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Policy Matters

SPECIAL ISSUE ON ENVIRONMENTAL DEFENDERS

SEPTEMBER 2021

VOLUME II

GRASSROOTS IN ACTION

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Photo credits: Cover photo: Mama Fikile Ntshangase was an environmental activist and vice-chair of a subcommittee of the Mfolozi Community Environmental Justice Organization, a community-based organisation that has legally challenged a planned expansion of the Somkhele coal mine owned by Tendele Coal Mining Ltd. She was shot dead in her house on the evening of Thursday, 22 October 2020, in her home west of Mtubatuba in KwaZulu-Natal province in South Africa./© Rob Symons.

Background photo: Tendele Mine coal washing facility/© Rob Symons.

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A la niñez que defiende las semillas

por Rosa Chávez

Escucha como nace la lluvia escucha a la tierra cantar como las mujeres están sembrando agua como el murmullo de las hojas dice tu nombre nanita tierra sonríe

su saliva está llena de frutas lianas y raíces son sus bonitas arrugas canta, canta nuestro pequeño corazón canta, canta el tamborón del universo ahora mismo en alguna parte en el lugar donde no existe la distancia manos de colores protegen las semillas extiende tu mano y allí veras infinitas hormigas que dibujan la vida cierra tus ojos y allí veras galaxias, océanos, selvas, desiertos, silencios llenos de buena oscuridad alegrías con dientes de maiz negro escucha como nace la lluvia escucha al planeta cantar donde sea que tengas tu casa escucha a la tierra cantar.

Rosa Chávez is a Maya K'iche' Kaqchiquel woman, poet, artist and educator. For her, naming her identity is an important way of recognising her ancestors as well as her present. She has published five poetry books, including *Piedra ab'aj* (Editorial Cultura Guatemala/Editorial Casa de poesía, 2009). Rosa has ventured into theatre, performance, video and sound experimentation. Her work has been widely anthologised and translated into different languages. Rosa focuses her energy and experiences working with women, communities and movements that defend land, bodies and territories.

To childhood who protects seeds

by Rosa Chávez

Translation by Antonia Carcelen-Estrada

Listen to how rain is born Listen to the earth singing how women are sowing water how the whisper of the leaves says your name granny earth smiles her saliva is full of fruits vines and roots are her pretty wrinkles sing, sing our little heart sing, sing vast universe drum right now, somewhere in the place where distance does not exist colorful hands protect the seeds extend your hand and there you will see infinite ants drawing life close your eyes and there you will see galaxies, oceans, jungles, deserts, silences full of good darkness joys with teeth of black corn listen, how rain is born listen, to the planet singing wherever your home may be Listen to the earth singing.

Rosa Flores and her daughter Alina contemplate one of the 45 lakes of Osogoche in the Sangay National Park. Ranging from 900 meters up to 5,319 meters above sea level in the highlands, this region of the Ecuadorian Amazon is home to one of the most complex series of ecological habitats in the world. Local and Indigenous peoples like the Puruway Nation, to which Rosa belongs, have nurtured this biodiversity for millennia, teaching their youth to sow water and care for all forms of life as relatives.

PHOTO: MANUELA L. PICQ



Guest contributor

Imagining otherwise: steps forward for a greater recognition of Indigenous wisdom and resistance

Hindou Oumarou Ibrahim*

Translated from French by Caroline Seagle. For the original article, please see Annex I.

A call to action

- 1. The criminalisation of environmental defenders must stop immediately.

 No one should be killed, assaulted, driven from the land of their ancestors, or simply marginalised for standing up for our most precious common good: life itself.
- 2. We need dedicated support, resources, intelligence and funding. Right now, for us, the defenders of the environment, resistance has but one name: action. To do this, we need to be given the means to act.
- 3. Finally, climate policies and actions need to be more participatory, from design to implementation, which means improving Indigenous participation in decision -making.

For Indigenous peoples, protecting the land is not a commitment or a cause – it is a way of life. Ecosystems are our cities and homes, our workplaces and supermarkets, our hospitals and pharmacies, our bookstores and churches, our universities and our diplomas. We are one with nature, we are part of it because human beings are but one species among millions of others in the natural world. We make our collective decisions based on the traditional wisdom and knowledge inherited from the generations which preceded us, allowing for the generations which will succeed us to live in dignity and collaboration with nature.

In my community, the Mbororo Fulani of Chad, in order to become adults, teenagers must know the names of their ancestors for seven generations and recall what they did

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"If the earth turns, turn with her" (Fulani proverb, Mali). Hindou Oumarou Ibrahim in her Fulani (Peul) village surroundings, Chad.

PHOTO: SALMA KHALIL ASSOCIATION EN TERRE INDIGÈNE.



during their lives. To make a decision, teenagers must think about their own impact on the next seven generations. This custom allows us to guide our behaviour with permanent care and concern for the protection of nature. By living on the front line, within nature, we are witnesses to these changes. This way of life, built on cooperation with our ecosystems, is often perceived in industrial societies as belonging to the past. In contrast, this way of life presents a roadmap for humanity's future. Because if we do not immediately stop this war against nature, then it is the very survival of humanity as we know it that is at stake. If we do not stop burning fossil fuels, destroying the last primary forests, emptying our oceans of their life to fill them with plastics, we have little hope of escaping. Let's be sure: we'll never win the war against nature.

She is stronger than us.

Indigenous peoples are often among the first to notice climatic disruptions, to sound the alarm on the disappearance of living species. Living on the frontlines, next to nature, we are witnesses to these changes. On the ice floes of the Arctic, in the tropical forests of Africa, Amazonia and Asia, in the steppes and savannahs, in the islands of the Pacific, the Indian Ocean and the Atlantic, industrial companies are waging a war against nature, with local and Indigenous peoples among its first victims. Our indigenous lands, which hold 80% of the world's biodiversity, are the target of the greed of industrial agriculture. Our rivers are soiled with plastic and chemical pollution. Our coral reefs are threatened by rising sea levels, warming water and ocean acidification. Far too often, we are only a few generations away from disappearing.

For more than 50 years now, since the birth of the first modern movements for the protection of nature, many of us have wanted to build peace with nature. More and more of us are rising up to protest against the destruction of ecosystems, to oppose the theft of our lands, and to end all pollution. We are a group of citizens who demand peace with, and for, our Mother Earth. And every year, in addition to the silent victims of global climate change, which will prove to be the biggest serial killer in human history if we

do not meet the goals of the Paris Agreement, many environmental defenders are also victims of a war of humans against humans. Here, we kill for land, for a piece of forest. Elsewhere, it is the scarcity of natural resources that pushes communities, who until then lived peacefully, to fight for the few natural resources that are still intact, whether it be water or fertile land. Further on, it is the industrial fishing boats which, by destroying fish stocks, plunge entire communities into famine and poverty.

Yet, there is another way.

It is that other way that environmental defenders want to pursue: one of close collaborative relationships between women and men, between people and nature. There are many options to enter into resistance and protect our planet. All over the world, a generation, the one that directly succeeds mine, has risen up in recent years. It's a generation of children and adolescents who understood at an early age, when they should have been living a carefree life – going to school, learning, and playing – that their future was in danger. They understood that they had to stand up and demand profound change everywhere in order to declare peace with nature. This is a generation calling on big companies to give up fossil fuels and stop all pollution. This is a generation bringing to justice nation-states that have not done enough for the climate and biodiversity. This is a generation willing to fight endlessly simply to ensure a future for this planet and its living beings.

It's a generation that I dreamed of as a child, when we – my Indigenous brothers and sisters – were still too often alone in saying that our Mother Earth was sick. This is a generation that should have dreams, but for which we are now on the verge of leaving a nightmare. Yet it is a generation of hope that is dawning everywhere in Europe, North and South America, Africa, the Pacific, and Asia. It is a generation that can finally put an end to this war on nature.



PHOTO: SALMA KHALIL ASSOCIATION EN TERRE INDIGÈNE.



This generation is our best hope. It brings to the table, without prejudice, solutions that other environmental defenders, many of whom are Indigenous peoples, are fighting to have recognised. With our millennia of contact with nature, we have in our belief systems and traditional knowledge a unique reservoir of solutions, and we are ready to share it. Because today, defending the environment can no longer be reduced to demonstrating in the streets or negotiating international treaties that are too poorly designed, applied and respected.

Hindou with AFPAT pamplet.

PHOTO: SALMA KHALIL ASSOCIATION EN TERRE INDIGÈNE.



No, we need to act. Indigenous peoples are already doing it, and they will continue to do so. They will continue to produce food by repairing ecosystems, as my community in the Sahel does, with its transhumant pastoralist way of life. Today we are among the only ranchers in the world to produce meat and milk that is carbon neutral. We are still the exception, but tomorrow we will be the norm.

Indigenous people and forest dwellers are also at the forefront of the climate battle. When their forests burn down, they know how to replant them, repairing ecosystems so that, little by little, birds, mammals and insects return. They also know how to withstand crises, droughts, hurricanes, and torrential rains, and how to find varieties of edible plants even in the worst conditions.

Because of their knowledge of ecosystems, Indigenous peoples are aware of how to avoid the transmission and development of animal diseases that can sometimes infect humans. They know how to derive medicinal plants from the functioning of ecosystems, which can be of great help to the world. They can also predict, through observing the behaviour of animals and plants, the future of weather conditions, thus providing valuable information for adapting to a changing climate.

This traditional wisdom and knowledge must be recognised and protected, because it represents an encyclopaedia of solutions that we, the first defenders of the environment, wish to share with the rest of humanity to meet the two greatest challenges of this century: climate change and the extinction of biodiversity.

We can create alliances with other societies and institutions to share these solutions and act together, working with all those who want to end the war against nature. In industrial societies, there are also many defenders of the environment. Some never demonstrate in the streets, but dedicate their lives to finding solutions, developing renewable energies and using nature-based solutions to replace plastics and chemicals. We can work together, we can unite to fundamentally change the relationship of humanity with our Mother Earth. For that, we will need to have our rights respected, in particular our right to land. Respect for human rights is an essential pillar of environmental protection.

We, the Indigenous peoples, have thousands of solutions that could be deployed around the world. We have the experience and the know-how that has allowed us to live in harmony with our ecosystems for generations, and we can contribute to and design millions of projects that can protect our common lands, our forests, and our oceans.

To achieve this, it is high time that, beyond simply respecting our rights, the international community comes to our aid. While every year billions of dollars are still invested in intensive agriculture, which destroys our forests and pollutes our soils, or in fossil fuels, which destroy our climate, there is almost no funding to help those who protect 80% of global biodiversity, who are acting in our common good. Almost no one is helping my Indigenous brothers and sisters in their efforts to protect forests, sustainably manage and share resources, or take care of corals, even when these efforts could help prevent future crises, including pandemics.

This must change. Because protecting nature – defending the environment – is not simply an engagement, a cause, or a commitment. It is a way of life. This is the path we must all take, and it is the most beautiful path: that of life, at peace with nature, at last.

Preface

This three-volume, special issue of Policy Matters – an open-access, peer-reviewed journal edited and published by IUCN-CEEP – is dedicated to environmental defenders. It features a mix of interdisciplinary academic articles, stories, poetry, music, art, videos and photos. It seeks to give voice to the experiences and struggles of environmental defenders worldwide.

The COVID-19 Pandemic has had a devastating impact on the health and well-being of communities and nature, with Indigenous and local communities being doubly hit because of uneven access to healthcare, relief aid, and other forms of protection, making their situation even more precarious. At the same time, defenders engaging in struggles against governments, corporations, and other entities to defend their customs, territories, human rights and environmental health are facing worsening threats from big business, mining, hydro-electric projects, palm oil, illegal logging, large-scale agriculture, and even conservation initiatives. Despite this, environmental defenders are showing remarkable resilience and local action. As Rius Valle – an Indigenous defender from the Philippines – states, "the pandemic will never stop us. Neither the government nor this pandemic can silence us to express our protests. We think, the commitment to continue is the most important thing right now, because this is not just our fight or these children's [sic], this is a fight of the whole world".1

Volume II of this special issue of Policy Matters explores the deeper politics and poetics of "Grassroots in Action". Featuring a foreword by Hindou Oumarou Ibrahim, activist and environmental defender from Chad, the contributions in this volume highlight the importance of Indigenous culture, grassroots action, and ecological wisdom in preserving nature and protecting defenders.

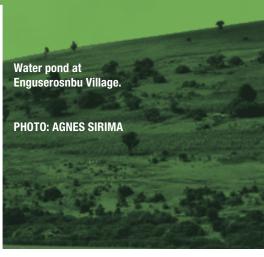
This volume – presenting stories from a vast geographic expanse, including Zimbabwe, Madagascar, the Democratic Republic of Congo, Tanzania, as well as India, Colombia, Canada's Northwest Territories, Cambodia, and Malaysia – is unique in that it explores the relationship between Indigenous and local artwork as a form of resistance against land exploitation and environmental destruction. Several poetry and artistic contributions from authors convey a cultural and ontological dimension to the profound connection Indigenous and local land defenders have with their lands. Interlaced with these artistic contributions are articles that point to the remarkable resilience of local populations standing against oppression.

The Editorial Team



Mundano is a Brazilian street artist and activist whose work makes people stop and think about the issues swirling around them everyday. "I use these ads to get people to reflect on the corrupted political system. On all the false promises, and all the awful waste", he explains. This art piece was displayed in Art of Resistance Collective show in Amsterdam in 2019.





Forest conservation through cultural practices: The case of Enguserosambu Community Forest (EFC) in Tanzania

Agnes Sirima^{a)} and Elizabeth Baldwin^{b)}

Abstract

Tropical forests provide critical global and local ecosystem services and habitats for many of the world's plants and animals. Their loss threatens the sustainable economic growth and social stability of developing countries. This paper aims to understand social mechanisms that communities of Enguserosambu village, Loliondo, Tanzania, use to manage forest resources, as well as generate, accumulate, and transmit local environmental knowledge. Document reviews, group-held semi-structured interviews and field observations were used as techniques to obtain the data needed for this research. Results indicate that Indigenous ecological knowledge expands beyond mere knowledge of the land. It includes knowledge of resources, how they are managed and which ecological processes are associated with them. Traditional elders have always used their local knowledge to manage the forest for cultural and spiritual purposes. Further, different age groups within the community play an essential role in protecting the forest. It is thus important to acknowledge the role played by traditional systems in order to better understand and protect forests.

Key words: community-managed conservation, Indigenous knowledge, ecological knowledge, forest protection

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Introduction

Tropical forests are among the most diverse ecosystems on Earth (Laurance, 1999; Millenium Ecosystem Assessment, 2005: Khasa & Dancik, 1997). They contain about two-thirds of the world's biodiversity (Millenium Ecosystem Assessment, 2005; Raven, 1980), provide access to species' habitats outside park boundaries by being found adjacent to other areas of high biodiversity concern (Hansen & Rotella, 2002), provide a buffer to core protected areas from edge effects such as fire and invasive species (Brooks et al., 2002; Laurance, 1999), and sustain the world's life support system by providing services such as water and soil protection for local and distant communities (Dudley & Phillips, 2006). Many forests also have significant economic importance and offer ecotourism and recreational values to individuals and communities (Tobias & Mendelsohn, 1991; Willis & Benson, 1989). Forests are also sacred sources of wonder and delight (Dudley & Phillips, 2006). Regardless of their conservation, spiritual, aesthetic, recreational and livelihood values, most forests around the world are under intense anthropogenic pressure (DeFries et al., 2005).

Community-managed forests refer to the management of forest uses in public lands mostly for non-timber forest products (Bray, Merino-Pérez, & Barry, 2005), and constitute a significant proportion of the world's forests today; however, little is known regarding their condition or how they are managed. Community-Based Forest Management (CBFM) is practiced in many rural communities in developing countries, including Tanzania. Documented benefits of community-managed forest conservation include poverty alleviation and a decrease in the rate of deforestation (Basnet, 2009). Giving an example from Mexican communities, Bray et al., (2003) argue that community-managed forests have significantly increased income for the communities that own the forest areas and protect the forest cover – important to the integrity of the entire landscape.

Forests are also home to many cultures, namely those of Indigenous peoples living there. Forest used by local and Indigenous communities rose from 9.2% in 2002 to 11.4% in 2008 in several parts of the world (Sunderlin et al., 2008; White & Martin, 2002). Indigenous peoples' ways of conceptualising and managing natural resources serve as an alternative to the dominant notion of protected area management held in western science, built on a top-down governance approach (Hunn, 1999; Reid et al., 2006). These dominant paradigms also inform broader landscape degradation narratives surrounding pastoralism in Kenya and form part of a 'mainstream conservation' discourse that ignores holistic modes of environmental care, governance and management, and Maasai² notions of stewardship/custodianship, or erematare (Godfrey, 2018).

Indeed, Indigenous communities surrounding forests have developed a pattern of resource use and management that reflects their intimate knowledge of local environments and ecosystems (IFAD, 2012). Stevens (1997) argued that Indigenous communities have developed land use systems and traditions that limit resource destruction, partitioning resource use among communities, groups and households. More specifically, Indigenous communities, who have lived off forests for centuries, have managed to develop an

identity, culture and way of life that resonates around forest use (Anderson, 1993). This occurs despite local and global changes that may have an impact on Indigenous peoples' lifestyles and, consequently, on the resources they manage (Berkes, 2012).

Community roles in forest management are closely linked to access rights. Bray et al. (2003) argue that CBFM has the potential to offer forest-related benefits to the communities while maintaining ecosystem integrity and biodiversity. Further, Wily (2001) argues that CBFM is a powerful management paradigm as it shares authority, ownership, and decision-making with the local people, hence providing them with immediate benefits and the will to sustain the forest.

Gadgil, Berkes and Folke (1993) contend that, in areas where local people have depended on natural resources for their livelihoods for centuries, individuals have developed a sense of ownership which in some instances enhances biodiversity conservation. The close linkages between nature and culture, as well as long-term interaction with the local environment, provide most of the Indigenous communities with holistic understandings of ecological processes (Nabhan, 2000; Vogt et al., 2002; Godfrey, 2018), hence their ability to manage forests well. Because their ecological knowledge is based on trial and error over a long period of time, Indigenous peoples' knowledge base becomes hard to quantify, and their relationship to nature intangible. Unfortunately, such a knowledge base is rarely recognised by western scientific approaches to conservation (Berkes, 2012). It is important, however, to go beyond simply acknowledging the value of Indigenous knowledge if biodiversity is to be managed sustainably in the long run.

Maasai livelihoods in the Enguserosambu Community Forest

For centuries, Maasai pastoralism has co-existed alongside spectacular wildlife populations in and around the Serengeti-Mara ecosystem (Thompson & Homewood, 2002). The traditional seasonal movements of herds help protect both dry and wet season pastures from overgrazing, as Maasai elders carefully planned where to go and when to use these resources sustainably. The ecological rationale of these seasonal movements conform to the factors governing seasonal wildlife movements between the Serengeti plains in Tanzania and Maasai Mara National Reserve in Kenya (Western & Gichohi, 1993). Recently, the changing economic atmosphere, due to increases in tourism and wildlife hunting investors in the area, has rendered the conservation role played by local communities in managing forest resources less visible. These economic changes have favoured land uses with more tangible, short-term financial returns rather than longterm, sustainable outcomes. A proposed change in pastoral land use has given rise to conflicts related to competing land use, thereby threatening sustainable conservation of forests and surrounding rangelands by local communities. An understanding of the Indigenous knowledge system that Enguserosambu communities use to protect the forest is crucial in appreciating the role of ecological wisdom in conserving forests for the benefit of ecosystems and people.

It is against this background that this research was conducted. It seeks to assess the contribution of Indigenous ecological knowledge to the conservation of the Enguserosambu Community Forest (ECF) in Tanzania. Our main research objective was to understand social mechanisms that communities of Enguserosambu village use to manage forest resources, and how the generation, accumulation and transmission of local knowledge plays out in practice.

Methods

Study site description

Enguserosambu Community Forest (ECF) is located at Enguserosambu ward, Ngorongoro district in the Arusha region of Tanzania. The forest is located at 2°6′0″S and 35°35′59.99″E and is 81,438 hectares (ha) in size. ECF is spread among four villages: Ng'arwa, Orkiu-Juu, Naan and Enguserosambu. It is a natural forest composed of hardwood and softwood tree species. The forest also provides habitat for wildlife and birds; it is one of several corridors used during annual migrations between Serengeti National Park in Tanzania and Masaai Mara Reserve in Kenya. As such, the ECF is an important water catchment forest for the greater Serengeti ecosystem. It is also source of water for Lake Natron, a breeding site for lesser flamingos in the region. ECF is therefore a vital forest for the sustainability of the Ngorongoro Conservation Area and the Serengeti National Park as well as the entire Serengeti-Mara ecosystem. The forest provides water to the Loliondo and Sale divisions of the population, which amounts to half of the total population within the Ngorongoro District – 174,278 inhabitants (Government of Tanzania, 2013).

Cultural and traditional practices are key conservation and management approaches used by the Enguserosambu communities to manage the forest and its resources. In 1957, the forest was divided into Loliondo I in the south and Loliondo II in the north (the latter now recognised as the ECF). Loliondo I covers about 7% of the entire forest and, following its creation, was left under the management of the local government authorities. Loliondo II, covering the remaining 93% of total forest area, was placed under the control of the central government, though with no official government gazette.

Because of its remoteness, Enguserosambu Community Forest (ECF) is poorly studied, and Indigenous peoples are currently the main source of local biological and ecological information in the area. ECF is part of the Serengeti-Mara ecosystem, which is among the richest ecosystems worldwide in biodiversity and characterised by a number of economic activities, tourism being the most important.

Livelihoods of Enguserosambu communities are reliant on forest resources.

The predominant land use in Loliondo has been pastoralism, based on transhumance³, although agriculture is increasing in the area. The traditional seasonal movements of herds helps protect both dry and wet season pastures from overgrazing. Customary elders set aside land zones for different uses based on traditional practices. Seasonal movement

of the cattle in the area conforms to annual wildlife migrations between the Serengeti and Mara zones (Homewood & Rodgers, 1991; Sinclair, 1995). This seasonal movement has allowed pastoral herds and wildlife to co-exist in the Serengeti ecosystem for over 200 years (Sinclair, 1995).

Communities living in the area are predominantly Maasai, and the total population in the area is about 2,500 inhabitants (Personal communication, 2015). Local people in the Enguserosambu community are culturally connected to the forest; they make use of the forest for spiritual and cultural purposes. The Enguserosambu community contends that everything provided by the forest is useful, including the forest's role in regulating climate. Within the forest, cultural connections between people and nature is enhanced, as the forest provides space for cultural celebrations. Several local institutions, forest user groups and community elders are among the stakeholders involved in guiding forest activities.

Data collection

Document reviews, group-held semi-structured interviews, personal communication and field observations were all techniques used to obtain data needed for the research. The Pastoral Livelihood Support and Empowerment Programme (PALISEP), a local NGO, was used as a 'gate keeper' to gain access to the community. Purposive sampling based on length of stay in the area, participation in knowledge accumulation, sharing and preservation, as well as membership in any of the existing forest user groups, was used to identify participants for the research.

Interviews were found to be an ideal technique to collect information from members, as they provided a better understanding of the opinions, values, attitudes, feelings and common understandings held among people (Arskey & Knight, 1999). Dialogue during the interview process helped to uncover drivers of behaviour not always seen and measured using other techniques. Specifically, five group-held, semi-structured interviews were conducted with 11 customary and influential elders, out of which two were females. Group interviews were carried out in order to eliminate the use of a translator whenever possible by having one elder who can speak Swahili paired with the one who cannot. Being together also helped elders to remind each other of important events or issues that another might have forgotten. In cases where none of the elders spoke Swahili, a translator was used during the interview process and only one person was interviewed. Interviews were conducted until data saturation was attained. Each interview lasted between 30 minutes and two hours. Interviews were conducted either at interviewees' houses, a nearby school, or at the village office. Most of the interviews were audio recorded. For unrecorded interviews, the researcher detailed responses in the field notes. The interviews consisted of three steps: 1) asking about the life history of the respondent; 2) description of the traditional values and practices associated with forest management; and 3) reflection on traditional values and meanings to Enguserosambu community culture, livelihood and lifestyle.

Data processing and analysis

Data collected was transcribed and translated by the researcher before being analysed. Data analysis was conducted in several stages. During fieldwork, the researcher created memos and notes with ideas surrounding particular topics. Content analysis of transcriptions was conducted using NVivo 10 to generate topics that were combined into meaningful units and later developed into themes to help capture the meaning behind issues discussed. According to Braun and Clarke (2006), "[A] theme captures something important about the data in relation to the research question and represent some level of patterned response meaning within dataset". Analysis was done on two levels: level 1 involved sorting and putting together all the information to generate codes, themes and memos, and level 2 involved interpretation of the themes and examined how the themes are related, i.e. looking for patterns, relationships and irregularities of the generated themes (Patton, 2002; Miles & Huberman, 1994).

The first level of data analysis yielded labels and topics in terms of words or phrases that helped to formulate the storyline. Short sentences and paragraphs that elaborated the topics were then developed to provide a description of what the label meant in relation to the research purpose. This step provided the basic structure of the coding scheme, and helped organise the codes and eventually the themes. Interpretation and comparison among themes was then developed to search for patterns and relationships and enhance data interpretation. Whenever appropriate, sub-themes were developed. Coding notes were also generated that suggested interpretations or connections between themes.

Results

The following section is organised according to the themes generated during data analysis and meant to capture meaning and values attached to the forest by Enguserosambu communities. It provides an explanation of forest management approaches and practices used by local communities to protect the forest. Six topics were generated, and the themes describing each topic are elaborated below. Major topics generated include: 1) forest management history; 2) knowledge accumulation and dissemination strategies; 3) forest protection mechanisms; 4) community livelihood and lifestyle; 5) forest management challenges; and 6) forest benefits.

1. Forest management history

The forest has been under community custodianship for centuries. Hence, it is the role of local communities to continue protecting the forest to preserve their culture and sustain their livelihoods. The forest possesses very special value to the Enguserosambu community. Most of the community members do not see the difference between their own culture and the forest because the two are tied together. Culture and nature relationships have even stronger bonds than relationships among brothers and sisters,

as described by some informants. All cultural and spiritual celebrations are conducted within the forest.

According to the communities, the forest is managed under an open access regime and everyone has access to it, including its resources. However, management responsibilities are headed by the customary elders and, currently, in collaboration with the community conservation trust. For years, traditional rules and regulations were used to control forest resource utilisation. To ensure that all community members abide to the rules and regulations, customary elders regularly carry out awareness sessions within the community to educate members on the forest's importance and ensure its protection.

Despite these efforts by the elders, forest destruction continues, albeit to a smaller extent than in the past. The ECF's destruction, among other factors, led the government to propose a change in forest management and ownership, whereby the central government was to ensure its protection. The government sought to protect the forest from destruction and preserve its value as an important water catchment forest for the greater Serengeti ecosystem. The government move awakened community struggles to legalise their ownership rights, as local community members saw themselves as sole custodians of the forest; this process culminated in the transfer of forest management and ownership, under the guise of the new Forest Act of 2002, over to the community in a ceremony held in October 2013. Given that the new Forest Act provided communities with formal ownership of forest resources, it was high time for them to grab the opportunity.

The process to demand ownership rights commenced in 2003 and concluded in October 2013 with a ceremony where the community was granted the certificate of forest ownership. Each community member, on their own accord, participated in the process of legalising Loliondo forest as community owned forest. The process followed the legal guidelines as outlined in the Tanzanian Forest Act of 2002, which identifies, among other things, a community forest category. It provides space for the community to manage and own forested areas within their territories.

To ensure thorough forest protection, Enguserosambu communities established a Board of Trustees known as Enguserosambu Forest Trust (EFT). The Board of Trustees is responsible for managing the forest on behalf of the communities. Educated members within the community as well as influential and customary elders played an instrumental role in securing communities' rights as legal custodians of the forest. The role that educated members played in securing ownership rights is similar to what Balooni et al. (2010) found when assessing the role of local elites in joint forest management in India. Balooni et al. contended that local elites play an instrumental role in shaping the processes and outcomes of participatory forest management interventions, especially when communities are characterised by social hierarchies. The social hierarchy in Enguserosambu communities had a positive influence, in that it helped locals collectively fight for their rights, as elders' opinions were highly valued.

2. Knowledge accumulation and dissemination strategies

Customary elders have an important role to play in shaping traditional knowledge and ensuring its survival for future generations. They are also responsible for land use planning. Three main approaches are used to facilitate knowledge transfer to community members: age group meetings, traditional ceremonies and traditional bomas⁴ (*Manyata*).

Age group meetings

Maasai society is patriarchal, whereby men have more power compared to women. The Maasai also live according to age groups, hence informal education is provided based on individual age. For instance, youth of the same age group receive education

Women from Orkiu village in Enguserosambu Community Forest carrying dry firewood, an important resource for heat energy within the community.

PHOTO: EMMANUEL OLE KILELI, 13 MARCH 2019



on traditional practices together.

Meetings are conducted with the elders in informal settings, away from home and other dwellings. Elders teach youth about customs and traditions, culture and its relations to the forest, and other life skills such as endurance, patience and self-respect. Traditional age group meetings are conducted every two months. The main reason for having the age group meeting is to sensitise youth to be responsible society members. This

is because youth (Morani) are responsible for guarding the forest. Age group meetings are also used as a step towards joining traditional bomas where young adults are gathered for more traditional teachings. Age group meetings provide an opportunity for youth to discover other talents/work aspirations, such as traditional doctors, honey collectors, etc.

We always share our knowledge during [those] meetings, especially to those below us. We teach them about important medicinal trees in the forest and provide them with our will to protect the forest and ask them to share the knowledge to those below them when they get older. For those interested in medicine, they receive more information and get to know those who are responsible. This is also similar to other activities (Community elder #1, personal communication).

Traditional bomas

Traditional bomas, also known as *Manyata*, offer another key stage in the process of knowledge sharing within the community. Those who attend Manyata are ready to become responsible adults in the society. Before attending traditional bomas, young adults are required to have made several visits to the forests as a rite of passage. The main emphasis during *Manyata* is on societal laws and traditions. It is an important stage that seal young adults in as full members of society who can participate in decision-making.

Also, there is what is called Manyata boma. When the appropriate time comes, people of certain age are brought together for about three months in Manyata. It [Manyata] is a place where the main emphasis is on customs and traditions, making sure that current and future generations protect societal values. It is an important rite of passage in the society; no one can escape this stage. What happens during that time is nothing but more emphasis on traditions (Community elder #3, personal communication).

Traditional ceremonies

Traditional ceremonies for women within the Enguserosambu community start early, when a woman becomes pregnant. Two months into her pregnancy, a woman introduces the unborn baby to the forest. The connection to the forest is continued throughout the lifetime of the unborn baby. For men, there is progression from childhood to warriorhood to adulthood. In all the traditional practices among the Maasai of Enguserosambu, there are special trees used to help youth graduate from one stage to another. Honey, milk, meat and soup with herbs are the main components used during traditional ceremonies. In every stage of traditional ceremonies the forest is used as the central locale. Some stages of personal development require a prolonged stay in the forest; for instance, overcoming selfishness and pride necessitate longer stays. To comment on this, one of the customary elders said:

Also, when youth are taken for circumcision, a goat must be killed. They will go to the forest, select a perfect tree, then they will slaughter the goat. When they reach a certain age, a cow will be slaughtered. Throughout these ritual practices, emphasis is put on the importance of the forest to all the traditional practices. All the celebrations take place in the forest to signify its importance (Community elder #3, personal communication).

Apart from these knowledge sharing mechanisms, other forest management practices are also emphasised. Within the community setting, there is a team responsible for conflict resolution, as well as different committees at the village level responsible for overseeing the general environment and forest management. At the ward level, there is a community conservation trust: a community board responsible for overseeing forest management practices. Community elders, the village council, Ilaigwanak,⁵ community trust members and forest user groups collaborate on setting use limits and management strategies. Usually, these groups meet and agree on a land use plan and oversee its implementation at local, sub-village, village and ward levels. It is the role of the community conservation trust to facilitate the documentation of local ecological knowledge and build capacity in areas surrounding the forest. Despite this organisational structure, it is the responsibility of every community member to protect the forest.

3. Forest protections mechanisms

There are various strategies implemented to ensure that the ECF is protected, including fencing of important areas, forest guarding, enforcing proper land use plans and upholding traditional laws. Fencing is mainly used to protect water catchment areas, important trees and areas significant for traditional celebrations. All important trees for traditional celebrations are known and highly protected.

Land use plans

TraditiLand use plans contribute towards decreasing resource use conflicts. Four land use areas have been identified in the Enguserosambu environs: farming land, grazing land, land for residential use and forest areas. Grazing land is divided into two groups based on the season and age of the cattle. In terms of livestock age, there are special grazing grounds for calves, known as lokeri, and areas for grazing other cattle. Lokeri are often located in lush green areas in close proximity to water sources. With regard to seasons, there is grazing ground for dry and wet seasons. During the wet season, cattle roam around open areas close to homesteads, while during the dry season, cattle are allowed to enter designated grazing areas inside the forest. The allocation of both dry and wet season grazing areas helps protect pasture throughout the year.

Most of the traditional land use plans are similar to urban planning structures or zoning practices in protected area management. They are all meant to identify what can and cannot be done in the area, reducing resource use conflicts and allowing for sustainable extraction of resources. Traditional land use plans have spatial and temporal attributes and allow for setting aside damaged areas for recovery (Eagles et al., 2002). Despite the intended purpose of land use by customary elders, similar to zoning, land use planning faces major challenges due to the lack of clear mechanisms for its operationalization (Hull et al., 2011). A good example during this research was with farm allocations. Farms are controlled and shared equally among community members. According to customary elders, distributing farms according to the agreed-upon farm size ensures fairness to all members. Fairness in farm allocation also reduces the pressure of opening new farms when demand increases. However, this seems to be contrary to what the majority of user groups mentioned during the interviews. Most of them complained that farming in the area is uncontrolled and has significantly increased, notably on grazing lands. For example, one of the users mentioned:

It is completely different from how it used to be. People have increased, cattle has increased but land is still the same. Farming has also increased, which contributed to the decline of grazing land. Currently we do not have enough grazing areas because of farming.

Forest guarding

Given that most of their activities involve frequent visits to the forest, forest user groups (women, warriors, honey collectors, traditional doctors) participate in guarding the forest. After their visit to the forest, user group members are required to report back to customary elders if they encounter any suspicious activities within the forest. For example, women visit the forest regularly to collect firewood and fetch water. Their frequent visitations place them in a better position to witness most of what is happening in the forest. Hence it is their duty to report back to the elders in case they encounter ything unusual.

Traditional law enforcement

Two main approaches are used to punish offenders: traditional laws and formal laws, or 'bylaws'. Traditional laws are exercised by customary elders. Several stages are involved when enforcing traditional laws. First, the offender is isolated from others and no one is allowed to visit them. Likewise, they are not allowed to visit anyone for about one week. Isolation is meant to give the offender time to reflect and repent. Being a social community, isolation is felt deeply by those who are punished with it. The isolation period is sometimes followed by being charged traditional fines that include local brew, cow, and traditional blankets for elders. Local corrective methods have managed to deter most community members from breaking customs and traditions. However, due to the increased encroachment by 'outsiders', community by-laws are also used. The procedure is handled at the local government offices with the possibility of advancing to the ward and/or court level, depending on the type and magnitude of the offense committed.

4. Community livelihood and lifestyle

Livestock keeping is the key livelihood activity carried out by communities in the ECF. Cows, goats, sheep, and – to a lesser extent – chicken are the main livestock kept. Community members also keep dogs, cats and donkeys. The diversity of domestic animals reflects the function that each animal has in the household. For example, the donkey is used for carrying water, firewood and other household supplies, while dogs and cats are kept for security purposes. Dogs usually guard outside areas while cats look out for snakes and other unwanted creatures inside the house. Cows, goats, sheep and chickens are for food and a source of income. Most people keep an extremely large number of cattle. Average cattle ownership per household ranges between 10 and 300 cattle. The number includes the mix of all available livestock in the household. Large numbers of cattle are associated with wealth, hence the more cattle one has, the wealthier they are perceived to be. Given the high status value that is attached to cattle, the majority keep more cattle than the grazing land can sustain.

Pastoralism in the area is managed by traditional/customary institutions. Grazing grounds are also allocated based on local knowledge. The type of animal breeds that are kept by pastoralists is characterised by their indigeneity to the area, which means that they are more resilient to dry conditions. Besides livestock rearing, communities also practice other economic activities, like farming and petty business.

The forest also contains trees important for making traditional tools and weapons. Some of the trees are important for different traditional ceremonies. These are trees that provide sources of fire (*mitarakwa*), trees where the ceremony is performed, and trees that are used to offer blessings to youth and women (*oreiteti*). The ECF is also a catchment forest, supplying water for both human use and ecosystem support. Forests also provide building materials to support the construction of community development projects such as schools and health centres. However, the quantity of non-timber forest products is

decreasing. This may be attributed to the (1) changes in livelihood patterns, (2) changes in rain patterns, (3) drying out of some water catchments, and (4) forest cover loss. Customary elders also commented on there being fewer native trees and fewer, less varied wildlife populations within the forest.

5. Forest management challenges

Population growth, increased agricultural activities, large numbers of livestock, illegal logging, fires, and encroachment are among the main threats to the sustainability of the forest today. In a 2002 census, the population of Enguserosambu community was 1,521 inhabitants, while in 2012 the population increased to 2,320 inhabitants (Government of Tanzania, 2013). Having more children is associated with having a wealthier status in the community. For the man of the house, having more kids provides status and prestige. The increased population numbers mean increasing demand for settlements, new farms, higher demand for forest services and increased livestock. In terms of identifying the causes of forest degradation, some respondents mentioned natural occurrences, such as heavy rains and storms, although these kinds of events do not occur frequently.

The most challenging and upcoming threat is mining, which began in Naan village in close proximity to the forest. Clear cutting and extraction in one of the rivers along the forest edge was observed. At the time of research, plans were underway to expand more mining plots to meet the increasing demand. The expansion of mining areas will subsequently clear large portions of the forest to meet the demand for mining plots.

Changes in societal needs and lifestyle pose another threat to forest conservation. Knowledge retention among young generations is very low, especially after obtaining a formal education. Most of the young generation, after being educated, end up moving someplace else – far from where their knowledge is most needed. Those who do remain behind choose to have a modern lifestyle, ignoring their traditional upbringing. Most of them turn out to be opportunistic, driven by individual motives rather than communal benefit. For example, one of the customary elder commented:

Most of youth have given up their traditional values, they are copying practices and lifestyles from other cultures. Most of them [youth] despise their own culture and traditions. But we are trying hard during meetings to make them aware that even though they leave the community to go for better education somewhere else and see how other people live, they should not come back and copy everything. So even though they will be educated, when they come back, they are obliged to obey traditional rules.

There is also increasing societal transformation in terms of acquiring modern homes equipped with solar panels as opposed to living in traditional huts, adding further pressure on forests.

6. Forest benefits

Emphasis is put on forest protection because it's at the core of the livelihood, culture and traditions of the Enguserosambu community. All individuals agree that once the forest is lost (degraded), customs and traditions that were kept for generations will also disappear. Similarly, all benefits and services that communities are currently enjoying from the forest will cease to be available. Since forests play a large part in supporting livelihoods, it is important for Enguserosambu communities to find amicable solutions in order to retain knowledge of cultural practices favouring forest protection and survive the wave of challenges facing their society today. To achieve this goal, collaboration

Community members at Enguserosambu village gathered during an age-set traditional ceremony, a community important event performed partly in Tanzania and finalised in Kenya every 10 years.

PHOTO: EMMANUEL OLE KILELI, 20 AUGUST 2019



among trusted members, customary elders, user groups and NGOs is crucial to strengthen social institutions and build the capacity of all community members.

Despite these challenges, customary elders see many opportunities, as long as measures to rectify the current situation are put in place. With regard to reducing forest pressure, several solutions were suggested, including

finding an alternative energy source rather than depending on firewood only; finding an alternative source of livelihood that is compatible with forest protection, e.g. beekeeping; increasing conservation training and capacity building among community members; and developing more comprehensive land use planning that takes into account current population changes. Furthermore, customary elders called for government support at the local level in order to strengthen their conservation efforts and achieve better results.

Discussion and conclusion

Indigenous ecological knowledge is more than just the knowledge of the land. It includes knowledge of resources, their management, and the ecological processes associated with them. From the findings, it is clear that the Enguserosambu community has more knowledge about resource use and practices that ensure long term resource protection than previously thought. According to Boven & Morohashi (2002), traditional knowledge also guides ritual practices and their potential to encourage sustainable use, as they incorporate spirituality and Indigenous worldviews. Communities have accumulated this knowledge through trial and error by virtue of their closeness with nature/the environment (Davis & Wagner, 2003). With such rich knowledge, Indigenous leaders argue that they are better protectors because they actually use their territory. When they visit their surroundings from place to place, community members acquire a detailed and intimate knowledge of the flora and fauna, allowing them to note changes better than an outside monitor would, and help keep invaders like illegal loggers or hunters out of the forest.

Culture and the forest are one and the same, according to the Enguserosambu community. Culture is dead without the forest. The connection that communities have with their forest attests to this. Furthermore, the forest provides a spiritual connection; it is a source of livelihood; a place where cultural celebrations are held; and a dry season grazing ground. To maintain the connection for generations to come, customary elders have to make sure that the knowledge is shared and sustained within the community. Age-group meetings, traditional ceremonies and Manyata bomas were mentioned as key strategies used to disseminate knowledge among community members. Other practices, such as fencing off water catchment areas, land use zoning and forest patrols using different user groups are also emphasised. Practices of Enguserosambu communities align with Berkes' (2012) definition of traditional ecological knowledge as stories of how socio-cultural systems have adapted to specific ecosystems over time. These findings are similar in the sense that oral history is the main medium through which knowledge is shared among community members in Enguserosambu. Through age group meetings and cultural celebrations that are held often, elders get to share their knowledge with the other group members.

Generational change is, however, a factor of concern among customary elders. Younger generations seem to be less interested in maintaining forest management practices for the benefit of the community. Although most youth understand the value of the forest to their culture, they are also aware of different lifestyles. Due to their exposure to education, travel to different places and the need for a 'better' life, most young people are eager for opportunities that will reward them better financial results. Most documented challenges with Indigenous knowledge transmission show that younger generations more often embrace market paradigms, to the detriment of ethical beliefs surrounding traditional forest conservation practices. In many cases, market forces are more powerful than social institutions, and rarely are market forces integrated into social institutions as a means to understand the current state of affairs in the community setting.

Socio-economic activities in the area are changing. Enguserosambu ward is growing, and with it comes changes in socio-economic practices. Currently there is an increase in population in the area. There is also pressure from the nearby villages of Loliondo, Sakala and Wasso. Most residents in these nearby areas do not share the same values and traditions with the Enguserosambu community, yet they indirectly benefit from, and depend on, forest resources (such as water and other non-timber forest products). Given the ongoing mix of communities, Enguserosambu people need to find alternative sources of livelihood to meet the demand. The forest alone cannot provide communities with all their needs for it to be sustainable.

Community-managed forests are a relatively new category in Tanzania. The new Forest Act of 2002 provides a clear framework and incentives for community involvement in forest management. The Act also gives the community the power to own and manage forest resources. Although regulations are provided, one of the weaknesses of the ecosystem approach is that it undermines the contributions of Indigenous practices and their potential to support ecosystem conservation.

A combination of both Indigenous knowledge systems and scientific systems will help provide a broader understanding of ecosystem management. Lertzman (2010) argued that Indigenous ecological knowledge and western science represent a potential complementary relationship that cannot be viewed as separate. If western science ceases to act as the 'saviour' and starts working with local communities in a way that acknowledges that it too has something to learn from the process, it will support the dignity of the cultures that are a part of the complex forest ecosystem. Incorporating this ethic into conservation planning is complicated and time consuming, but has potential to be longer lasting.

Community involvement in forest management serves a dual purpose: it helps improve forest conditions, while supporting the livelihoods of the communities. All this is achieved through local institutions. Local institutions have evolved over time, and as such, communities have utilised their Indigenous knowledge and sometimes combined it with technical knowledge received through research and extension services. Through their local institutions and 'learning by doing', Enguserosambu communities have succeeded in protecting the forest, although not to their full potential due to several impediments such as lack of incentives, extreme poverty and lack of technical expertise. In order to overcome these obstacles, policies geared towards nurturing and building local capacity and improving social and economic capital must be put in place to ensure that community involvement is effective and has positive results on both local and national levels.

Traditional knowledge still supports conservation and management of the forest. However, there are external threats interfering with its effectiveness. Being 'traditional' does not mean being static. This is evident because the communities kept changing their practices and elders met regularly to assess these changes and integrate new ideas into their daily lifestyles. Cultures are malleable and adapt to changing conditions, though the pace is almost always slow.

Indigenous knowledge is usually acknowledged but not fully or meaningfully incorporated into rules, regulations and general planning and management of resources. Traditional systems have the potential to contribute to our current understanding and use of various ecosystems (Berkes, 2012). In an effort to broaden conservation practices to include communities as part of conservation strategies, a combination of micro and macro-level analysis is necessary to make collaborative decisions about conservation practices. Combining both micro and macro scales in conservation planning is important since each one provides context for the other. It is particularly important now, as park and conservation management approaches worldwide are moving towards improving relationships between protected areas and neighbours living adjacent to them.

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Underprivileged youth become proud park rangers: Reflections from the Democratic Republic of Congo (DRC)

by Christine (Tina) Lain^{a)} and Doris Schyns^{b)}

Introduction

In the Complexe Upemba-Kundelungu (CUK, see Figure 1) in the Democratic Republic of Congo (DRC), a new generation of rangers is being trained to protect wildlife. The training programme doesn't only prepare youth for the job of being a ranger, it also provides them with role models they never had.



Video of local community members singing during ranger training workshop. (Copyright: Tina Lain/ 14 November 2019/Lusinga HQ)

Located in the Katanga Province in the South-East of the DRC, the CUK consists of two National Parks covering an area of approximately 24,600 km² of spectacular wilderness. Upemba National Park, having legal protection since 1939, is one of the oldest parks in Africa. It's linked to Kundelungu National Park and a number of game reserves, together forming a massive mosaic of protected areas. In 2017, the Forgotten Parks Foundation (FPF) signed a 15-year contract with the Congolese Wildlife Authority (ICCN) for CUK's management, rehabilitation and development.

Upemba and Kundelungu boast a wide diversity of habitats, including a full transitional gradient from highland steppe through Miombo woodlands to both

FIGURE 1
Map of the Complexe Upemba Kundelungu in the DRC (March 2019).
SOURCE: ICCN/FORGOTTEN PARKS FOUNDATION)

wooded and grassland savannah. There are numerous rivers, waterfalls, wetlands and gallery forests. The Lufira River and Lake Upemba, both within park boundaries, form a critical watershed for the region, as well as the source of the mighty Congo River, and were internationally designated a Ramsar Site in 2017.*

COMPLEXE UPEMBA-KUNDELUNGU
REPUBLIQUE DEMOCRATIQUE DU CONGO

TUNGS NY SKA

National
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^{*} A Ramsar Site is a coastal or inland wetland with international importance, recognised by the Ramsar Convention on Wetlands.

Refuge for zebras and savannah elephants

The CUK's wildlife populations suffered during the Second Congo War (1998–2003), and a subsequent combination of park neglect, illegal poaching, and bushmeat hunting further decimated wildlife numbers. Nevertheless, many species remain, and the park is a refuge for the last savannah elephants in Katanga, as well as the only remaining herds of zebra in DRC. Other notable species include the endemic Upemba lechwe, the roan, antelope, black sable, buffalo, leopard, giant ground hornbill and many other bird species.

To protect this unique ecosystem, its habitat and wildlife from illegal poaching and other threats, a new generation of park rangers is being trained.

The training programme has given these young men a purpose... They are extremely proud of the job they do and their contribution to the protection of local wildlife.

Robert Muir, Provincial Director of ICCN and Director of EPF

Young rangers step up to the board

In December 2019, funded by the European Union, 50 rangers in the first group of trainees received their certificates upon successful completion of the three month programme. In December 2020, the second group of 60 rangers completed their programme. The second training was tailormade and focused on intersections between law enforcement and human rights, which are important topics for rangers and



Zebra from the Upemba National Park, D.R. Congo.

PHOTO: FORGOTTEN PARKS FOUNDATION

local communities. In total, 91 rangers were trained in human rights standards. Basic training, facilitated by instructors and human rights specialists from the Endangered Species Protection Agency (ESPA), focused both on the 'technical' aspects of the job, such as how to carry out patrols and be aware of the danger of possible ambushes; and on the improvement of the self-esteem, team skills and emotional resilience of youth participants. Further, it was structured to help participants better understand what human rights standards are and how to respect them when engaging with communities, while being aware of their own rights and responsibilities.

Managing challenges together

The ESPA team had to constantly adapt to these new parameters, providing human rights support and guidance to the recruits. For instance, tribalism was highlighted towards the end of the screening process, when it became apparent that the Basanga tribe from Kyubo had been segregated by all recruitment groupings during selection training, in particular by some members of the Bantu tribe, many of whom were cooks on site or ran security detail at the front

gate of the park. Recruitment candidates from the Basanga tribe/Kyubo area were forced to wait at the rear of the queue at mealtimes and were shunned from all social circles, leading to severe social discontent. The young men selected to continue on to the training programme were made aware of the importance of teamwork and equity in all aspects of working as a ranger, without regard to tribal or ethnic differences. Some rangers were directed that any such future incident would result in sanctions being imposed.

Role models

While most of the recruits look up to notable park rangers, such as ICCN Director and 2017 Goldman Environmental Prize recipient, Rodrigue Mugaruka Katembo, or older mentors provided during the training, a number of them develop leadership skills themselves. "It makes me proud to see my son become a role model himself", said the mother of one recruit.

In some cases, the training programme helped develop trust between local villagers and the rangers.

Many of the boys grew up without a father or other role model to look up to. The ranger programme provides them with role models, sometimes for the first time in their life, and offers a future for them and their families. I'm so happy my son has been selected.

Mother of newly-recruited ranger, December 2020

Part of a team

During the training, there is a strong focus on team building. "As a ranger, you are not just an individual carrying out a job; you are part of a team" Tina Lain, Lusinga headquarters, states. It is therefore important that the rangers get to know each other well and recognise the specific contribution each ranger within the group and community can offer.



Selfie of two proud rangers in the Complexe Upemba-Kundelungu, DRC.

PHOTO: RANGER MIKA, LUSINGA HQ, 14 DECEMBER 2019

The training consists of various modules. After the basic training that prepares participants for the work as a park

It's not that you just can tell others what to do, because you are wearing a uniform or carrying a gun; it takes great interpersonal skills to operate as a team. And it's great to see how each of the participants discovers their own strengths. These young adults really grow during the training, also on an emotional level.

Tina Lain, speaking from the Lusinga headquarters following a training, December 2020

ranger, we offer additional modules in collaboration with the University of Lubumbashi", says Lain. "While the basic training focuses mainly on how to deal with risks, additional modules centre for example around human rights, community engagement or fisheries".



Group photo with Kim and the new rangers upon graduation in Lusinga Headquarters (HQ)/ Complexe Upemba-Kundelungu, DRC.

PHOTO: TINA LAIN, LUSINGA HQ, 14 DECEMBER 2020

While rangers are educated on biodiversity monitoring, FPF and IUCN NL also work with various partner organizations to ensure further personal development of the rangers.

"It's important that the ranger force is well prepared for the job ahead, both physically and mentally", Lain concludes. When well equipped with the necessary skills and attitudes, rangers are able to perform better, both as individuals and as part of a team, and they are better prepared to engage effectively with the people they encounter during their patrols and the

Three of the trainees went to Mitwaba, a village 35 kilometers from Upemba's Parks headquarter Lusinga. They were on leave for the weekend and found a wallet with money in it, what they did was amazing: they went to the police station to give it back and see if they could find the rightful owner. This was such big news within the community; local community members were so surprised about what these three young rangers had done, that they invited them in their homes and asked where they were coming from and how it was possible? The three young men said that they were the new ranger recruits of Upemba Kundelungu and were attending training in the park. I never felt so proud of my recruits, and realised this was probably one of the best outcomes we could ever dream of in a training: not only changing the attitudes and values of these young men, but also the perceptions of the communities towards the rangers.

'Kim', ESPA's Kenyan instructor, December 2020

surrounding communities. Too often we forget to recognise that rangers are above all part of a community, strengthening the capacities of these youth is a way to support communities to be more resilient, making them aware of their rights and duties and helping them reduce conflict with protected areas.

For more information on the CUK project and ranger training programme, visit: https://www.iucn.nl/en/countries/dr-congo



"¡Guardia, guardia, fuerza, fuerza!" Supporting community-led solutions for the protection of Land and Environmental defenders: the experience of the Indigenous Guard in North Cauca, Colombia

Hannah Storey^{a)} and Nick Middeldorp^{b)}

Abstract

The Business & Human Rights Resource Centre documented over 2,000 attacks on human rights defenders linked to business-related human rights abuses between 2015 and 2019. According to the former UN Special Rapporteur on the situation of Human Rights Defenders, Michel Forst, environmental human rights defenders are facing "increasing and intensifying violence against them". In response to the growing recognition of both violent and non-violent retaliation encountered by human rights defenders, a multi-level, multi-actor human rights defender protection ecosystem has emerged. However, more emphasis is needed on addressing the collective element of threats faced by land and environmental defenders. By highlighting the experience of Colombia's Indigenous Guard, this article explores the concept of collective protection and the need for the protection ecosystem to support and strengthen community-led initiatives for protection which are collective in nature, rapid, adaptable, culturally appropriate, and intertwined with advocacy strategies.

Key words: human rights defenders; collective protection; guardia indigena; Colombia; territory

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Introduction

According to Global Witness, between 2002 and 2013 over 900 land and environmental defenders were killed (Global Witness, 2014). In 2019, they reported that an average of more than four defenders were murdered each week (Global Witness, 2020), and killings are just one of the ways defenders are targeted. The Business & Human Rights Resource Centre documented over 2,000 attacks on human rights defenders linked to business-related human rights abuses between 2015 and 2019, ranging from frivolous lawsuits and arbitrary arrests to death threats, beatings and killings – over 570 attacks in 2019 alone (BHRRC, 2020).

In response to the growing recognition of the tide of violent retaliation faced by human rights defenders, and since the adoption of the UN Declaration on Human Rights Defenders (United Nations General Assembly Resolution 53/144) in 1998, a thriving international 'Human Rights Defender Protection Regime' has emerged (Bennett et al., 2015). This protection ecosystem includes a variety of different actors and types of mechanisms, including state-based mechanisms such as Colombia's National Protection Unit (Unidad Nacional de Protección, 2019); supranational initiatives such as the Inter-American Commission of Human Rights' Precautionary Measures (OAS, 2011); and Non-Governmental Organisation (NGO) support programmes such as those run by Front Line Defenders (2011), FORUM-ASIA (2010), Urgent Action Fund for Women's Human Rights (2020) and consortia of NGOs such as ProtectDefenders.eu (ProtectDefenders.eu, 2016). The EU and several individual states have developed guidelines for embassies on providing support to human rights defenders (European Union, 2008; Government of Canada, 2019; HM Government, 2019), and many governments have established 'shelter cities' or temporary relocation programmes for at-risk human rights defenders (Government of Norway, 2010; Madrid Protégé n.d.; Shelter City n.d.). Despite this growing effort, according to the former UN Special Rapporteur on the situation of human rights defenders, Michel Forst, defenders are facing "increasing and intensifying violence against them" (Forst, 2016).

Given that many land and environmental defenders⁶ are working as part of community-wide struggles to protect their collective rights (Global Witness, 2020), the risks they face are often both individual and collective in nature. While individual protection is an essential part of the protection ecosystem, failing to account for the collective elements of protection limits the impact of protection initiatives (Protection International, 2018b). Organisations within the protection ecosystem are becoming much more cognisant of the need to support collective protection, but more learning on the topic is still needed by many. This article will explore what is meant by collective protection, and through considering the example of the Indigenous guard of North Cauca, Colombia, we will argue that supporting and strengthening community-led security initiatives is crucial for addressing the collective risks defenders and their communities face. We first discuss how the need to support collective protection has gained international recognition, and then highlight some of its distinctive elements. We then turn to the example of *community-led* collective protection by the Indigenous movement in North Cauca, Colombia, before turning to the conclusions of this article.

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Increasing recognition for collective protection

The strategies employed by organisations and governments within the protection ecosystem vary significantly across contexts and depending on who is providing the support. Broadly speaking, support to defenders can include advocacy targeting key actors, such as governments; international solidarity or visibility actions designed to raise the profile of defenders; funding for physical security support, such as providing fencing, transportation and bodyguards or purchasing IT and security equipment; delivering security trainings and capacity building; legal support, such as providing legal services, advice or trial observation; temporary relocation to safe places; and psychosocial support, as well as coverage of medical expenses.

According to Global Witness many defenders belong to Indigenous Peoples and local communities whose lands, territories and resources are being threatened (2020). Territorial dispossession of Indigenous people and local communities, with its history rooted in conquest and colonialism, has continued unabated in the 21st century, fuelled by the growth of land hungry mega-development projects such as hydropower and infrastructure developments, and in the agribusiness and extractives sectors (Younger, 2020). For communities not necessarily dispossessed of their lands, indirect impacts from these projects, such as polluted water sources or destroyed cultural sites, can still be devastating. The human rights struggles of these communities, particularly of Indigenous Peoples, are often intrinsically linked to their right to self-determination (IWGIA, 2017). The right to self-determination, being fundamentally a collective human right (ICCPR, 1966)⁷, means that land and environmental defenders in these communities are more often than not part of a wider struggle for collective, rather than individual, rights.

For defenders of collective rights, the risks they face have both individual and collective dimensions. Although leaders in communities are often championed for leading the fight for collective rights, those rights – being collective – are being fought for by, and on behalf of, the community as a whole. Collective rights are by definition a common project. Even though some defenders may face increased risk compared to others – because they are more visible, for example – the human rights struggle is not linked specifically to one defender or another, but rather to the community as a whole. If one defender faces risks, it is often indicative of a pattern of risk faced by many others in their community (Protection International, 2018b).

The impact of violent retaliation against defenders in these contexts is also collective. When individual defenders are attacked, the effects of that attack are felt by many others, including their organisations, communities and family members (A/HRC/39/17). The impact of murder on those left behind has been well documented. Those close to the victim can suffer severe mental health impacts including depression or Post Traumatic Stress Disorder, in some instances leading to drug and alcohol abuse (Costa et al., 2017). For land and environmental defenders, the impact of murder can be particularly traumatic, as such attacks are often perpetrated not only to silence the defender, but also

to divide communities and undermine the wider human rights struggle (A/HRC/39/17). Those left behind who are also working for the cause, may understandably feel a considerable chilling effect – fearing they themselves might be next. Even in cases of non-violent retaliation, such as the criminalisation of defenders, community members may cease their human rights work out of fear of facing criminal charges themselves (Ibid.).

A large number of the initiatives by actors in the protection ecosystem are designed to support individual defenders (Protection International & University of York, 2017). These initiatives are crucially important for when risk levels are critically high and defenders need urgent and individualised support, such as temporary relocation to a safe location, but in the case of defenders of collective rights it is also crucially important that the protection ecosystem supports strategies for addressing collective risk if it is to effectively protect these defenders.

Human rights defenders have been urging the protection ecosystem to focus on collective protection for some time. In Colombia, defenders have been calling upon the government to implement a collective protection strategy for many years, recognising that the individual armed protection provided by the National Protection Unit is not financially sustainable or effective in the long term (Front Line Defenders, 2018b).

In recent years this request has been heard more strongly. Participants at Protection International's 2017 roundtable 'rethinking the protection of human rights defenders' identified a focus on the protection of individual defenders as a shortfall of the protection ecosystem (Protection International & University of York, 2017). In their publication *Collective Protection of Human Rights Defenders and through their Communities are Human Rights Defenders campaign*, Protection International (2018a) has called for those implementing protection strategies to recognise the collective element of human rights work, and to work on strengthening collective capacity rather than emphasising individual defenders as leaders (2018b).

In November 2018, at the Human Rights Defender World Summit, many defenders highlighted the need to recognise the collective element of security. An Afro-Colombian women human rights defender, Noira Candelo Riascos, said "security must be collective. It affects families. It affects communities". (Amnesty International et al., 2018)

In December 2019 the UN General Assembly approved a resolution on environmental defenders which urged states to "develop and implement effective protection initiatives for human rights defenders... and to ensure that these measures are holistic [and] respond to the protection needs of individuals *and the communities in which they live*". (General Assembly Resolution 74/146 2020, emphasis added).

Collective protection is not a new concept, but its importance is increasingly recognised, and many actors within the protection ecosystem – primarily NGOs – have responded to these calls for change. Following are a number of examples.

In 2018 the Front Line Defenders award for human rights defenders at risk for the Americas region was awarded to the Peaceful Resistance of the Microregion of Ixquisis in Guatemala – a community based organisation which was established by 22 neighbouring Indigenous communities resisting the imposition of three hydroelectric dams in their territories without their free, prior and informed consent (Front Line Defenders 2018a). In 2020 the same award was given to the Guardia Indígena (Indigenous guard) of the department of Cauca, Colombia (Front Line Defenders 2020b) – a community rooted initiative which carries out collective protection actions on behalf of the Indigenous communities in the region (see below).

A protest by the Indigenous movement in Cali on October 12th (Columbus Day/Día de la raza/día de la resistencia indígena).

PHOTO: NICK MIDDELDORP



For Mexican organisation
ProDESC "community security
has become a core aspect
of [their] methodologies"
(ProDESC, 2019), and in
2019 they released the report
Community-based Security
Measures and Territory:
Methodological Notes from
Integral Defense Perspective, a
guide on community security
for defenders, collectives and
communities.

Also in 2019, the Zero Tolerance Initiative was launched – a coalition of international NGOs and Indigenous and local community activists and organisations aiming to address reprisals against defenders working on business-related human rights abuses. One of the core aims of the initiative is to support the collective protection of Indigenous Peoples and local communities (Zero Tolerance Initiative, 2019).

In 2020, Just Associates (JASS) launched a toolkit for women human rights defenders Our Rights, Our Safety: Resources for Women Human Rights Defenders – a manual by and for women human rights defenders designed to strengthen their collective safety.

Elements of collective protection

Many actors in the protection ecosystem now acknowledge that a successful security strategy for the protection of land and environmental defenders must recognise, and mitigate, the collective dimension of threats faced by defenders, but providing collective protection is not straightforward.

We must not think of collective protection as merely scaled up individual protection. Many systems suitable for individuals, such as temporary relocation or providing physical security measures, become logistically complicated and expensive if provided to large

groups of people.⁸ For communities fighting to remain on their ancestral territories, or fighting to recoup stolen land, temporary relocation can even be counterproductive, as relocation schemes remove the defenders from the very land they are aiming to protect. Relocating large numbers of community members can undermine their human rights struggle altogether, potentially leaving their lands exposed to incursions. For Indigenous Peoples and local communities with a deep connection to their lands (IWGIA, 2019; UNPFII, 2007), relocation can be particularly problematic, even traumatic in some cases (Griffin-Pierce, 1997; Weaver, 2001).⁹ Rather than scaled up individual protection, collective protection includes strategies which aim to protect the community as a whole, as well as the individuals within it.

Understanding community dynamics and context is crucial for implementing effective collective protection as they can help to determine which protection strategies are likely to work best within a particular context (Protection International, 2018b). For example, it is important to consider the physical characteristics of the community, for instance whether community members are densely or sparsely located; as well as the community's internal dynamics (e.g. whether they are a tightly knit community or affected by internal conflict). For instance, organising patrols of community land might be difficult to organise for communities who are geographically spread out. For communities with some level of internal conflict, it may be important to consider increased attention for digital security practices as a means to prevent information – particularly that which might put community members at risk – from falling into the wrong hands.

Risks faced by different members and groups within communities will vary because of racism, classism, sexism and other forms of discrimination (JASS, 2017). Effective collective protection strategies should therefore build upon analysis of the different types and levels of threats faced by different members of the community, as well as the impact, or potential impact, on them as individuals, on their families, friends and colleagues, and on the community as a whole (Ibid.). It is widely understood, for example, that women human rights defenders face risks which are specific to their identity as women: they are more likely to experience gender-based and sexual violence (Ibid.). Similarly, effective collective protection should be developed with reference to the underlying struggle of the community (Protection International, 2018b). Different human rights struggles will lead to different risks for the community depending on which actors – the national or local government, local police, paramilitaries, criminal organisations, private companies, etc. – are involved, and what actions have been taken by the communities in defence of their rights. For these reasons effective collective protection will vary from community to community.

To illustrate this let us consider the fictional case of a community who has experienced land grabbing by a multinational company. Some community members have decided to reoccupy the stolen land meaning they are at risk of – potentially violent – retaliation. Given the risk of violence the community have decided that only male community members will take part. Many of these men were bringing in the main income in their families and their absence puts financial pressure on their families who have to survive

on one less income. The financial burden becomes too much, and the men have to come home, leaving the land once again open to incursion. Although in this scenario it was the men who experienced the risk of direct violence, it was the economic impact on their families which meant the reoccupation could not continue. An effective collective protection strategy would therefore not only consider what physical protection the men might need when reoccupying the land, but also how the women and families would be financially supported throughout the reoccupation.

Consider now that the community leaders have faced death threats. The threats are believed by community members to originate from company employees, but it cannot be proven. Given the danger – when defenders are killed, threats commonly precede the murder (Front Line Defenders, 2019)¹⁰ – the leaders are temporarily relocated out of the territory. Without its leaders, the community is unable to continue the struggle effectively. Noticing the lack of leadership with the community, the company starts to offer some community members money or jobs if they were to support its cause, sowing further division. Here, an effective collective protection strategy would have included strengthening community organisations and structures. Strong community institutions could have helped ensure that several community members are closely involved in the human rights work. Likewise, the tactics used by the company to sow division would be less likely to be effective where there is a strong community identity.

When facing threats, communities often develop their own systems for protection against violence, criminalisation and harassment. These community-led systems for protection are essential for their safety, as well as for their ability to stay on their lands. In October 2018, defenders at IWGIA's 'Defending the Defenders' conference called on the international community to "support the establishment and strengthening of [these] community-based mechanisms for the protection of indigenous human rights defenders at risk" (IWGIA, 2018) and yet these systems are mostly untapped by the international protection ecosystem. As we will see, community-led initiatives and solutions are often collective in nature, rapid, adaptable, culturally appropriate, and intertwined with advocacy strategies, and therefore offer a promising and effective method for ensuring the collective element of human rights work is properly integrated into protection strategies.

Collective protection in North Cauca, Colombia

Colombia is currently recognised as the world's most dangerous country for land and environmental rights defenders. The country accounts for 30% of registered worldwide reported killings of environmental defenders (Global Witness, 2020), and most defenders were killed in the southwestern department of Cauca. Despite the 2016 peace accords between the FARC-EP insurgent group and the Colombian state, Cauca remains a conflict-ridden department due to land disputes and the presence of illegal armed groups. Cauca is home to several Indigenous peoples, of which the Nasa are the largest group. The region is also home to one of the most successful examples of community-led collective

protection, the *Guardia Indígena*, or Indigenous Guard (Pedraza Lopez, 2018), a movement in which both men, women and children participate.

The Nasa count on 500 years of experience in protecting their ancestral territory from outside threats, first fighting off the Spanish invaders for a hundred years before negotiating a tributary relationship in exchange for far-reaching autonomy with the Spanish Crown in the 17th century, establishing the resguardo (reservation) system still in place today (Rappaport, 1990). Resguardos are demarcated lands collectively owned and autonomously governed by Indigenous communities' own institutions. Following decades of encroachment by landowners of reservation lands in the 20th century, Cauca's Indigenous people began to self-organise, leading to the formation of the Consejo Regional Indígena del Cauca (regional Indigenous council of Cauca, or CRIC by its acronym in Spanish) in 1971. Despite continuous government repression and armed conflict in Cauca, the CRIC successfully managed to reclaim ancestral Indigenous lands and obtain a considerable degree of autonomy, including in areas such as healthcare and education. In 1984, in the face of armed attacks sponsored by large landowners who felt threatened by the Indigenous land claims, many of Cauca's Indigenous joined the Quintin Lame Armed Movement (MAQL), a guerrilla force dedicated to protecting Indigenous lands in the course of the Colombian armed conflict (Peñaranda Supelano, 2015).

State-civil society negotiations preceding the 1991 Constitution – the first constitution to acknowledge Colombia as a multi-ethnic nation and to recognise differentiated Indigenous rights (Peñaranda Supelano, 2015) accompanied the demobilisation of the MAQL. When paramilitary violence surged across Colombia, including in Cauca, around the turn of the 21st century, the Indigenous authorities did not reinstate the MAQL, but instead chose a path of non-violent resistance, creating the Indigenous Guard, called *Kiwe Thegnas* (literal translation: caretakers of the land) in the Nasa language. The Kiwe Thegnas number around 8,000 in Cauca, and around 2,000 in North Cauca alone.

By 2021, the initiative has been replicated across Colombia's Indigenous territories as well as by white/mestizo peasant and Afrocolombian communities, creating the Guardia Campesina and Guardia Cimarrona respectively. In North Cauca, the FARC-EP splinter groups *Columna Movil Dagoberto Ramos* and *Columna Movil Jaime Martinez* have refused to lay down arms following the 2016 peace accords, and continue to profit from the taxation of illegal mining and marijuana cultivation as well as the production and trafficking of cocaine in this strategically important trafficking corridor. In turn, other armed groups including neoparamilitary formations and the FARC-dissident group *Segunda Marquetalia* are attempting to gain a foothold and dominate the region. Indigenous leaders opposing the operations of these different groups on their ancestral territory have increasingly come under attack in the years following the 2016 peace accords, as illustrated by the following threat published by the dissident faction Dagoberto Ramos on 5 December 2020:

[W]e declare the traditional authorities a military objective (...) we give them 24 hours to leave their territories with their families in order for them to cease persecuting and capturing our units, we know their movements and their security schemes.

Whilst Cauca's Indigenous are under constant threat from illegal armed groups, public security forces (notably the army) who operate on behalf of local agribusinesses, often conveniently conflating legitimate protests with guerrilla (supported) activities, also pose a threat. In essence, the Indigenous movement is caught between two fires.

On 13 August 2020, two Nasa were killed in a joint military and police operation aimed at evicting them from land they were attempting to reclaim from a group of politically-connected sugar cane companies near the Corinto resguardo, notably Ingenios del Cauca S.A, owned by the magnate Carlos Ardila Lule, one of Colombia's richest businessmen and staunch supporter of the current Colombian government. The military and the ESMAD (Esquadrón Móvil Antidisturbios) riot police burned the crops planted by the community on the reclaimed land and opened fire on unarmed protestors, killing land rights activist Jhoel Rivera and journalist José Avelardo Liz. Liz worked for the local radio station Nación Nasa and was filming the eviction when he was shot dead.

Although eyewitnesses claim that shots were fired from the direction of the soldiers, and video material is available of soldiers opening fire during the confrontation, the army denied having fired any shots and instead blame FARC-EP splinter group Dagoberto Ramos of having taken advantage of the confrontation to sow chaos. In turn, the local Indigenous authority, the *Association of Indigenous Councils of North Cauca* (ACIN by its acronym in Spanish) denounced the riot police stating that they aggressively denied passage to a medical team on its way to tend to the wounded. The private sector association representing the involved companies, Procaña, declared in a statement that the armed forces were operating under judicial orders, and that

[W]e reject these violent and illegal acts [by the Indigenous community] that affect the civil population and the Armed Forces, who, in the full exercise of their constitutional duties, work for the defence of the fundamental rights of all citizens who live in the region (Procaña et al., 2020).

The Indigenous Guard or *Kiwe Thegnas*, of which most members are in their twenties, but which counts former MAQL members among its senior participants, mainly exercises territorial control through checkpoints strategically located at *resguardo* entry points, and by patrolling the territory, a practice whose roots can be traced to the resguardo limit patrols of the colonial period in the 17th and 18th centuries (Chaves, 2020). The Kiwe Thegnas also carry out policing duties within the resguardos: settling internal disputes, apprehending criminals, and maintaining public order. Foregoing firearms, they are merely equipped with communications equipment, camping gear and the traditional bastón de mando, a hand-crafted wooden staff of office infused with spiritual authority (ibid). When encountering armed actors (whether military or illegal armed groups) within resguardo limits, or when facing the riot police during protest actions organised by the Indigenous movement, the Kiwe Thegnas employ the strategy of physical positioning: facing the opponent with superior numbers (or creating the illusion of numerical superiority), refusing to give ground and forcing the attacker to retreat, or when possible disarming and capturing the attacker (Alayón Rodriguez, 2018).

Beyond the exercise of territorial control, the Kiwe Thegnas are also promoted by the Indigenous authorities as a vehicle for identity building. In a country where racist stereotypes of Indigenous peoples as violent, lazy and uneducated continue to prevail in wider society (Observatorio de Discriminación racial et al., 2009), the Kiwe Thegnas provide a powerful counter to this narrative, and participation instils a sense of pride in one's ethnic identity. In this light, ONIC, Colombia's national Indigenous organisation, lobbies for official recognition of the Indigenous Guard's anthem – "¡Guardia guardia, fuerza fuerza!" (guard, guard, strength, strength) – by the Colombian government. Within Indigenous society, the Kiwe Thegnas have become a platform for the empowerment of young women: in 2020, around 30% of its members in North Cauca were female.

This identity building process begins at a young age: in North Cauca, the Nasa authorities have created the *Luuçx Kiwe Thegnas*, or Child Indigenous Guard. The children do not participate in confrontative actions; rather, participation in Luuçx Kiwe Thegnas is an important element of the children's education: they are taught about their history, local *usos y costumbres* (traditional customs), and are encouraged to care for their local environment. For example, in October 2020, the Luuçx Kiwe Thegnas of the Toez resguardo participated in a march for peace and helped repaint the Casa de Cabildo (council house) vandalised earlier that month with FARC-EP graffiti. This initiative attempts to reinforce ethnic consciousness and participation in the Indigenous movement at a young age. It also shields the children from the recruiting efforts of the illegal armed groups, who found the school closures that were part of the 2020 coronavirus lockdown

A Guardia Indígena checkpoint at the entry of the Canoas reservation.

PHOTO: NICK MIDDELDORP



measures fertile ground for the recruitment of vulnerable minors in rural Colombia (Semana, 2020).

The Kiwe Thegnas is but one expression of Indigenous autonomy and agency in Cauca. The recuperation of ancestral land (whether lost during the colonial period

or appropriated by landowners and agribusiness during the 20th century), as in the case mentioned before, is a community-driven process whose participants are called *liberadores de la Madre Tierra* (liberators of Mother Earth). The Kiwe Thegnas have an important role in these processes by patrolling the limits of the recuperated lands and standing watch to warn for the possible arrival of police units attempting to evict the liberators, who reclaim land by replanting it with local crops. The Thê Walas – traditional healers and spiritual guides of the Nasa people – work alongside the Kiwe Thegnas and the Ne'h Wesx (governors/elected community leaders) by realising protection and harmonisation rituals. Acts of violence are considered as impurities that disharmonise the territory. Captured militia members belonging to the communities are trialled, punished, and reintegrated according to customary law and traditional remedies that facilitate reharmonisation, a

process overseen by both the political (the Ne'h Wesx) and spiritual authorities (the Thê Walas). The key role of the Thê Walas in the exercise of Indigenous self-determination has not gone unnoticed by the illegal armed groups attempting to weaken the Indigenous movement – in May 2020, two Thê Walas belonging to the resguardo of Corinto were abducted whilst they were performing a ritual and were later found murdered, presumably by Dagoberto Ramos militants (Resguardo Indígena Paez de Corinto, 2020).

As shown, the collective protection strategies by Cauca's Indigenous peoples are rooted in the communities and their history, intersecting with other dimensions of their lifeworld including customary law and spirituality. By adopting the discourse and practice of nonviolent resistance, the Indigenous movement has been able to legitimise itself on the national and international levels, enabling it to mobilise financial and technical support from both the Colombian state and international NGOs. The Kiwe Thegnas are not merely a mechanism of collective protection building on community participation, knowledge of the terrain and territorial control, but it is meant to strengthen Indigenous identity as a whole.

However, as a mechanism of protection it is not fool proof. First, infiltration of – and recruitment of Kiwe Thegnas members by – illegal armed groups is always a risk. Second, the strategy of physical positioning is inherently risky. Facing the riot police at road blockades, the risk of a stray (or intentionally aimed) bullet wounding or killing a protestor is significant. During confrontations with illegal armed groups, the cornered trespassers may – acting under pressure – decide to open fire instead of retreating or surrendering. This is exactly what occurred in October 2019 near the town of Tacueyó, when Dagoberto Ramos militants opened fire on the unarmed Kiwe Thegnas closing in on them, perpetrating a massacre that cost the lives of five people: four Kiwe Thegnas and Cristina Bautista, Ne'h Wesx of Tacueyó.

It needs to be noted here that the collective protection initiative discussed here does not exclude individual protection measures. Indigenous leaders facing severe threats receive material support from the Colombian state's Unidad de Protección (Protection Unit): depending on the severity of the situation these may include bulletproof vests, armoured SUV's, and trained bodyguards. The Unidad de Protección also provides operational training to the Kiwe Thegnas. In extreme circumstances, human rights defenders have to (temporally) relocate outside of their territory, although this is last resort measure. In the case of locally rooted community leaders (e.g. Thê Walas under threat), who in some cases lack fluency in the Spanish language, relocation is an especially unviable option: it would uproot them from the communities where they fulfil a crucial role and place them in an alien environment where they cannot exercise their vocation. The Indigenous authorities are advocating for a shift in allocated resources from individual to collective protection measures, but as long severe and acute threats persist, individual protection measures remain a crucial part of a successful protection strategy.

Nevertheless, a conclusive answer to the threats faced by Indigenous land defenders in Cauca cannot be sought in individual protection measures. After all, they are responsive:

bulletproof vests and armoured vehicles may protect the individual user (they mitigate impacts), but do not reduce the threat itself. For Cauca's Indigenous movement, the solution to the conflicts that provoke violent attacks is invoked in the naming of its 2019 and 2020 large scale protest actions: "minga (collective work/protest action) for the defence of life, territory, democracy and peace". It calls for both the Colombian state and the oppositional armed groups to commit to the peace process and to respect Indigenous self-determination. There seems to be a paradox at work here: the quest for

"Communities are already doing a great job at protecting themselves, but they need international support to continue".

Felicita Pranom Somwong, Human Rights Defender World Summit in 2018 self-determination invokes punitive responses from those contesting the territory with the Indigenous movement, whether legal agribusinesses or illegal armed groups. However, simultaneously, the survival of the Nasa and other Indigenous nations (in Colombia and beyond) as peoples depends on this collective work "in the defence of territory". Protection measures, in particular individual ones, will merely reduce the bleeding of a people struggling for survival until the problem is addressed at its root: halting the continued colonisation of Indigenous territories by outside forces.

Supporting community-led protection

Supporting community-led protection is one way that the international community can help to mitigate the collective risk faced by land and environmental defenders. As we have seen, community-led protection mechanisms cannot take a 'one size fits all' approach. They must be adapted to the situation of each community. For communities which already have strong systems for collective protection in place, support should be focused around targeted funding and technical inputs as needed. For example, communities may require legal advice on a specific issue, capacity building on a particular topic such as digital security, or funding to purchase necessary security equipment. Flexibility in grant and support programmes, like those offered by organisations such as Front Line Defenders (2020a), is important so that support can be tailored to the needs and circumstances of communities (A/HRC/31/55).

Where organisations support defenders with capacity building of any kind, it is crucial this is offered to multiple community members, not just to key leaders, in order to support the development of collective leadership (JASS, 2017) and to increase the resilience of the community as a whole (Protection International, 2018b). This is particularly important in contexts where leaders might need to relocate, due to very high risk or some much needed rest and respite, so that others in a community are also equipped with the necessary knowledge and the underlying work can continue in their absence.

For communities where protection systems have not yet been created or are weaker, a different approach is needed. One such technique is supporting the establishment of

community assemblies where communities can come together to discuss and decide upon their security strategies. Guidance through the process such as that outlined in ProDESC's tool *Community-based Security Measures and Territory* (2019) can be useful, but the ultimate system for collective protection should not be imposed if it is to be effective.

More broadly, community strengthening is a fundamental part of community-led protection. A community which is well-organised and cohesive will be more effective at addressing risk (Protection International, 2018b). Therefore, support to strengthen community infrastructure, such as the provision of safe spaces for communities to meet and organise themselves, can be invaluable (Ibid.).

Community strengthening can also occur through supporting the documentation of collective memory. According to ProDESC "to retrieve collective memory and territory, to give them new meaning, and to use them as a bastion for the collective defence of rights is a mechanism to recover the collective power from which the peoples have been historically dispossessed" (2019). Collective memory processes strengthen community resilience through encouraging the discussion and documentation of historical systems of protection – both physical and psychosocial – employed by the community and can lead to the revival of traditional approaches, the recognition or reinforcement of existing practices, or even trigger conversations on new tactics.¹¹

Finally, fostering network building can support effective community-led protection. Strengthening solidarity and protection networks improves the ability of defenders to react to threats (Protection International, 2018b) through sharing resources, strategies, breaking through isolation (JASS, 2020) and creating a network which can spring into action when threats occur. For communities that have not yet established protection systems, meeting other communities that already have systems in place can be invaluable. Facilitating, and funding, knowledge-exchanges between different communities facing similar threats can therefore be a good way to support community-led protection initiatives.¹²

Conclusion

In conclusion, community-led protection strategies are some of the most effective methods for addressing the collective risks faced by Indigenous Peoples and other local communities who are fighting for their collective rights to self-determination and to their lands, territories and resources. The case of the Kiwe Thegnas, highlighted in this article, shows how community-led protection initiatives can be interwoven with other key dimensions of community life, and form an important platform of collective identity building. These initiatives go beyond aiming to provide protection to contributing to group identity building processes, and the envisioning and construction of a better future – in the case discussed, Indigenous self-determination in a territory free of violence. In other words, community-led protection strategies have the potential to address the underlying root causes of collective risk as well as to protect the community in the immediate future.

Although there is an important role for protection strategies designed for individuals, the human rights defender protection ecosystem must take inspiration from the Kiwe Thegnas and focus on encouraging, supporting and strengthening community-led protection initiatives when working with Indigenous Peoples and local communities. There are many ways to support community-led protection initiatives, such as supporting network building and community strengthening as well as providing flexible funding and technical input, but one key principle that must be remembered is that such protection strategies must be led and established by communities themselves if they are to be effective.

In Cauca, Colombia, the Kiwe Thegnas have left, and will continue to leave, their mark on communities engaged in the "defence of territory". As the hymn goes: "¡Guardia, guardia, fuerza fuerza! ¡Por mi raza, por mi tierra!". ¹³

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Who is 'Indigenous', anyway? The story of the San peoples of Zimbabwe

by Ruwadzano P. Makumbe*

Indigeneity, as in most parts of Africa, remains a contested concept in Zimbabwe. There is no recognition or acknowledgment of this status by the government of Zimbabwe, despite Zimbabwe being a signatory of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). The San or Tjwa peoples of Zimbabwe are Indigenous minorities who are the poorest and most socially excluded members of the Zimbabwean social fabric. They not only face acute discrimination



Tjwao Language Party in Tsholotsho, Matabeleland North, Zimbabwe.

PHOTO: TSORO-O-TSO SAN DEVELOPMENT TRUST

in terms of the protection of their basic rights to ancestral land, natural resources and self-governance, but also inequities in the protection of their socio-economic rights to education, health, water and sanitation.

Various factors and government policies have exacerbated the marginalisation of the Tjwa San peoples, including the disintegration and disregard of their land rights. Key to this is the failure by the government to legally recognise

the Tjwa/San people as Indigenous peoples. The Indigenization and Economic Empowerment Act defines an 'Indigenous Zimbabwean' as "any person who, before the 18th of April, 1980, was disadvantaged by unfair discrimination on the grounds of his or her race, and any descendant of such person".

This definition is premised on the historical injustices brought about by the colonisation of Zimbabwe by Great Britain. Politically speaking, the term refers to black Zimbabweans, and the general view of the government is that all black Zimbabweans are Indigenous.

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Of interest is that UNDRIP has been domesticated in section 13 of the Constitution of Zimbabwe, 2013, to the extent that it is therefore applicable to all Zimbabweans without distinction. This presents challenges in the recognition and protection of the Tjwa San peoples, who are marginalised and excluded in legal and social structures. Factors such as their economic and cultural way of survival, the real risk of cultural and linguistic extinction, the lack of access to educational



Tjwa/San community gathering.
PHOTO: TSORO-O-TSO SAN DEVELOPMENT

and healthcare facilities, and efforts at assimilation, all show the disparity between San peoples and the rest of Zimbabwean society. This has also resulted in Tjwa/San community members being used as cheap labour by neighbouring communities, without access to an effective alternative.

In an effort to change this trajectory, the Tjwa/San community developed the Tsoro- o-tso San Development Trust. Through this platform, the San community in Zimbabwe has successfully lobbied and advocated for the protection of their rights. These efforts saw the inclusion of the Tjwao language as an official language in the Constitution of Zimbabwe, in 2013. There are also efforts to educate and train Tjwa/San youths through different programmes and activities, including cultural awareness and the drafting of the Tjwao language dictionary. Despite the gaps in policy, this brings to light Tjwa/San peoples' success stories in preserving their culture, environment and community.

To collaborate with and support the Tjwa/San community in Zimbabwe, please visit: http://tsorotso.org/.





Defending the forest by transferring knowledge to the next generation – A story of an Adivasi village in India

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Abstract

The small and marginal Indigenous community in the forest fringe areas had intergenerational knowledge of the surrounding ecosystem, which shaped their farming practices. This phenomenon has gradually changed over the past 30-40 years, when seed, fertiliser or pesticide companies started pushing for new technologies and products, assuring higher yield. The farmers began following the practices prescribed by the companies and gradually forgot the intricate knowledge and skills required for living in their ecosystem – a phenomenon called de-skilling. The Adaptive Skilling through Action Research (ASAR), initiated by an Indian non-profit organisation and an academic institution with Indigenous communities, is a quest to find out ways to change these trends. Increasing dependency on markets made the younger generation in the Ghughri village of Madhya Pradesh ignorant about the plants available in their village and the nearby forest. Whereas, according to the elderly people in the village, these plants were meeting most of their daily needs. Ignorance and lack of interest of the younger generation have resulted in useful trees being replaced for timber species by the forest department and illegal felling by neighbouring villagers. In ASAR, elderly people engaged with the younger generation and walked around their village and forest in order to understand floral diversity and its use. They made a biodiversity register with information about different species of plants. This article illustrates how this intergenerational knowledge transfer helped the younger generation take interest in the forest and turn all the villagers into forest defenders.

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Key words: biodiversity register, deskilling, forest defenders, ASAR

On 30 January 2019, on a sunny winter morning, 10-year-old Khilawan and a group of around 25 villagers, comprising of children, young adults and the elderly, were scouting the forest adjacent to Ghughri, their village, in the Dindori district of Madhya Pradesh, India.

Their faces beamed with excitement and interest as they were discovering the richness and diversity of the jungle. They walked almost seven kilometres across the forest to become familiar with the varieties of plants and animals, and understand their dependence on the forest products.

With the premise that villagers would protect forests if they acknowledged it as an inherent part of their life, elders of Ghughri helped the younger generation discover the rich biodiversity of their forest. While the villagers turn into forest defenders, the children embrace conservation by documenting the species in a biodiversity register.

New learning

During the walk, the group collected leaves, bark and flowers, and understood how the parts of different plants are used by the villagers for different purposes. They also developed understanding about the occurrence of certain plants in particular parts of the jungle. They came to know about many trees and plants that were an integral part of their lives, but were disappearing fast from their jungle. For example, *tinsa* (Ougeinia dalbergioides) was used for making plough; plants such as *bel* (Aegle marmelos), barra (Terminalia chebula), bahera (Terminalia belerica), amla (Phyllanthus emblica), kumbhi (Careya arborea), jamrashi (Elaeodendron glaucum), banda (Loranthus longiflorus), satavar, batua and surteli, 14 which have medicinal use and can cure illnesses like abdominal pain, snake bites, rabies and indigestion, besides respiratory and heart diseases.

They came to know about trees, whose leaves and bark were used to catch fish, and trees whose leaves were consumed as food, which are now found in smaller numbers in the forest. They also were introduced to trees such as *tendu* (*Diospyros melanoxylon*), *chaar* and *kusum* (*Schleichera oleosa*) which are of economic importance. They additionally discovered the vast number of species that were still present in the village even after extensive deforestation; the group found many animals or their traces in the forest.

Documenting biodiversity

The children realised that various plants and animals were decreasing rapidly and that local knowledge about these species would be lost with the older generation. It was important to pass the elders' wisdom to the younger generation and document it in an easily understandable manner.

Khilawan and his friends in the primary school made a biodiversity register with dried leaves, flowers and barks that they collected. They wrote the local names of the plants,

Children preparing biodiversity register with help from elders.

PHOTO: SAURABH SINGH



their usage and occurrence in the register. The register would be kept in their school.

Hiralal, their teacher, assured them that he would help them update the register with details whenever they found a new species. The villagers now know that this register will help them find the species that are disappearing fast.

Dependence on forests

This work started with the Adaptive Skilling through Action Research (ASAR), a joint action research of Professional Assistance for Development Action (PRADAN¹⁵) and Azim Premji University (APU¹⁶). ASAR's objective is to find ways to reverse deskilling through adaptive skilling.

Ghughri, a forest village about nine kilometres from Amarpur, the administrative block headquarters, is one of the three villages chosen for the action research. More than 84% of its population are Gond, an Adivasi (Indigenous group of people).

Forests, with their diversity of flora and fauna, have been an integral part of the lives and livelihoods of Adivasis in central Indian Plateau. Forests are their source of food, fodder, fuel, medicine and timber, as well as manure in the form of decomposed leaves and branches for the lands in the lower catchment.

Forest degeneration

After the forest department was established, the floral diversity started decreasing gradually, as they started planting/nurturing only timber species. At the same time, with the advent of modern agriculture, seeds of high yielding or hybrid varieties, along with chemical fertilisers and pesticides, gave the farmers an assurance of higher yield.

The farmers started practicing what the seed, fertiliser and pesticide companies prescribed. They gradually became dependent on the inputs supplied by these companies, and no longer needed the intricate knowledge about the forest-farm production system.

Gradually the farmers forgot their generations-old knowledge and skills – a phenomenon called de-skilling. They became passive observers to the decline of their forest.

In general, in the Adivasi villages that fringe the forests, the elderly people are still concerned about the decline whilst the younger generation have neither the knowledge about the plants in the forest nor are they bothered about their gradual destruction.

Forest defenders

Elderly people like Gangaram, who felt that the young generation's lack of knowledge about their forest resulted in the lack of interest in protecting it, decided to educate them about the forest.

The idea that "forests could be protected if the youth knew about the different species and their uses", was unique. The method that the elders adopted to transfer this knowledge to the younger generation, through a walk in the forest, was also unique. The walk also enabled the creation of a biodiversity register.

This awareness helped the villagers start guarding the forest. The villagers divided into groups and started guarding different parts of the forest to stop illegal felling, and confiscated the axes and wooden logs from outsiders coming to the forest to cut trees. Ramki Bai of Ghughri said that people from all the adjacent villages got the message that villagers of Ghughri were against illegal felling.

Villagers of Ghughri plan to take this initiative to nearby villages and involve schools, so that a movement can be created to pass on the knowledge through generations towards forest conservation. The forests will thus be rejuvenated and the people of Ghughri will reside in the village they dream of.



PHOTO: SAURABH SINGH



El Legado

Music and lyrics: Karla Lara 23 March 2016

Una canción de amor del pueblo Lenca una canción de luchas que recuente el tiempo que haga memoria de tanta gente y que alce grande y fuerte a nuestra Berta

Una canción mujer que hace historia guardiana de los ríos con sus ancestras y que celebre aniversarios de esta organización que nos ha legado



Children and members of COPINH, with Karla Lara in the back

PHOTO: KARLA LARA



Y vamos a luchar por este COPINH que amaba tanto y vamos a cuidar la organización que nos ha dejado y vamos a seguir con la convicción que ella está esperando y vamos a honrar a la compa Berta que está escuchando

Con niñas muy valientes se harán los coros con voces refundadas que avanzan tiempos y gritarán al Patriarcado que se vaya porque es territorio liberado

Una canción de luchas y de hermandades una luz de esperanza el pueblo indígena que hace memoria a nuestra Berta y a la organización que está alerta

Y vamos a luchar por este COPINH que nos ha dejado y vamos a cuidar la organización que amaba tanto y vamos a seguir con la convicción que ella está esperando y vamos a honrar a la compa Berta que esta escuchando

y vamos a cuidar a este COPINH que amaba tanto

y vamos a honrar a la compa Berta que está escuchando

Karla is a singer and composer, part of a broad and diverse artistic movement that believes in the need to create songs with their own identity, history and rhythm, and proud to be part of a generation that with dignity builds the Honduras that its people deserve. Contact information: laranecedad@gmail.com

The Legacy

Translation by Iryna Petriv

A love song from the Lenca people a song of struggles that recounts time that reminds of so many people and that lifts, big and strong, our Berta

A woman-song that makes history guardian of the rivers with her ancestors and that celebrates anniversaries of this organization she inherited to us

And we will fight for this COPINH that she loved so much and we will care for the organization she has left to us and we will continue with the conviction she expects and we will honour compa Berta, who is listening...

With brave girls the choirs will be made with re-founded voices that move times forward and will shout to Patriarchy it should leave, as this territory is freed

A song of struggles and fraternities a light of hope, the Indigenous people that remember our Berta and the organization that is alert

And we will fight for this COPINH that she left to us and we will care for the organization she loved so much and we will continue with the conviction she expects and we will honour compa Berta, who is listening and we will take care of this COPINH that she loved so much and we will honour compa Berta, who is listening





Can an Indigenous Peoples protect hornbills in peninsular Malaysia? A case study from Belum-Temengor Forest Complex, Perak State

Yeap Chin Aik,^{a) b)} Balu Perumal,^{c)} Roslan Carang,^{d) f)} Azam Carang,^{d) f)} Marisan Pandak,^{d) f)} Dedi Bin Roslan,^{d) f)} Hadi Bin Mes,^{e) f)} Razak Bin Sema,^{e) f)} Noordin Bin Asu^{e) f)}, Mustpa A/L Ramlee,^{e) f)} Woo Chee Yoong^{f)}

Abstract

Indigenous peoples, or Orang Asli, are the oldest populations in Peninsular Malaysia. For generations, the Orang Asli have depended on forests for food, medicines, building materials, spiritual and cultural needs. Since Malaysia's Independence in 1957, tracts of forests have made way for various types of national development resulting in less space for Orang Asli and wildlife. As a result, many Orang Asli communities could no longer depend fully on remaining forests to provide them with their needs. 'Development' also has exposed the majority of Orang today to the cash economy, thus changing their way of life. Consequently, some Orang Asli were involved in the illegal wildlife trade for income. This is thankfully not often the case, and the Orang Asli people can also be seen as a positive force in wildlife conservation. The Malaysian Nature Society (MNS) has been involved in the Belum-Temenggor Forest Complex (BTFC) in advocating for its protection. The forest complex is home to the Orang Asli of the Jahai and/or Temiar tribes and 10 hornbill species – the highest diversity per site globally. Through the MNS Hornbill Conservation Project, we have been working with several Jahai and Temiar Orang Asli from two villages to develop and capacity build them as Hornbill Guardians to (1) demonstrate that Orang Asli can champion foresthornbill conservation, and (2) support the implementation of our national policies and plans in mainstreaming Orang Asli into conservation in Peninsular Malaysia and the country's global responsibilities (e.g. Aichi Biodiversity Targets, Sustainable Development Goals, post-2020 Global Biodiversity Framework).

Key words: Belum-Temenggor Forest Complex, policy, forest governance, protected area, Orang Asli, Hornbill Guardian

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Introduction

The Orang Asli, which translates as the 'original' or 'first peoples' from the Malay word, is the dominant Indigenous people's group in Peninsular Malaysia. They are found in all Peninsular Malaysia States except Perlis, Penang and Melaka, with a population of over 140,000 individuals. Pahang State has the largest population, followed by Perak State with over 42,000 Orang Asli. The Orang Asli group is categorised into three main groups and 19 sub-ethnic groups, including the Senoi, Negrito, and Proto Malay. Geographically, the Negrito is distributed in the northern parts of Peninsular Malaysia, the Senoi in the central part and Proto Malay in the south.

Although Orang Asli are part of Malaysian society, most Malaysians know very little about them or have few encounters with them. Today they remain one of the most marginalised communities in the country as they continue to struggle with multiple, complex issues primarily related to land rights and recognition, education, health, economy, leadership, infrastructure, culture and identity (Kathirithamby-Wells, 2005; Nicholas, 2010; PMO, 2019). Some of these issues are linked to biodiversity/wildlife conservation and forest governance.

The involvement of Indigenous peoples in conserving biodiversity and protecting forests is not new. Time and again, their traditional ecological knowledge and 'know-how' have proven to be effective in protecting biodiversity, forests and lands (Garnett et al., 2018). Throughout Peninsular Malaysia, environmental and social NGOs and researchers work with different Orang Asli sub-ethnic groups on various conservation issues such as protected areas, wildlife/flora protection and trade, ethnobotany, land rights, natural resource management and nature-related tourism (Lim & Anak Awang, 2010; Prentice et al., 1999; Azrina Abdullah et al., 2011; Serina Rahman, 2020; Tan, 2009).

Within the context of wildlife conservation in Peninsular Malaysia, conservationists and Orang Asli communities have yet to work together to champion forest-bird conservation. This unexplored gap has become more relevant as Malaysia is the 12th country with the highest number of globally threatened birds (63 species) (BirdLife International, 2020). Globally, many Indigenous tribes and local communities have deep cultural or utilitarian associations with bird species, some even championed for their habitat protection work and rehabilitating species from the brink of extinction (Devokaitis, 2019; Thomas, 2012; Cocker & Tipling, 2013; Collar et al., 2007; Tisen et al., 2015). In East Malaysia (Sabah and Sarawak), bird augury divination observed by the Iban communities symbolises their close cultural relationships with their land and forests (Freeman, 1999).

This paper shares Malaysian Nature Society's (MNS/BirdLife in Malaysia) journey and experiences in working together with the Jahai and Temiar Orang Asli to conserve hornbills and their forest habitat. The foundation of the work is strongly supported by the aspirations and strategies of Malaysia's national policies, plans and global commitments. More importantly, it highlights that Orang Asli are key allies in championing bird and forest conservation in Peninsular Malaysia and thus contribute to the implementation of Malaysia's conservation policies and plans as well.

Belum-Temenggor Forest Complex – A landscape of contrasts

The Belum-Temenggor Forest Complex (BTFC, 339,143 ha) is located at the northern part of Peninsular Malaysia in the Hulu Perak district of Perak State. Embedded within this forest complex is the dendritic Temenggor Lake as its focal point. The 172 km² lake is the result of the damming of several rivers for the purpose of irrigation, water catchment and hydroelectric in the 1970s. The major river is Perak River, which flows generally south-southwest and is joined with Temenggor River from the south (Davison, 1995a). The East-West Highway also cuts across this vast forest landscape. It is contiguous with another large forest complex (84,300 ha) in southern Thailand, the Bang Lang National Park-Hala-Bala Wildlife Sanctuary.

Within the general area of the BTFC, the lowest lying points in the south-west are at about 130 m.a.s.l. (metres above sea level). The ground rises unevenly to about 1,000–1,400 m.a.s.l. along the watershed forming the Perak-Kelantan State border in the east, and reaches high points of 1,533 m a.s.l. at Gunung (mountain) Ulu Titi Basah, and 1,450 m a.s.l. at Gunung Ulu Merah along the Perak State-Thailand border to the north. The forest complex, especially the hills and mountainous region, is also a part of the Banjaran Titiwangsa (or 'Main Range'), Peninsular Malaysia's backbone. The dominant forest type is the hill dipterocarp forest dominated mostly by the *Shorea* spp. hardwoods (Davison et al., 1995).

The BTFC is one of the most biodiverse sites in Malaysia, supporting many species of flora and fauna. It is one of the last strongholds for large mammals, such as the Malayan tiger, Asian elephants, gaur and the Malayan tapir. Three hundred and thirty-six bird species have been recorded, many of which are forest-dependent (Yeap & Lim, 2020). Plant diversity is also high in the BTFC, being the only site in the country that supports three Rafflesia species per site. As such, the BTFC is recognised as an Important Bird & Biodiversity Area and as well as a *Key Biodiversity Area* globally (Yeap et al., 2007).

In terms of governance and administration, the BTFC is an amalgamation of both a protected and non-protected areas. This large forest complex is collectively made up of five 'forest blocks' governed by two state government agencies. The Royal Belum State Park (117,500 ha) is managed by the Perak State Parks Corporation. This protected area constitutes 35% of the total size of the BTFC. The remaining four forest blocks are managed by the Perak State Forestry Department as Forest Reserves (Gerik, Temenggor, Banding and Amanajaya/221,643 ha). Each Forest Reserve has two functions: production (logging) and protection. Currently, parts of Gerik and Temenggor Forest Reserves are being selectively logged while the regenerated older logged and virgin parts are untouched.

The Orang Asli of the BTFC

The Jahai and Temiar tribes are the main subgroups of Orang Asli in the BTFC. The Jahai belongs to the Senoi group, while the Temiar belongs to the Negrito group. Several Orang

Asli settlements of different sizes are located within the BTFC, of which Pos Air Banun, Pos Kemar, Pos Chiong and Kampung Sungai Tiang are the largest. The settlements are the result of the construction of the Temenggor Dam thirty years ago and Orang Asli-centric government development programmes (Ronzi et al., 2018; Tuan Pah Rokiah et al., 2017). An estimated 7,000 Orang Asli live in at least 18 villages scattered in both the protected area (Royal Belum) and production forests (Forest Reserves). The majority of Orang Asli communities here live permanently in these settlements and seldom practice their past nomadic lifestyle.

The Orang Asli communities here are highly dependent on their immediate natural environment for their livelihood and to generate cash income. Traditionally, the communities collect forest produce and hunt small mammals, certain primates, ungulates and fish for food. Living in settlements, the Orang Asli cultivate certain crops for food – tapioca, banana, spice plants, vegetables, and fruit trees such as durian, rambutan and jackfruit. Hunting animals for protein is less common now but fish became a staple following the flooding of Temenggor dam. Processed chicken has largely replaced bush meat.

To generate cash income, many Orang Asli harvest and sell non-forest timber products such as durian, stink beans (petai/*Parkia* sp.), rattan, wild bee (*Apis* spp.) and stingless bee (*Trigona* spp.) honey, medicinal plants, agarwood (gaharu), freshwater fishes, terrapins/turtles and frogs. In some settlements, rubber is planted at a small scale, tapped and sold as scrap rubber. However, prolonged depressed rubber prices have stopped many from tapping, as the price is no longer lucrative.

Over the years, increased competition from transnational poachers illegally harvesting agarwood and snaring mammals in the BTFC have affected the Orang Asli's livelihood as well as safety in the forest. Some Orang Asli have gotten involved in illegal trade of flora and fauna, such as trapping songbirds like the white-rumped shama (*Copsychus malabaricus*) and the straw-headed bulbul (*Pycnonotus zeylanicus*), or supplying bush meat and fishes to middlemen for income. The participation of Orang Asli in this illegal activity is also motivated by poverty, as the majority of them are living below the national poverty line. Earnings from illegal wildlife trade are a significantly attractive source of income.

The BTFC - A globally important hornbill landscape

The BTFC is known to support 10 hornbill species, namely the oriental pied (*Anthracoceros albirostris*), black (*A. malayanus*), bushy-crested (*Anorrhinus galeritus*), white-crowned (*Berenicornis comatus*), wreathed (*Rhyticeros undulatus*), plain-pouched (*R. subruficollis*), wrinkled (*Rhabdotorrhinus corrugatus*), great (*Buceros bicornis*), rhinoceros (*B. rhinoceros*) and helmeted (*Rhinoplax vigil*) hornbills. In terms of hornbill diversity per country globally, Malaysia ranks second with Myanmar and the Philippines, home to 10 species respectively, after Thailand and Indonesia. Of the 10 species, eight are globally threatened (BirdLife International, 2020). The helmeted hornbill was recently uplisted to Critically Endangered

due to the severe threat of poaching for its casques, which has decimated many populations in Indonesia (Jain et al., 2018a). The loss of primary forests across its distribution range compounds the situation. Apart from high hornbill diversity, the BTFC, along with its contiguous forest block in southern Thailand, supports hundreds of plain-pouched hornbills on migration annually during the months of July to December (Yeap et al., 2015).

The Malaysian Nature Society's (MNS) involvement in this landscape began in the 1990s with a series of two scientific expeditions to document its biodiversity and advocate for its protection. The importance of this landscape in the context of hornbill conservation was first documented through these expeditions. In 2004, the MNS Hornbill Conservation Project was established as a long-term field conservation project using hornbills as the flagship species to further promote and advocate for good forest governance in the BTFC, be it in a protected area or in Forest Reserves. Hornbills are known to be effective seed dispersers in the tropical forests, hence their moniker, "farmers of the forests" (Kinnaird & O'Brien, 2007). They are also indicators of a healthy forest ecosystem, as almost all are dependent on good, intact (as much as possible) forests. Another strong justification for its inception was the large knowledge gap on hornbill ecology in Malaysia (Wells, 1999). Much was not known about its ecological needs and habitat interactions, which posed a challenge in the development of a forest/hornbill conservation strategy.

National policies and plans supporting hornbill guardianship and conservation

In Peninsular Malaysia, a national conservation assessment (DWNP, 2010) and national species action plans have been developed (some in final stages of approval) for large mammals, including the Malayan tiger, Asian elephant, Malayan tapir and sunbear (see DWNP, 2008). In contrast, there are no national action plans specific to birds despite Malaysia being the 12th country in the world with the highest number of globally threatened bird species (BirdLife International, 2020). Under these circumstances, regional action plans are used as the guiding documents. In the case of hornbills, the *Helmeted Hornbill Regional Conservation Strategy and Action Plan* is used, as Malaysia is a key range country for this species (Jain et al., 2018a).

While the lack of a bird-specific national action plan may seem to inhibit much needed conservation actions for threatened bird species, our national policies and plans do address the need to include and mainstream more stakeholders into biodiversity conservation. The Orang Asli communities (part of the larger Indigenous peoples category) were identified as one of the key stakeholders of the *National Policy on Biological Diversity* (2016–2025) – a major step forward for a national document (MNRE, 2016). Nicholas (2005) has long argued for the inclusion of Indigenous peoples in protected area and forest management and governance to prevent accusations of "acts of sabotage."

The *Central Forest Spine (CFS) Masterplan* is Peninsular Malaysia's response to the threat of habitat fragmentation (JPBD & JPSM, n.d.). The plan focuses on maintaining ecological

linkages for wildlife through a series of connecting Primary and Secondary Linkages anchored by four major forest complexes. As with earlier national policies, the plan was developed with large mammals as the main focal wildlife group in need of linear crossings (i.e. Primary Linkages), while other wildlife (birds included) were assumed to utilise the non-linear crossings (i.e. Secondary Linkages). Within the context of the CFS, the BTFC is recognised as one of the Primary Linkages. While the CFS is very much wildlife-centric, the plan also identified economic opportunities for Orang Asli within these linkages (Tuan Marina & Zahari, 2013).

At the site-level, the *Royal Belum State Park Management Plan* (2018–2027) identified Orang Asli communities that live within its park boundaries as key stakeholders and allies in park management (PSPC, 2017). The document further elucidates several actions to strengthen their inclusion and participation in shouldering the task of park governance and management together with Perak State Parks Corporation. Safeguarding the park's biodiversity is another key strategy of which hornbills are intricately a part of. The management plan provides a fertile ground to encourage and cultivate Orang Asli communities to be guardians or protectors of the park's biodiversity.

Developing Hornbill Guardians, one Orang Asli at a time

The MNS has a track record of working with Orang Asli communities in the past in natural resource management and site protection advocacy (Ulu Geroh/Semai tribe) (Tan, 2010) and supporting protected area establishment (Endau-Rompin/Jakun tribe) in Peninsular Malaysia (Davison, 1988).

In the BTFC, the MNS first worked with a small Orang Asli village (Kampung Chuweh) in the Temenggor Forest Reserve (southern part of the BTFC), where they were employed for short-term to assist in locating active hornbill nests in 2004, but later became long-term. The project progressively included another village, Kampung Sungai Tiang (Royal Belum State Park, north part of the BTFC) and the Orang Asli team grew from two to six Orang Asli members. In the early days of the project, the MNS principal investigators had assumed that since they have been living in the landscape for generations they would possess intimate knowledge of where the hornbills were nesting. This assumption was not entirely accurate, as hornbills were not their usual prey, thus a different approach was required.

Traditionally, the Jahai/Temiar Orang Asli in the BTFC hunted wildlife for food, including birds. Large birds such as hornbills and forest pigeons (*Treron* spp.) were usually stalked and hunted at fruiting fig trees using blowpipes with darts laced with Ipoh tree (*Antiaris toxicaria*) poison. Additionally, when they encounter a nesting hornbill in the forest – where the female and chick(s) are sealed in a nest tree cavity – they would 'harvest' them for food and the chick(s) kept as pets. These encounters are usually opportunistic in the forests. This overall infrequent offtake is likely to be negligible, hence does not pose a serious threat to the hornbill population in the landscape.

Box 1 Policies and plans that support Orang Asli inclusion and active participation in biodiversity conservation in BTFC

(i) National Policy on Biological Diversity (2016–2025)

Goal 1 of this policy called for empowering and harnessing the commitment of all stakeholders to conserve biodiversity, which is further expressed in Target 2 of this goal: by 2025, the contributions of Indigenous peoples and local communities, civil society and the private sector to the conservation and sustainable utilization of biodiversity have increased significantly. Two Actions are of key importance:

Action 2.1 – Recognise, support and empower Indigenous peoples and local communities.

Action 2.4 – Enhance stakeholder participation in decision making processes.

(ii) Central Forest Spine (CFS) Masterplan

A socio-economic study of the Primary Linkage 2 (PL2), Temenggor Forest Reserve-Royal Belum State Park, outlined the economic opportunities via 'ecotourism' for Orang Asli communities living in/around CFS ecological corridors.

(iii) Royal Belum State Park Management Plan (2018–2027)

Strategy 3 – Safeguard Biodiversity. By 2022, strong protection measures have been implemented with the help of partners, resulting in the reduction of all threats to the park's biodiversity.

Strategy 6 – Engage Local Stakeholders. By 2023, local communities and other key stakeholders are empowered and engaged as allies in park management and biodiversity conservation.

(iv) Helmeted Hornbill (Rhinoplax vigil): Status Review, Range-wide Conservation Strategy and Action Plan (2018–2027)

Goal 2 of this Strategy called for range countries to "strictly protect Helmeted Hornbill populations and their habitats throughout their natural range"

in which Objective 2.3 strongly encourages empowering local communities to be conservation stewards for the helmeted hornbill (HH).

Action 2.3.4 – Create awareness materials and conduct training and consultations to empower local communities to be ambassadors for HH conservation [...].

Action 2.3.5 – Create community-partnered nest protection programmes in important HH areas.

Action 2.3.6 – Encourage local communities to inform government authorities of illegal land use activities [...]; create community stewardship and forest guardian programmes.

With this realization, the MNS principal investigator and our Orang Asli discussed the best approach to marry both their traditional forest knowledge with 'modern' field methods in locating hornbill nests, based on lessons learned in Thailand (Poonswad, 1993). Elements of the Free, Prior and Informed Consent (FPIC) are embedded therein and practiced between both parties, where knowledge gained through this work is shared and, consequently, sharing to external parties would require joint consent. To further cement the bond, we develop annual work plans together, discuss challenges and celebrate achievements.

The Orang Asli team – now regarded as the BTFC Hornbill Guardians – and the MNS principal investigator worked together and refined our localised hornbill conservation field methods for 15 years. Their capacity was further enhanced when two of the Hornbill Guardians received 'formal' training from the Thailand Hornbill Project team at Khao Yai National Park in 2018 (HRF, 2018). They were also able to share their experiences with the THP's Hornbill Nest Protectors, which consist of Siamese Malay villagers from south Thailand. For the Hornbill Guardians, this was a major exposure as it was their first experience out of Malaysia and being able to meet other local communities that protect hornbills. It was a proud moment for them as Hornbill Guardian para-biologists. In Asia, active participation of the Indigenous and local communities in the Hornbill Guardian/Nest Protector approach has shown to be innovative in conserving both forests and hornbills.

While hornbill conservation is the mainstay, some of the Hornbill Guardians have started to map out forest resource locations around their village and roaming areas in the Temenggor Forest Reserve. Using the hornbill monitoring skills learned, they have been mapping out honey trees with GPS where their village traditionally harvest wild honey from March until June annually. This seasonal harvest is an important resource, providing much needed additional income for Orang Asli communities. By mapping out this resource, they can then learn to monitor the honey trees' productivity and safeguard it along with hornbill nest trees (Hill et al., 2019). At the same time, the MNS is working with a local anthropologist in mapping resource use and customary boundaries of one Orang Asli village in the Royal Belum State Park (Kamal Solhaimi Fadzil, personal communication) to better understand Orang Asli's use of the forest and its resources. The involvement of Orang Asli communities in forest management and governance in the BTFC is increasing, especially in the Royal Belum State Park. Inclusive roles and positions are being created and populated by Orang Asli, giving them a voice in state park governance and management.

Mainstreaming Hornbill Guardians into forest-hornbill governance

Globally, there has been growing evidence that Indigenous communities contribute significantly to conserving biodiversity, some of which is highly threatened (FAO, 2010; Garnett et al., 2018). In Malaysia, there is growing awareness and recognition that Indigenous peoples and communities can be key allies and play critical roles in ecosystem

management or co-management with government agencies (Gill et al., 2009; Prentice et al., 1999). These models are currently more visible in East Malaysia (in Borneo) than in Peninsular Malaysia.

In the BTFC, the MNS has built the foundation for hornbill conservation, based on the amalgamation of traditional forest and hornbill knowledge with the involvement of Jahai/Temiar communities as Hornbill Guardians. Over the years, the Hornbill Guardians have successfully located and monitored over 100 hornbill nests in the landscape. As of 2019, 142 chicks have successfully fledged, including five helmeted hornbills. The discovery of nests of several hornbill species were also landmark achievements – setting first or second records for Malaysia. The BTFC is currently the only site in Malaysia with such achievements. The Jahai/Temiar Hornbill Guardians have clearly shown that Orang Asli can be defenders of Malaysian biodiversity.

Ecological knowledge on hornbills is crucial for forest governance and protection. Nine out of ten of Malaysia's hornbill species rely heavily on good, intact (as much as possible) primary forests for their long-term survival. This relationship is symbiotic – healthy hornbill populations, healthy forests. Thus, population numbers and breeding productivity in forests where they occur are important indicators. The information can be channelled into forest and/or protected area management plans.

For Royal Belum State Park, its management plan outlined several priority strategies that included safeguarding biodiversity, conducting focused research efforts, and engaging local stakeholders (PSPC, 2017). The Hornbill Guardians, the MNS and Perak State Parks Corporation (park manager) are working closely to monitor hornbill populations, as well as further develop their Jahai/Temiar park rangers' capacity in hornbill conservation skills. The Hornbill Guardians will play a key role in peer-to-peer capacity building, assisted by the MNS. This unique tripartite relationship supports the implementation of the RBSP's management plan.

In production landscapes, hornbill information can influence the broader state-level forest management plans and/or specific Forest Reserves. In 2019, the Hornbill Guardians investigated and confirmed an active nest of the globally threatened rhinoceros hornbill in a logging compartment in the Temenggor Nature Reserve after being tipped off by Orang Asli villagers. The information was immediately conveyed to the district forestry office which took ground actions to prevent the nest tree from being logged. In January 2002, the MNS and the Hornbill Guardians presented a report to the Perak State Forestry Department which contained recommendations on ways to conserve the Temenggor Nature Reserve based on a hornbill resource use map.

The readiness of state government agencies in responding to the feedback and information provided by the Hornbill Guardians and the MNS is a positive step forward in forest-hornbill conservation. These are catalytic steps that MNS hopes would spur further engagements and discussion with government agencies in improving forest conservation and governance using hornbills as flagship species.

Box 2 Examples of Indigenous peoples and local communities safeguarding hornbills and habitats as Hornbill Nest Protectors/Guardians in South-East Asia

India

Pakke Tiger Reserve (PTR) in Arunachal Pradesh, North-East India, supports four hornbill species: Wreathed, Great, Oriental Pied and Rufous-necked. Since 2003, The Nature Conservation Foundation (NCF) has been studying and monitoring nesting hornbills in the protected area. While the hornbill populations inside the PTR are secure, hunting and deforestation outside PTR threatened their existence. The NCF's study pointed to increased competition among hornbills for nest trees due to the lack of this crucial resource. The Indigenous Nyishi community, the dominant tribe in the area, use the upper beak/casque of the great and rufous-necked hornbills in their traditional headgear, as well as the fat and the meat.

The NCF and the Arunachal Pradesh Forest Department (APFD) began working with the Nyishi community living around PTR in order to address the issue. The Nyishi community banned hunting throughout the year and now adopted the fiberglass beak as a substitute. The NCF also initiated the Hornbill Adoption Program (HNAP) in partnership with the Ghora-Aabhe Society and the APFD in 2011. The Society consists of a council of village elders – a key component of the partnership. As of 2018, the NCF employed 12 Nyishi villagers from 10 villages to find, monitor and protect hornbill nests and roosts. Funds raised via the HNAP are used to support their salaries and community welfare and development. The Nyishi villagers were trained as para-biologists. As a result, over 100 chicks have fledged successfully.

In 2014, a tree nursery was set up to raise and plant native tree species of importance to wildlife in degraded forest patches around the PTR. Over 3,000 saplings have been planted by the Nyishi community with various local stakeholders and schoolchildren.

In 2015, the inaugural Pakke Paga Festival (PPF) was held to celebrate the role of the Nyishi community in conservation efforts around the PTR and its wildlife. This unique festival has helped boost local tourism and provide more incentives for the Nyishi community's continued involvement in conservation. Four years later, the PPF was declared as Arunachal Pradesh's state festival – a great boost of confidence and recognition for the Nyishi community. (Candade, 2019; Rane & Datta, 2015)

Thailand

The Budo Sungai Padi National Park in Narathiwat province (southern Thailand) boasts an extraordinary story of a once top hornbill chick poacher who became a champion of hornbill conservation. The protected area supports six hornbill species, including the helmeted hornbill. Two decades ago, the Thailand Hornbill Project (THP) team led by Dr Pilai Poonswad was alerted to the news of severe hornbill chick poaching in Budo Mountains. Large trees were also illegally cut down in the area. Siamese Malay villagers that live around the protected area poached for a living, as there were few economic opportunities in the province.

The THP team investigated the situation and engaged the top poacher in a bid to turn the tide. The poachers realise that their

continued activity would eventually cause the local extinction of hornbills in the national park, thus eliminating their source of income. Dr Poonswad managed to persuade the poachers to give up the illegal activity in exchange for a more sustainable solution. They were able to work with 13 villages to implement two programmes, with the support of government officials. The THP hired reformed poachers to look after hornbill nests – or Hornbill Nest Protectors – repair nest cavities and monitor the hornbills' nesting process. The second programme focused on educating schoolchildren on forest conservation, hornbill biology and the importance of hornbills to forests. The underlying goal was to convince their parents of the benefits of conservation. The transformation of poacher-to-protector took time and was led by the top poacher himself. The community's Islamic faith further convinced them to participate.

More than two decades later, over 600 hornbill chicks have successfully fledged as the result of the Hornbill Protectors' work. The sustainability of this programme hinges on the THP's Nest Adoption Scheme where active hornbill nests can be symbolically adopted annually for a fee, which goes into supporting the Hornbill Protectors' work. (Arthayukti, 2015; Poonswad et al., 2005)

Indonesia

In Indonesia, helmeted hornbills are found only in Sumatra and Kalimantan. Planet Indonesia (PI) is an Indonesian non-governmental organisation with the mission to "conserve at-risk ecosystems through village-led partnerships." The organisation works with rural communities to gain access to basic services by using their unique Conservation Cooperative model. The model helps communities to secure and manage rights over natural resources, and address conservation of the ecosystems at risk and support inclusive governance. Through these partnerships, PI is able to address the issue of rural poverty and conservation simultaneously.

Gunung Nyiut Penrissen Forest Complex in West Kalimantan is one of Pl's flagship project sites. This vast primary forest (180,000 ha) supports several globally threatened species including the Helmeted Hornbill. Pl is working with two Indigenous communities (Dayak Bekasi and Dayak Belangin) on improving their livelihoods, health, education and farming practices as well as reducing forest loss through comanagement of this reserve with Indonesian government agencies, i.e. the Department of Natural Resources (Balai Konservasi Sumber Daya Alam, BKSDA) and the Department of Forestry (Dinas Kehutanan, DISHUT). This partnership has successfully reduced forest loss as much as 70%.

In 2016, PI discovered a helmeted hornbill nest which was outside of the species' known range in Kalimantan. PI partnered with six Indigenous villages to create village-level agreements to protect this critically endangered hornbill (instead of hunting it) and over 50,000 ha of their forest habitat. Knowing that the helmeted hornbill was vulnerable to poachers, especially during their nesting period, PI's Indigenous Biodiversity and Wildlife Protection Unit provided round-the-clock surveillance and protection to the pair and nest tree. As a result, the chick successfully fledged. (Gokkon, 2017; Jain et al., 2018b)

Implementation challenges

Education level. Education remains a key concern among Orang Asli communities nationwide. Half of the Hornbill Guardians received limited primary education while the other half completed secondary level. Based on our observations, this condition impacted their roles as para-biologists which was further fuelled by low self-confidence. Fortunately, we managed to remedy this situation through mentoring.

'Price of modernity'. Modernity and its conveniences are clearly welcomed by Orang Asli communities and embraced quite readily by the younger generation. In the BTFC, youths are slowly drifting away from learning traditional forest knowledge from their elders. This trend is worrisome, as other Orang Asli tribes face a similar situation (Prentice et al., 1999). The Hornbill Guardians shared that there are no 'formal methods' to teach or transfer such knowledge to them. Interest and the decision to learn lie with individuals, and elders seldom dictate or push. This condition presents a challenge to secure the involvement of youngsters and build the next generation of Hornbill Guardians, as 'forest work' is considered 'difficult'.

Sustainability. The MNS Hornbill Conservation Project has yet to attain a comfortable level of sustainability. Workable examples from Thailand and India can be emulated and tailored to local conditions. To date, we have piloted a citizen science-type 'voluntourism' programme in the Hornbill Guardians' village, where paying volunteers help monitor plain-pouched hornbills from August to September (Yeap et al., in prep.). This programme also provides an opportunity for the villagers and Hornbill Guardians to hone their skills in tourism.

Lessons learned

Conservation is a two-way street. Working with Orang Asli tribes and communities requires conservationists to embrace Indigenous worldviews on how to conserve forests and species. This requires humility, respect and readiness on the part of conservationists to accept 'unconventional' wisdom and find a conciliatory path to integrating both 'western science' and traditional ecological knowledge in the pursuit of solutions to forest and species conservation problems. Adopting this approach helps Orang Asli to better understand and reciprocate conservationists' viewpoints.

Appreciate and embrace their culture. Learning and appreciating Orang Asli language by using as much as possible Indigenous names for flora and fauna is important. Although the Hornbill Guardians are able to understand scientific terms to a certain degree, it is incumbent on the principal investigator to display his/her readiness to learn in return. This behaviour often leads to a rich learning experience.

Share credits generously. There is growing recognition of Indigenous peoples as coauthors in scientific publications instead of being confined to mere acknowledgments.

They are indeed 'partners in knowledge' (Popkin, 2016), despite not having an active role in authorship. Without their active collaboration in the field, many conservation projects would face disruption or fail.

Provide learning exposure as much as possible. Orang Asli tribes and communities that are involved in conservation often do not have the opportunity and platforms to showcase their work, causes and achievements. To compound matters, most lack or have

The Hornbill Guardians discussing areas to survey for nesting hornbills in the landscape.

PHOTO: ©MNS/ YEAP CHIN AIK



PHOTO: ©MNS/YEAP CHIN AIK





limited education, which manifests in low self-confidence to share or speak publicly. The Hornbill Guardians have been exposed to different platforms to address this shortcoming. For three consecutive years (2017-2019), they attended the national level celebrations of the World Indigenous Peoples Day, and in 2019 a representative Hornbill Guardian was selected to speak in the 29th International Congress for Conservation Biology in Kuala Lumpur. He was one of the four Orang Asli invited to speak of their work in conservation. By participating in these events, Hornbill Guardians have started to step out of their comfort zone, build self-confidence and develop pride in their work and achievements.

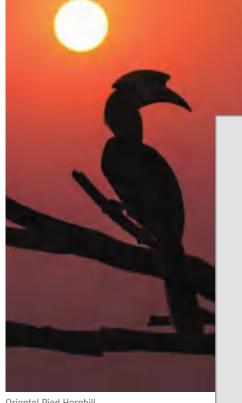
Conclusion

The inclusion of more Orang Asli tribes and communities in conserving species and forests, and (co)managing natural resources is a step forward, as most still live within or near high biodiverse sites in Peninsular Malaysia. Their participation contributes to the triple bottom line of strengthening forest governance, sustaining biodiversity and improving livelihoods – as well as meeting the global aspirations for Indigenous peoples (Thaman et al., 2013; Convention on Biological Diversity, n.d.). Although national policies and plans are supportive, many implementation challenges remain to be tackled.

Our work in the BTFC with the Hornbill Guardians provides a glimmer of hope that Orang Asli are vital allies in conservation. With the achievements and lessons learned to date, the MNS plans to replicate this approach to other Important Hornbill Landscapes with Orang Asli or local community presence in Peninsular Malaysia. With the continued loss of forest cover, the urgency of mainstreaming hornbill guardianship and conservation into our forest governance structures has never been greater.

Acknowledgements

The MNS thanks the Forestry Department Peninsular Malaysia, Department of Wildlife and National Parks Peninsular Malaysia and Perak State Parks Corporation for their constant support and interest in our work. To the Orang Asli of Belum-Temenggor Forest Complex, the MNS is honoured to be accepted by you and working with you. This work is partly supported by the European Union through BirdLife International-led, *Strengthening Non- State Actor Involvement in Forest Governance* project. MNS is also grateful to all past donors supporting the BTFC Hornbill Guardians.



Oriental Pied Hornbill (Anthracoceros albirostris) at sunset (Pangkor, Malaysia).

PHOTO: PAUL WILLIAMS CC BY-NC 2.0 We would like to acknowledge and celebrate the life of environmental defender and co-author of this article, Balu Perumal, Head of Conservation of the Malaysian Nature Society (MNS). Balu passed away peacefully on 6 August 2021 as a result of COVID-19-related complications. He was 54. A botanist at heart, Balu was a strong advocate for working with communities in conserving nature, often challenging the rigidity of conventional conservation approaches and narratives, though stressing the urgency of conserving nature, saying it "cannot wait". Balu was a well-rounded conservationist who was well known and respected, described by his friends and co-workers at MNS as a wonderful person, always calm and unassuming, even under pressure, and a great team player, colleague, mentor and friend. He left behind a large footprint in Malaysia's conservation world and "even larger (conservation) shoes to fill in the Society". In the words of his colleague, co-author of this article, Yeap Chin Aik, "MNS will do its best to carry on Balu's legacy".

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"We are defending our territories" — Women activists say NO to Base Toliara Project, Madagascar

by Volahery Andriamanantenasoaa) and Maggie Maponderab)



Mikea woman from Madagascar carrying tubers of the baboho, the Mikea staple food that is gathered in the forest.

PHOTO: CRAAD-OI

With its carbon dioxide emissions of 0.1 tonnes per capita - amongst the lowest in the world - Madagascar has contributed very little to the climate crisis. This socalled 'Big Island' is a biodiversity hotspot comprising valuable and sensitive ecosystems seriously compromised by climate change, with more than 1,865 species threatened with extinction, including 80% of vegetal and animal species endemic to the country. According to the Global Climate Risk Index 2020, Madagascar is the fourth country in the world most affected by global warming, adverse weather events, and other climate risks threatening unique animal species and large numbers of poor and vulnerable communities representing 80% of the population.

Against the backdrop of widespread degradation of the country's natural environment, the Malagasy Government's development and growth agenda continues to focus on the promotion of the extractive and agro-industry sectors, as well as the development of the blue economy and the establishment of Special Economic Zones dedicated to foreign investors. As a result, these development strategies are characterised by their worrying ecological footprint and recurrent land grabbing - all at the expense of communities that are raising their voices to say 'No' and demand alternatives to this development model that safeguard their lands, resources and livelihoods.

For many years, communities in Madagascar have fought against the Australian-owned ilmenite mining operation, the Base Toliara Project. The resistance has been spearheaded by a women-led collective from CRAAD-OI Madagascar and FARM (Femmes en Action Rurale de Madagascar), a federation of rural women's groups from the affected communities, who oppose the project because of the threat it poses to their way of life, and the Mikea forest on which many of them depend for their livelihoods, food and survival.

"We first need to protect the forest. The reason why we protect the forest is because when there is a forest, there is water. And

a) Human rights specialist and director of CRAAD-OI Madagascar.

b) WoMin Communications and Solidarity Coordinator.

when there is water, agriculture goes well, and people do not resort to charcoal," says activist Retsiva Antanandava. "We are fighting against Base Toliara because we are protecting our territory. We do not accept that they spoil our lands. If we protect the forest, we protect our descendants".

After prolonged opposition from local communities, the government announced the suspension of all Base Toliara's activities in 2019. However, earlier this year, Base Toliara flouted the edict, using the onset of the COVID-19 pandemic as a pretext to restart their communications and shoreup their influence on the country's mining sector by claiming moral authority based on the 'significant' financial contribution that they made to the Government for the fight against the pandemic. The women from the 12 communes affected by the mining project, supported by the majority of the 200,000 inhabitants, refuse to stand down and they say, emphatically, No to Base Toliara.

If we protect the forest, we protect our descendants.

Retsiva Antanandava

Retsiva is a member of the Indigenous Mikea people of south-west Madagascar. She, along with women activists in her community, have waged a long war against the ilmenite mine since it was first proposed as early as 2012. The Base Toliara mining project obtained a license from the government of Madagascar on one mining and three exploration properties covering a total of 40,753 hectares, which enclose the territories of 12 communes. These mining concessions cover several environmentally protected areas, including the Mikea Forest, which is home to the Mikea

Indigenous group along with other community groups there. At least half the forest, which is "home to numerous unique and endangered animals, including several species of lemur, has been protected since 2011 as Mikea National Park" (Friedberg, 2019).

The Mikea Forest plays a vital role in the daily life of the Mikea people – spiritually, culturally, socially and economically. The Mikea indigenous people are among the poorest people in the world. They have limited access to marketed commodities, medical care, education and other public services, and almost no voice in regional or national politics.

In the south-western region, where the Base Toliara Project for ilmenite exploitation is being established, the Mikea Indigenous women and the community live almost entirely from hunting and gathering in the Mikea Forest. For these women, the forest is sacred and must be used with moderation and respect for the spirits who live there. Those affected by the large-scale mining operations are subjected to the restrictions on land and forest-use associated with the establishment of the mining and offset projects. Such resourceuse restrictions affect important subsistence and health-related activities, with critical and gendered impacts not only on livelihoods and food sovereignty, but also on customary and cultural rights. The gendered division of labour often means that women are seen as primary food gatherers, water providers, caregivers – roles that would be heavily impacted by mining activity. When agricultural land is no longer available, and/or soil and water sources are depleted or polluted, women's work burden is likely to increase in order to earn a decent income and provide for their families and community.

Base Toliara Project faced opposition from the start

From the start, the project was met with resounding opposition from communities. Despite this, the Malagasy Government issued the company a mining license and an environmental permit.

The government also declared Base Toliara a "public utility", i.e. a project that is for the 'public good', in July 2018. This decision was met with profound resistance. Affected communities mobilised continuous protests and demonstrations involving thousands of people. Discontent came to a head when a group of 40 people allegedly burned and vandalised the mine's exploration camp. Nine of them were arrested in May 2019, and charged with arson, destruction of property and forming a mob. They were only convicted on one charge and released in June, with a six-month suspended sentence.

In November, the Malagasy Government suspended all operations and communication activities of the Base Toliara Project, because of "opposition from local communities and unfavourable terms for the people and government" (Vyawahare, 2019). Base Toliara's efforts to get the government to lift the suspension have continued over the last few months. In April 2020, the company made donations to the local COVID Operation Centre of Toliara and was praised by its promoters as one of the main contributors to the fight against the pandemic. The mining company's promoters have argued that because of these contributions, the suspension of its operations should be lifted by the government.

The company has also threatened those who criticise its actions. In May 2020, local TV channel Ma-TV released a documentary on how children have been affected by Base

Toliara's activities and pointed out that the company was flouting its suspension. Both the journalist and the TV network have been threatened with legal action by Base Toliara for releasing the documentary.

As Malagasy laws do not yet provide sufficient protection for communities' rights, such as free, prior informed and continued consent, affected communities have to find ways to make their voices heard when facing powerful transnational companies. The affected communities in Toliara, led by women activists, are clear and continue to voice their opposition to the Base Toliara project. They will continue to organise and fight for a permanent ban of the mining company on their lands, even in the face of the company's power and might, threats, intimidation and collusion with the government. "We will not give our lands to them even if they kill us or shoot us", activists have said, "and we will not run away either because we are defending our territories".

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The supply chain of violence*

by Sam Illingworth**

Between 2002 and 2017, 1,558 environmental activists and peaceful protesters were killed, many of whom were Indigenous peoples, members of traditional, peasant and agrarian communities.

Illegal logging in community forests, oil drilling in Indigenous territories, mining concessions in native soils, these have become our warzones. Activists hailed as terrorists. while global agribusiness is paraded as unchallenged and unchosen liberator. Forever on the right side of progress; writing its history with cheques, and laws, and body bags. Outsourced resource consumption underpinned by marginalisation, turn ancestral lands into contemporary killing fields. Defenders fall in muted protest; their deaths the tip of melting icebergs, as slow violence bleeds through faceless communities. Trading alms for avarice, we wash our hands in waters offering salvation for those that we no longer care to name.

^{*}Butt, N., Lambrick, F., Menton, M. and Renwick, A. (2019). 'The supply chain of violence'. *Nature Sustainability* 2(8): 742–747.

^{*} This poem is part of Waking Ground (Gaspereau Press, 2020).

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More*

by shalan joudry**

How many times must we awaken each other? how long must we stand? how absolute must we love?

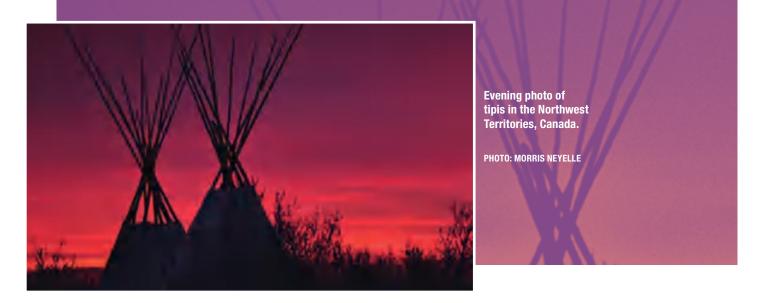
we speak our truth
when it would be easier
to stay silent

yet. there is always more that needs tending more calls to act



^{*} This poem is part of Waking Ground (Gaspereau Press, 2020).

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Four facets characterising environmental defenders of the Sahtu Dene: a literary-historical approach

Rachel Hosein Nisbet*

Abstract

The practices and cosmology of the Kawchodinne (hare) people from the Sahtu region of the Denendeh (Land of the People) in Canada are dramatised in Sick Heart River. This narrative, set in the late 1930s, culminates with its protagonist, Edward Leithen, offering practical and emotional support to the Kawchodinne during a famine. Written during Buchan's time serving as Canada's Governor General, this narrative, depicting 'brotherly kindness' towards these native people, deserves further attention. The paternalistic tone of Buchan's novel cannot be overlooked. However, I focus on four facets of its narrative that recur in the actions of contemporary environmental defense instigated by the Dene Nation. Both novel and Nation foster: interculturalism and the recognition of a culture's 'internal plurality', which contributes to new forms of coexistence and collaboration; inclusion of nature within the community, a quality Marcone associates with the Buen Vivir movement (Marcone, 2017); understandings of environmental processes through experiential systems, which, as Seymour Epstein contends, include images, metaphors, and affect-rich narratives (Epstein, 1994); positive recognition of 'arts of witness', which cultivates skilful judgement (Rose, 2017); and the rejection of stereotypical views of native peoples as possessing an intuitive understanding of Earth's balance, which Joni Adams (2001) cautions against. Buchan's novel and the Dene Nation rather focus on the symptoms of imbalance that manifest when collective socio-environmental wellbeing is not cultivated. My paper ends by reviewing how the above qualities, which foster socio-environmental health, are currently supported by the Dene Nation and Northwest Territories government policy.

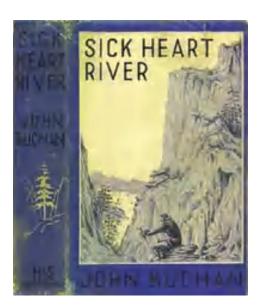
Key words: cosmovision, land-as-kin, interculturalism, art of witness, environmental humanities, Dene Nation, land defenders, literary history, Canada

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Advocating for biodiverse, resilient ecosystems is a task that unites environmental defenders. Cultivating ecosystems for the common good counters what John Knox, UN's Special Rapporteur on human rights and the environment from 2012 to 2018, describes as an "overwhelming incentive to wreck the environment for economic reasons" (UNHROHC, 2017). Recent international initiatives, including 'nature-based solutions' championed by the IUCN, also seek to achieve human and ecological flourishing, as wild fires, flooding and drought number among the natural hazards that increasingly confront communities. The successful implementation of such schemes constitutes a multi-scalar challenge. It requires that internationally defined guidelines for nature-based solutions are enacted by incorporating local wisdom. In general terms, this concerns how biophysical processes and socio-ecological practices intermesh in a given place. Accordingly, Indigenous peoples' knowledge about caring for the land should be incorporated in relevant subnational environmental legislation and policy recommendations (IUCN, 2020).

Cover of Sick Heart River, by John Buchan (1930), first edition.

PHOTO: © ABE BOOKS



The present article adopts a literary-historical approach to consider how the antagonistic understanding of 'land-as-kin' (Indigenous worldview) and 'ecosystem services' (for instance, the usefulness of drinking water) might be accommodated within heterogeneous environmental policies that recognise the value of ecosystems as framed by the wage economy and by traditional Indigenous practices. It compares recent environmental assessment and policy publications by the Sahtu Dene in Canada's North Western Territories with the detailed, fictional representation of this people in John Buchan's novel *Sick Heart River* (1941). It

demonstrates how the equitable sharing of resources for the common good is an ethos defended in the Sahtu's current policy and by the 1930s Sahtu community dramatised in Buchan's novel.

This fiction is useful, with certain caveats, in considering how antagonistic ways of valuing the land-as-kin or as a utility might be accommodated within subnational environmental policies. Written by Canada's Governor General on the eve of the Second World War, it portrays a collective desire to cultivate kinship ties between diverse peoples and an appreciation of the dynamic ecosystems supporting them. However, it overlooks how this people's way of life changed due to the signing of Treaty Eleven, which assigned mining and logging rights to the British Government, in exchange for cash settlements, plus hunting and trapping supplies.

The Sahtu's voicing of an environmental strategy has been influenced by their successful Land Claim (1993/4), and by the Canadian North Western Territories' membership of

the multilateral Arctic Environmental Protection Strategy (AEPS) and its subsequent incarnation as the Arctic Council (Young, 2002). The CARMA network (CircumArctic Rangifer Monitoring & Assessment network), operating within the working group on the Conservation of Arctic Flora and Fauna (CAFF), gives impetus to the Sahtu's ongoing environmental assessment work (Dene Nation, n.d.).¹⁷ Their local caribou surveys contribute to pan-Arctic assessments. The CAFF's most recent, pan-Arctic appraisal of caribou and wild reindeer finds a 40 percent decline in numbers within three generations (Gunn, 2016).

Defending caribou populations' health is complex, in the context of rapid climate change and habitat fragmentation. But their decline signals future environmental challenges for Arctic caribou and human communities. In light of this extremely troubling data, one constructive way to re-frame subnational environmental politics

Dene winter camp.

PHOTO: KYLE TUTCHO



and policies is to place greater value on Indigenous environmental defence of land-as-kin, and to encourage dialogue between this valuing of the living land and economic systems that assign monetary value to natural resources.

While policy recommendations often value ecosystem 'services' and natural resources, including mineral wealth, the term 'cosmovision' articulates Indigenous notions of deep-kinship with lands as living entities. It derives from the Universal Declaration of the Rights of Mother Earth (UDRME) and describes 'a cosmic spirituality linked to nature thousands of years in the making' (Adamson, 2014). Cosmovision

does not frame resources like water as utilities, but rather involves reverence for the ecological communities and natural resources that have sustained Indigenous communities for millennia. These kinship ties are place and community specific; but their role in buttressing the 'eco-cosmopolitan' environmental vision of the Sustainable Development Goals should not be underestimated. Goals including SDG 13.1 (strengthen resilience and adaptive capacity to climate related hazards) invite a respect for nature's power that is intrinsic to Indigenous cosmovision. Bringing together Indigenous and non-Indigenous ideas about environmental defence constitutes a multiscalar challenge. When people, animals and plants are confronted with life-threatening environmental despoliation, nature should be understood as affording services vital to life and as a body that requires veneration and care (Hogan, 2017; de la Calenda, 2010).¹⁸ To incorporate Indigenous respect for land-as-kin within future environmental policies requires, however, that antagonistic understandings of the 'environment' and 'natural resources' be placed in dialogue (de la Calenda, 2010).

Sick Heart River anticipates current socio-environmental challenges, and the requirement for collective environmental defence strategies that accommodate Indigenous and non-Indigenous beliefs and capabilities. In the 1930s, the Sahtu's wellbeing was undermined by tuberculosis, transmitted from outside the community. Their present community similarly faces complex socio-environmental problems, which are compounded by external factors. A locally diminished caribou population is one of several indicators of local biophysical and social imbalance that result from socio-environmental change that transcends the Sahtu's lands. Buchan's novel bridges Indigenous and non-Indigenous values, representing the desire for community wellbeing as a wish common to the Sahtu, Métis¹⁹ and non-Indigenous characters. This mutual desire unites them in combatting tuberculosis, which afflicts the Sahtu and the novel's non-Indigenous protagonist, Edward Leithen, alike. Identifying a common desire relevant to present socio-ecological challenges in the North Western Territories might help in combatting the diverse impacts of climate change. But only if the Sahtu's role in Indigenous- and non-Indigenous activities, like the oil industry, is clearly mapped.

Sick Heart River's narrative shares four characteristics with current Sahtu Dene environmental policy and recommendations to redress local socio-ecological imbalances. These characteristics reinforce a deep-kinship with the land, and might productively inform cosmopolitan environmental defence efforts more generally. They number:

- 1) Recognition of 'interculturalism', and the intracultural or internal plurality of Sahtu culture; acknowledging diversity within a culture offers what Marcone describes as new forms of 'coexistence' and 'collaboration' (2017). Interculturalism also invites more nuanced kinship models to be developed, enabling diverse capabilities within (and across) communities to be advanced for common good.
- 2) Including nature within concepts of community extends and complicates the possible interrelations between actors in a given place. Marcone finds such a scheme characteristic of the Indigenous South American *Buen Vivir* movement. But it is absent from Western anthropocentric environmental defences of 'ecosystem services' that overlook the linkages between people's wellbeing and that of other lifeforms (Ibid.).
- 3) The positive recognition of the 'art of witness', the skill of closely observing individuals' behaviour within natural ecologies, which Rose & van Dooren argue can cultivate wise interpretations of environmental change (2017).
- 4) The deep-kinship ties evoked by the Sahtu and represented in *Sick Heart River* are associated with a land-based apprenticeship, during which people observe how specific plants and animals interact within ecosystems, identifying patterns in their behaviours; thus, learning the art of witness, rather than acquiring it intuitively.

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Acknowledging that deep-kinship has to be cultivated by active appreciation of physical environments supports Adamson's contention that to assume Indigenous people have an intuitive sense of 'Earth balance' is to overlook the complex health and environmental challenges presently confronting Indigenous communities (2001).

Buchan very probably had the opportunity to witness Sahtu hunting practices first-hand during his travels up the Mackenzie River, from above the Great Slave Lake to Hudson's Bay (Buchan, 2007). During his visit, he also flew over the region, later describing the 'gigantic Mackenzie seaming the North with its tributaries' (Buchan, 1940). There are many similarities between the fictional depiction of the Hare guides in *Sick Heart River* and the histories of the Sahtu recounted by Blondin and presented on the Sahtu Dene's website, implying that Buchan's fictional representation of their cultural practices is accurate. There are historical lacunas in *Sick Heart River*, however. Its narrative overlooks the Norman Wells oil extractive industry, and this non-Indigenous community's role in transmitting tuberculosis, focusing instead on the ailing Sahtu. The paternalistic actions of the novel's protagonist, Edward Leithen, involve him mobilising his entourage to ensure that local natural resources are shared to halt a tuberculosis epidemic among the tribe. With this focus, the novel avoids opposing the kinship values of the characters against the monetary value associated with oil extraction. But this is one of the novel's failings as a historic fiction.

While paternalistic in its attitude towards the Sahtu, and omitting to reference Treaty Eleven, Buchan's novel is valuable in its depiction of this community's intercultural dynamics. Several descriptive passages imply that the Sahtu incorporate intracultural practices from other tribes. Leithen notes that the Chief of the Hares (Sahtu) has an Anishabe grandmother and wears 'one of the soup-plate Victorian Silver medals' inherited from her. This genealogical detail demonstrates that Indigenous groups combine knowledge and cultural practices through intermarriage with different tribes.

Buchan's sensitivity to intercultural nuance may partly derive from his joint British and Scottish identity. Leithen, a Scottish lawyer with a London law practice, is the protagonist that most closely resembles Buchan in his fictional oeuvre, as his grandson, James Buchan, notes (2007). Due to their intercultural skillset, John Buchan and Leithen are familiar with rural hunting practices and the academic knowledge necessary for a law career. In moving between Britain's cosmopolitan urban and Scottish rural societies, Leithen shifts between cultures, like the half-Ojibwé, half-Scottish *Métis* guides accompanying him in the North. These men teach Leithen to read the North attentively. They also sharpen his respect for the Sahtu, as experts in understanding rabbit ecology and 'dandies at trappin'. Buchan's account of the Sahtu's hunting accords with local records. Leithen observes that one of the Sahtu "managed to shoot an occasional partridge or ptarmigan. The second night out he made a kind of Dutch oven and roasted a porcupine, after parboiling it" (Ibid.).

It is very plausible that Buchan came into contact with the Sahtu when passing Norman Wells on the Mackenzie River, translating this experience into *Sick Heart River's* fictional

narrative. Blondin describes this settlement as home to Indigenous Dene that "depended on moose and rabbits for food", recalling how Buchan describes the Sahtu as 'the Hare' (Ibid.). Writing more generally about the Dene Nation, which comprises the Sahtu, Dogrib and Chipewaya, he says "we kept warm with fire, drank from the river, built sledges and traps from wood, ate roasted caribou and fish". Buchan's fictional account describes all of these food sources as part of the Sahtu diet. The guide Johnny explains "there were ptarmigan and wild grouse to be got in the bush, and the woodland caribou". Later he describes how:

[A]s a general thing they fish all summer and dry their catch for the winter. That gives 'em both man's meat and dog's meat. But this year the white fish and pike was short in the lakes and the rivers. I heard that in the fall when we were comin' in. (Ibid.).

This echoes Blondin's statement. Additionally, the character Johnny notes that:

[M]oose and caribou and deer were scarce, because the darned rabbits had gone sick. It happens that way every seven years or so. So them pitiful Hares started the winter with mighty poor prospects (Ibid.).

In combining trapping and fishing, the Sahtu, as described by Buchan, deploy competences associated with other tribes that are also now part of the Dene Nation. But despite their diverse food-sources and understanding of food web interactions, their health remains precariously dependent on the wellbeing of the animal populations they hunt. Great emphasis is placed on the value of sharing the hunt, for this reason. Moreover, because the health of their human community so clearly depends on the health of the animals they hunt, these communities are not considered as separate entities. 'Country foods' include moose caribou, and fish, and also "rabbits, ptarmigan, grouse, ducks and geese" (Harnum et al. 2014). These animals, then, can be considered part of the Sahtu community.

Moose hide drying in the sun.

PHOTO: MORRIS NEYELLE



Leithen appreciates how the Sahtu community's livelihood depends on the country food they hunt and trap, in part, because of his backwoodsman's skill. His training as a lawyer also teaches him the value of closely observing the behaviour patterns of animals or the seasons, which Rose & van Dooren term 'the art of witness' (2017). Admiring the Sahtu's efficiency at making camp, he realises "what a blundering amateur he was compared with Johnny and the Indians" (Ibid.). That Buchan also appreciated the art of witness is demonstrated by the sometimes excessively detailed descriptions recounted by the firstperson narrator, Leithen; for instance:

Johnny, after sniffing the air, pronounced on the weather. The first snow had fallen; there would be three days of heavy frost; then for maybe ten days there would be a mild, bright spell [...] A little drove of snow buntings had passed yesterday; that meant, he said, since the birds were late in migrating, that winter would be late [...]

Johnny next explains that "The Hares call it the White Goose Summer [...] It ends when the last white goose has started south" (Ibid.).

The above description suggests that the Sahtu are finely attuned to the behavior of animals and climate patterns in their local environment. But Harnum et al. (2014) demonstrate that cultivating the art of witness is more complex within the contemporary Sahtu community. Hunting has become a leisure activity, largely restricted to wealthy individuals (Ibid.). So the possibility of training community members in the art of witness is no longer available to all. Leithen could assert "the Hares have an instinct for

Two Dene girls filleting fish from the Great Bear Lake.

PHOTO: MORRIS NEYELLE



ritual", implying their acts of witness connected them to what he terms 'the holiness of life' (Buchan, 2007). But at present the Sahtu are actively seeking ways to diversify out of a 'super-hunter model' that correlates the ability to share country food within the wider community with an individual's wealth; the latter sometimes being earned by working within the extractive

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industries (Harnum et al., 2014). While the Sahtu's 1993-94 land claim re-assigned them (more limited) community lands, the sub-surface mineral wealth at Norman Wells was not transferred back to them at this date, only the right to control access to it. Community values, including 'sharing' country food and cultivating the art of witness, are now bound up with the ability to derive an income from working in such industries. Accordingly, 'the art of witness' and its links to what Harnum et al. describe as a "sense of responsibility and spirituality" has become intertwined with financial income sources not traditionally part of, or venerated within, the Sahtu cosmology. This antagonism deserves to be recognised and accommodated in regional environmental policy; Harnum et al.'s report represents an important contribution to this endeavour.

While the development of the 'super hunter' appears to compromise Sahtu Indigenous values on one level, there are environmental actions 'to preserve Country' that can be framed using local Indigenous traditional knowledge. Take for instance the managing of light burning to create the secondary growth upon which caribou feed. Buchan alludes to this practice, with Leithen recounting how controlled burning is important for caribou grazing:

[T]here had been a bush fire recently, so the ground was open except for one or two skeleton trunks and a mat of second-growth spruce. Something caught his eye in the tangle, something grey against the trees, something, which ended in what he took to be withered boughs. He saw that they were antlers [...] the caribou had its head down and was rooting for moss in the snow.

From his description, Leithen has sighted a boreal caribou, whose flourishing is furthered by the action of light burning to cultivate vegetation growth (Benson & Winbourne, 2015). This is an example of the art of witness being used to maintain wider community relations that extend beyond the hunting of caribou to include the management of the ecosystems upon which the caribou depend. It is promising that future, regional environmental policy looks like it may foster a wider ecosystemic approach to managing ecological flourishing, and will endeavour to develop the art of witness within a wider community of Indigenous Sahtu. This will give greater place to Indigenous knowledge. But until the mineral resources in the region are also included in cosmologies of landas-kin, and extracted as natural resources in a manner that does not exceed the CO₂ drawdown capacity of regional forests, a model of ecosystem balance that connects Indigenous and economic values cannot be established.

Such a speculative, next phase of environmental defence is conceivable now that the Mackenzie Valley Resource Management Act's amendments have passed into legislation (Minister of Justice, 1998). This shift gives the Sahtu's Land Use Planning Board even greater powers and increased income from onshore and offshore oil and gas profits (Northwest Territories Lands and Resources Devolution Agreement-In-Principle, 2011). Accordingly, the impetus to develop environmental policy that accommodates antagonistic notions of natural resources as deriving from land-as-living kin (Country food) and mineral resources as having economic value is even more pressing. Failing to do so will replicate how *Sick Heart River* represents the value of 'sharing' by focusing only on hunting, without considering how mineral resource exploration on Sahtu lands also impacts on the wellbeing of their land-as-kin.

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Community-level responses to 'forest violence' in Cambodia

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Abstract

Community Forestry is an important way to protect biodiversity and traditional rural livelihoods. Forest defenders, however, face multiple forms of violence from logging and agricultural interests. This paper examines the ways through which Community Forestry in Cambodia has faced these challenges, where demand for forestland in the past three decades has intensified forest-related conflicts. Many of these conflicts involve direct violence between and within interest groups including local villagers, organised logging groups, land-seeking migrants and state officials, such as police and soldiers. While such violence seeks to intimidate and prevent Community Forestry participants from pursuing their forest-protection activities, many rural Cambodians continue to participate in community-based forest management activities despite significant threats to their personal safety and limited results in achieving forest protection. This chapter seeks to explain in part why grassroots mobilisation against deforestation continues despite much violence and reduced support from international donors.

Key words: Cambodia, defenders, land, logging, human rights

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Introduction

Contemporary concerns for community forest loss in Cambodia emerged in the early 1990s as the pace of logging accelerated in many parts of the country within the context of a failed peace agreement and rampant corruption (Le Billon, 2001). As part of the many measures taken, formal Community Forestry (CF) practices begun in earnest in 1992, when western international donors and NGOs started funding specific projects in this domain (Blomley et al., 2010; Nurse & Malla, 2006). As financial aid for post-conflict reconstruction flowed rapidly into the country, the international aid and 'environmental-conservation complex' (Brockington, 2006) attempted to prevent the asset-stripping of forests, as had occurred in other areas of South East Asia (Poffenberger & Smith-Hanssen, 2013).

Cambodia's deforestation rate nonetheless accelerated faster than any other country in the world between 2001 and 2014 (Davis et al., 2015), despite repeated Cambodian government official commitments to forest protection (RGC, 2010). In 2010, approximately 20% of Cambodia's forested land was included in Economic Land Concessions (ELCs), 80% of which was in Protected Areas and National Parks (Forest Trends, 2015). Driven primarily by large-scale ELCs for cash crop plantations, mining or hydroelectric schemes (Forest Trends, 2015), deforestation also resulted from clearings by land-poor Cambodian farmers and illegal logging. This latter practice involved a wide range of actors, including local and neighbouring villagers, as well as provincial and national elites (i.e. entrepreneurs and corrupt officials) organising timber poaching groups and using ELCs to conduct logging operations and/or to cultivate short-term crops such as cassava (Diepart & Schoenberger, 2017; Mahanty & Milne, 2016; Milne, 2015).

In parallel to deforestation trends, international donors increased support for Community Forestry throughout much of the 2000s, mostly to maintain a resource base for subsistence purposes, as well as for conservation benefits, promoting 'grassroots democracy' and mitigating climate change – these objectives reflecting the flux of various meta-narratives and funding priorities among agencies such as the FAO and World Bank (Cock, 2016; Sunderlin, 2006). The Government of Cambodia passed a new forestry law in 2002, a specific sub-decree on community forests in 2003 and guidelines in 2006. This legal framework, however, provides community tenure rights only in the form of a 15-year lease, clearly benefiting state territorial interests; prohibits 'commercial' activities by community members, thereby reducing customary forest user rights beyond subsistence; and imposes high costs and complex administrative tasks to communities (Blomley et al., 2010).

The governance of CFs at community level has also been frequently problematic. Although forest defenders can be considered self-selecting, in that all members of CF/CPA participant villages are invited by NGOs to join, Persson and Prowse (2017) have documented in two CFs an "exclusion of younger and poorer households from formal meetings, high costs and limited benefits for members, informal information channels where women and poorer households are excluded, low levels of formalisation, high enforcement costs and massive external pressures".

The demand for forestland in the past three decades has intensified forest-related conflicts, including in Community Forests. Many of these conflicts involve direct violence between and within interested groups including local villagers, organised logging groups, land-seeking migrants and state officials, such as police and soldiers. Although these categories can be useful in identifying power differentials, social hierarchies, and social positionings relevant to CFs, some individuals identify with more than one of these categories at once.

Direct violence has included punching, pistol-whipping, machete attacks, shootings, death threats, arson of homes and being held hostage in the forest. Among the gravest cases of violence against environmental defenders – noting that these were not local CF participants – were the murder in 2012 of Chut Wutty, founder and director of the Natural Resource Protection Group (NRPG); and in 2018 of a three-person patrol including a forest protection ranger, a military police officer and a member of the Wildlife Conservation Society (Sochua, 2018).

This violence is intended to dominate and discipline, by preventing CF participants from conducting forest-management activities, and scaring others off joining. Yet, while forest-related violence has undermined the effectiveness of CBFM projects, many rural Cambodians continue to participate in CBFM activities despite significant threats to their personal safety and limited results in achieving forest protection (Grant & Le Billon, 2019). This paper seeks to explain in part why grassroots mobilisation against deforestation continues despite the violence and reduced support from international donors.

Community-based forest protection in Cambodia

Community-based forest management (CBFM) projects support communities to take a central role in managing their local forests with the aim of improving sustainable forest management practices for conservation of locally and globally valued ecosystems, to support forest-dependent livelihoods for their economic and cultural value, and to promote political development through participation in democratic processes (Menzies, 2007). Although organisational structures vary between different CBFM projects, the approach implies the decentralisation or delegation of forest management responsibilities and, to some extent, governance (Berkes, 2007).

It is implied, and sometimes a formalised legal requirement, that with increased rights over local resources, communities will exclude illegitimate forest users and prevent illicit extraction of forest resources, thereby assuming the responsibility of law enforcement at the local level. In this framework CBFM participants are not passive recipient beneficiaries of integrated development and conservation projects but are tutored to become 'responsibilised' (Cruikshank, 1999; Li, 2007) members of an environmental community of care, enacting the behaviours they have been taught to value (Agrawal, 2005; Sundar, 2001).

However, the practices that CBFM aims to reduce (deforestation and illicit extraction of forest resources) are frequently associated with physical violence and threats thereof, as illicit forest users attempt to take forest resources by force and scare environmental defenders into silence (Forst, 2016; Franck & Hansen, 2014; Global Witness, 2014; 2015a; 2016a; 2017; Gonclaves et al., 2012). Thus, in seeking to reduce these practices, some participants in community-based forest management experience physical violence, threats and intimidation during conflicts over forest use (hereafter, 'forest-related violence').²³

Unlike community forests in many other countries, Cambodia's CFs don't have any community-managed commercial logging enterprises yet (RGC, 2010).²⁴ Rather, they are managed for subsistence use and conservation of biodiversity and wildlife habitats (referred to by the Forestry Administration as 'Protection Forests'). To improve the financial motivation for villagers to participate in CF protection, communities are encouraged to pursue alternative ways to generate income from the forest such as establishing eco-tourism projects or non-timber forest product (NTFP) enterprises (honey, rattan, and resin processing are common pursuits) (Sunderlin, 2006).

The government also plans to generate income for communities and the FA through three forest carbon credit projects (RGC, 2010). These are based on the CF model – multiple CFs in a landscape are 'bundled' and counted as one REDD+ project even if the forest is not contiguous (Bradley, 2011). The day-to-day management remains largely the same as other CFs but there is additional technical assistance for measuring carbon emissions and avoided emissions.

Although Cambodia was one of the first countries in SEA to initiate a REDD+ project and the national framework was promoted as a promising model for sustainable forest management elsewhere in Southeast Asia (Broadhead & Izquierdo, 2010; Poffenberger et al., 2009), its pilot project in Oddar Meanchey has been abandoned by REDD+ donors (Lang, 2014) and has reverted back to regular CF operations due to the FA's inability to agree the terms with a carbon credit buyer in 2014 (Khoun, 2014). A second form of CBFM in Cambodia is Community Protection Areas (CPAs). In terms of organisational structure at the community level, purpose, and daily management, CPAs mirror CFs.

However, CPAs are established in forests that are already designated as Protected Areas, such as a National Park, Wildlife Sanctuary or Biosphere Reserve (Open Development Cambodia, 2016). These national conservation zones are under the jurisdiction of the Ministry of Environment (MoE) rather than the Forestry Administration, a department in Ministry of Fisheries and Forestry (MAFF), although this has little impact at the community level – both are equally bureaucratic and inefficient at processing applications despite NGO attempts to move the process forward (San, 2006). Due to the similarity of CPAs to CFs and because they are much fewer in number (approximately twenty eight have been granted [San, 2006]), there is little literature specifically on CPAs as distinct from CFs or the larger Protected Areas in which they are located. Even implementing NGOs tend to conversationally refer to CPAs under the same umbrella term of 'CF.'

Overall, CFs and CPAs have been effective in reducing deforestation, though less so than protected areas (under the Ministry of Environment) or protected forests (under the Forestry Department), at least compared to non-conserved forests (Ota et al., 2020).

Participation motives and processes

Two main studies have previously examined factors influencing participation in Community Forestry within Cambodia. Pasgaard and Chea (2013) suggest that it is easier for "better-off households" to find time to engage in CF activities and access the information provided by NGOs. Looking at Cambodia's most well-known case, the self-organised forest protection community scheme around Prey Lang forest, Turreira-Garcia et al. (2018) find from a survey that active forest monitors represent a minority of villagers (22%), and mostly consist of motivated forest-users, but with no particular ethnicity, gender, or length of residence in the area. Here, we seek to complement these findings through a focus on how community forest patrollers perceive themselves in relation to violence and forest protection activities.

To this end, we deploy the concept of 'subjectivity' and the ways in which three processes can help understand the generative and more-than-disciplinary effects of violence, namely: the interpellation of specific subject positions through expressions of power, the internalisation and interpretation of embodied expressions of power, and the subsequent performance and performativity of emergent subjectivities. By exploring the construction of subject positions after experiencing violence and the potential for those emergent subjects to act or act differently, such a study of subjectivity can help trace how the repressive and generative powers of violence, among other forms of power, influence the behaviours of participants in CBFM projects. The study draws from a survey and fieldworks observation and interviews by the first author.

Performing environmental subjectivities through forest patrols

Forest patrols are the most important performative act for CF participants, as well as the most dangerous. Even when apprehending illicit forest users, patrollers are often unable to make arrests due to the lack of transportation out of remote forest locations and unwillingness to (possibly illegally) arm themselves with weapons equivalent to those of loggers. At most, they can conduct a citizen's arrest and call local authorities, and may be able to confiscate the wood cutting and logging equipment. Forest patrols, which are generally self-funded by participants (e.g. food and gas), thus appear to have limited effectiveness at reducing deforestation when not supported by effective law enforcement systems.

Patrols, for many CF participants interviewed, demonstrate that they are not afraid of powerful political and economic elites and are willing to stand up for their

environmental rights. One interviewee noted, "When we patrol, everyone who sees us knows we are protesting illegal deforestation. We want the loggers to see us patrolling so they know we are not afraid of them". Although direct violence does affect how CF practices are conducted, with for example prior announcement to avoid the risk of chance encounter with armed loggers, patrolling enables CF members to express their refusal to bow to what is interpreted as illegitimate power. Participation in CF becomes a performance of their desire to uphold Cambodian laws and individual human rights in contrast to the prevailing political regime. As another interviewee noted,

I know we have to keep patrolling the forest, because the government will not protect it so it is our responsibility to do it. We have to show the government that we are better than them. We do our duty honestly even when the police do not.²⁶

This sense of duty and adherence to rules – as formally defined by CF legislation and local CF bylaws drafted by CF members, and informally interpreted as social norms by patrol participants and other community members – guides the performance of CF activities and is demonstrated, for example, through patrol groups taking formal photos of themselves during patrols to document that the patrol group is upholding its responsibility to look after the forest as prescribed in CF guidelines and in spite of the dangers posed by illicit forest users. Similarly, patrols often start by driving their motorbikes through a village in convoy. This signals the patrol's resolve to onlookers, while reducing the risk of violence suffered as a result of a chance encounter with armed loggers. Participants intend their actions to be seen, unlike the covert forms of 'everyday resistance' described by Scott (1985).

An important audience for CF performances is the international conservation and development community, which - despite having so significantly shaped the development of CFs in Cambodia - has been withdrawing support for CFs in some provinces due to insufficient forest conservation outcomes (Radio Free Asia, 2015). Many interviewees hope that by continuing to practice CF activities as previously encouraged by NGOs and simultaneously exposing the constraints on their success due to lack of political support, donors will come to recognise these efforts and constraints, and thereby put more pressure on the state to effectively reduce illegal logging and deforestation.

The performativity of forest patrols suggests that participation in CF is part of the broader struggle for political rights, of which environmental rights are a part (Agyeman et al., 2016). This form of collective action resonates with O'Brien's concept of 'rightful resistance' in which "a partly institutionalised form of contention... works largely within (yet at the edges of) an existing opportunity structure" (1996). CF provides such a structure, including 'legitimate' access to government officials; as expressed by one of the interviewees, "[w]e talk with the authorities legitimately because we have the right according to the CF agreement".

In this respect, CF may be considered as a "conservative" form of collective action (Simpson 2014), in that it does not seek regime change, or even can't be interpreted as a 'depoliticising' process (Li, 2007), in that forests and forest users are treated as components of a technical problem. Yet, CF is one of the few options available in an

illiberal political regime. It provides an arena for the performance of subjectivities and identities, and for the performative act of expressing opposition to those who try to disperse, silence, and isolate them through various forms of violence, including direct forest-related violence, structural violence, symbolic violence and the 'slow' violence (Nixon, 2011) of environmental destruction. In this, participation in CF unlocks ways of being political – of contesting oppressive structures – while acting within sanctioned institutions.

Politicised violence and rights consciousness

Experiences of direct forest-violence not only contribute to draw attention to structural violence, but also help to illuminate symbolic violence of social norms facilitating direct and structural violence, and hold members of their community in positions of subjection to elites. In response, CF participants frequently re-purpose the language of rights as a tool to challenge the symbolic violence of hierarchical Cambodian society that naturalises direct and structural violence against politically and economically marginalised communities. As an interviewee noted:

Village people are easily scared when the Village Chief tells them 'if you join CF, you will have to leave the village and eat rice with the monks.' This is because they do not know their rights. They do not understand that they have the right to protect the forest and they do not have to obey the Village Chief. They do not understand that they can vote to get a new chief and that he or she is accountable to the villagers.²⁷

The perceived choice between colluding in systems of oppression and opposing them also revolved around the language of rights, including universal human rights, the National Constitution, and rights granted by CF Agreements, that delegitimise the Cambodian 'system':

In Cambodia, we have a system – some people are rich and so they have more power, some people are poor so they do not have so much power. They say this is the Khmer tradition but now I understand that it does not matter if a person is rich or not, we all have rights. We have the right to live in peace and we have the right to protect our forest. [The NGO] gives us training on human rights and the Cambodian constitution. The Constitution says that we have the right to protect our forest. The CF Agreement says we have the right to protect our forest. Big Men do not have more rights than me. We are equal and so I join CF to show other poor people that we have rights.²⁸

Political awareness and new subjectivities thus emerge from community forest protection and the violent responses that often ensue. These, however, rarely translated into effective means of reducing the impunity of 'forest destroyers', largely because of the broader political authoritarianism and patronage relations at play in Cambodia. Attempts to enforce existing laws in order to punish and deter forest-related violence thus appear to be wholly unsuccessful. During fieldwork for this study, no cases were found in which those responsible for forest-related violence against CBFM participants or NGO employees had been arrested, let alone convicted, even in cases where the identity of the perpetrator

was known. This mirrors the national trend as even cases that have been prominent in Cambodian and international media have not been fully investigated or have been closed prematurely (Amnesty International, 2017c; Cox & Ok, 2012; Lambrick & de Smet, 2015).

Examples from interview data of how law enforcement authorities fail to act on reports of forest-related violence are dishearteningly common and repetitive despite the brevity of each one: "we reported them to the police but they did not investigate"; "I reported him to the Village Chief but he did not report to the police or give any punishment"; "the police and the Village Chief came to see the remains [of an arson attack on a house] but up to now, they have not made any arrests". Explanations for this repeatedly point to the authority figure to which the report was made being engaged in illegal logging networks and associated violence or being the political client of those who are.

The precise details of these networks remain murky – a default given the illegal nature of their activities, and the illicit and extra-legal arrangements that are made (Springer, 2017). Yet, a consistent picture emerges from interviewees' claims and observations of village-level social dynamics indicating that law enforcement authorities do not pursue reports of forest-related violence because of influence from political and institutional patrons.

The overarching reason that existing laws are not effective in punishing forest-related violence is that the illicit forest users most likely to use violence – organised logging groups, the military, and clientelistic local loggers and migrants – are those most able to use personalised systems of power to circumvent the legal-rational disciplinary mechanisms of the justice system. These failures by law enforcement authorities in turn structure the behaviour of Cambodian citizens and shape how they interact with the justice system to defend their rights and respond to direct violence.

Specifically, it makes many CBFM participants less likely to ask law enforcement authorities to uphold their rights and contributes to an attitude of resignation to systemic injustice while still motivating grass-roots efforts to prevent deforestation, including through the hiring of trusted soldiers – often family relatives – to accompany CF members during their patrols. Regardless of the short-term effectiveness of the solution, militarising forest patrols is not a sustainable solution to reducing violence in the forests. To do so is treating the symptom of the problem (direct violence) rather than the causes (structural violence and elites' impunity to the law) (Duffy et al., 2015; Lunstrum, 2014). It displaces forest-related violence in time or space rather than eliminating it. Rather, the situation of CF requires a deeper transformation of power relations between communities, NGOs, and authorities (Grant & Le Billon, 2020), clearly a difficult challenge in Cambodia.

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The Weeping Tilapia

by Ndivhuho Mugeri*

Video



Listen and listen carefully, oh, you people of the world, My voice is faint so you better pay attention, I'm here in the murky waters of Lake Fundudzi, Uncertain of my tomorrow because a bird whispers a Mine, So bring a pen and paper, I want to tell you all.



Lake Fundudzi in the Soutpansberg in the Limpopo Province of South Africa

PHOTO: IRIS AUDA (17 MAY 2018, WIKICOMMONS)

I'm here but you can't recognise me,
I have turned brown in this mud because the waters are so shallow lately.
What then? The farmer had to irrigate his crops upstream,
The taste of his pesticides ain't too bad, I have accustomed,
What else can I do except frown?

I would have loved to speak to you from my favorite spot, Under the Sycamore tree, there by the curvy roots But a neighbor longed for a grilled steak, A few dry branches, Boom! The whole tree is gone, It's so sad I now sleep in the deep end.

Earlier I laughed at myself for mistaking a diaper for a meal, My son died choking in a can of soda,
It doesn't rain but pours over here,
It just ain't enough to fill the Lake so I can breed in peace,
I'm so lonely the last nets took even my unfertilised roe.

Those who speak for me are turned foes,
Dollars or Rands in their hungry mouths or death!
My friend, The Crocodile, wails the same lament,
He has teeth, so my prayer for some won't change a thing,
Save me if anybody out there hears a thing,
Hurry, hurry! I see what looks like a bait!



*Ndivhuho Mugeri was born in the rural village of Tshifudi, South Africa, 41 years ago. He grew up drinking and swimming from the local river called Tombo-Gede. He went on to earn an Honours Degree in Environmental Sciences from the University of Venda. Currently, he works for the mining company Exxaro, though he has a passion for writing poems and aspires to publish his poetry.

"The Weeping Tilapia" was written based on a sacred Lake called 'Fundudzi' in Venda. The poem holds both figurative and literal importance. It illustrates the plight of the marine species, brought about as a result of deforestation of riparian vegetations; the demise brought about by uncontrolled over-fishing; the impact of pollution on marine ecosystems; the impact of agricultural and mining activities on the ecosystem, and most importantly, the demise suffered by environmental ambassadors. The poem is meant to highlight the killings of environmental champions, echoing the theme of this special issue.

Iron Eyes Song by J. Herbst

Far too long they tried to say that you and I were to go our separate ways.

Here we stand in full circle with you, one by one we have joined hand in hand we find our strength.

Now I see only when we come together as one a light shines a path before us.







Tokata Iron Eyes

PHOTO: EARTH GUARDIANS

Composer, arranger, copyist, and saxophonist, Joseph Herbst uses music as a medium for storytelling, often as part of collaborative projects, in order to push ourselves to see the world in different ways while strengthening our sense of community. Since 2018, Joseph has been leading multiple projects, starting with "This is Our Environment" and the Joseph Herbst Sextet, an evolving project that brings together original music, spoken word, and environmental justice in order to challenge our understanding of the environment to push us towards a more just and equitable society founded on a sense of community.

The inspiration for Iron Eyes comes from a passage from Naomi Klein's book, No Is Not Enough, regarding an experience she had at the Standing Rock Sioux Tribe's camp resisting the Dakota Access Pipeline. Joseph was at another part of camp when this event occurred. "I will never forget the experience of being at the main camp when the news arrived, after the months of resistance, that the Obama administration had finally denied the pipeline permit. I happened to be standing with Tokata Iron Eyes, a fiercely grounded yet playful thirteen-year-old from Standing Rock who had helped kick-start the movement against the pipeline. I turned on my phone video and asked her how she felt about the breaking news. 'Like I have my future back,' she replied, and then she burst into tears. I did too."

You can get in touch with Joseph through his email address, josephherbstmusic@gmail.com

Notes

- Global Witness (2020). Defending the environment in the time of COVID-19: increasing threats, clampdowns on freedoms and tragic losses [Blog] 16 September 2020. https://www.globalwitness. org/en/blog/defending-environment-time-covid-19-increasing-threats-clampdowns-freedoms-andtragic-losses/ [Accessed 19 August 2021].
- An Indigenous group from Kenya and Northern Tanzania.
- Pattern of seasonal movement between dry and wet season pastures.
- A group of small circular/oval huts made of mud and cow dung, surrounded by a circular fence of thick and thorny bushes to protect the household and cattle.
- A council of elders overseeing the daily running of the village and administering matters on the basis of an oral body of law.
- From here all terms referring to 'defenders' (other than the broad term Human Rights Defender) refers to land and environmental Defenders.
- The International Covenant on Civil and Political rights (ICCPR) states that "all peoples have the right of self-determination" implying that selfdetermination is a collective right of people rather than of individuals.
- Although some temporary relocation initiatives are able to support family relocation, many are unable to do so, or have to reduce the length of the relocation due to the higher cost (Müller, 2019).
- "The sense of a traditional homeland is so strong for many Navajos that when outside their traditional territory and away from sacred geography they sometimes experience an extreme imbalance that can only be corrected by returning to their home communities" (Weaver, 2001).
- In 2018, at least 29% of those killed as recorded by Front Line Defenders – had previously received a specific direct threat (Front Line Defenders, 2019).
- ¹¹ For an example of Nasa communities' process of documenting historical memory, see (ACIN, 2016).
- For an example of community exchanges focused on community-led protection between

- Afro-Colombian and Colombian Indigenous communities, see FPP (2017a; 2017b).
- ''Guard, Guard, strength, strength! For my race, for my land!"
- We could not figure out the taxonomic classification of some of the plants yet. Only local names have been provided for those species.
- PRADAN is an Indian non-profit organisation. To know more, visit www.pradan.net
- ¹⁶ For more information, visit www. azimpremjiuniversity.edu.in
- 17 The Dene Nation Chiefs Caribou Committee (DNCCC) included representatives from the Sahtu, Ti Cho, Gwich'in and Akaicho regions. Thus, rather than 'scaling up' their knowledge with regard to caribou herds' reproduction and migration, this committee focused on comparing local information gathered in neighbouring regions (Eastern to Western Arctic). It positions Traditional Knowledge (TK) as being as equally important as Western Science, thus 'shifting to a closer traditional relationship with the environment' (Young, 2002).
- Linda Hogan in 'Country and the Gift' (2017) writes of Country as being 'cared for as a living body' that needs to be kept in balance. Similarly, Marisol De la Calenda in 'Indigenous Cosmopolitics in the Andes: Conceptual Reflections beyond 'Politics", writes how Indigenous peoples place themselves in relation to an unseen pluriverse that can be described as 'Mother Earth' (Barefoot Hopi) or 'Pachamama' (2010).
- The Métis constitutes a different Indigenous group, composed mainly by the mix of French and native americans.
- Sick Heart River's narrative also draws on a range of sources to develop its portrayal of the North, as Buchan's grandson James points out, including published non-fictional travel narratives about Canada's North West and his son's aural accounts of the Baffin Island region. James Buchan (2007) lists George Mitchell's descriptions of the Yukon, accounted by Angus Graham in The Golden Grindstone (1935), as one source for his Grandfather's novel.
- ²¹ According to local Dogrib indigenous historian

George Blondin, those drilling for oil at Norman Wells after the Treaty 11 signing, numbered among the non-natives that could have brought tuberculosis into the Sahtu community (1997). Buchan's vision of developing a kinship with the Sahtu was not borne out in the 1940s. Blondin describes how tuberculosis sufferers were exiled to sanatoriums, further eroding the deep kinship of the Sahtu for their lands (Ibid.).

- Macmillan & Parlee (2013) provide more information on this topic.
- ²³ For a discussion of the concept of violence, see section below.
- The government aims to explore the commercial potential of CFs through a pilot of Community-Based Production Forestry by 2029 (RGC, 2010).
- Conversation with a CF member during participant observation in forest patrol, Oddar Meanchey, 24 May 2015.
- Interview with Head of CF, Kampong Thom, 4 July2015. Emphasis added.
- Interview with Head of CF, Oddar Meanchey, 15 June 2015. We note that village and commune chiefs used to be directly nominated by higher authorities. Commune level elections took place in 2002, with most seats going to the ruling party, and village chiefs were appointed through majority vote by commune councilors in 2006 which "further cement[ed] the party's dominance [at] the lowest levels of administration" (Hughes, 2009).
- Interview with Head of CF, Preah Vihear,4 December 2015.
- Interview with CFMC, 5 July 2015, Kampong Thom; interview with CF member, 8 July 2015; Kampong Thom; interview with CFMC member, 15 June 2015, Oddar Meanchey.

Annex I

Imaginer autrement: des pas en avant pour une plus grande reconnaissance de la sagesse et de la résistance autochtones

Hindou Oumarou Ibrahim*

Un appel à l'action

- 1. La criminalisation des défenseurs de l'environnement doit s'arrêter immédiatement. Personne ne devrait être tués, violenté, chassé de la terre de ses ancêtres, ou simplement marginalisé parce qu'il défend notre bien commun le plus précieux: la vie.
- 2. Il faudra aussi nous donner les moyens d'agir, car désormais notre résistance à nous, les défenseurs de l'environnement, à un nom: l'action. Pour cela, nous avons besoin de soutien, de ressources, d'intelligence et de financements dédiés.
- 3. Finalement, il faut que les politiques et les actions climatiques soient plus participatives de la conception à la mise en œuvre, ce qu'on appelle la participation des à la prise de décisions.

Pour les peuples autochtones, protéger la terre n'est pas un engagement, une cause, c'est un mode de vie. Les écosystèmes sont nos villes et nos logements, nos lieux de travail et nos supermarchés, nos hôpitaux et nos pharmacies, nos librairies et nos églises, nos universités et nos diplômes. Nous ne faisons qu'un avec la nature, nous en faisons partie car les êtres humains sont une seule espèces à travers des millions autres de la nature. Nos décisions collectives, nous les prenons à la lumière des connaissances et savoirs traditionnelles héritées des générations qui nous ont précédées, et pour permettre aux générations qui nous succéderont de vivre dignement et en collaboration avec la nature.

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Dans ma communauté, les peuls Mbororo du Tchad, pour devenir adulte, un adolescent doit connaître les noms de ses sept générations d'ancêtre qui les ont précédés et de ce qu'ils ont été dans leur vie. Pour prendre une décision, il doit penser à son impact sur les sept générations qui lui succéderont. Cela nous permet de conduire nos sociétés avec le souci permanent de la protection de la nature. Ce mode de vie, construit sur la coopération avec nos écosystèmes est souvent perçu dans les sociétés industrielles comme un mode de vie qui appartient au passé. C'est pourtant l'avenir de l'humanité. Car si nous n'arrêtons pas immédiatement cette guerre contre la nature, alors c'est la survie même de l'humanité que nous connaissons qui est en jeu. Si nous ne cessons pas de bruler des énergies fossiles, de détruire les dernières forêts primaires, de vider nos océans de leur vie pour les remplir de plastique, nous n'avons que peu d'espoir d'en réchapper. Soyons en sur: nous ne gagnerons jamais la guerre contre la nature.

Elle est plus forte que nous.

Les peuples autochtones ont souvent été parmi les premiers à constater les désordres du climat, à alerter sur la disparition des espèces vivantes. En vivant en première ligne, au côté de la nature, nous sommes les témoins de ces changements. Sur les banquises de l'Arctique, dans les forêts tropicales d'Afrique, d'Amazonie et d'Asie, dans les steppes et les savanes, dans les îles du pacifique, de l'océan indien et de l'Atlantique, la guerre contre la nature lancée par les sociétés industrielles fait ses premières victimes. Nos terres autochtones, qui rassemblent 80% de la biodiversité mondiale sont l'objet de la convoitise de l'agriculture industrielles. Nos rivières sont souillées des pollutions plastiques et chimiques. Nos récifs coralliens sont menacés par la hausse du niveau des mers, le réchauffement de l'eau et l'acidification des océans. Nous sommes trop souvent à quelques générations de la disparition.

Depuis plus de 50 ans maintenant, et la naissance des premiers mouvements modernes de protection de la nature, nous sommes nombreux à vouloir construire cette paix avec la nature. Nous sommes de plus en plus nombreux à nous lever pour protester contre la destruction des écosystèmes, à nous opposer au vol de nos terres, et à toutes les pollutions. Nous sommes une foule de citoyens qui réclamons la paix avec notre mère la terre. Et chaque année, en plus des victimes silencieuses du changement climatique, qui sera le plus grand tueur en série de l'histoire de l'humanité si nous ne respectons pas les objectifs de l'Accord de Paris, de nombreux défenseurs de l'environnement sont aussi victime d'une guerre des hommes contre les hommes. Ici, on tue pour des terres, pour une parcelle de forêt. Ailleurs, c'est la raréfaction des ressources naturelles qui pousse les communautés, qui vivaient jusque-là pacifiquement, à se battre pour le peu de ressources naturelles encore intactes, qu'il s'agisse d'eau ou de terres fertiles. Plus loin, ce sont les bateaux de pêche industriels qui, en détruisant les stocks de poissons, plongent des communautés entières dans la famine et dans la pauvreté.

Il existe pourtant un autre chemin.

C'est celui que souhaitent emprunter les défenseurs de l'environnement. Celui d'une collaboration entre les femmes et les hommes, d'abord entre eux, et ensuite avec la nature. Il existe de multiple façon d'entrer en résistance, et de protéger notre planète. Partout sur la planète, une génération, celle qui succède directement à la mienne s'est levée ces dernières années. C'est une génération d'enfants, d'adolescents qui a compris, à l'âge où l'on devrait encore vivre de manière insouciante, aller à l'école, apprendre et jouer, que leur avenir était en danger. Qu'ils devaient se lever et imposer partout un changement profond, et déclarer la paix avec la nature. C'est une génération qui appelle les grandes entreprises à sortir des énergies fossiles et à stopper toutes les pollutions. C'est une génération qui traduit en justice les États qui n'en ont pas fait assez pour le climat et la biodiversité. C'est une génération qui se battra sans cesse simplement pour assurer un avenir à cette planète et à ses être vivants.

C'est une génération dont j'ai rêvé enfant, quand nous étions encore trop souvent, avec mes frères et mes sœurs autochtones, seuls à dire que notre mère la terre était malade. C'est une génération qui aurait dû avoir des rêves, et à laquelle nous sommes sur le points de léguer un cauchemar. C'est pourtant une génération d'espoir qui se lève, partout, en Europe, en Amérique, en Afrique en Pacifique et en Asie. C'est une génération, enfin, qui peut mettre un terme à cette guerre contre la nature.

Cette génération est notre meilleur espoir. Elle vient à la rencontre, sans préjugés, des solutions que d'autres défenseurs de l'environnement, les peuples autochtones, se battent pour faire reconnaître. Avec nos millénaires de vie au contact de la nature, nous avons dans nos connaissances et savoirs traditionnels un réservoir unique de solution, et nous sommes prêts à la partager. Car aujourd'hui, défendre l'environnement ne peut plus se résumer à manifester dans les rues, à négocier des traités internationaux trop mal ou trop peu appliqués et respectés.

Non, nous avons besoin d'agir. Les peuples autochtones le font déjà, et ils continueront à le faire. Ils continueront à produire des aliments en réparant les écosystèmes, comme le fait ma communauté dans le Sahel, avec son mode de vie d'éleveur transhumant. Aujourd'hui, nous sommes parmi les seuls éleveurs au monde à produire de la viande, du lait neutre en carbone. Nous sommes encore l'exception, demain nous serons la norme.

Les autochtones des forêts sont eux aussi en première ligne de la bataille climatique. Quand leur forêt brule, ils savent la replanter, réparer les écosystèmes pour que, peu à peu, les oiseaux, les mammifères, les insectes reviennent. Ils savent aussi comment résister aux crises, aux sécheresses, aux ouragans et aux pluies diluviennes, en trouvant des variétés de plantes comestibles dans les pires conditions.

Grâce à leur connaissance des écosystèmes, les peuples autochtones savent aussi éviter la transmission et le développement des maladies animales qui peuvent parfois contaminer les humains. Ils savent tirer du fonctionnement des écosystèmes des plantes médicinales

qui peuvent être d'un grand secours. Ils peuvent aussi lire, dans le comportement des animaux, des plantes, le futur des conditions météorologiques et ainsi fournir de précieuses informations pour s'adapter au changement du climat.

Ces connaissances et savoirs traditionnels doivent être reconnus, protégés, car ils sont une encyclopédie de solutions que nous, les premiers défenseurs de l'environnement, souhaitent partager avec le reste de l'humanité pour répondre aux deux grands défis de ce siècle: le changement climatique et l'extinction de la biodiversité.

Nous pouvons passer des alliances avec les sociétés et institutions pour partager ces solutions et agir ensemble, avec tous ceux qui veulent désormais en finir avec la guerre contre la nature. Car dans les sociétés industrielles, il y a aussi de multiples défenseurs de l'environnement. Certains ne manifestent jamais dans les rues, mais consacrent leur vie à trouver des solutions pour développer les énergies renouvelables, pour remplacer le plastique et tous les produits chimiques par des solutions fondées sur la nature. Nous pouvons travailler ensemble, nous unir pour changer en profondeur la relation de l'humanité avec notre mère la terre. Pour cela, il faudra respecter nos droits, et notamment notre droit à la terre. Le respect des droits humains est un pilier indispensable de la protection de l'environnement.

Nous, les peuples autochtones avons mille solutions à déployer partout. Nous avons des savoirs et connaissances qui peuvent nous permettre de vivre en harmonie avec nos écosystèmes, et des millions de projets qui peuvent protéger nos terres, nos forêts, nos océans.

Pour les réaliser, il est grand temps qu'au-delà du simple respect de nos droits, la communauté internationale nous vienne en aide. Alors que chaque année des milliards de dollars sont encore investit dans l'agriculture intensive qui détruit nos forêts et pollue nos sols, où dans les énergies fossiles qui détruisent notre climat, il n'existent presque aucun financement pour aider ceux et celles qui protègent 80% de la biodiversité mondiale à agir pour notre bien commun. Personne ou presque n'aide les projets de mes frères et sœurs autochtones pour protéger les forêts, gérer et partager durablement les ressources, prendre soin des coraux ou encore prévenir les prochaines pandémies.

Cela doit changer. Car protéger la nature, défendre l'environnement, ce n'est pas un simple engagement. C'est un mode de vie. C'est le chemin que nous devons tous prendre, c'est le plus beau des chemins: celui de la vie, en paix avec la nature, enfin.

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