depend, and which are fundamental to their social, cultural and spiritual lives. ICCAs are not only crucially important for climate, biodiversity and planetary health, but they are also strongholds of cultural and biocultural diversity (IUCN, 2019) as well as linguistic diversity, which has been declining rapidly in recent years (Harmon & Loh 2010). Even in areas recognised primarily for their natural features, cultural and linguistic diversity are intertwined with the diversity of nature. For instance, 80% of all Natural and Mixed UNESCO World Heritage sites (designated for their natural features) intersect with at least one Indigenous language (Romaine & Gorenflo, 2020). In Africa alone, 147 Indigenous languages share at least part of their geographic extent with Natural and Mixed UNESCO World Heritage sites (Gorenflo & Romaine, 2021). Furthermore, this analysis finds that almost one-third (32%) of the extent of Natural and Mixed UNESCO World Heritage sites overlap to some extent with potential ICCAs (see Figure 8), indicating further that

natural and cultural values are more connected than these particular designations may suggest.

Indigenous languages are developed in territories and thus their survival is inherently tied to them. Recognition of Indigenous languages is integral for Indigenous peoples' resurgence, continuity of inter-generational knowledge transmission and sustainable governance of biodiversity. It is widely accepted that areas of high biodiversity overlap with areas of high language diversity (Gafner-Rojas, 2020; Mclvor, 2020). Language diversity also plays a key role in self-determination, maintenance of Indigenous knowledge, cultural affiliation, identity, cultural continuity and governance of territorial resources (Duff & Li, 2009; Gafner-Rojas, 2020; Mclvor, 2020). There is arguably a need for more and more appropriate legal recognition and protection of Indigenous languages, including in the context of environmental law and standards (Gafner-Rojas, 2020). One opportunity on the immediate horizon is to consider Indigenous languages more explicitly in the post-2020 global biodiversity framework.



- Extent of terrestrial Natural and Mixed World Heritage Sites that overlap with potential ICCAs
- Extent of terrestrial Natural and Mixed World Heritage Sites that do not overlap with potential ICCAs

Figure 8. The extent of overlap between Natural and Mixed UNESCO World Heritage sites potential ICCAs. Precise boundaries of the overlap are shown since the original boundaries of potential ICCAs are not discernible. Areas not covered should not be assumed to lack ICCAs.

Cultural and biological diversity are deeply integrated, and the maintenance of Indigenous and local knowledge systems is essential for biodiversity conservation, climate mitigation and effective environmental governance (RRI, 2019). A high co-occurrence and correlation between linguistic and biological diversity points strongly toward the inherent links between them and could provide the basis to argue for coordinated conservation of nature and culture in Natural and Mixed UNESCO World Heritage sites (Gorenflo & Romaine, 2021).

Although not all of the studies discussed above are specific to ICCAs, they shine a light on the fundamental importance of reforming policies, laws, institutions and practices around worldviews that are rooted in the deep relationships between people and cultures and the nature on which all humans depend, rather than in a flawed ideology that people and nature should be considered separately, and that nature can only thrive without people. Ellis et al. (2021) suggests that (with rare

exceptions), current biodiversity losses are not caused by human conversion or degradation of “untouched” habitats, but instead by the appropriation, colonisation and intensification of use in lands that have been long inhabited, shaped and sustained by prior societies. Lands now characterised as “natural,” “intact,” and “wild” generally exhibit long histories of use, as do protected areas and Indigenous lands. Looking at the history of how land has been used over the last 12,000 years, the study argues that global land use history confirms that empowering Indigenous peoples and local communities through rights will be critical to conserving biodiversity across the planet (Ellis et al., 2021).

The next section looks at some of the extractive and commodity-driven development pressures that Indigenous peoples and local communities may face in the future. These developments pose huge risks for Indigenous peoples and local communities if they are not supported to lead proactive, self-determined and desired development pathways (IPBES, 2019).

Section 5: Future development pressures on potential ICCAs

In many places, ICCAs and their custodians must confront a range of industries seeking to exploit resources in their territories. Energy and extractive industries, large-scale monoculture agriculture and infrastructure projects can destroy habitats and traditional ways of life (ICCA Consortium, 2019). Communities are further at risk where there is inadequate recognition of their governance rights and systems, and a lack of political and legal support (IPBES, 2019). Furthermore, communities are often violently removed or displaced from their territories. In 2019, 212 environmental defenders were killed for taking a stand against environmental destruction, the highest number ever to be killed in a single year (Global Witness, 2020). Of these defenders, 40% were Indigenous. In 2020, of all human-rights defenders, those defending environmental and Indigenous rights were the most at risk of attacks and killings (Front Line Defenders, 2020). Addressing these issues should be at the forefront of the world's efforts to address human rights abuses and the climate and biodiversity crises as interlinked struggles.

In some countries, an increase in deforestation can be linked to “development” policies such as legalizing mining in the Amazonian forests. Ranching and industrial agriculture resulted in fires engulfing vast

areas of the Amazon forests in the summer of 2019 (Bartel et al., 2020). The increase of industrial projects in the name of economic growth is likely to have catastrophic consequences not only for Indigenous peoples and their ways of life, but also for biodiversity and halting carbon emissions (Diele-Viegas & Rocha, 2020). During the COVID-19 pandemic, land invasions intensified in Indigenous territories and communities responded with blockades and restricted access to their territories (Mentone et al. 2021). In many countries around the world, Indigenous peoples and communities faced an increase in violence and direct threats to their lands and territories from industrial activities during the pandemic (Dil et al., 2021).

As well as understanding current threats, it is important to look to the future to understand the potential for further pressure, and where that is likely to occur. As the IPBES (2019) report suggests, Indigenous peoples and local communities feel threatened by external pressures, so this analysis takes a proactive look at where that pressure is likely to be greatest. This analysis used the global Development Potential Index (DPI) to identify the extent of potential ICCAs that could be susceptible to “high development pressure” in the future (see Figure 9). The Global Development Potential Index (DPI) is

a cumulative development pressure map created by combining previously published Development Potential Indices (DPIs) (Oakleaf et al., 2019) for renewable energy (concentrated solar power, photovoltaic solar, wind, hydropower), fossil fuels (coal, conventional and unconventional oil and gas), mining (metallic, non-metallic), agriculture (crop, biofuels expansion) and urban pressure map based on global urban growth projections from 2020 to 2050 (Zhou et al. 2019).

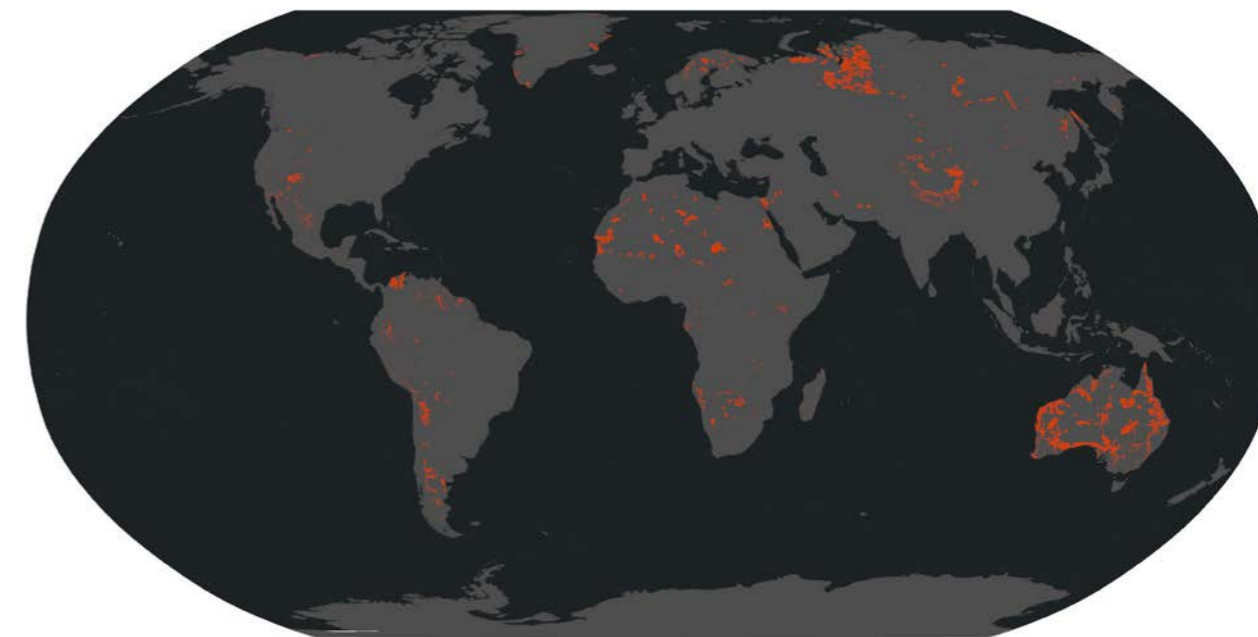
Areas of high development pressure indicate “highly suitable” areas for expansion based on the presence of large reserves of unexploited resources and the infrastructure to support their extraction and transportation. As such, development pressure maps may not adequately capture frontier expansion made possible by investments in new infrastructure by sectors like extractive mining and oil and gas (Oakleaf et al., 2019). These maps consider the biophysical and economic suitability of commodity-based and extractive development expansion and were used to highlight areas where such industries could impact Indigenous peoples and local communities and their collective lands and territories.

It’s important to note that these types of extractive and commodity-based development pathways can be challenged and reframed by more sustainable human-resource relationships espoused by Indigenous peoples and local communities (see Box 7). The emergence of rights and protections for nature aligned with Indigenous worldviews can be a path forward in preventing and avoiding the negative impacts of external development pressures.

5.1. Main findings and their implications

At least 16% of the extent of potential ICCAs has high exposure to potential future development pressure from commodity-based and extractive industries (see Figure 9). This finding only includes areas under high pressure, due to lower certainty with regards to the medium and low pressure areas (see Annex 2 for methods). Therefore the other 84% of the area of potential ICCAs should not be considered free from potential pressure from commodity-based and extractive industries.

Although these industrial and economic growth pressures are not inevitable, it is important to be prepared for the possibility that they will occur, including by proactively and urgently supporting Indigenous peoples and local communities to secure



Overlap between potential ICCAs and areas of potential high future development pressure

Figure 9. The extent of potential ICCAs that overlap with areas of potential high development pressure, as defined by the global Development Potential Index (DPI). Precise boundaries of the overlap are shown since the original boundaries of potential ICCAs are not discernible. Areas not covered should not be assumed to lack ICCAs.

Box 7. Rethinking the relationships between people and nature

Indigenous cultures, aspirations, stewardship and governance of their territories, lands and seas are also influencing innovations in state legal systems. For example, Ecuador has “incorporated” Indigenous law into its constitution by giving rights to ‘Pachamama’ (Mother Earth) as well as recognizing “buen vivir” (“living well”) as a holistic measure to protect marginalized members of society, support Indigenous principles of responsibility, reciprocity and interconnectedness (Sajeva, 2017). The constitution of Bolivia also recognizes the rights of Mother Earth. In 2017, the government of New Zealand/Aotearoa granted personhood to Whanganui River (Te Awa Tupua) as a result of nation-to-nation negotiations with the Māori of the Whanganui Iwi (Macpherson & Ospina, 2020). These are exciting innovations within state legal systems that could have positive impacts on shaping future economies and societies.

Photo: Darwin Pizarro, Fundación ALDEA, 2019



their land, tenure and other rights. Deciding whether or not to allow an investor in community lands is one of the most important decisions that a community can make.

If an investment project is undertaken in a precautionary, respectful and inclusive way, it could potentially contribute to community development and prosperity (Heiner et al. 2018) and minimise harm. Yet when an investment is implemented in bad faith, or without proper community consultation and consent, it could have innumerable negative impacts, including claiming land that community members rely on for their livelihoods,

polluting local rivers, lakes, air and soils, blocking access to cultural sites and violating human rights (Bernauer & Roth, 2021; Colchester, 2004; O’Bonsawin, 2010).

This report shows how crucial Indigenous peoples and local communities are in conserving areas of importance for biodiversity, climate and overall planetary health. Economic incentives have often favoured expanding economic activity (including extractive and commodity-driven development) over conservation or restoration, which has often resulted in harm (IPBES, 2019). Therefore, global environmental commitments should include halting destructive industries (and their financing streams such as perverse incentives) as the primary drivers of biodiversity loss and prioritising the multiple values of nature and ecosystems over short-term financial gain in economic activities to allow for better ecological, economic and social outcomes (IPBES, 2019). Furthermore, protection of Indigenous peoples and local communities against violence and harm, and appropriate and adequate support to defend their territories and themselves against destructive industries and other threats is essential so they can continue to practice their ways of life and pursue their self-determined futures.

Part III

Conclusions

Recognising and fulfilling the rights of Indigenous peoples and local communities who are governing, managing and conserving their collective lands and territories is crucial for a healthy planet. This analysis highlights that Indigenous peoples and local communities are effectively sustaining areas of importance for biodiversity, areas of intact forest and areas considered globally important for carbon storage and climate resilience, often without any legal recognition or protection. Furthermore, much of this area is not covered by state and privately governed protected and conserved areas. This not only shows that the formal network of protected and conserved areas has significant gaps in coverage and effectiveness but also shows that Indigenous peoples and local communities are central to sustaining nature outside of formal state systems.

These findings underscore how essential it is to appropriately recognise and support Indigenous peoples' and local communities' rights and ways of life in both the development and implementation of the post-2020 global biodiversity framework. In negotiating the post-2020 framework, including any area-based targets (whether for 30% or otherwise), Parties to the CBD should use this global analysis as evidence of the central importance of protecting human rights in general. Of particular importance are the rights of

Indigenous peoples and local communities, who are the heart and soul of equitable and effective conservation but remain largely unrecognised as such and excluded from decision-making processes that affect them. The risks of not doing so are undeniable for both people and the planet and time is of the essence.

Indigenous peoples and local communities are facing growing threats to themselves and to their lands and territories, particularly from industrial pressures such as commodities and extractive industries, which are also among the main drivers of biodiversity loss. Communities are actively resisting and challenging these threats, drawing on deep reserves of collective strength and resolve, but they may not be able to do so forever.

Supporting Indigenous peoples and local communities to secure their rights, particularly to their collective lands and territories and self-determined governance systems and cultural practices, is arguably the biggest opportunity in the post-2020 framework and fundamental to the diversity and wellbeing of all life on Earth. The time is now for state governments, conservation organisations, private actors and all citizens to take responsibility and be held accountable for their roles in the interlinked global crises we are all facing, and to come together at this critical juncture in our history – for the future of life on Earth.

Photo: Fatma Zolfaghari



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Annex 1

Data and limitations

Datasets used

Table 1. Datasets used in this analysis. Those in the grey cells were used to make the potential ICCAs layer, those in the green were intersected with the potential ICCAs layer to obtain the results

Dataset name	Description	Citation and version used	Purpose of analysis	Dataset limitations
Indigenous peoples' and local communities' lands baselayer	A global base layer of Indigenous peoples' and local communities' lands covering 132 countries was generated by combining datasets containing lands where Indigenous peoples and local communities have ownership and/or governance authority (regardless of legal recognition). These datasets were sourced from existing efforts that have greatly contributed to the understanding of the extent of Indigenous peoples and local community lands and territories. Datasets included Indigenous Peoples' lands dataset (Garnett et al., 2018); LandMark (2020); World Database on Protected Areas (UNEP-WCMC & IUCN, 2020a); World Database on Other Effective Area-Based Conservation Measures (UNEP-WCMC & IUCN, 2020b); Indigenous and Local communities (IPLC) governance of lands and waters dataset (Conservation International, 2020). Full details of this layer in WWF et al., forthcoming (2021)	(WWF et al., 2021, forthcoming)	To form part of the potential ICCAs layer (those areas owned/governed by Indigenous peoples and local communities)	This layer only covers land. Datasets with a marine component were clipped so only the terrestrial areas remained, since only limited data were available on coastal and marine areas under IPLC ownership or governance. Furthermore, it does not include all countries (it includes 132); however, by combining these datasets, it provides the most globally comprehensive dataset of Indigenous peoples' and local communities' lands to date.
World Database on Protected Areas (WDPA)	The WDPA is the most comprehensive global database of marine and terrestrial protected areas, updated on a monthly basis. The compilation and management of the WDPA is carried out by the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC). For this analysis we used points and polygons: GOV_TYPE = 'Indigenous Peoples' or 'Local communities' (minus STATUS = 'Proposed' or 'Not Reported' or DESIG = 'UNESCO Man and Biosphere Reserve'. These sites were excluded following the usual method for deriving coverage statistics from the WDPA)	(UNEP-WCMC & IUCN, 2021a) Version: January 2021	Protected Areas under IPLC governance were included in the layer of potential ICCAs. ICCAs can also meet the definition of a protected area, if one of the primary objectives of the ICCA is biodiversity conservation, and if the ICCA custodians decide to adopt this term.	In the case of the WDPA and WD-OECM, sites with shared governance were not included in the base layer. Although many shared governance arrangements involve Indigenous peoples and local communities, it is not possible to identify these based on the level of detail in the WDPA and WD-OECM. Since it excludes protected areas where Indigenous peoples and local communities participate in governance but are not the sole governance authority, this report is likely to underestimate the extent of Indigenous peoples and local community governed protected areas.
World Database on Other Effective Area-based Conservation Measures (WD-OECM)	The WD-OECM is a new, and incomplete, global database of marine and terrestrial OECMs, updated on a monthly basis.	(UNEP-WCMC & IUCN, 2021b) Version: January 2021	OECMs under IPLC governance were included in the layer of potential ICCAs.	In the case of the WDPA and WD-OECM, sites with shared governance were not included in the base layer. Although many shared governance arrangements involve Indigenous peoples and local communities, it is not possible to identify these based on the level of detail in the WD-OECM.

Dataset name	Description	Citation and version used	Purpose of analysis	Dataset limitations
	The compilation and management of the WD-OECM is carried out by UNEP-WCMC. For this analysis we used polygons: GOV_TYPE = 'Indigenous Peoples' or 'Local communities'		ICCAs can also meet the definition of an OECM, if the ICCA has conservation outcomes (regardless of its objectives), and if the ICCA custodians decide to adopt this term.	Since it excludes OECMs where Indigenous peoples and local communities participate in governance but are not the sole governance authority, this report is likely to underestimate the extent of IPLC governed OECMs. The WD-OECM is a relatively new database and does not yet contain data for the vast majority of countries.
Global Human Modification	The Global Human Modification (GHM) layer provides a measure of the ecological condition of terrestrial lands globally (at a 1-km resolution circa ~2016) based on the extent of human modification by activities, ranging from human settlement, agriculture, transportation, mining, and energy production (Kennedy et al. 2018). Low GHM were selected following Kennedy et al. (2018).	(Kennedy et al., 2018) Data is for ~2016	To form part of the potential ICCAs layer (those areas with low human modification as a proxy for good ecological condition)	The GHM dataset maps current land condition (circa 2016) based on the spatial extent and magnitude of impacts from human settlement, agriculture, transportation, mining, energy production, and electrical infrastructure globally (excluding Antarctica) (Kennedy et al. 2018). GHM ranges from 0 (no modification) to 1 (fully modified) and reflects the proportion of a landscape modified by mapped cumulative human impacts. While the GHM captures many of the significant human stressors, it does not capture them all, including timber production or selective logging, pastureland, recreational use, hunting, spread of invasive species, or climate change. The GHM focuses on mapping human activities known to negatively impact terrestrial natural systems and does not capture some human activities, especially in the context of lands customarily governed by Indigenous peoples and local communities, that may modify the environment for the better through the building of landesque capital that can protect biodiversity and provide critical environmental services (IPBES 2019).
ICCA Registry	The global ICCA Registry was established in 2008 to raise awareness of the significance of Indigenous peoples' and community-led conservation practices. It is a global registry of territories and areas that are self-identified and conserved by Indigenous peoples and local communities. The data in the ICCA Registry is voluntarily provided by ICCA custodians, or through their supporting organisations. It is not yet comprehensive but continues to grow each year, providing a much-needed evidence base to promote the recognition and support of ICCAs worldwide.	(UNEP-WCMC, 2021b) -	Known ICCAs from the ICCA Registry were included in potential ICCAs layer. ICCAs in the ICCA Registry were submitted by ICCA custodians themselves, or their supporting organisations.	This ICCA Registry database was not originally a spatial dataset. For the purpose of this analysis the data were converted into a spatial dataset of points, using the latitude and longitude values, which were buffered by their reported area. Therefore, they will not represent the true shape of the ICCA. Sites that did not have a reported area, had errors in their latitude and longitude, or had certain restrictions on their use were excluded from this analysis.
	Data submitted by ICCA Consortium and partners of the Global Support Initiative to ICCAs	N/A		These data have not been submitted into the ICCA Registry but were submitted for the purposes of this report. For the purpose of this analysis the data were converted into a spatial dataset of points, using the latitude and longitude values, which were buffered by their reported area. Therefore, they will not represent the true shape of the ICCA. Sites that did not have a reported area, had errors in their latitude and longitude, or had certain restrictions on their use were excluded from this analysis.



Dataset name	Description	Citation and version used	Purpose of analysis	Dataset limitations
World Database of Key Biodiversity Areas (KBAs)	Sites of significance for the global persistence of biodiversity, defined using criteria in the <i>Global Standard for the Identification of Key Biodiversity Areas</i> (IUCN 2016). Data on KBAs are held in the World Database of Key Biodiversity Areas, which is managed by BirdLife International on behalf of the KBA Partnership, comprising 13 of the world's leading conservation organizations.	(IUCN, 2016; BirdLife International, 2020) Version used: September 2020	To identify the extent to which potential ICCAs overlap with areas identified as important for biodiversity.	This dataset consists of areas identified as important for biodiversity. The dataset is only updated 2-4 times a year, so there may have been changes on the ground that are not yet reflected in the database. Key Biodiversity Areas have been identified most comprehensively for birds (Important Bird and Biodiversity Areas; IBAs) and for highly threatened species restricted to single sites (Alliance for Zero Extinction sites). Birds comprise <50% of species for which KBAs have been identified, and more comprehensive application of the Global Standard (to identify sites of importance in particular for other taxonomic groups, ecosystems, ecological integrity and irreplaceability) is needed in most countries. Many areas that do not meet the Key Biodiversity Areas standard may be important for biodiversity at a national scale. It's important to recognise that many Key Biodiversity Areas have not been identified yet. It is likely that sites that meet criterion C for ecological integrity will overlap with ICCAs. As yet there are no Criterion C sites in the World Database of Key Biodiversity Areas, although 4 have been recently proposed for Mongolia (at the time of writing).
Terrestrial Ecoregions	A biogeographic regionalization of the Earth's terrestrial biodiversity. The biogeographic units are ecoregions, defined as relatively large units of land or water containing a distinct assemblage of natural communities sharing a large majority of species, dynamics, and environmental conditions. Ecoregions are classified into 14 biomes.	(Dinerstein et al., 2017)	To identify the extent to which potential ICCAs might contribute to representative coverage of geographically distinct species assemblages and ecosystems.	This dataset is a biogeographic regionalisation of the Earth's terrestrial biodiversity. It has been refined with a major review in 2017 and is considered accurate, with well-established classifications. The dataset is likely to require revision in the future as based on more accurate information and climate change impacts. This dataset does not include freshwater biota.
Cumulative Development Potential Index (DPI)	The Global Development Potential Index (DPI) is a cumulative development pressure map created by combining previously published Development Potential Indices (DPIs) (Oakleaf et al. 2019) for renewable energy (concentrated solar power, photovoltaic solar, wind, hydropower), fossil fuels (coal, conventional and unconventional oil and gas), mining (metallic, non-metallic), agriculture (crop, biofuels expansion) and urban pressure map based on global urban growth projections from 2020 to 2050 (Zhou et al. 2019). The DPI for each sector represents land suitability that accounts for both resource potential and development feasibility. Each DPI is a 1-km spatially explicit, global land suitability map that has been validated using locations of current and planned development and examined for uncertainty and sensitivity. The DPIs can be used to identify lands with current favorable economic and physical conditions for individual sector expansion and assist in planning for sector and cumulative development across the globe.	(Oakleaf et al., 2019)	To identify the extent of potential ICCAs that could be susceptible to high development pressure in the future.	Areas of high development pressure indicate highly suitable areas for expansion based on the presence of large reserves of unexploited resources and the infrastructure to support their extraction and transportation. As such, development pressure maps may not adequately capture frontier expansion made possible by investments in new infrastructure by sectors like extractive mining and oil and gas. The high development potential maps also does not capture other aspects of feasibility, such as property type or regulatory quality; nor do they account for production demands due to uncertainties, lack of data, and ever-changing policies and incentives that affect it. Thus, the development pressure map should be interpreted as the relative suitability for expansion by different commodity-based sectors and not the exact location of development siting or the total land area that will be converted.

Dataset name	Description	Citation and version used	Purpose of analysis	Dataset limitations
	Each DPI was categorized per country based on standardized z-score ranges following Oakleaf et al. 2019, as low (≤25th percentile), moderate (>25th – 75th percentile), or high (>75th percentile). Then a cumulative development index was created by combining all sectors, maintaining the highest development pressure category per cell. When combined with the potential ICCAs dataset, the cumulative DPI score indicates the relative suitability or “readiness” of Indigenous peoples and local communities’ lands to be developed by commodity-based economic sectors. However, the DPIs should not be used to denote the exact location of development siting, given that it does not account for national- or regional-level production demands due to uncertainties or lack of data on per-sector projections.			
Intact Forest Landscapes (IFL)	Intact Forest Landscapes are defined as an unbroken expanse of natural ecosystems within areas of current forest extent, without signs of significant human activity, and having an area of at least 500 km ² (Potapov et al., 2008).	(Potapov et al., 2008)	To identify the extent to which potential ICCAs overlap with Intact Forest Landscapes	Intact Forest Landscapes are detected using remote sensing techniques, meaning they may not be completely accurate in all areas due to misclassification of computer algorithms and issues with satellite imagery. This analysis used the 2016 version of the data, so the results might change if re-done when a more up to date data layer is created.
Natural and Mixed World Heritage Sites	The World Heritage List comprises 1,121 properties of Outstanding Universal Value. To be included on the World Heritage List, sites must be of outstanding universal value and meet at least one out of ten selection criteria. Natural and Mixed Sites World Heritage sites (249) were pulled from the January 2021 version of the WDPA for use in this analysis.	(UNEP-WCMC & IUCN, 2021a; IUCN, 2021)	To identify which World Heritage Sites overlapped to some extent with potential ICCAs.	There is a lag time between a World Heritage site being inscribed, and the data being made public through the WDPA.
Global Safety Net	The Global Safety Net was proposed as a set of terrestrial areas of the world that are of particular importance for biodiversity and climate stabilisation. It is a combination of 12 datasets which are used to identify areas that are important to conserve to meet biodiversity and carbon targets (Dinerstein et al., 2020)	(Dinerstein et al., 2020)	To identify the extent to which potential ICCAs overlap with the Global Safety Net	The Global Safety Net is a partial combination of 12 datasets, all of which will have their caveats. See Dinerstein et al. (2020) for more details on each of them. The analysis undertaken in the paper is now a little out of date (for instance it used a 2018 version of the WDPA). The authors' estimate of the area of 'unprotected' Key Biodiversity Areas (including Alliance for Zero Extinction sites) + buffers + hotspots, + locations for range rarity and threatened species together comprise only 2.4% of land. The extent of 'unprotected' Key Biodiversity Areas alone, without buffers and the other locations is actually 4.5%. The authors excluded all areas that did not meet their definition of natural/semi-natural habitat. The result is that a number of Alliance for Zero Extinction sites (and many Key Biodiversity Areas – or parts of) were excluded.



Limitations of the Potential ICCAs layer

This report estimates the extent of potential ICCAs globally by combining a dataset of Indigenous peoples' and local communities' lands (from WWF et al., 2021, forthcoming) with a dataset of areas in good ecological condition (i.e., with low human modification). In taking this approach, significant assumptions were made that will not always hold up in reality – notably that all ICCAs have low levels of human modification, and that the custodians of these lands would identify with the 'ICCA' concept. This method therefore has inherent limitations, and this potential ICCAs layer should only be considered an estimation of where ICCAs might be on land.

Firstly, the data on Indigenous peoples' and local communities' lands (which formed part of the potential ICCAs base layer) cover land only, and are incomplete, meaning that areas outside the base layer should not be assumed to lack ICCAs. Furthermore, while the extent of Indigenous peoples' and local communities' lands may be underestimated for certain areas, it is likely to be overestimated for others, notably for areas where Garnett et al., (2018) modelled the extent of Indigenous peoples' and local communities' lands based on census data. For more information on the limitations of the Indigenous peoples' and local communities' lands base layer specifically, see WWF et al., forthcoming (2021).

Secondly, low human modification areas were used as proxy for areas good ecological condition. This approach has several limitations:

- Not all areas of low modification will have good ecological condition (i.e., high ecosystem integrity or species intactness).
- By selecting for those only in good ecological condition, it might exclude ICCAs that are **“disrupted”, or “desired”**.
- This method may have excluded potential ICCAs with moderate or high modification of their landscape. Many ICCAs have modified landscapes, but the activities and the modification of the landscape is beneficial for biodiversity carbon sequestration and other ecosystem services (Kennedy et al., 2020), as well as being part of their cultural heritage.

In the case of the WDPA and WD-OECM, sites with shared governance were not included in the base layer.

Although many shared governance arrangements involve Indigenous peoples and local communities, it is not possible to identify these based on the level of detail in the WDPA and WD-OECM. Since it excludes protected areas and other effective area-based conservation measures where Indigenous peoples and local communities participate in governance but are not the sole governance authority, this report is likely to underestimate the extent of potential ICCAs.

In addition, the potential ICCAs dataset is likely to include lands whose custodians are unfamiliar with the 'ICCA' concept or do not identify with it. It should therefore not be assumed that the custodians of all areas covered by the base layer would accept the characterisation of their lands as 'potential ICCAs'.

The statistics provided in this report are only estimates, but they add to the evidence that ICCAs are a vital component of global conservation efforts, and that Indigenous peoples and local communities should be supported to build this evidence base in a participatory way. This means that Indigenous peoples and local communities should be supported to map their ICCAs and share their data following a process of free, prior and informed consent. In this way, the estimated base layer presented here can gradually be replaced with an accurate dataset of self-identified and self-reported ICCAs.

Photo: Michael Ferguson



Annex 2 Detailed methods

i. Potential ICCAs layer

- The Indigenous peoples' and local communities' lands base layer [from WWF et al., 2021, forthcoming] was updated with the latest versions of the WDPA and WD-OECM (January 2021).
- Both points and polygons from the WDPA and WD-OECM were included, selecting only for GOV_TYPE = 'Indigenous Peoples' or 'Local communities', minus STATUS = 'Proposed' or 'Not Reported' or 'UNESCO Man and Biosphere Reserve'. These sites were excluded following the usual method for deriving coverage statistics from the WDPA and WD-OECM.
- This layer was intersected with low human modification (using the Global Human Modification Index) areas to identify potential ICCAs.
- Known ICCAs (n=119) were then added to this layer. Known ICCAs were sourced from the ICCA Registry database, the ICCA Consortium members, or partners from the Global Support Initiative to ICCAs.
- Only the data given without restrictions was included in the analysis. Furthermore, those that had missing reported areas, or errors in the latitudes and longitudes were also excluded.
- Some of the known ICCAs were point data, so they were buffered by their reported area and merged with the potential ICCAs.
- The potential ICCAs layer was then dissolved into a flat layer. This flat layer was intersected with a modified version of the Global Administrative Areas (GADM) country base layer to remove marine areas. The layer was also divided into countries (using their ISO3 code). 113 countries are present in this layer.

- An Identity (GIS tool) was then done between the potential ICCAs and the WDPA and WD-OECM to distinguish areas overlapping with state and privately governed protected and conserved areas.

ii. Coverage of potential ICCAs

- To understand the coverage of potential ICCAs globally, the area of potential ICCAs on land was divided by the total land area of the world excluding Antarctica (27,846,664 km² / 134,918,845 km²) to give 21% (28 million km²). To create the protected and conserved areas statistics (i.e. coverage of state and privately governed protected and conserved areas), using the January 2021 version of the Protected Planet Initiative data (WDPA and WD-OECM, point and polygons). The usual Protected Planet **method for calculating coverage statistics** was used, giving the result of 14% (18.5 million km²).
- The area of potential ICCAs layer that lies outside of state and privately governed protected and conserved areas calculated in the above step was calculated by removing the areas of potential ICCAs that intersected with the protected and conserved area layer (28 million km²) and resulted in 23 million km² (83% of the area).
- This area (23 million km²) was then added to the area of state and privately governed protected and conserved areas (18.5 million km², calculated in an earlier step), making a total of (41.5 million km²). This area was divided by the total land area of the world excluding Antarctica (134,918,845 km²) to give 31%.

iii. High Development Pressure

- The Development Pressure Indices were reclassified to only include high development

pressure cells (5 and 6 - following Oakleaf et al., 2019). There were two main reasons: 1) simplification of the analysis and 2) lower certainty with regards to the medium and low pressure areas. This lower certainty is due to omission errors that are related to global infrastructure datasets. Other reasons are based on advancement in technologies of capturing resources. This dataset was then projected to WGS 1984 and converted to a polygon feature class (maintaining cell boundaries). An intersection was done with the potential ICCAs layer and the area was calculated.

iii. Ecoregions and biomes

- The total area of each ecoregion was calculated. Ecoregions were intersected with the potential ICCAs layer. The area of each ecoregion covered by the potential ICCAs layer was calculated. Biome coverage was calculated by summing the coverage results for the ecoregions constituting each biome. The rock and ice ecoregion was included in the tundra biome.

iv. Key Biodiversity Areas (KBAs)

- KBAs (polygons only) were clipped to the GADM to select only terrestrial KBAs. The global terrestrial area of KBAs was calculated. These were then intersected with the potential ICCAs and the area was calculated.

v. Intact Forest Landscapes (IFL)

- The area of IFLs globally was calculated. IFLs were then intersected with the potential ICCAs and the area of intersection was calculated.

vi. Global Safety Net

- Each Global Safety Net Layer was dissolved to remove any overlaps. State and privately

governed protected and conserved areas were erased from each Global Safety Net layer. The biodiversity components of the Global Safety Net (species rarity, distinct species assemblages, rare phenomena, intactness) were erased from the carbon layers. The area of each layer was calculated. Each layer was intersected with potential ICCAs and each intersection area was calculated separately. All Global Safety Net layers were then merged and dissolved and the total Global Safety Net area (minus state and privately governed protected and conserved areas) calculated. The potential ICCAs were then intersected with this and the area was calculated.

vii. World Heritage sites

- Natural and Mixed World Heritage sites (n=249) were extracted from the WDPA (January 2021 version). The 249 sites were then intersected with potential ICCAs. The area of overlap was then calculated.

viii. Integrating literature into the spatial analysis

- Multiple combinations of various key words were used to search Web of Knowledge, SCOPUS and Google Scholar data bases. The combinations were targeted towards literature that explore Indigenous conservation governance in relation to biodiversity conservation, protected areas governance, conceptualisations of territories, rights to territories and recognition of Indigenous peoples' rights in general. Duplicate literature was removed. In the next step, titles and abstracts were reviewed and approximately 64 peer-reviewed articles were selected for this report.

Annex 3

The legal distinction between Indigenous peoples' rights and local communities' rights

There is no formal or universally agreed definition of Indigenous peoples, but the most cited description is in **Cobo (1981)** including the following excerpt: "Indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing on those territories, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions, and legal system." The rights of Indigenous peoples (including tribal peoples) are relatively well defined in international law. This distinct category of rights is derived from their identity as Indigenous peoples (**UN Declaration on the Rights of Indigenous Peoples, 2017**).

In contrast, there is no clear description, definition or common understanding of "local communities" or the rights thereof in international law. A **2013 note by the UN CBD** explains: "Many communities may be considered local and may also be described as traditional communities... They are culturally diverse and occur on all inhabited continents." Although this term is used frequently in certain international fora such as the UN CBD, it is legally incorrect to conflate Indigenous peoples and local communities or to automatically transfer the Indigenous rights framework to non-Indigenous communities because the former have clear and distinct rights and the latter do not (see, for example: **Inuit Circumpolar Council, 2020; Forest Peoples Programme, 2013**).

At the same time, the legal landscape is shifting with growing recognition of the rights of non-Indigenous communities. These rights arise out of the deep relationships between their cultures, ways of life and collective lands and territories they have inhabited for generations

(see, for example, the **2007 Saramaka case**), of the rights of peasants (see: UN Declaration on the Rights of Peasants and Other People Working in Rural Areas, 2018) and of the rights of minorities more generally (see: **UN Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities, 1992**).

Notwithstanding the above, anyone who is a member of a non-Indigenous local community is still entitled to all internationally recognised human rights enjoyed by all individuals, for example, under the Universal Declaration on Human Rights and human rights treaties. In international law, a "definition" is not a prerequisite for protection; groups such as minorities have been guaranteed rights under international law without establishing a definition.

Photo: Grazia Borrini-Feyerabend





**The ICCA
Consortium**

