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Managing Transnational UNESCO World Heritage Sites in Africa

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Transnational UNESCO World Heritage Sites in Africa – Cooperation is the Key to Success

Transnational UNESCO World Heritage sites are the ultimate manifestation of international cooperation – an enriching experience of interculturalism and dialogue between peoples. They offer a unique opportunity to explore and exchange effective and sustainable solutions to contemporary issues, such as climate change, migration, integration, conflict and many others.

For the first time, this publication presents the most up-to-date and comprehensive work concerning Transnational UNESCO World Heritage sites in Africa, reflecting the interdisciplinary and forward-looking approaches that have dominated research and conservation methodologies in recent decades.

The diverse articles and case studies shine a light on how transnational management of properties in Africa provides a crosscutting and sustainable response to contemporary issues related to heritage and associated communities.

It also explores the variety of challenges and opportunities related to the management of these sites and highlights best practices that have been implemented.

This publication, together with UNESCO, calls on all States Parties to the World Heritage Convention, concerned international and regional organizations, and all relevant stakeholders to support efforts to protect and promote Africa's rich cultural and natural heritage. It is through concerted action and joint activities that the recommendations from this publication can be implemented and thereby help preserve these properties for future generations.



This publication presents articles from more than **30** experts bringing together data covering **20** countries.



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'Since wars begin in the minds of men and women, it is in the minds of men and women that the defences of peace must be constructed.'

Foreword

Transboundary and transnational cooperation is at the very heart of the Convention Concerning the Protection of the World Cultural and Natural Heritage, as it reflects the core principle of shared responsibility, international solidarity and co-operation expressed in its Articles 4 and 6. It is an enriching experience of interculturalism and dialogue between people, and offers a unique opportunity to exchange and find effective and sustainable solutions for emerging issues such as climate change, migration, integration, conflict and many others. Home to the earliest human civilizations and some of the most spectacular natural places on Earth, Africa has fully embraced the World Heritage concept and is implementing some of the best practices when it comes to cross-border collaboration.

I am therefore extremely proud to present this first publication of *Managing Transnational UNESCO World Heritage Sites in Africa*. Building on the outcomes of several initiatives under the World Heritage Convention, such as the first regional meeting on transboundary cooperation for the promotion of effective management of World Heritage sites in Africa, held in 2019 in the city of Man (Côte d'Ivoire), and the dialogue during the Third Cycle of Periodic Reporting in the Africa region 2020–2021, this publication brings together a series of articles from specialists in the management of African heritage, reflecting the interdisciplinary and forward-looking approaches that have dominated research and conservation methodologies for transboundary management in Africa in recent decades.

By reading the articles of this publication, carefully selected by a technical and scientific committee, you will understand why transnational management of properties in Africa has emerged as a means to provide a cross-cutting and sustainable response to contemporary issues related to heritage and beyond. You will also learn about the variety of challenges and opportunities related to the management of these sites and different best practices that have been implemented.

I would also like to recall the important statement that is the Ngorongoro Declaration, adopted at the Arusha Conference in Tanzania in 2016, which stresses the importance of preserving African heritage as a driver for sustainable development. The Declaration considers African heritage as critically important in order to achieve regional socio-economic benefits, environmental protection, social

cohesion and peace. It is also worthwhile to highlight that this work is in line with the objectives of the African Union's Agenda 2063: The Africa We Want, addressing the challenges of safeguarding UNESCO World Heritage in Africa in the context of the region's rapid development, and advocating for the incorporation of regional strategies in the pursuit of solutions, which will necessarily lead to an Africa with a strong cultural identity, a common heritage and shared values. In this regard, I would like to extend my sincere appreciation and thanks to all the participating site managers, experts, institutions and government representatives for their commitment and dedication to the protection of African heritage for future generations.

Last, but not least, I am particularly thankful to the government of the Netherlands for paving the way for this publication, as well as the governments of China, Flanders, Norway and the European Union for supporting many activities aimed at promoting transnational management in Africa. I therefore call on all States Parties, concerned international and regional organizations, and all relevant stakeholders to support efforts to protect and promote Africa's cultural and natural heritage, as it is through concerted action and joint activities that the recommendations from this publication can be implemented in a sustainable manner for future generations.

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2015–2021

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Mechtild Rössler

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UNESCO would like to express its appreciation to the government of the Netherlands for its generous support for the organization of the first regional meeting on ‘Transboundary Cooperation for effective management of World Heritage sites in Africa’ which led to this publication. We also wish to express our sincere gratitude for the ongoing financial support provided by the governments of China, Flanders, Norway and the European Union to better safeguard, manage and promote transnational UNESCO World Heritage sites in Africa.

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Finally, this publication would not be possible without the contributions of the authors who have given their time to share their experiences through these articles.

Introduction

Adopted in 1972, the Convention Concerning the Protection of the World Cultural and Natural Heritage is one of the most important global conservation instruments. It embodies the core principle of shared responsibility and international solidarity by conveying the idea that, throughout the world, there are some cultural and natural heritage sites whose significance and importance are so valuable that their protection is not only the responsibility of a single nation, but rather that of the international community.

A transnational World Heritage property is a site inscribed on the UNESCO World Heritage List that spans the borders of more than one country. As of February 2022, 6 transnational sites in Africa were inscribed on the World Heritage List:

- Mount Nimba Strict Nature Reserve, shared by Côte d'Ivoire and Guinea: Natural site inscribed in 1982
- Mosi-oa-Tunya/Victoria Falls, shared by Zambia and Zimbabwe: Natural site inscribed in 1989
- Stone Circles of Senegambia, shared by Gambia and Senegal: Cultural site inscribed in 2006
- Sangha Trinational, shared by Cameroon, Central African Republic and Congo: Natural site inscribed in 2012
- Maloti-Drakensberg Park, shared by Lesotho and South Africa: Mixed site inscribed in 2013
- W-Arly-Pendjari Complex, shared by Benin, Burkina Faso and Niger: Natural site inscribed in 2017

Transnational UNESCO World Heritage sites are the ultimate manifestation of international cooperation – an enriching experience of interculturalism and dialogue between peoples. They offer a unique opportunity to explore and exchange effective and sustainable solutions to contemporary issues, such as climate change, migration, integration, conflict and many others.

Home to the earliest human civilizations and some of the most spectacular natural landscapes on Earth, Africa's dynamic legacy is an outstanding embodiment of universal values. Africa has gradually embraced the World Heritage concept and is

implementing some of the best practices when it comes to cross-border collaboration. The inclusive, participatory and collaborative methods linked to their implementation are all geared towards ensuring the conservation of sites, involving local communities, promoting regional integration, reducing poverty, strengthening social cohesion, and fostering sustainable development, innovation and peace among people.

Against this background, with the support of the government of the Netherlands, and in close collaboration with the UNESCO Office in Abidjan, the State Party of Côte d'Ivoire represented by the Ivory Coast Parks Office and Reserves (OIPR), advisory bodies (IUCN and ICOMOS) and the African World Heritage Fund (AWHF), the UNESCO World Heritage Centre organized the first regional meeting on transnational cooperation for the promotion of effective management of World Heritage sites in Africa from 11 to 15 February 2019 in the city of Man (Côte d'Ivoire). Attended by more than 60 experts, site managers, technical and financial partners, academics and private sector delegates from 20 African countries representing over 40 institutions involved in African heritage management, the meeting provided an opportunity to exchange knowledge and experience of the management of transnational World Heritage sites in Africa, including the use of traditional knowledge. Current and planned initiatives at the transnational sites, as well as potential extensions and nominations, were also discussed during the meeting. In addition, the role of the World Heritage Convention in promoting transnational cooperation was analysed and priorities for improving the effective management of transnational properties in Africa were defined.

Managing transnational World Heritage sites is considered as one of the main challenges for heritage conservation in Africa. From harmonizing legal provisions, coordinating transnational governance and establishing joint management mechanisms, to ensuring coherent development in all concerned States Parties' plans and engaging different communities living around the sites, the transnational management of World Heritage sites requires joint commitment and a complex coordination process. In this regard, discussions between the UNESCO World Heritage Centre, the African World Heritage Fund (AWHF) and African States Parties to the World Heritage Convention on the preparation of the regional Action Plan (2022–2027) have pointed to the establishment of landscape management cooperation plans for transnational World Heritage sites as one of the key activities to improve their conservation, effective management and promotion. The Action Plan (2022–2027) was approved during the extended 44th session of the World Heritage Committee in July 2021.

As UNESCO's first publication focused on transnational World Heritage sites in Africa, this book brings together the experience and reflections of seasoned African experts in the management of African transnational heritage. The contributions have been carefully reviewed by a technical and scientific committee composed of experts from the International Union for Conservation of Nature (IUCN), the International Council on Monuments and Sites (ICOMOS), the UNESCO World Heritage Centre and Springer Nature.

This publication showcases different initiatives across Africa that have led to the successful management of transnational UNESCO World Heritage sites (e.g. Sangha Trinational, W-Arly-Pendjari Complex, Mosi-oa-Tunya/Victoria Falls and Maloti-Drakensberg Park) and analyses the potential of some shared heritage (e.g. Koutammakou, the Land of the Batammariba and Lake Chad Cultural Landscape) to be extended or nominated as transnational World Heritage sites. It also addresses some cooperation initiatives at the initial stage led by one country.

In addition, the publication provides several testimonies demonstrating the approach and the value of involving local communities in the management of transnational World Heritage sites (e.g. Maloti Drakensberg Park). It highlights the key role that leadership and political will on the part of one or more governments can play in driving and cementing cooperation between States Parties, opening up discussions and searching for joint solutions on such varied regional challenges as demographic pressures, climate change and the management of biodiversity (e.g. Maasai Mara National Reserve and Serengeti World Heritage site). Lastly, this publication also provides perspectives on consolidating peace and promoting regional cooperation through the effective management of transnational UNESCO World Heritage sites in Africa (e.g. Greater Virunga Transboundary Collaboration, Central Africa World Heritage Forest Initiative (CAWHFI), BIOSphere and the Heritage of Lake Chad (BIOPALT) project).

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Managing the migration – Maasai Mara National Reserve and Serengeti World Heritage Site connectivity



Jacinta Nzioka



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Introduction

The greatest natural mass wildlife migration on the planet, involving one ecosystem, two different nations and millions of animals, brings together the Serengeti World Heritage Site (WHS) in Tanzania and the Maasai Mara National Reserve in Kenya. In terms of natural heritage, the border is crossed by the Mara River and represents a fluid boundary. On the scale of Indigenous local communities, the

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borderlands area is also shared on both sides by the Maasai peoples, long associated with a pastoral and herding tradition of domesticated animals, but more recently through transformed engagement in conservation and tourism activities. But with regard to the more substantive conservation, tourism and other economic or political aspects, the boundary between Kenya and Tanzania forms a more challenging frontier which, to be truly effective, demands a greater degree of cooperation and joined-up management of the ecosystem.

This paper reflects on the desire to share meaningful cooperations that require the incorporation of a multitude of agencies and responsibilities far beyond the basic involvement of the Kenya Wildlife Service (KWS) and natural heritage conservationists. The Maasai Mara is already acknowledged through its listing since 2010 in the Kenyan Tentative List of UNESCO World Heritage Sites.¹ The complexity is represented not least by the indication of the Maasai Mara as a mixed site under the Outstanding Universal Value criteria (v), (vii) and (x), whereas in the existing Serengeti WHS, it is only presented as a natural site under criteria (vii) and (x). For more effective collaboration across interrelated issues, such as anti-poaching, the evolving roles of Indigenous peoples and the development of sustainable tourism initiatives, as well as the desire for infrastructural development for the people, it is apparent that the future lies in measures that bring together combined management efforts which, as well as crossing borders, also bridge the nature-culture divide.

The ecosystem

The East African savannas are well known for the large-scale seasonal migrations of grazing herbivores. Perhaps one of the most well-known is the annual migration of 1.3 million wildebeest, along with 0.6 million zebras and Thomson's gazelles in the Serengeti-Mara ecosystem (Sinclair, 1995). The significance of this migration is enormous: it is the largest and most species-diverse large mammal migration in the world. It is of iconic importance for tourism and has huge ecological significance, resulting in the Serengeti National Park in Tanzania being listed as a WHS.

The Maasai Mara National Reserve

The Maasai Mara National Reserve is situated in Rift Valley Province of Kenya, in Narok County. It was inscribed onto UNESCO's Tentative List in 2010 as a mixed site under criteria (v), (vii) and (x). Indeed, the site qualifies for inscription onto the

¹ <https://whc.unesco.org/en/tentativelists/5512/>

full World Heritage List, as it hosts traditional human settlements that are under threat by human development; it is a unique and spectacular showcase for nature's beauty, with the migration being recognized by both travel media and tourists as one of the new wonders of the world. It is also recognized as an ecosystem for natural habitat and conservation, having some of the highest numbers of predators and savannah big game in the world.

The site adjoins the Serengeti National Park along the Kenya-Tanzania border, and is considered part of the same ecosystem. The National Reserve is Kenya's most-visited protected area, world famous for its high density of herbivores and predators, and the annual migrations of wildebeest, *Connochaetes taurinus*.

The Maasai Mara lies in the Great Rift Valley (fault line), some 3,500 miles (5,600 km) long, from Ethiopia's Red Sea through Kenya, Tanzania, Malawi and into Mozambique. It is characterized by a wide valley and a towering escarpment in the hazy distance. Habitats in the Maasai Mara are varied, including open rolling grassland, riverine forest, Acacia woodland, swamps, non-deciduous thickets, boulder-strewn escarpments, and *Acacia*, *Croton* and *Tarchonanthus* scrub. The permanent Mara and Talek rivers and their tributaries flow through the reserve and approximately trisect it. There is a pronounced rainfall gradient from the drier east (with c. 800 mm rainfall per year) to the wetter west (with c. 1,200 mm per year).

The Serengeti World Heritage Site

The Serengeti WHS, on the other hand, is situated on the north-east part of the United Republic of Tanzania and is at the heart of the larger Serengeti ecosystem, which includes other game reserves and conservation areas. It was declared a WHS in 1979.

The Serengeti National Park was inscribed onto the UNESCO World Heritage List in 1981² as a mixed site under categories (vii) and (x). The park is a nature site of phenomenal authentic beauty and unique natural habitat for conservation, and is managed by the Tanzania Parks Authority, a government agency.

Serengeti National Park was one of the first sites listed as a WHS when United Nations delegates met in Stockholm in 1972. By the late 1950s, this area had already been recognized as a unique ecosystem, providing us with many insights into how the natural world functions and showing us how dynamic ecosystems really are.

Today, most visitors come here with one aim alone: to witness millions of wildebeest, zebras, gazelles and elands on a mass trek to quench their thirst for water and eat fresh grass. During this great cyclical movement, these ungulates move around the ecosystem in a seasonal pattern, defined by rainfall and grass nutrients. These large herds of animals on the move cannot be witnessed anywhere else. Whereas other famous wildlife parks are fenced, the Serengeti is protected but unfenced, giving animals enough space to make their return journey – one that they have been doing for millions of years (Figure 1).

²<https://whc.unesco.org/en/list/156/>

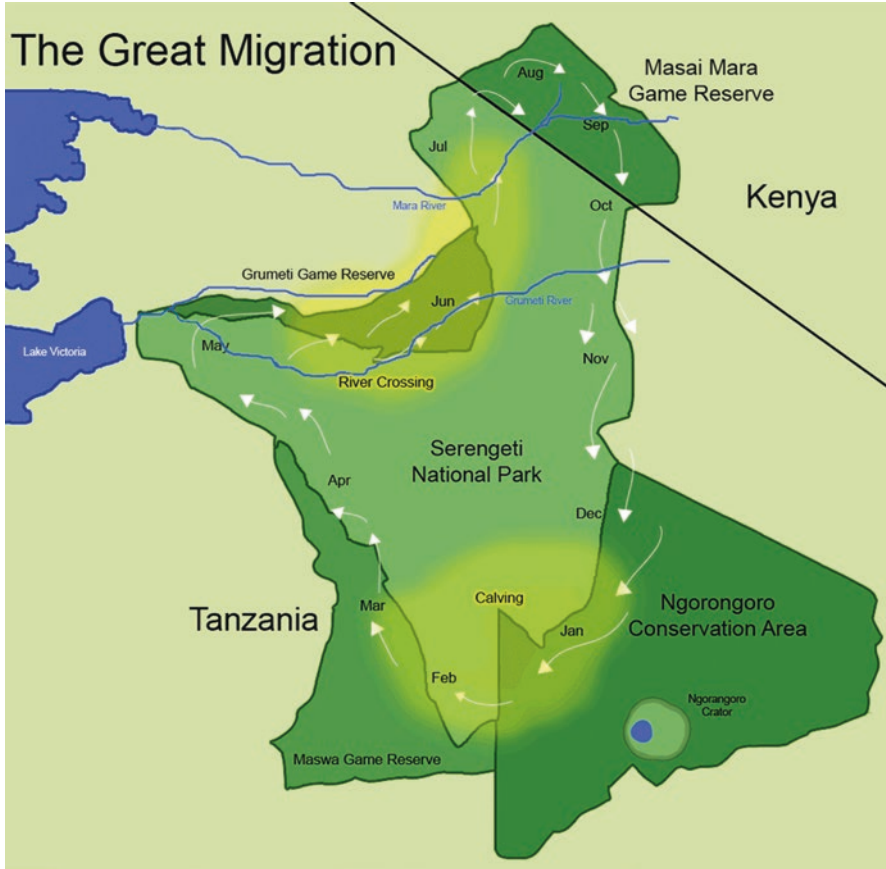


Figure 1. Flow of the migration between Serengeti and Maasai Mara. *Source:* UNEP, 2013. (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations).

Management of the transnational sites

The Maasai Mara National Reserve is managed by the Narok County Government. Because of a rapidly growing human population and accelerating land-use changes, there is ever increasing pressure on the reserve. Parts of the area have good agricultural potential due to moderately high rainfall and fertile soils. Large-scale farms with fields of wheat, maize, barley, soya beans and sorghum are already dotted across the landscape towards the north, in Lemek and Olkinyei. There are now farms within 10 km of the reserve boundary, and there have been serious human-wildlife conflicts in this area. The clearance of natural vegetation that accompanies agriculture increases the pressure for demarcation and subdivision of

land. This has led to the splitting up of group ranches into individual plots that can be fenced, leased or sold. Generally, subdivision is a process that contradicts wildlife conservation. As subdivision proceeds, the movement of wildlife is inevitably impeded, and human-wildlife conflict increases. Some 45 tented camps and lodges now operate in and around the reserve. There has been little consideration given to how many tourist facilities the area can support, and the proliferation of accommodation puts severe pressure on resources, particularly wood-fuel and water. Uncontrolled dry-season grass fires, poaching for meat both for subsistence and on a commercial scale, especially along the western boundary, invasion of the reserve by livestock, rampant off-track driving, and chronic harassment of animals have all attracted unwelcome attention.

On the other hand, the Serengeti National Park is managed by the Tanzania Parks Authority (TANAPA), which is an agency of the federal government, and has been engulfed by a series of management challenges that threaten the property. Similar challenges facing the Mara are seen in Serengeti, although not on the same scale of rampant intrusion; Serengeti still remains less crowded, especially with regard to tourism infrastructural development. The escalation of elephant and rhino poaching in the property is of significant concern and is also affecting other natural properties in Tanzania and across the African continent. While the authorities are undertaking efforts to contain the situation in Serengeti, a broader approach to solving the illicit trade in ivory, rhino horn and other wildlife products is required. According to UNESCO's 2014 World Heritage Committee report, there are a number of threats beyond poaching that need to be considered through joint management of the ecosystem, including infrastructure development (airports, airstrips and roads), hydrological challenges, development of tourist camps and lodges.

The case for a considered review of the transnational site management

Currently, UNESCO lists 37 transboundary World Heritage sites globally and the migration is not on the list. Serengeti is a listed nature site, and the Maasai Mara is on the Tentative List.

The Serengeti and the Mara are quite unique, due to their large concentrations of wildlife and the great wildebeest and zebra migration, and carnivores that follow suit. Both these areas are exceptional, in that no migration of this magnitude happens anywhere else in the world. The two sites are also an area whose host communities, the Maasai people, still lead traditional lifestyles that are now under threat from human development and the growth in tourism. The community found in Serengeti is the same as that found in Maasai Mara. They share the same language, lifestyle, values and practices, and are believed to be the same Maasai people, who are simply on either side of the border. Like the herbivores that migrate across the Mara river between the two countries, the Maasai people equally make the crossing to interact,

as they uphold family ties across these imaginary ‘colonial borders’, as the local people refer to them. Maasai Mara is surrounded by ‘community conservancies’ – buffer zones and private conservation zones whose owners voluntarily leave their land for conservation by private agencies in return for an income from leasing the land. This eases pressure on the reserve due to growing species populations, gives the locals an economic alternative to grazing and ensures a concerted effort towards conservation in the ecosystem.

Serengeti National Park, on the other hand, is sufficiently large and intact to ensure the survival of all the species contained therein, if maintained in its present state, but that does not in itself ensure the protection of the entire ecosystem. That said, all other parts of the ecosystem do have a greater or lesser degree of protection. A potential threat is the plan to build a transport infrastructure through the Serengeti. This would essentially bisect the ecosystem, with predictably negative consequences for both the Serengeti and the Mara.

UNESCO’s World Heritage Committee Report of 2014 recommended to the States Parties of Kenya and Tanzania to further strengthen efforts towards the sustainable management of the Mara River Basin and preparation of a joint management plan for the basin, and to sustain and strengthen management programmes, including collaboration with other stakeholders across the wider Serengeti ecosystem through the Serengeti Ecosystem Forum. Progress has been very limited with this, which continues to pose a threat to the sites.

A Joint Tourism Marketing Strategy – a recent engagement under the East Africa Community (EAC) regular summits in 2018 – identifies transnational tourism product development as key. This includes the ecosystem, but there are visible challenges in implementing the strategy, due to disjointed management of the zone. The proposed infrastructure development by respective states should be reviewed to balance conservation and human development.

The East African savannas are highly resilient and variable ecosystems, so migration enables animals to track spatially and temporally varying resources across the landscape. This gives migratory populations an advantage over resident populations, and allows these populations to rise to very high levels (Hopcraft et al., 2013). Migrating animals may also move to access breeding grounds, to reduce the risks of predation and disease, and to enhance their genetic health (Bolger et al., 2008).

A passive, yet serious, threat to the migration as a unique and authentic natural phenomenon is climate change, in particular affecting the source of the Mara River. The Mau Forest in the rift valley highlands of Kenya is currently undergoing a reforestation programme following massive deforestation over the past ten years. The migration is triggered by climatic changes and natural seasonality of rains and breeding patterns, forcing the wildlife to cross the river for both breeding and feeding seasons. Any interruption to these natural trends will affect entire populations, and it is not clear how much longer the wildlife will continue to migrate between the two countries if the breeding and grazing patterns are interrupted by climatic changes.

Excessive numbers of visitors and an over-reliance on wildlife tourism by the two countries, specifically during the wildlife migration season, puts pressure on the two reserves – zealous travellers wait for hours to see this unpredictable, mysterious

and amazing theatre of natural cinema. Human interference, blocking some migratory routes, to obtain a close encounter with the migrating animals, no matter how fleeting, has a long-term effect on the migration.

Wildebeest are especially vulnerable to human impacts in their wet season ranges. Many protected areas in East Africa primarily conserve the dry season habitat for migratory wildlife, with the wet season ranges occurring almost entirely outside of protected areas on adjacent communal or private lands. Protected areas also tend to be small and were not designed to conserve all of a migratory species' habitat requirements (UNEP, 2013). As a result, wildebeest must journey outside of protected areas to reach their wet season ranges. Here, they face a number of pressures due to human population growth, land-use change and increasing development.

Conclusion and recommendations

Conserving wildlife migratory routes requires implementing conservation plans beyond protected area boundaries. The dispersal areas and migratory corridors encroached upon by humans can be kept open for wildlife by encouraging wildlife-friendly land uses, and the cooperation and participation of community and private landowners. Governments need to provide the correct enabling policy and legislative environment to support the types of initiatives already emerging to protect migratory habitat.

Due to the transnational nature of the wildebeest migration in East Africa, the respective countries and governments, both national and local, need to work together to mitigate threats to the migrations.

Factual scientific information on where, when and why wildlife migrations occur is needed to inform conservation and management decisions, and to project future trends if the information is not adopted into planning today. This includes mapping the movements and ranges of wildebeest, the ecological drivers of migration and population levels, and a good understanding of the threats to migrants and their habitats.

The Kenya and Tanzania governments are already mapping wildlife corridors and migratory routes with the aim of securing critical wildlife areas. In other initiatives, researchers are collaring wildebeest to track their movements to understand the effects of landscape fragmentation and climate change, and reporting their movements online.

Conserving migrations requires a proactive approach, anticipating and responding to threats before the abundance of migrating animals is critically reduced, and thus the phenomenon of migration long-gone. In this regard, conservation organizations such as the Convention of Migratory Species, which works to conserve migrations of species threatened with extinction, could be expanded to conserve threatened or endangered migrations, and not just those which contain rare or endangered species (Harris et al., 2009).

Efforts to secure dispersal areas and migratory corridors will require an integrated approach to land-use planning both inside and outside of protected areas. By taking into account wildlife and their migratory routes, people, livestock, landscapes and natural resources, a more comprehensive conservation effort can be made. Thus, there is a need to work collaboratively with landowners and users to identify threats along migratory routes, so that these critical areas can be effectively protected.

Extensive consultation with communities and landowners, as well as governments, conservation organizations and other stakeholders, must be a prerequisite to any action. The rapid and dramatic wildebeest population decline in East Africa calls for urgent, comprehensive and decisive remedial steps to protect the remaining populations and rehabilitate their habitats. This will enhance their resilience to the intensifying droughts and contribute to the sustainability of local livelihoods.

UNESCO also has an opportunity to revisit the listing of the site, review its current listing criteria and expand the same to ensure that the entire ecosystem is listed as one. This may compel responsible institutions to align their management and monitoring of all programmes, including conservation and infrastructural developments, to ensure the sustainability of the site for the long term.

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Challenges in preparing a serial transnational nomination for geometric rock art sites in the Lake Victoria region of Kenya, Tanzania and Uganda



Jackline Nyiracyiza Besigye, Sarah Musalizi, and Raymond Asiiimwe

Introduction

Lake Victoria's proposed rock art nomination represents an extensive collection of rock paintings. These include large geometric finger-painted shapes that bear an exceptional testimony to a cultural tradition that started over four millennia ago in connection with fertility and potency among the Pygmy hunter-gatherers, whose spirits are still in contact with generations living around the sites today (Namono, 2010a). For instance, the entrance to the Nyero 2 site in Uganda is shaped like a cervix (Figure 1) and it is indeed possible that at that time this area was used for fertility rituals.

The geometric rock art sites in the Lake Victoria Basin are found on granite outcrops, adding to the site's mystery. This is also seen on the islands of Lake Victoria, especially at Dolwe, Mfangano and Mwanza, where rock boulders are very often found on top of each other. The rock art in this area includes outstanding examples of a rock painting tradition made within a ritual context by hunter-gatherers ancestral to the forest Pygmies of East and Central Africa (Namono, 2010a). As the hunter-gatherers were most likely related to the Later Stone Age, the geometric paintings were probably made between 4000–14,000 BP. While further examples of the tradition are found on other islands in Lake Victoria in Kenya and in Tanzania, the Ugandan sites are more numerous, more detailed and more clearly associated with Pygmy cosmology (Hollman, 2017).

The significance of the rock art, its power and potency are derived from the meaning encoded in the shapes depicted and the sites selected (Namono, 2010a). These were sites of contact with the spirit world. The present inhabitants in and around the rock art sites attach new meaning to them, but they continue to fulfil a similar function of engaging with the supernatural. The surfaces with rock art

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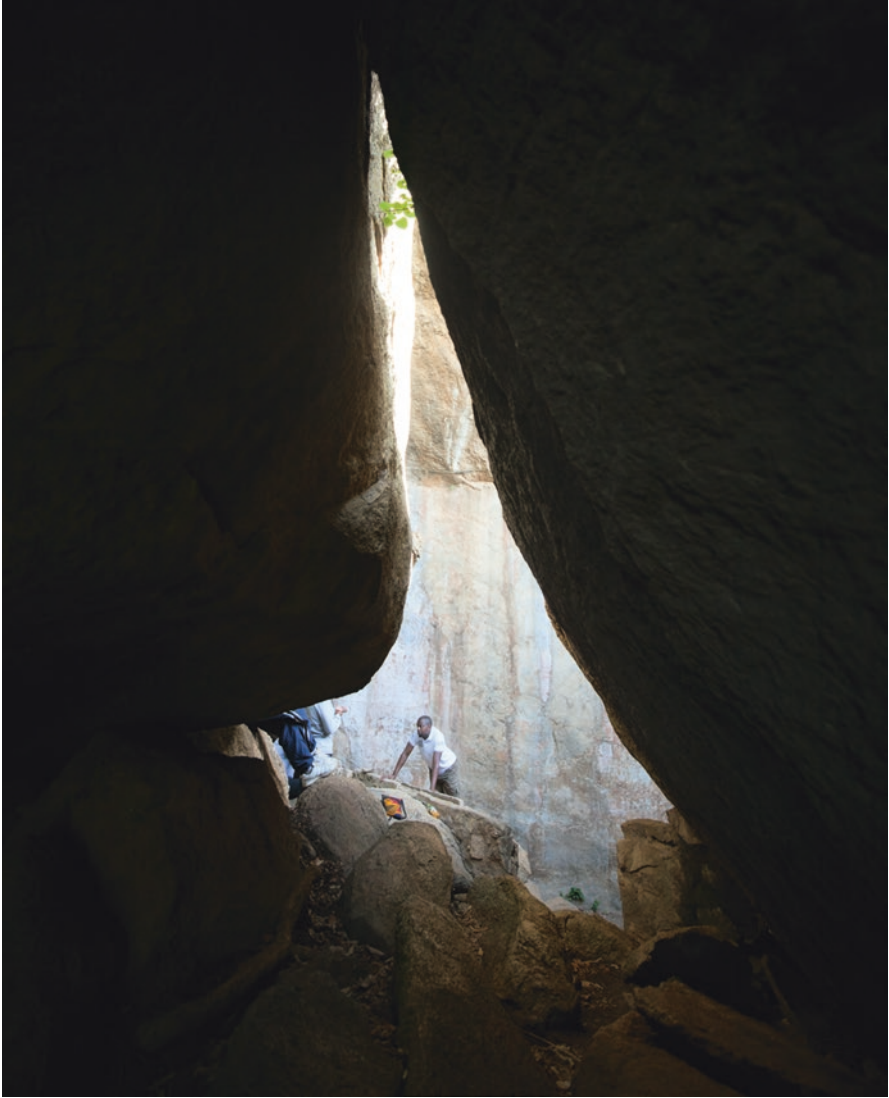


Figure 1. Photo by Jeremy Hollman, who interprets this entrance to Nyero 2 to signify fertility. Most rituals took place at sites like this.

remain ‘pregnant’ with potency. In depicting phallic and womb shapes, the Pygmies were harnessing the potency of the forest which ritually assured fertility and regeneration (Namono, 2010a). Harnessing potency can be equated to harnessing the fertility that present-day users of rock art sites seek to obtain from the ancestors and the supernatural world. At Nyero 2, barren women seek to become fertile by

touching the surfaces on which the images are painted and leaving monetary tokens for the spirits in anticipated appreciation of success. At Kakoro, they slaughter chickens in appeasing these gods to get children.

Like the other sites in Lake Victoria region, such as Mfagano, the sites are also associated with rain-control activities, as elders from the local communities report to have witnessed or participated in the rainmaking practices at the rock art sites. All these sites are referred to as ‘the place of the spirits’, also reported by local people at Kapir, Kakoro, Mukongoro and Dolwe rock art sites. The sites therefore remained powerful, even after the tradition of rock painting had disappeared.

It is often said that rock art sites contain the world’s greatest works of art, with aesthetic values and powerful and spiritually charged imagery embedded in the landscapes (Neville et al., 2015, p. 6). In many parts of Africa, rock art continued to be made until very recently. For instance, some of the works in South Africa and Namibia are attributed to European art (Smith and Ouzman, 2004). In East Africa, we have art attributed to the Bantu that could date back around 100–200 years; and some white agriculturalist art can also be found in Kondo. The rock art found at Lake Victoria Basin, however, has a quite distinct style and cannot be found anywhere else. The form, and especially the spiritual values on fertility, make it unique.

The proposed Lake Victoria nomination properties belong to a distinctive tradition called ‘red geometric art’ (Mabulla, 2005, p. 36; Namono, 2010b, p. 41; Hollman, 2017). This is the geo-cultural framework of the nominated art, which is thought to be associated with groups of Pygmy hunter-gatherer peoples who occupied the central African rock art region for thousands of years (Namono, 2010a, b, 2011, 2012). In the case of the Pygmy peoples who lived around Lake Victoria Nyanza, and in the dambo landscape east of Lake Kyoga in eastern Uganda, they were also likely to have subsisted on fish. The attribution of hunter-gatherer authorship has been widely argued by researchers, e.g. Mortelmans (1952) and, most recently, by Smith (1995, p. 251, 2005, 2013) and Namono (2010a, pp. 26–38, 2012, pp. 406–19). Olivier (2011, pp. 204–301) agrees with this notion. He notes that the Batwa/Pygmy in Equatorial Africa are socially and economically linked to those in south and central Africa, and are the authors of the red geometric art.

Archaeologically, a few Ugandan and Kenyan sites show that rock art users were probably Late Stone Age to Iron Age. Kanyore pottery has been excavated in Nyero 2, Uganda and Kakapel in Kenya. Other common archaeological materials are LSA lithics, Urewe ware potsherds and MIA and LIA potsherds. Some tools, such as curved wood roulette, are also depicted on rock art. The dating of two Ugandan sites (Nyero and Kakoro) indicates that the paintings were done between 1,000 and 5,000 years ago. It should be noted that Mwanza is known for Early Iron Age sites from about 500 BC. We think that the sites documented by Chaplin (1974) and Mabulla (2005) are of the same cultural affinity.

Location of the project area

The serial transnational nomination is considering two sites from Kenya, five from Tanzania and six sites from Uganda (Figure 2). All the proposed sites for serial transnational nomination are either on islands or in areas which were formerly swamps or wetlands. In the same way as today, people who lived in the dombo areas made full use of their environment through specializing in the hunting of water antelopes, fishing and growing certain crops (Turchetta, 2013; Olivier, 2011).

The process for the serial transnational nomination dossier for the Lake Victoria region rock art of Kenya, Tanzania and Uganda

This idea was first mooted in 2017 after several consultations with the International Council on Monuments and Sites (ICOMOS) on the Nyero and other hunter-gatherer geometric rock art sites in Uganda. A report by ICOMOS recommended that Uganda provide additional information on the comparative analysis. Following the report by rock art specialists, ICOMOS recommended a serial transnational nomination that includes other geometric rock art sites in the Lake Victoria region.

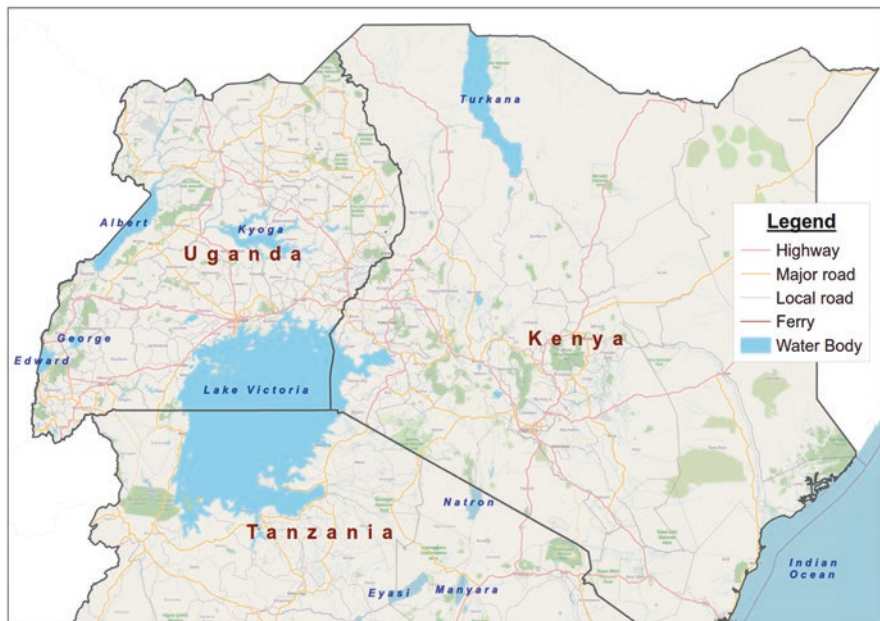


Figure 2. Location of nomination sites in Kenya, Tanzania and Uganda (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations). *Source:* Jackline N. Besigye, 2021.

In this regard, a workshop to kick-start planning for the new project was held from 23–26 August 2018 in Uganda, Kampala (Figure 3).

Specifically, the workshop aimed to:

- Impart theoretical knowledge on what the scope of a serial nomination should be.
- Get further guidance on the roadmap to a successful serial transnational nomination dossier by inviting experts from within the region (Africa) and ICOMOS.

Workshop Recommendations

- Formulate a task force to be composed of around nine professionals.
- The task force should be an expert committee derived from the States Parties who have long experience of this work. Involve the museums from the State Parties and other institutions, especially universities in the three countries. Some of the universities suggested included Makerere University and Kyambogo University in Uganda; the University of Nairobi in Kenya and the University of Dar-es-salaam in Tanzania.
- Dr. Janette Deacon and Jeremy Holmann to be technical advisers on the activities to be conducted by the task force.
- Formulate terms of reference that show social links, in order to determine the connectivity to rock art sites. The nomination dossier for Uganda already has a lot of information and therefore other States Parties need to add to this.



Figure 3. Some of the members who attended the opening ceremony for the workshop. © Raymond Asiimwe.

- Assistance to the State Parties to be provided by the Africa World Heritage Fund (AWHF). The representative from the AWHF suggested that the task force should come up with a work plan and later engage the AWHF for assistance. This can be offered in the form of funding and technical assistance.
- Further research to obtain detailed information, based on facts. This includes mapping sites, a detailed interpretation of the rock art and the archaeology of these sites.
- An open database of rock art to be created, which will be accessed by the three States Parties.
- Conclusions from the workshop to be forwarded to the East African community by the Minister of Tourism, Wildlife and Antiquities (Uganda), so that possible resources could be arranged to conduct the nomination process.
- UNESCO regional office to initiate meetings between the three countries (Kenya, Tanzania and Uganda) to discuss the issue of the transnational serial nomination of the geometric rock art.
- ICOMOS representative to report to UNESCO headquarters in Paris, to request that they write to the regional office.
- Uganda to coordinate and lead the entire process of the transnational serial nomination.
- Uganda and Kenya to travel to Tanzania for the initial negotiations with Tanzania.
- The three countries to sign a memorandum of understanding (MOU).
- Kenya representative to follow up on the signing of the MOU for the Mount Elgon Biosphere Reserve, for it to be submitted for nomination.
- The nomination file name to be changed to ‘Geometric rock art in Lake Victoria Region¹ of Kenya, Tanzania and Uganda’.
- The name of the serial nomination to be forwarded to the Tentative List and individual sites for at least a year before the property is nominated.
- Department of Museums and Monuments to send photographs of the graffiti at Kandege 2 (Dolwe Island) to Dr. Claire Dean, who is based in Seattle, USA, and ask for her advice about removing it.

Activities undertaken to date

MOU drafted and submitted to Kenya and Tanzania through the Ministry of Foreign Affairs and the idea of rock art nomination tabled to the East African parliament by the Uganda representative, the Honourable Mary Mugenyi.

The Ugandan team, together with their Tanzanian colleagues, visited sites in Mwanza in July 2019 that had been documented by Chaplin (1974) and Mabulla (2005). We noted that all rock art in the Bukoba, Mwanza and Mara regions were

¹For the purpose of this task force, the area will be defined as encompassing Lakes Victoria, Kyoga and Turkana and their geo-cultural hinterlands.

last documented in the 1950s, 1970s and 2005, respectively. Therefore, no current proper documentation of these sites is available – for instance, their location and status is not currently known to the Ministry of Natural Resources and Tourism. There is a lot of rock quarrying and use of rock outcrops for construction; therefore, it is possible that some unknown sites could have been destroyed (Figure 4).

Other observations from Mwanza

Two sites at Kigongo and Chole visited were well-preserved, although the ministry were not aware of them:

Kigongo rock art site

The site is a few metres from the lake and can be viewed from the ferry. It bears a cross which was erected on the topmost rock boulder above the paintings (Figure 5). The site is owned by the descendants of Chief Milewa, who welcomed Christianity to Tanzania and also had good trade ties with Mutesa I of the Buganda Kingdom. The painting is accessed through the chief’s courtyard, where there are even burial grounds.

Two shades of painting can be observed at Kigongo site: yellowish and red. No superimposed painting was observed (Figure 6).



Figure 4. Mwanza City, built on rocks. © Jackline Nyiracyiza Besigye.



Figure 5. The Christian cross on the topmost boulder, with rock paintings at the Kigongo site, just a few metres from the ferry landing site. © Jackline Nyiracyiza Besigye.



Figure 6. Kigongo rock paintings of both red and yellowish hues. © Jackline Nyiracyiza Besigye.

Chole rock art site

This site is in Chole subcounty, about 4 km from the main road and Kigongo. The paintings at Chole are magnificent, drawn on the base of the rock and its large overhang with a commanding view to the east (Figure 7). They are easily accessible, and can be viewed from a distance of just 10 m. The site consists of two large boulders, one resting on the other, to form an enclave on one side. On the other side is an open space with a wider view of rock painting on the lower end of the shelter. The base



Figure 7. Chole paintings, formerly documented by Chaplin (1974), that are similar to those in Uganda and Kenya, and could be of same cultural affinity. © Jackline Nyiracyiza Besigye.

of the panel rests on the edge of a heavily patinated rock, especially on the south-eastern side, due to running water. About 28 geometric designs were observed on the overhang boulder and 10 faded designs on the basement boulder. The artist has used the finger technique for these paintings, which are in red, superimposed over a yellowish hue.

Three copules, or rock hollows, similar to those of Dolwe Island, were also documented. The site is well preserved and a few metres from the lake. A few Kansyore, Early Iron Age, Boudine and Roulette sherds were observed on these sites.

Following the recommendations from the workshop and Mwanza meeting, rock art experts from Uganda, Kenya and Tanzania, along with a rock art specialist from South Africa, were supposed to have visited and documented the sites of Kenya and Tanzania and created a database by November 2019. However this could not take place, as Uganda has been waiting for its counterparts to approve the MOU for this project.

Challenges of serial nomination

Consent from Tanzania: Because of differing policies and regulations from country to country, consent is still a challenge. Our Tanzanian colleagues participated in some of the initial activities but their full participation so far is still limited. In

January 2019, the Ministry of Tourism, Wildlife and Antiquities of Uganda sent a reminder informing the Tanzanian Permanent Secretary, Ministry of Natural Resources and Tourism about the transnational nomination process, but we have not received any response to date.

A Draft MOU was drawn up by Uganda and submitted to Kenya and Tanzania through the Ministry of Foreign Affairs, but one year after the submission, there is still no response. This has caused a number of delays on the Ugandan side.

Resource constraints: Much as this is a transnational nomination process, funding is currently provided by one State Party – Uganda. For this reason, Uganda is pushing for the meeting between the three countries before the budget processes end.

The COVID-19 pandemic has halted some activities, e.g. Uganda's sponsorship of the geo-referencing of the entire Lake Victoria rock art sites project. Also, following the death of the Director of Antiquities for Tanzania, we have to begin afresh with a new administration.

Future plans

- Uganda is gazetting all the rock art sites.
- Department of Antiquities Tanzania is to appoint an expert to work on the serial transnational nomination.
- Tanzania is to survey and gazette rock art sites proposed as part of the serial nomination.
- Kenya and Tanzania need to fast-track the MOU.
- Department of Museums and Monuments of Uganda to work with Ministry of Foreign Affairs to ensure MOU between the three countries is signed.
- The three countries to write joint funding proposals for implementing the project.

Proposed criteria for serial transnational nomination in the Lake Victoria region

In East and Central Africa, only two rock art sites are inscribed onto the UNESCO World Heritage List (WHL). It has been a longstanding question as to why Africa, rich with so many cultural sites, is so underrepresented on the WHL, and her sites mostly on the danger list.² In the case of rock art, only four sites from Tanzania, Zimbabwe and South Africa have been inscribed. While these sites have an element of hunter-gathering, the sites we wish to present in the serial transnational nomination of the Lake Victoria region present a unique feature of geometric red painting with fertility symbolism. They also contribute to the overall significance of the

² See: <https://whc.unesco.org>

proposed nomination properties and testify to the temporal and spatial depth and breadth of the Red Geometric Tradition in Central Africa (Hollman, 2017).

The criteria that we are proposing to use for the nomination are as follows:

Criterion (iii). The proposed nominated properties ‘bear a unique, or at least exceptional, testimony to a cultural tradition or to a civilization which is living or which has disappeared’.

- As regards the proposed serial transnational nomination, Lake Victoria region rock art ‘represent[s] an extensive collection of rock paintings with large geometric finger-painted shapes that bear at least an exceptional testimony to a cultural tradition that started over four millennia ago, in connection with fertility and potency among the Pygmy hunter-gatherers whose spirits are still in contact with present generations living around the sites today’.

Criterion (vi). Be directly or tangibly associated with events or living traditions, with ideas, with beliefs, or with artistic and literary works of outstanding universal significance.

- Local people visit some of the proposed nominated Uganda and Kenyan properties in the hope of fulfilment of their wish for fertility and/or rain (Posnansky and Nelson, 1968). The proposed Lake Victoria sites have outstanding aspects of values incorporated in local, contemporary beliefs and practices that cannot easily be found anywhere else in the world.

Conclusion

We have noted that sites in the Lake Victoria region continue to bear symbolic and religious significance to the current occupants of the area, a tradition handed down through generations. Ethnographic records confirm rock art does not illustrate daily life, but rather the artists’ religious beliefs and experiences (Chirikure et al., 2018). As can be seen in Uganda, geometric patterns in Kenya and Mwanza (Tanzania) are related to rites of passage for boys and girls as they approach fertility. We also note the presence of rain-making rituals, Bantu Iron Age users from 500 BC (Schmidt, 1997), geometric patterns on potsherds representing curved wooden roulettes, Kanyore-Urewe pottery and red geometric paintings, all of which justify a serial nomination of these sites.

We note that serial transnational nominations are now key priorities of UNESCO World Heritage, but that some elements need to be examined. It should be noted that for such a nomination to be successful, all key States Parties must be engaged. When the UNESCO World Heritage Centre organized a site meeting during the 43rd session of the World Heritage Committee held in Baku, Azerbaijan, in 2019, where the three State parties were present, there was limited interest due to other priority sites for nomination. It is therefore imperative that the World Heritage Committee consider partial nominations. This will ease the work of some States Parties who wish to nominate sites but whose neighbours are not ready.

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Transnational cooperation for effective management of the Okavango Delta World Heritage Site: The case of the Cubango-Okavango River Basin



Gertrude Matswiri

Introduction

Transnational natural heritage sites transcend national boundaries of two or more countries. The effective management of these sites requires close collaboration and cooperation between States Parties. Some of these natural heritage sites are Ramsar sites¹ and World Heritage sites. In addition, some of the transnational natural heritage sites are river systems; most countries have put in place agreements and structures for the effective management of these. With time, parts or the whole of these transnational river systems have been inscribed as World Heritage sites, not only because of their hydrological values but also due to other values such as biodiversity, biological and geomorphological processes, cultural and aesthetic values.

The inscription onto the World Heritage List of a part of a heritage site in one country creates gaps and complexities in its management, as the other parts do not have World Heritage protection and the State Parties are not bound by the requirements of the World Heritage Convention. This is the case for the Okavango Delta World Heritage Site in Botswana, which is part of the Cubango-Okavango River Basin managed under the Permanent Okavango River Basin Agreement of 1994, which focuses mainly on the hydrological values of the natural site. However, it is important to note that such agreements have been effective in ensuring the management of these river systems and therefore provide a platform for the introduction of other international agreements.

¹<https://www.ramsar.org/about-the-convention-on-wetlands-0>

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Location and description of the Cubango-Okavango River Basin and the Okavango Delta World Heritage Site

The Cubango-Okavango River rises in the headwaters of the Cuito and Cubango rivers in the highland plateau of Angola. The topographic extent of the Cubango-Okavango River Basin comprises approximately 700,000 km² but derives its principal flow from 120,000 km² of sub-humid and semi-arid rangeland in the Cuando Cubango Province of Angola. The basin is drained by the Cubango (referred to as Kavango in Namibia and Okavango in Botswana), Cutato, Cuchi, Cuelel, Cuebe, Cueio, Cuatir, Luassingua, Longa, Cuiriri and Cuito rivers and the Okavango Delta. Flowing from the Angolan highlands, the Cubango-Okavango forms the boundary of Namibia and Angola, and on this stretch is joined by the main tributary, the Cuito, before flowing through the panhandle as it enters Botswana and spilling into the Cubango-Okavango Delta, or Fan, in Botswana. The outflow from the delta forms a set of evaporation pans in the Kalahari Desert, principally the Makgadikgadi Pans fed by the Boteti River (OKACOM, 2011, p. 5) (Figure 1).

The Cubango-Okavango River Basin is internationally important for its biodiversity and biological productivity. The Okavango Delta is the best known feature of the river basin and is one of the largest Ramsar sites in the world (Figure 2). With its location, variety of habitats and resulting biodiversity, it is globally one of the unique areas for biodiversity conservation. The wetland environment of the delta provides a staging post for birds migrating to Southern Africa during the boreal winter and is a storehouse of globally significant biodiversity. The Cubango-Okavango River Basin has national, regional and – importantly – global environmental value. The basin supports predominantly rural communities, most often located either adjacent to the river or along roads (OKACOM, 2011, p. 5).

The Okavango Delta – the Botswanan part of the Cubango-Okavango River Basin – is a Ramsar site (1997) and a World Heritage site (2014). It was inscribed under criteria (vii), (ix) and (x) for its unique hydrological, biological and geomorphological processes, biodiversity and aesthetic natural beauty. The Namibian part of the Cubango-Okavango River Basin is a Ramsar site (2013) – the Okavango Bwabwata Ramsar Site. The site covers the lower Okavango River, part of the Okavango Delta Panhandle and permanently or temporarily flooded marshes and floodplains bordered by riparian forest and open woodland. Parts of the southern boundary of the site are contiguous with the northern boundary of the Okavango Delta Ramsar Site in Botswana (RIS, Namibia, 2014). The Namibian part of the Cubango-Okavango River Basin is also on the country's World Heritage Tentative List (2016), which means it is recognized as having the potential to be a World

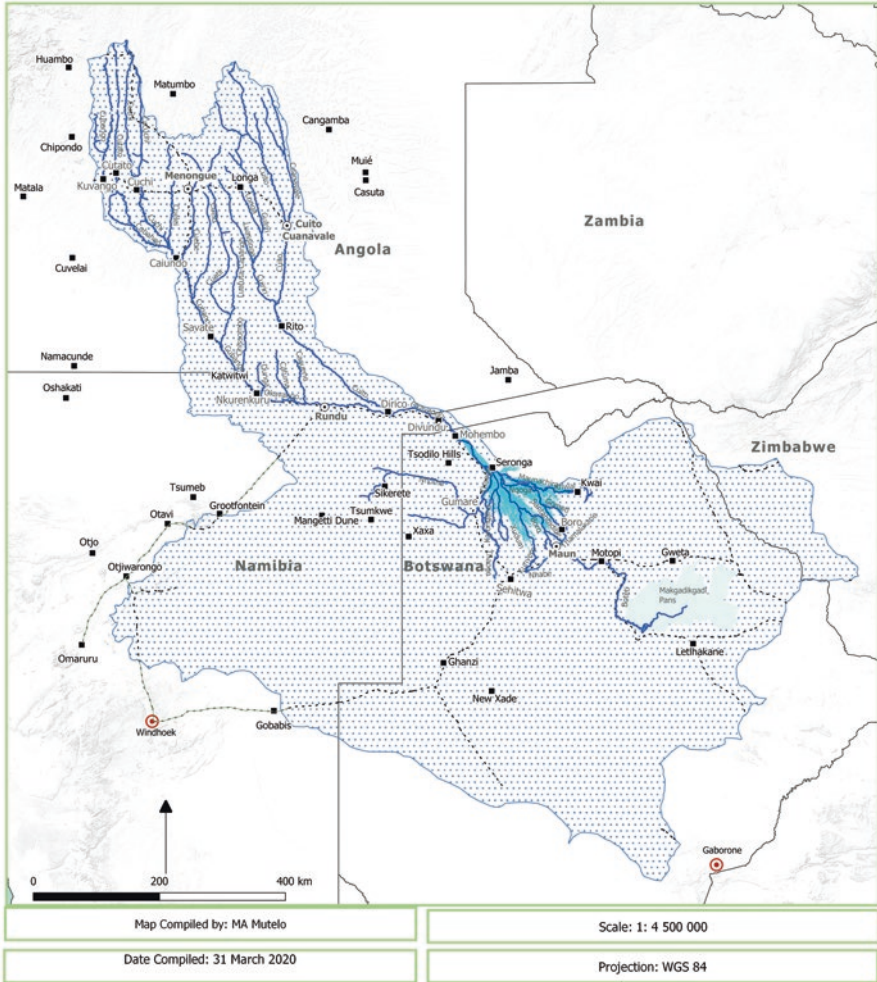


Figure 1. Map showing the origins of the Cubango-Okavango River Basin. *Source:* Okavango Delta Nomination Dossier, 2013. (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations).

Heritage site. This is based on the same criteria as the Okavango Delta World Heritage Site in Botswana. Currently, Angola’s part of the river basin has no Ramsar or World Heritage status. A coordinated effort is therefore needed to ensure the same level of protection for the whole river basin, and for effective management of the transnational natural site.

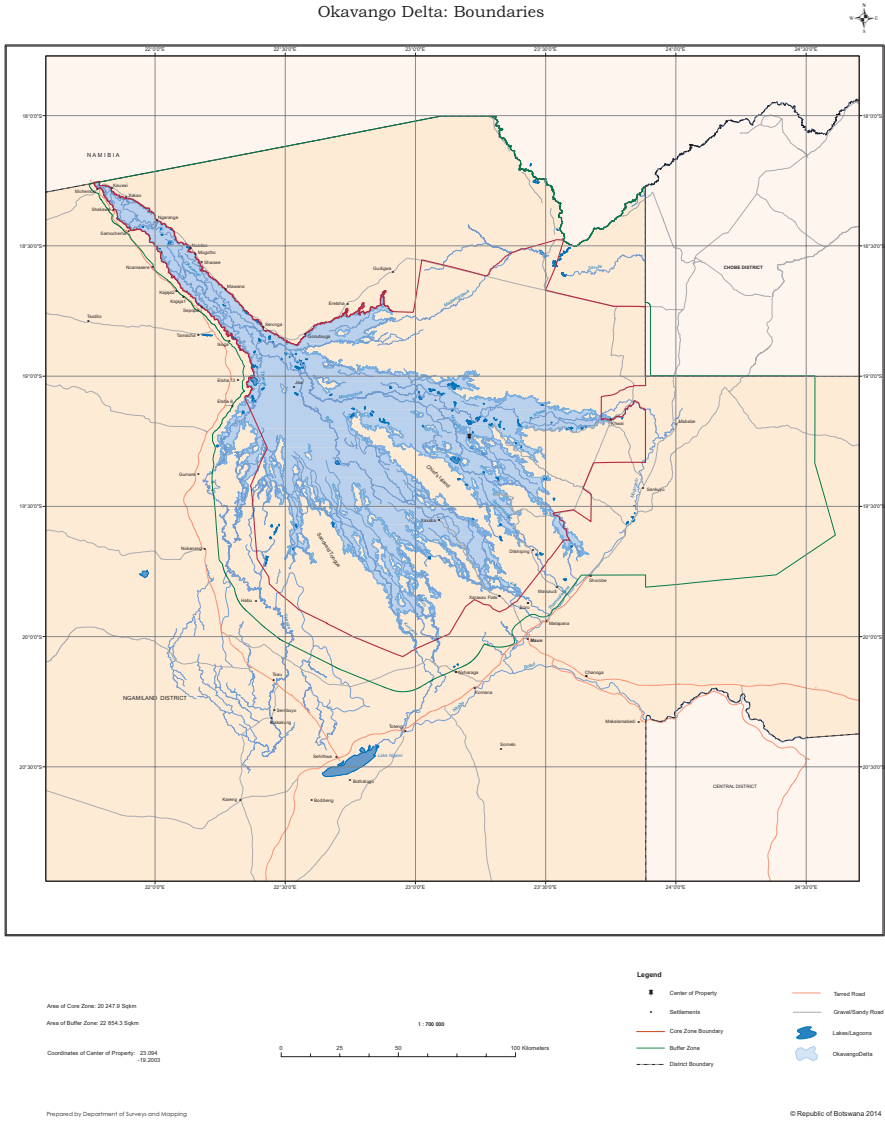


Figure 2. Okavango Delta map showing World Heritage boundaries. *Source:* Okavango Delta Nomination Dossier, 2013. (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations).

Current management of the Cubango-Okavango River Basin

The Cubango-Okavango River Basin is managed through OKACOM, established in 1994 by the 'Agreement between the Governments of the Republic of Angola, the Republic of Botswana and the Republic of Namibia on the Establishment of a Permanent Okavango River Basin Water Commission' (OKACOM, 2011, p. 107). The 1994 OKACOM Agreement commits the three member states to promoting coordinated and environmentally sustainable regional water resources development, while addressing the legitimate social and economic needs of each of the riparian states. Under this agreement, OKACOM is mandated to advise the party states on sustainable long-term yield, reasonable demand, conservation criteria, development of water resources, prevention of pollution and other matters pertaining to the management of the Cubango Okavango River Basin. The role of OKACOM is to anticipate and reduce the unintended, unacceptable and often unnecessary impacts that occur as a result of uncontrolled resource development (OKACOM, 2011, p. 6). To do so, it has developed a coherent approach to managing the river basin, which is based on equitable allocation, sustainable utilization, and sound environmental management and sharing of benefits. OKACOM advises the three riparian states on the best possible use of the river's natural resources.

In April 2007, the three States Parties concluded the 'Agreement between the Governments of the Republic of Angola, the Republic of Botswana and the Republic of Namibia on the Organizational structure of OKACOM' (the OKACOM Structure Agreement), which establishes the organs of OKACOM as the Commission, the Okavango Basin Steering Committee (OBSC) and the Secretariat (OKACOM, 2011, p. 107) (Figure 3). The Commission is the principal organ responsible for defining and guiding the development policy and the general supervision of OKACOM's activities. The Commission consists of the three national delegations, each comprising three commissioners appointed by their respective countries. The commissioners are representatives of relevant government departments who attend to OKACOM matters as part of their departmental functions, but do not work on OKACOM matters on a full-time basis (OKACOM, 2011, p. 108).

The OBSC is the technical advisory body to the commission, whereas the secretariat is responsible for providing administrative, financial and general secretarial services to OKACOM (OKACOM, 2011, p. 107). Article 7 (n) of the OKACOM Structure Agreement permits the commission to establish ad hoc working groups or specific temporary or permanent committees. Three task forces have subsequently been established, namely the Biodiversity Task Force, the Hydrology Task Force and the Institutional Task Force (OKACOM, 2011, p. 108).

The Cubango-Okavango River Basin remains one of the basins least affected by human activity on the African Continent. In its present near-pristine condition, the river provides significant ecosystem benefits and, if managed appropriately, can continue to do so. However, mounting socio-economic activity on the basin in

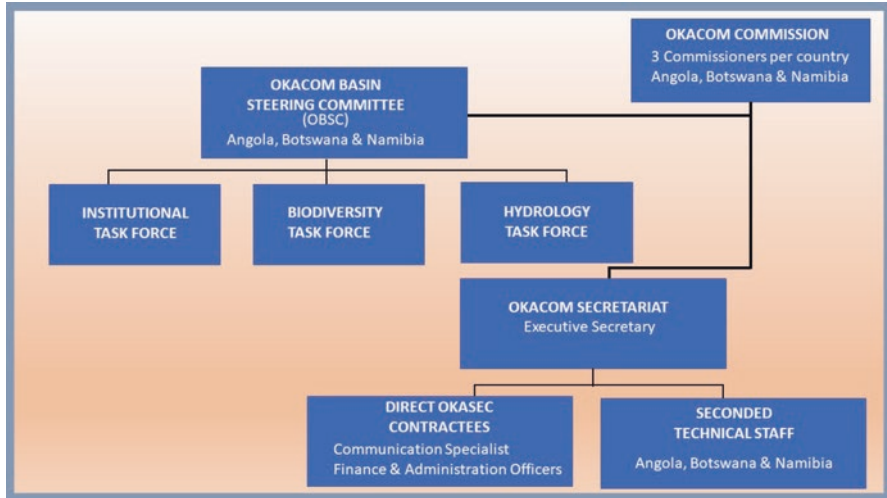


Figure 3. OKACOM organizational structure diagram. *Source:* OKACOM, 2011.

the riparian countries of Angola, Botswana and Namibia could change its present character and there is therefore a critical need to establish sustainable management of its resources. The riparian countries recognize that economic and social development within the basin is essential but that this also needs to be balanced against conservation of the natural environment and ecosystem services currently provided. This requires basin-wide understanding, agreement on the basin's problems and issues, and a blueprint for a development pathway guided by an adaptive process (OKACOM, 2011, p. 5). It is against this background that with the formation of OKACOM in 1994, the Global Environmental Facility's (GEF) Environmental Protection and Sustainable Management of the Cubango-Okavango River Basin (EPSMO) Project was introduced. A preliminary transnational diagnostic analysis (TDA) was completed in 1998 and the EPSMO Project was later developed through a GEF PDF-B grant and formally launched in 2004 (OKACOM, 2011, p. 6).

The long-term objective of the EPSMO Project was to achieve global environmental benefits through collaborative management of the naturally integrated land and water resources of the Cubango-Okavango River Basin (OKACOM, 2011, p. 19). The specific objectives of the project were to:

- Enhance the depth, accuracy and accessibility of the existing knowledge base of basin characteristics and conditions and identify the principal threats to the transnational water resources of the Cubango-Okavango River Basin through a TDA.
- Develop and implement, through a structured process, a sustainable and cost-effective programme of policy, as well as legal and institutional reforms and investments to mitigate the identified threats to the basins linked land and water

system through the Strategic Action Programme and finally assist the three riparian nations in their efforts to improve their capacity to collectively manage the basin (OKACOM, 2011, p. 19).

OKACOM, through the EPSMO Project, embarked on a TDA of the basin between 2008 and 2010. The TDA is a scientific assessment of the shared management issues and problems, both existing and emerging, of the Cubango-Okavango River Basin. For priority issues, the analysis identified the scale and distribution of the potential environmental and socio-economic impacts at national, regional and global levels. Through an analysis of the root causes, it identified potential remedial and/or preventive actions (OKACOM, 2011, p. 6). Since the Cubango-Okavango River Basin is still in near-pristine condition, OKACOM embarked on a unique TDA that looked forward to assess the positive and negative implications of possible future water resources developments. These were then addressed in the Strategic Action Programme (SAP) for the basin (OKACOM, 2011, p. 16).

The SAP for the basin builds on the knowledge collected by the TDA to work towards defining an acceptable development space in the Cubango-Okavango basin. The SAP is a basin-wide policy framework document for the Cubango-Okavango River system basin that lays down the principles for the development of the basin and improvement of the livelihoods of its people through the cooperative management of the basin and its shared water resources. The contents of the SAP are supported by and in accordance with their national development plans and the National Action Plans (NAPs) for their part of the basin that have been developed in parallel with the SAP. Implementation of the SAP is the individual responsibility of the basin states as components of the NAPs, and collectively as part of OKACOM. Therefore, the overarching objective of the SAP is to promote and strengthen the integrated, sustainable management, use and development of the Cubango-Okavango Basin at national and transnational levels according to internationally recognized best practices, in order to protect biodiversity, improve the livelihoods of basin communities and the development of basin states (OKACOM, 2011, p. 16).

The TDA identified four emerging areas of concern in the basin and four underlying driving factors. The SAP is therefore a coordinated management response to the problems posed by these driving factors and priority areas of concern (Table 1). The NAP is a critical tool for implementation of SAP priority actions at national level, and for the integration of transnational and basin concerns into national legislative, policy and budget decision-making processes. The NAPs represent an awareness of and commitment to enhanced sustainable management of water resources by the basin states. Like the SAP, the NAPs will be implemented over two separate five-year periods and will be reviewed every five years. The first period of implementation started in 2011 and ended in 2016; hence, they are due for review. Since the implementation started, basin states have been implementing projects and programmes as per their NAPs and as part of OKACOM; projects aligned to the SAP

Table 1. Transnational diagnostic analysis: Emerging areas of concern and driving factors

Areas of concern	Driving factors
Variation and reduction of hydrological flow	Population dynamics
Changes in sediment dynamics	Land-use change
Changes in water quality	Poverty
Changes in the abundance and distribution of biota	Climate change

Source: OKACOM Strategic Action Programme, 2011.

have been implemented at basin level through partnerships or support by organizations such as SAREP and UNDP GEF.

State Party initiatives – World Heritage status

It is important to note that the three basin states have ratified the UNESCO 1972 Convention on the Protection of the World Cultural and Natural Heritage, thereby demonstrating their commitment to ensuring the protection of their natural and cultural heritage of Outstanding Universal Value. However, the countries have different priorities and plans in terms of which heritage sites to nominate, hence the need for continued dialogue and cooperation in ensuring mutual understanding regarding the need to provide the Cubango-Okavango River Basin with World Heritage status. As indicated above, Botswana and Namibia are a step ahead, with Botswana's Okavango Delta inscribed in June 2014, and the Namibian part put onto the Tentative List in 2016, while Angola is still to decide. However, given the importance the three basin states accord to the river basin, talks have already started to work towards the nomination of the Angolan and Namibian parts of the basin. A meeting between the three riparian states, the World Heritage Centre Africa Unit and IUCN to discuss cooperation in the protection of the river basin was held during the 42nd session of the World Heritage Committee in Manama in 2018. The initiative of the basin states is receiving the support of the UNESCO World Heritage Centre Africa Unit and the IUCN. The first technical transnational meeting was hosted by Botswana in Maun from 3 to 4 June 2019, supported by the UNESCO Flanders Fund-in-Trust and the Government of Botswana through the Ministry of Environment, Natural Resources Conservation and Tourism (Department of National Museums and Monuments). It was at this meeting that the three States Parties, together with their partners and stakeholders, engaged to devise a tripartite action plan for the protection of the Cubango-Okavango River Basin. The action plan involved the establishment of a steering committee to drive the process, the development of TORs for the steering committee and the development of an action plan. The committee comprises two representatives from the three States Parties, representatives from UNESCO World Heritage Centre, the IUCN, the AWHF, the KAZA Secretariat and OKACOM Secretariat. Through consultations with the Ambassador of Angola and the High Commissioner of Botswana to Namibia, they had indicated the need to be part of the committee. It was agreed at this meeting that Botswana would serve as the

secretariat for the project/committee, and the first meeting for the steering committee was held in Kasane, from 26 to 27 February 2020. The meeting developed the TORs and action plan for the committee. Implementation of the action plan is ongoing and some progress has been made, although the COVID-19 pandemic has disrupted the process.

An important outcome of the meeting was that Angola and Namibia identified potential areas that could form part of the transnational extension. Angola has made progress in preparing its Natural Heritage Tentative List. They have identified two potential sites for the transnational extension: Luengue-Luiana National Park in Cuando Cubango Province and Torre de Aqua-Water Tower in Moxico Province. Namibia has identified the Mahango Wildlife Core Area, which is a part of the Bwabwata National Park, part of the river basin to the Panhandle as the potential site for transnational extension. The Mahango Wildlife Core Area is a Ramsar site and it is on the World Heritage Tentative List for Namibia.

Future transnational management considerations for the Cubango-Okavango River Basin

Future transnational management considerations for the Cubango-Okavango River Basin should consider the key findings of the TDA, as it provides a scientific analysis of the issues and concerns at national, regional and global level. One of the key technical findings of the TDA is that the Cubango-Okavango River is a floodplain-driven system, with floodplains that sustain the river in the dry season and store floodwaters that would otherwise increase flooding downstream. The Cuito River is key to the functioning of the whole lower river system because of its strong year-round flow, its wet-season storage of floodwaters on vast floodplains and the gradual release of water back into the river in the dry season. The riverine ecosystems and associated structures of people along the lower Cubango-Okavango River, the Okavango Delta and the outflowing Thamalakane and Boteti rivers are sustained largely by the annual flow regime of the Cuito. If these ecosystems and structures are taken into consideration at basin level, water resources development along the Cuito or intervention in the functioning of its floodplains should be modest and undertaken with caution (OKACOM, 2011, p. 28). It is with this in mind that future transnational management considerations should consider the protection of the source of the river basin or the Angolan part of the basin at international level, both at Ramsar and World Heritage level, as it is critical for the continued existence and functioning of the whole river basin.

The other key finding to consider is that the most significant constraints for the effective sustainable management of the basin lie in the institutional framework. These constraints have been identified as largely of a structural nature, namely the fragmentation of management responsibilities across different line-function ministries, the lack of intersectoral planning, limited coordination between different spheres of government, weak institutional structures at local level, a lack of skills,

management capacity and resources for integrated planning and effective monitoring, implementation and enforcement. Managing a transnational World Heritage property with multiple designations requires dedicated resources and strong institutions at local, national and transnational levels.

In addition, it is important to consider that OKACOM was established as a platform for cooperation, coordination and information among the three basin states with respect to water resource management. It is clear that it has a central role to play in the management of the basin, especially as there are no established basin-wide cooperation mechanisms in other natural resources management fields, such as land use and biodiversity (OKACOM, 2011, p. 30). It is therefore critical that future transnational management interventions consider the diverse nature of the resources of the basin and widen the cooperation mechanisms or mandate of OKACOM to accommodate these, especially the cultural resources of the basin. According to the TDA, the river contains sacred and cultural sites for the people of all three countries, and while these are of great importance for riparian communities, no formal studies have been undertaken on the location and significance of these sites along the river (OKACOM, 2011, p. 69).

Lastly, integrated resource management cannot be undertaken effectively without considering issues of land management and other natural resource-use aspects. However, this need is not yet reflected in the composition of national delegations of all countries to OKACOM and/or to the OBSC. Given the importance of agriculture and energy issues, forestry and wildlife and other sectors such as cultural heritage and tourism, increasing the diversity of sectors represented in the different organs of OKACOM would allow greater consideration of and coordination between sectors (OKACOM, 2011, p. 30). Given the cultural significance of wetlands and river systems, there is a need to consider the sacred, spiritual and cultural significance of the Cubango-Okavango River Basin to its people; there is a need to represent the heritage sector in the different organs of OKACOM if we are to nominate the whole river basin as a World Heritage site. The basin states, through OKACOM, should also consider embracing regional and international agreements/conventions that govern or apply to the different sectors of the diverse resources of the river basin.

Conclusion

In conclusion, the current management system of the Cubango-Okavango River Basin has laid a strong foundation for future integrated resource management of the basin. It has brought together different stakeholders from the three riparian states in the management of the river basin. However, effective management of the basin requires an integrated approach that will consider the inclusion of land management issues and other uses of natural resources, such as agriculture, forestry, energy, culture, tourism and the regional and international protocols and agreements that govern them.

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Management and conservation of the Mosi-oa-Tunya/Victoria Falls World Heritage property



John Zulu



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Introduction

The Mosi-oa-Tunya/Victoria Falls World Heritage property was granted World Heritage status on 15 December 1989 after the States Parties of Zambia and Zimbabwe submitted a joint nomination dossier to the UNESCO World Heritage Centre. The property was recognized for its ongoing geological processes, unique geomorphological formations and exceptional natural beauty, displayed through high water spray, daytime rainbows and distinctive lunar rainbows; these attributes convey the

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property's Outstanding Universal Value (OUV) under criteria (vii) and (viii). The Mosi-oa-Tunya/Victoria Falls has the widest curtain of waterfalls in the world, measuring 1,706 m, while its deepest point is 108 m. The property is renowned as one of the Seven Natural Wonders of the World, and the only one of this status in Africa. It is a tourism icon for the two States Parties, and for Africa as a whole.

Over the years, Zambia and Zimbabwe have developed and maintained cordial relations in managing a property of such magnitude, despite differences in institutional and national policies. This has been achieved by a mutual recognition, respect and passion for managing and preserving the property's OUV. Appropriate management structures have been developed and implemented to ensure effective management of the property. These structures are discussed in detail in this paper.

The management system: Working across borders

Property location

The Mosi-oa-Tunya/Victoria Falls World Heritage property is located on either side of the mighty Zambezi River, in the southern part of Zambia and the north-western part of Zimbabwe. The property straddles the river – the fourth longest in Africa – which flows from the north-western provinces of Zambia, covering a distance of 1,300 km before plunging into the Mosi-oa-Tunya/Victoria Falls (Zulu, 2020). The property is located at 17°55'28" S/25°51'24" E at an altitude of 915 m and extends over 6,860 ha. In Zambia, the property is comprised of the Mosi-oa-Tunya National Park, covering 3,779 ha. The Victoria Falls National Park and Zambezi National Park in Zimbabwe cover 2,340 ha and 741 ha, respectively. The total area includes all the river islands as far as Palm and Kandahar islands upstream of the falls.

The legislative framework: Zambia and Zimbabwe

The States Parties of Zambia and Zimbabwe have protected the Mosi-oa-Tunya/Victoria Falls as a national monument using their respective legal instruments since the 1930s. By 1937, the Victoria Falls National Park on the Southern Rhodesian side (now Zimbabwe) was established and administered by the Forestry Commission at that time; the falls were divided into the Southern Bank (Zimbabwean side) and the Northern Bank (Zambian side). The division aimed at protecting both the cultural and natural values embedded in the property (Makuvaza, 2012, pg. 43) until it was declared a World Heritage property in 1989. The management of the property has been driven by two government institutions on both sides; however, other governmental and non-governmental institutions have also been involved.

National legislative framework – Zambia

The National Heritage Conservation Commission (NHCC) is a government institution under the Ministry of Tourism and Arts (MOTA), charged with the responsibility of identifying, conserving and managing all of Zambia's immovable cultural and natural heritage (NHCC Act No. 173), including the Mosi-oa-Tunya/Victoria Falls World Heritage property. Zambia has a well-developed legal policy and institutional framework to regulate social and economic activities that have an impact on the natural environment. For effective management of the property, other pieces of legislation are used, including: the Zambia Environmental Agency, Town and Country Planning Act; Public Health Act; the Zambia Wildlife Act; the Forests Act; and the Energy Regulation Act. While Zambia has been reviewing and improving these legal instruments to attain sustainable tourism, there have been conflicting institutional interests due to overlaps in respective mandates.

National legislative framework – Zimbabwe

The Zimbabwe Parks and Wildlife Management Authority (ZIMPARKS), under the Ministry of Environment, is responsible for managing the Mosi-oa-Tunya/Victoria Falls World Heritage property on behalf of the State Party. The Zimbabwe Tourism Authority (ZTA) is the implementing arm for the Ministry of Environment, Tourism and Hospitality Industry.

Over the years, debates as to who should manage the Mosi-oa-Tunya/Victoria Falls World Heritage property have arisen between ZIMPARKS and National Museums and Monuments of Zimbabwe (NMMZ) (Makuvaza, 2012). ZIMPARKS have been managing the property since 1952, when part of the Victoria Falls National Park was established. On the other hand, the NMMZ, charged with managing national monuments and heritage properties in the country, claims to be the rightful institution to manage the property (Makuvaza, 2012, pg. 3).

The opposite has been the case on the Zambian side, where the NHCC, charged with the responsibility of conserving and managing immovable cultural and natural heritage, is managing the Mosi-oa-Tunya/Victoria Falls World Heritage property located in a 'national park' unlike the Department of National Parks and Wildlife (DNPW), which is responsible for managing national parks.

Despite contentious debates as to who should manage the property, institutions have, over time, developed an understanding and have supported each other in their work. This has been achieved by the deliberate recognition and inclusion of all stakeholders in decision-making and in the general management of the property.

Mosi-Oa-Tunya/Victoria Falls management plans

Joint Integrated Management Plan (JIMP) 2018–2022

In line with the UNESCO Operational Guidelines and the 1972 World Heritage Convention,¹ the States Parties of Zambia and Zimbabwe have developed and implemented the Joint Integrated Management Plan 2018–2022 as a guide for the sustainable protection of the property's OUV. The plan was published after a series of consultative meetings between public and private institutions, and other concerned parties. The plan is reviewed periodically by the two States Parties in consultation with stakeholders and the communities at large. The States Parties actively use this important tool to guide management operations in upholding the OUV.

Joint Sustainable Tourism Plan (JSTP) 2017

To effectively manage and conserve the natural and cultural values of the Mosi-oa-Tunya/Victoria Falls, the Joint Sustainable Tourism Plan was developed to guide the tourism development and marketing of the destination by the States Parties. The development of this plan was guided by the UNESCO World Heritage Centre and the JIMP (2018–2022), and aims to create mutual benefits from tourism for the local communities, while promoting landscape-level ecosystem management and transnational initiatives to mitigate its negative impacts (Joint Technical Committee, 2018, pg. 1). Further, the plan proposes tourism infrastructure and activity developments aimed at reaching global tourism markets (Joint Technical Committee, 2017, pg. 2).

Joint Sustainable Financing and Business Plan (JSFBP) 2019

The two States Parties of Zambia and Zimbabwe are in the process of developing the Joint Sustainable Financing and Business Plan, with a focus on creating multiple income streams to aid the protection of property's OUV and increase the socio-economic benefits of conservation for local communities (Joint Technical Committee, 2019, pg. 6). The plan aims to address issues of benefit sharing and participation in day-to-day conservation with the immediate communities living around the property (Joint Technical Committee, 2019, pg. 1).

¹ See: <https://whc.unesco.org/archive/convention-en.pdf>

The joint management structure of the property

The Mosi-oa-Tunya/Victoria Falls World Heritage property has for years sustained peaceful bilateral relations between the States Parties thanks to well-developed management structures. The established structures are comprised of joint ministerial, joint technical and joint site management committees following technical guidance from the World Heritage Centre and UNESCO advisory bodies. The committees have different mandates and terms of reference focused on implementing the Joint Integrated Management Plan 2018–2022, the 1972 World Heritage Convention and the Operational Guidelines.

The Joint Ministerial Committee

The Joint Ministerial Committee is comprised of ministers responsible for managing tourism in the respective countries. The committee is required to meet once a year to deliberate on management agendas raised by the Joint Technical Committee. The committee deliberates on issues aimed at preserving the property at interstate level, while maintaining bilateral relations.

The Joint Technical Committee

The Joint Technical Committee is comprised of institutional principals, technocrats and selected stakeholders from both States Parties. The committee analyses policy issues and advises ministers and the Joint Site Management Committee on best conservation and management practices. The committee, together with the Joint Site Management Committee, responds to concerns raised by the World Heritage Centre. The committee is co-chaired by UNESCO National Committees from both States Parties.

The Joint Site Management Committee

The Joint Site Management Committee is comprised of stakeholders from both the private and public sectors. The committee is co-chaired by site managers from the two States Parties, and deliberates and implements conservation and management measures aimed at upholding the OUVs of the site. The Joint Site Management Committee endeavours to maintain high-level and recommended conservation practices. The committee handles various concerns from different stakeholders and attempts to resolve any conflicts (Figure 1).

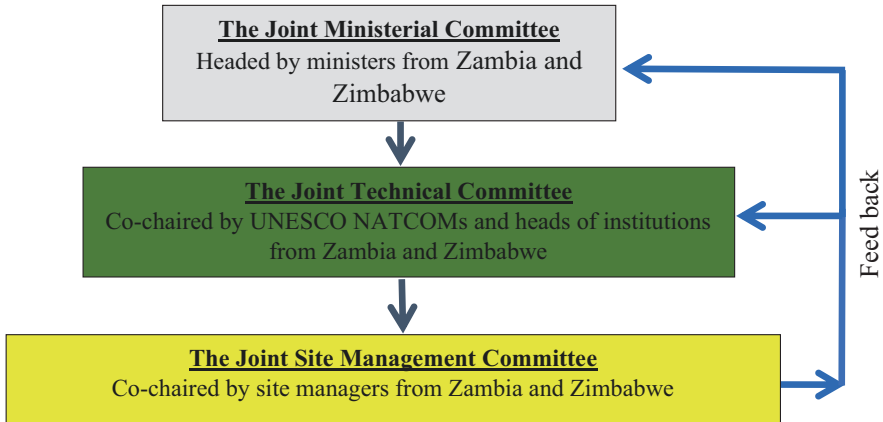


Figure 1. The management structure of the Mosi-oa-Tunya/Victoria Falls World Heritage property. *Source:* Joint Integrated Management Plan 2018–2022.

Breaking the ‘imaginary’ boundaries – Borders

It is undeniable that managing transnational properties such as the Mosi-oa-Tunya/Victoria Falls can be challenging, calling for a dedicated passion which goes beyond individual State Party interests. Zambia and Zimbabwe have endeavoured to lay aside respective national interests for the sake of ensuring the property is managed effectively and in perpetuity. However, in order to attain the desired status of cooperation for effective management of the property, the following challenges still need to be overcome.

Collective monitoring, research and publication of findings

Despite the magnitude and unique values of the property, there has not been collective research and systematic monitoring of challenges such as deforestation, riverbank erosion, climate change/variation, human and wildlife conflict or control of invasive alien species, to name but a few. While the States Parties of Zambia and Zimbabwe have been undertaking joint monitoring exercises to collect data on property values and attributes, they also need to undertake more collaborative ventures in monitoring and research resulting in publications. Implementing this would not only improve cordial relations between the States Parties but provide vital information required to effectively manage the transnational property.

Tourism

Being one of the Seven Natural Wonders of the World, the property is a globally renowned tourist destination. Hundreds of thousands of tourists visit the property annually from different parts of the world. Currently, despite tourists paying a lot of money to reach the destination, some are unable to view both sides of the property because of prevailing immigration rules in the respective States Parties. Tourists are subjected to time-consuming border formalities and visa payments to access either side of the property. Tourists know that the falls are in one State Party, as opposed to being transnational; this has disadvantaged the property, the communities living around it and the tourists. This property is a single entity but divided by an ‘imaginary political line’, which should not be the case. Local and international tourists must be able to access the entire property without difficulty because this is a single attraction.

Cultural value mapping

The Mosi-oa-Tunya/Victoria Falls World Heritage property is not just a natural geological feature but a place to encounter and access the supernatural (Zulu, 2020). This transnational property has connected communities worldwide of differing religious views with a single, undivided ritual landscape. It is considered to be a ‘place of power’ (McGregor, 2003, pg. 722); a sacred site. While the State Party of Zambia is active in mapping cultural values, this is not the case for Zimbabwe. However, it is undeniable that cultural values, especially spiritual, are prominently embedded in the property. Borders and boundaries with a ‘divided management system’ have limited the full appreciation of the spiritual values of the property. The two States Parties must facilitate access to the entire property and learn from the communities living around it, including tourists who mainly visit the property for spiritual reasons.

Conclusion

Over the years, the States Parties of Zambia and Zimbabwe have developed a profound and solid relationship in managing the Mosi-oa-Tunya/Victoria Falls World Heritage property. The States Parties have collectively utilized policy tools and legal instruments to uphold the property’s values, which include the Joint Integrated Management Plan, the 1972 World Heritage Convention and its Operation Guidelines, the Joint Tourism Policy, integrating conservation, and many others. In addition to the above, the States Parties of Zambia and Zimbabwe have endeavoured to put the interests of the property before the demanding pressure of socio-economic benefits.

This has sustained the bilateral relations between the two States Parties. However, while there is a solid base between the two States Parties because of the long-term cooperation, there are potential opportunities to overcome the current divisions highlighted above through an even greater emphasis on a value-based management approach, because values transcend borders. A value-based management approach would bring even greater benefits for the property, the management team(s), the community(ies) and the visitors.

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Engaging local communities in conservation and governance of the World Heritage in a transnational context: An example from the Maloti-Drakensberg Park World Heritage Site (Lesotho/South Africa)



Joyce Loza

Introduction

Local communities and Indigenous peoples are – and have been for centuries – the custodians of many World Heritage sites. Thus, they should be recognized as key actors in the process of identification, management and sustainable development of a property. The importance of enhancing their engagement in the stewardship of World Heritage sites and ensuring equitable sharing of the benefits deriving from heritage is recognized as a strategic objective of the World Heritage Convention: the fifth ‘C’ (Communities).

Launched in the year 2000, the Community Management of Protected Areas Conservation (COMPACT) initiative was established as a partnership between the World Heritage Centre, the UNDP-implemented GEF Small Grants Programme (SGP), the United Nations Foundation (UNF) and UNESCO (as the institutional host of the programme) to demonstrate how community-based initiatives can substantially increase the effectiveness of biodiversity conservation in globally significant protected areas while helping to improve the livelihoods of local people.¹ With an emphasis on complementing and adding value to existing conservation programmes, COMPACT uses small grants to support clusters of community-based activities that are intended to strengthen biodiversity conservation in and around protected areas (Brown and Hay-Edie, 2014).

The transboundary Maloti-Drakensberg Park World Heritage Site (MDP WHS) embarked on the COMPACT approach in 2015, and this article will present the

¹ See: <https://whc.unesco.org/en/series/40/>

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process from stakeholder consultations to small grants supporting clusters of community-based activities.

Contextualization

Study area

Covering 249,313 ha, the MDP WHS is the largest and most significant protected area within the Protected Area Network of the Maloti Drakensberg Transfrontier Conservation and Development Area (Maloti Drakensberg Transfrontier Programme, 2008). It is comprised of two parts: the uKhahlamba Drakensberg Park (UDP), a 242,813 ha park situated in KwaZulu Natal, South Africa, and the 6,500 ha Sehlabathebe National Park (SNP) located in the Qacha's Nek District of Lesotho, which shares an international boundary of around 12 km with the southern tip of the uKhahlamba Drakensberg Park (Maloti-Drakensberg Park World Heritage Site, 2020). The UDP is recognized worldwide due to its outstanding natural and cultural values, and as such it was listed as a mixed World Heritage Site in 2000 and a Ramsar Site in 1996 (uKhahlamba Drakensberg Park, 2019). The addition of the SNP to the World Heritage site broadens the spectrum of natural and cultural heritage protected by this transboundary park, and therefore its inscription onto the World Heritage List in 2013 was appropriate.

The transboundary MDP WHS is dominated by the Maloti Drakensberg – a mountain range of unique origins, and as such has a diverse range of ecological niches resulting in a rich biodiversity and a high number of endemic species (Sylvester et al., 2020). In addition, it is home to thousands of rock art paintings, a product of the San's long historical relationship with this mountain environment, as well as an interesting historical cultural heritage (Mazel and Watchman, 2003). Furthermore, the MDP WHS contributes significantly towards the economy of the Southern African subregion through protecting a vast portion of this mountain range, thereby securing the supply of high-quality water from its dense network of wetlands,² the sustainable use of natural resources and the development of appropriate forms of tourism (Chellan and Bob, 2010).

In terms of the Maloti Drakensberg's significance to water, the region is the most important water catchment area for the people of Lesotho and South Africa.³ Two of the largest civil engineering projects in Southern Africa, the Tugela-Vaal Scheme and the Lesotho Highlands Water Project, transfer water from the mountains to the economic powerhouse of Africa, the province of Gauteng.⁴ The Upper uThukela, located within the Tugela catchment, is a strategic water source. One of the critical

² See: <https://whc.unesco.org/en/list/985/>

³ See: <https://www.water-technology.net/projects/lesotho-highlands/>

⁴ See: <https://randshow.co.za/lesotho-highlands-water-project-reaches-out-to-gauteng/>

water provision schemes in South Africa, the Tugela/Vaal Scheme, which was commissioned to provide water to Gauteng until the Lesotho Highlands Water Project came into force, is supplied by the Thonyalana and Mweni river tributaries located in this area. The tributaries open into Woodstock Dam – the main feeder source for the Tugela/Vaal Water Pump Storage Scheme. The Tugela/Vaal scheme is used by Eskom to generate hydroelectricity and still augments Gauteng’s water supply as and when needed. On the Lesotho side, the SNP and its buffer zone form the catchment of the Tsoelike River, which is one of the major tributaries for the Senqu River, which passes through Lesotho, South Africa and Namibia (with its catchment extending as far as Botswana) (Ministry of Tourism, Environment and Culture, 2017). The Lesotho Highlands Development Authority intends to commission, or is in the process of commissioning, the hydropower scheme in the Tsoelike River. The major tributaries for the Tsoelike River are the Tsoelikana River, which originates in SNP and the Leqooa River, which originates in the buffer zone of SNP. In the landscape on both sides of the international boundary, there are local populations who are dependent on the mountains for all or part of their livelihood. Therefore, this is a critical area for water provision and regulation in the region.

The MDP WHS falls within the Drakensberg Mountains, characterized by significant plant and animal biodiversity, with unique habitats and high levels of endemism (Maloti Drakensberg Transfrontier Programme, 2008). The Maloti Drakensberg Transfrontier Conservation Focus Area (MDTFCA) is part of the grassland biome (Mucina and Rutherford, 2006) and thus contains a diversity of grasses and associated forbs (Carbutt, 2019). Other vegetation types include isolated areas of indigenous Afromontane forest (which are located on the south-facing slopes in the region), wetlands of the region (including the characteristic tarns), alpine heathland, and *Protea* savanna (Maloti Drakensberg Transfrontier Programme, 2008). All these features, together with the various human-dominated landscapes, combine to create a wealth of ‘sense of place’ values, appreciated by many different people. This biodiversity also continues to produce ecosystem services that can be classified as supporting (e.g. nutrient cycling), provisioning (e.g. food and medicine), regulating (e.g. flood regulation), and cultural (e.g. spiritual) (Maloti Drakensberg Transfrontier Programme, 2008). They provide a variety of livelihood and well-being benefits to people, including security, high-quality natural materials and health (Maloti Drakensberg Transfrontier Programme, 2008) (Figure 1).



Figure 1. The location and extent of the MDP in Southern Africa. *Source:* MDTP bioregional planning maps, used with permission from the MDP WHS Joint COMPACT Team (South Africa and Lesotho).

Note: Map produced before the change of 'Swaziland' to 'Eswatini'. The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Local communities and their role in World Heritage site management

Social context

Communities located at the foothills of the Maloti Drakensberg Mountains and outside the boundary of the MDP WHS both in Lesotho and South Africa are largely poor and dependent on natural resources to sustain their livelihoods (oKhahlamba Local Municipality, 2018). This is contextualized in various municipal integrated development plans, including the oKhahlamba Local Municipality Integrated Development Plan 2018/19, which records a 43% unemployment rate in the local population within the boundary of the municipality and highlights the dependency of the local population, especially those at the foothills of the Drakensberg mountains, on natural resources. Sources of livelihood for these rural communities include, but are not limited to, bee-honey harvesting, grassland harvesting for roof

thatching and other crafts, reeds from wetlands for crafts such as mats (*amacansi*), beer strainers, hats, and grass for livestock grazing. Some of the resources supporting local communities, such as grass for crafting hats, are accessed from the MDP WHS through the access and benefit-sharing programmes. The local community also utilizes the park space for cultural experiences and educational programmes. Furthermore, the MDP WHS is an employment hub for local communities (Ezemvelo KZN Wildlife, 2019), who are also engaged in seasonal job opportunities during the fire season (Krüger, 2020). In addition, the communities benefit from interventions supporting the development of small, medium and micro enterprises (SMMEs) – for example, the community levy supports the empowerment of local businesses (Ezemvelo KZN Wildlife, 2019). MDP WHS, through the Ezemvelo Invasive Alien Species Programme, supports the clearing of invasive alien plants in the protected area and its buffer zone. This provides training and wage opportunities for the local community.

Thus, the support provided by the MDP WHS resources to local communities cannot be overstated. However, despite the importance of the MDP WHS and its buffer zone in the context of transformation through its aforementioned contribution of socio-economic benefits for the local community, both the natural and cultural heritage are under enormous pressure from, largely, anthropogenic activities.

Challenges

Through extensive consultations with partners during the development of the MDP WHS COMPACT Strategies from 2017 (Maloti-Drakensberg Park World Heritage Site, 2018), some of the challenges of the MDP WHS and its buffer zone were identified as:

- Inappropriate fire regimes
- Poor grazing management by livestock affecting ecological infrastructure, such as water quality
- Invasive alien plant infestations
- Overharvesting of natural resources
- Destruction of cultural resources, such as rock art
- Wetland destruction

Consultations with partners during the development of the MDP WHS COMPACT strategies from 2017 prioritized solutions to the above challenges, both within the boundary and in the buffer zone of the MDP WHS (Maloti-Drakensberg Park World Heritage Site, 2018) (Figure 2).



Figure 2. Left to right: Depicting the negative impact of overgrazing and poor rangeland management on water resources in Enkambini, EmaSwazini, KwaZulu Natal, South Africa. © Joyce Loza, Mohau Monyatsi and Motabotabo Mamasheane.

Institutional arrangements

In terms of institutional arrangements, Ezemvelo KZN Wildlife and the Ministry of Tourism, Environment and Culture in South Africa and Lesotho, respectively, are management authorities (Maloti-Drakensberg Park World Heritage Site, 2020). On the South African side, the buffer zone to the MDP WHS falls under communal land tenure and is under the management authority of traditional leadership. Challenges, such as veld fires, cannot be localized – they do not observe boundaries, and therefore a fire originating outside the boundary of the MDP WHS can spread to the MDP WHS, destroying not only the natural (O’Connor et al., 2003) and the cultural heritage, but also tourism infrastructure, devastating livelihoods (Fakude, 2016). Hence, it is critical for the MDP WHS management authorities to jointly manage the buffer zone with the community through its traditional leadership.

It is within this context that COMPACT strategies are critical, to strengthen collaboration with the community and other partners in co-developing innovative interventions for managing the buffer zone in congruence with the management efforts of the MDP WHS. Furthermore, this is necessary to promote the management and sustainable use of the natural and cultural heritage resources for the benefit of current and future generations. Other key partners to the MDP WHS are government authorities, civil society (non-governmental organizations, community-based organizations) and academia.

Engaging local communities in conservation and governance

From stakeholder consultations to priority actions

The initiation of the COMPACT project in the MDP WHS has been jointly funded by the UNDP Country Office in Lesotho, the Global Environmental Facility Small Grants Programme (GEF SGP) in Lesotho and South Africa, Ezemvelo KZN Wildlife (EKZNW) in South Africa, the Ministry of Tourism, Environment and Culture (MTEC) in Lesotho, and the Maloti Drakensberg Transfrontier Programme

(MDTP), as well as financial support from UNESCO through its cooperation with the governments of the Netherlands and Norway.

With the MDP WHS being a transnational site shared between Lesotho and South Africa, two separate but parallel processes were undertaken to produce site strategies for the COMPACT initiative, following the established COMPACT methodology. Besides the parallel national consultation workshops, a number of joint workshops were held between the two countries to help synchronize the respective strategies. The two processes were then collated to form a single strategy with a joint results framework for the MDP WHS, which includes the Sehlabathebe National Park WHS in Lesotho and the uKhahlamba Drakensberg Park WHS in South Africa. This was undertaken through an extensive stakeholder consultative process with Lesotho and South African stakeholders from 2017–2018. The 2018–2022 MDP WHS COMPACT Site Strategy and Joint Results Framework identifies priorities for implementing the COMPACT objectives across the MDP WHS in both Lesotho and South Africa.

The strategies build on the work and information gathered and captured in the preceding reports, which also form part of the strategies, i.e. the Consultation Report, Scoping Report and the Baseline Assessments, Conceptual Models and Strategy Framework Report. These three reports provide a record of the stakeholder consultation process and a preliminary indication of the issues and opportunities relevant to the COMPACT initiative. The baseline assessment delves deeper into the natural, cultural, social, economic and political dynamics of the area, providing relevant information on how these impact the integrity of the MDP WHS and its buffer zone. The baseline further informed the development of the conceptual model, where the linkages between these dynamics, their impacts, related strategies and desired outcomes are illustrated. According to the findings of the Connecting Practice initiative, the relationship between the cultural and the natural values is not self-evident; therefore, the COMPACT initiative seeks to strengthen the interconnectedness of the cultural and natural values.

An ecological goods and services (EGS) approach, which identifies diverse EGS, current status and threats, was used to broadly determine the general state of the MDP and its buffer zone. This was the first time that the COMPACT process made use of this approach to aid the discussion and identification of initiatives to achieve the desired state of the park and its buffer zone.

Implementing priority actions on the ground

Following the successful stakeholder consultation and assessment phases, which prioritized actions to be set in the 2018–2022 MDP WHS COMPACT Site Strategy and Joint Results Framework, the joint COMPACT team engaged in their implementation – this is being done through grant-making. Current community-based interventions are implemented with funding from the Government of Norway in

collaboration with UNESCO. The implementation of these activities started in January 2021 and addresses the following key focus areas:

- Effective rangeland and livestock management to prevent degradation of grazing areas and also to improve household economic activity through livestock ranching/auctions.
- Promote participation of women and youth in local economic activities, such as livestock ranching, to contribute to addressing rural economic transformation, social and economic inclusion, and a reduction in households living below the poverty line.
- Increase protection of the buffer zone through effective land management practices.
- Improve fire management to further increase the protection of cultural and natural sites of the MDP WHS and the buffer zone.
- Mainstream conservation objectives of the MDP WHS and its buffer zone into planning and implementation by other role players, including the economy and production sectors.
- Promote ecocultural tourism initiatives.
- Address both food security and climate change through local communities, adopt climate-resilient agricultural practices and affordable technologies.
- Promote water security and sustainable access for local communities through implementing innovative interventions, such as spring protection.

To undertake an inclusive approach for community-based interventions, eight environmental local community monitors are currently employed in South Africa, and two in Lesotho. The provision for employment and training opportunities is one of the interventions to incentivize the community, and build and/or strengthen community capacity on the sustainable use of natural and cultural resources, with the aim of strengthening the governance of the MDP WHS.

Conclusion

The importance of joint efforts by partners, including the community, in safeguarding the natural and cultural resources of the MDP WHS cannot be overemphasized. It is within this context that COMPACT strategies are deemed necessary to (i) strengthen collaboration with the community and other partners in co-developing innovative interventions for managing the buffer zone, in congruence with the management efforts of the MDP WHS; and (ii) promote the management and sustainable use of the natural and cultural heritage resources for the benefit of current and future generations.

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Web Links

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The challenges of transnational management of cultural and natural sites in Africa: The case of Cameroon



Alice Biada

Introduction

The concept of ‘transnational management of cultural and natural sites’ can refer to the effective implementation of good practices and mechanisms at sites of cultural and/or natural significance, with a view to their sustainable management. Typically, these sites are located in contiguous areas of States that share the same borders and establish mutually agreed mechanisms for their management. The sustainable management of transboundary cultural, natural and mixed heritage sites in sub-Saharan African countries continues to pose enormous challenges, yet it could contribute to promoting peace in these countries, where the majority of the populations are victims of terrorism, social tensions and widespread poverty. Whether, for example, it is a question of the same protected area extending on both sides of a border as serial properties or a group of different sites, but linked by the same theme, the typology of transnational sites is diverse and requires the establishment of a transnational cooperation strategy that can provide mechanisms adapted to the African continent.

There are 3942 transnational properties on the World Heritage List, including the Sangha Trinational. The inscription onto the World Heritage List of this first transboundary natural site, in 2012, at the 36th session of the World Heritage Committee in St Petersburg, Russia, was the first successful cooperation between Cameroon (Lobéké National Park), the Central African Republic (CAR) (Dzanga-Ndoki National Park) and the Republic of Congo (Nouala-Ndoki National Park) under the first phase of the Central Africa World Heritage Forest Initiative (CAWHFI) project. To this end, and building on the experience of this successful transnational cooperation with the Sangha Trinational, Cameroon has strengthened the momentum through new projects with the State of Nigeria and other States Parties to the 1972

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Convention concerning the Protection of the World Cultural and Natural Heritage (hereafter ‘the 1972 Convention’) (UNESCO, 2017). This article aims to present some of the actions carried out within this framework, to evaluate their relevance through the good practices resulting from the protection, management, monitoring and presentation of the Sangha Trinational, and to highlight the advantages, as well as the limitations, of transnational cooperation in sub-Saharan Africa in general and in Cameroon in particular.

Cross-border cooperation aims at strengthening and developing relations between the territorial communities or authorities of two or more States, in order to create links or contractual agreements in the border regions to provide solutions to common problems. In Cameroon, some actions are carried out in this specific field with regard to the effective implementation of the 1972 Convention.

Actions carried out in Cameroon for cross-border cooperation

The Republic of Cameroon has been a State Party to the Convention concerning the Protection of the World Cultural and Natural Heritage since 7 December 1982. For the past three years, the country has been involved in initiatives for the joint inscription of sites onto the World Heritage List that share an Outstanding Universal Value (OUV) with other countries. In a concerted and concrete manner, the actions carried out in Cameroon through certain projects (either in progress or in the short, medium or long term) are the results of an agreement between the countries concerned by these joint projects, with procedures that require the collaboration of the different stakeholders. The implementation of these projects is, on the one hand, the result of the will of the countries concerned to effectively implement the 1972 Convention and, on the other, of the support of international technical and financial partners, notably UNESCO, the African World Heritage Fund (AWHF), the African Development Bank (ADB), the Lake Chad Basin Commission (LCBC), the European Union and many others.

Effective transnational cooperation: The cultural landscape of Lake Chad

One of the more visible forms of cooperation by the Government of Cameroon is its involvement in the BIOPALT (Biosphere and Heritage of Lake Chad) project. This project aims at strengthening the capacities of the member states of the Lake Chad Basin Commission (LCBC) to safeguard and sustainably manage the hydrological, biological and cultural resources of the lake, in order to contribute to poverty reduction and the promotion of peace in and around the basin. The Lake Chad Basin is of vital economic and ecological importance and supports more than 40 million people in Cameroon, the CAR, Chad, Niger and Nigeria (see Figure 1).

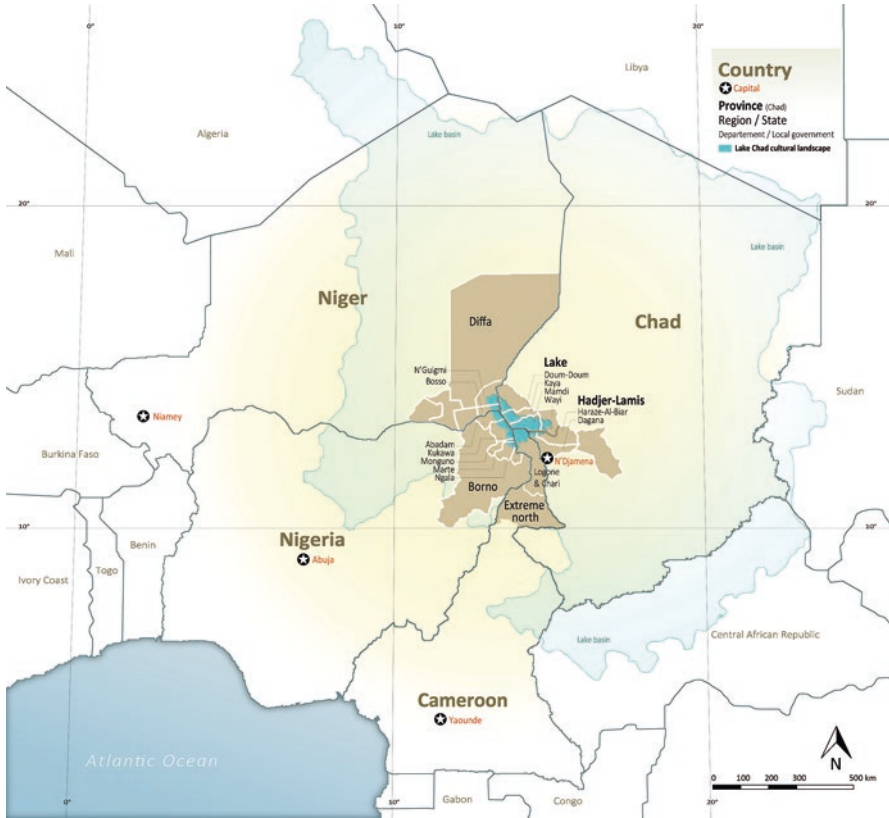


Figure 1. Map of the Lake Chad Basin. © Sébastien Moriset. (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations).

In addition to the two main components of the project, other activities include the establishment of an early warning system for droughts and floods, the ecological restoration of degraded ecosystems with a special focus on income-generating activities (IGAs) through the promotion of the green economy, and the enhancement of the natural resources of the basin. This project has so far focused on assisting the countries concerned in the preparation of a file for the creation of a transnational biosphere reserve in the basin and a proposal for the transnational inscription of the Lake Chad cultural landscape as a World Heritage property. In this paper, we will examine the second component of the project, which is supporting four of the above-mentioned countries in preparing the dossier for the nomination of Lake Chad as a cultural landscape, a process which is now nearing the end. This has so far enabled the strengthening and development of a common vision for this project through regular technical meetings, data-collection missions in the different countries, and various studies that have helped to enrich the knowledge of this landscape.

The results of these meetings are concrete, such as the harmonization of the tentative lists of cultural, natural and mixed properties of the said countries, the sharing of knowledge on the property and the strengthening of capacities in the preparation of nomination files for the prestigious World Heritage List. Furthermore, these meetings, which fostered collaboration between cultural and natural heritage professionals from these countries by contributing to the pooling of human resources, made it possible to submit the nomination file to the Secretariat of the World Heritage Convention before the required deadline of 1 February 2020. This transnational inscription will strengthen cooperation and successful subregional integration in favour of the promotion of peace and through transnational mechanisms of safeguarding and sustainable protection for future generations, through effective management, efficient monitoring and concerted enhancement of the Lake Chad cultural landscape.

Ongoing cross-border cooperation

For nearly three years, consultations have been underway with the State of Nigeria with a view to jointly nominating certain cultural and natural properties for the World Heritage List. The steps taken have helped to achieve effective collaboration through the establishment of a formal framework for exchanges between the two States, which has made it possible to begin discussions on the prerequisites and the actual nomination process for these two sites. The harmonization of the Tentative List of the two countries has been achieved. Two projects are underway, namely, the extension of the Diy-Gid-Biy (DGB) Cultural Landscape of the Mandara Mountains (on the Cameroon side) to the Sukur Cultural Landscape (on the Nigeria side), which has been inscribed on the World Heritage List since 1999, and the nomination of Takamanda and Korup National Parks in Cameroon and Oban Hills in Cross River State, Nigeria. As these sites are located in conflict zones, World Heritage status through these transnational inscriptions could further encourage the two nations and their peoples to live in harmony and contribute to the strengthening of subregional cooperation and integration for the promotion of peace.

The transnational inscription project for the Diy-Gid-Biy Cultural Landscape, extending to the Sukur Cultural Landscape

The DGB Cultural Landscape is a collection of 16 serial archaeological sites in 7 villages, consisting of terraces and platforms spanning the Mandara Mountain range, which is shared by Cameroon and Nigeria (see Figures 2 and 3). The DGB sites are monumental sites predating Sukur, located in a densely occupied and



Figure 2. Map of the DGB Cultural Landscape. © Bobo Aboubakar. (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations).

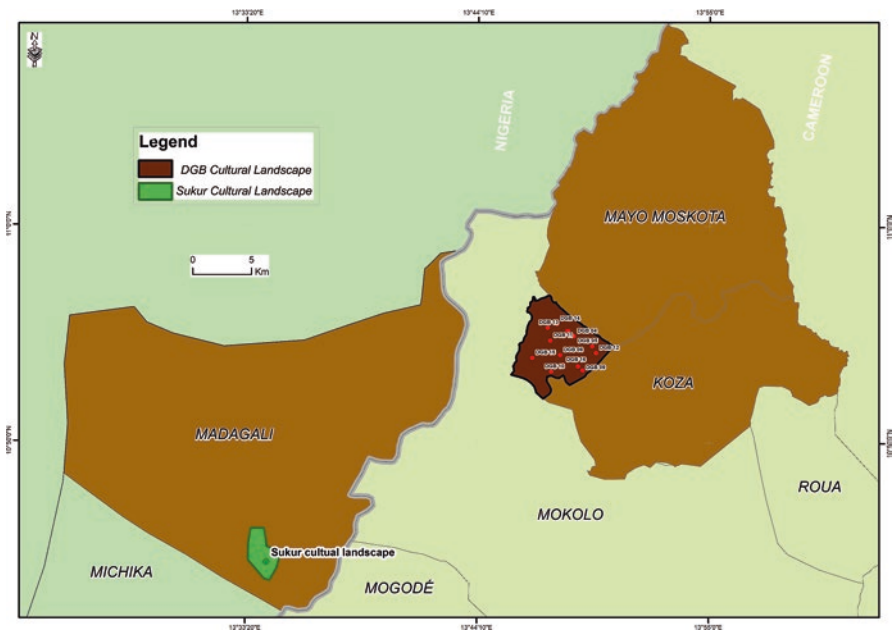


Figure 3. Map of the DGB Cultural Landscape. © Bobo Aboubakar. (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations).

domesticated modern mountain environment, imbued with cultural and symbolic meaning. They constitute the first well-established proof of human occupation in this part of the country, which has an extremely hostile climate. The presence of these archaeological ruins probably represents the native responses to the great droughts of the fifteenth and sixteenth centuries (MacEachern and David, 2013). They are a prominent example of land use in harsh and extremely difficult conditions and are associated with beliefs that have meaning for the present-day communities living there. There have been exchanges with the Nigerian side and other stakeholders for several years. These have been intensified over the last two years through technical meetings and field missions by experts from the countries concerned, with the support of UNESCO, the African World Heritage Fund (AWHF) and the School of African Heritage (EPA), and experts from the International Council on Monuments and Sites (ICOMOS).

In a joint approach, a comparative study between the two sites has been developed to determine the possibility of an extension with the Sukur Cultural Landscape in Nigeria. The two States Parties have thus far been able to carry out joint actions around this project and to elaborate the transnational nomination dossier for the DGB Cultural Landscape as an extension to the Sukur Cultural Landscape. This extension will certainly have a positive impact on the process of building a lasting peace in this area threatened by terrorism. To this end, the enhancement of this site will allow international recognition of this ‘forgotten heritage’ that has played an important social, cultural and political role in the life of the Mafa community. This process will contribute to restoring the dignity of the local communities, which have been violated by the exactions of the Boko Haram sect. It could also contribute to the strengthening of transnational safeguarding and sustainable management mechanisms for future generations.

The proposed inscription of Takamanda and Korup National Parks in Cameroon and Oban and Okwangwo National Parks in Cross River State, Nigeria

The Cross River-Korup Takamanda National Parks (CRIKOT) lie between the Cross River in eastern Nigeria and the Sanaga River in western Cameroon. These parks consist of diverse lowland ecosystems, including some of the highest and most species-rich tropical rainforests on the planet, as well as savannah and montane forest habitats at higher elevations. This transnational nomination is based on its OUV as defined in criteria (ix) and (x) of the Operational Guidelines for the Implementation of the World Heritage Convention. The process goes back several decades, although there were political obstacles to transnational collaboration in the 1960s–2000s, but on the ground, dialogue continued between the technical experts, and a new phase of fuller cooperation became possible after 2006. Since then, joint commitments have been made and a formal basis has been in existence since 2019

for carrying out this work, which has evolved in terms of taking into account the basic elements of transnational conservation. Actions related to transnational conservation and sustainable development in the region have thus been undertaken, through consultations between the different stakeholders and capacity building of professionals for the elaboration of the site's nomination dossier.

Possibilities of cooperation to be considered

Within the framework of the effective implementation of the 1972 Convention, an action plan was elaborated with the aim of attracting the interest of decision-makers and proposing relevant actions that could eventually improve the representativeness of African sites on the World Heritage List in general, and Cameroon in particular, through the elaboration of relevant and successful nomination dossiers.

Proposals were made to consider the possibility of carrying out cross-border or transnational cooperation actions with other countries bordering Cameroon. Because of its geographical position in Central Africa, Cameroon borders six countries (Congo, Gabon, Equatorial Guinea, Nigeria, the CAR and Chad). It is also located at the mouth of the Gulf of Guinea, which includes eight coastal countries bordering the Atlantic Ocean, namely Benin, Cameroon, Gabon, Ghana, Equatorial Guinea, Nigeria, Sao Tome and Principe and Togo.

Looking at the edge of this area, we notice the presence of several parks, several wetlands of international importance, classified as Ramsar sites, marine turtle conservation villages and slave embarkation ports in coastal African countries such as Nigeria, Ghana, Benin, Cameroon and other areas that served as slave markets during the transatlantic slave trade between the fifteenth and sixteenth centuries, and which are considered places of memory. In order to contribute to the preservation of these natural and cultural resources and to promote peace in conflict areas, much more thought could be given to finding links between these sites and to developing a transboundary and transnational proposal. Cooperation agreements exist between these countries of the Gulf of Guinea, but they do not visibly have a positive impact on the bad practices that persist, such as piracy and the illicit exploitation of natural resources, or on the prevention and resolution of conflicts between States and riparian communities.

Good practices in the Sangha Trinational

Despite the efforts made by the States Parties of Cameroon, the CAR and Congo to maintain the OUV of the Sangha Trinational, through the implementation of the 1972 Convention and the recommendations of the World Heritage Committee, the property faces a number of challenges, including containing the potentially high demand for biological resources due to:

- the unemployment of many workers in some forestry companies;
- a security environment that has been undermined by the circulation of weapons and munitions of war used for poaching purposes, especially targeting the African forest elephant.

Thanks to internal resources and the support of development partners, some substantial actions can be considered as good practices that aim to better protect the Sangha Trinational. These concrete actions contribute to the preservation of the integrity of the property, through the implementation of certain concrete activities, notably the sensitization of stakeholders; the development of income-generating activities; the fight against poaching and other forms of environmental crimes; strengthening the capacities of the management bodies of the property; taking into account human rights, in particular those of vulnerable indigenous peoples; the promotion of the well-being of the riparian communities; and the involvement of all stakeholders in the management of the property.

Some examples of concrete actions

In terms of operation

The Sangha Trinational is not only the first transnational natural site to be inscribed on the World Heritage List but it is also a model of successful international cooperation with its four functional consultation bodies, including:

- the annual Curators' Meeting;
- the Technical Planning and Implementation Committee (TPIC), which brings together the conservation departments of the three States with key local stakeholders in the periphery of the protected areas;
- the Technical Monitoring Committee (CTS), which is a body bringing together the conservation services of the three States with stakeholders at the level of the departments of jurisdiction, and which is chaired on a rotating basis by the prefects; and
- Technical Monitoring Committee A, which brings together the conservation services of the three States with national experts under the rotating chairmanship of the ministers.

In terms of funding

A sustainable funding mechanism is being implemented through the Fondation Trinational de la Sangha (FTNS). Similarly, the property and its buffer zone benefit from a management plan, the implementation of which involves local and Indigenous

communities, as well as international conservation NGOs, notably WCS and WWF, which have long provided financial and technical support. The CAWHFI initiative accompanies capacity-building activities of the conservation services in the three States.

Actions for the effective protection and management of the Sangha Trinational

The Sangha Trinational has a strong protection and management system, enjoying the highest legal status of protection in the three countries. In 2000, the governments of these States Parties signed a ‘Cooperation Agreement’ for the joint management of the Sangha Trinational. In addition, for better cross-border surveillance, an anti-poaching brigade (BLAB) made up of eco-guards from the three countries has been set up. On the scientific level, a committee called Sangha was created, a structure for the coordination of scientific research in the Sangha Trinational under the technical supervision of IUCN, which is one of the advisory bodies of the World Heritage Convention.

In order to address the complex issues involved in the transnational management of such a property, the three States Parties have opted to sign a multitude of agreements. These include:

- the Memorandum of Understanding Governing the Free Movement of Personnel within the Sangha Trinational Area;
- the Memorandum of Understanding on the Movement of Tourists in the Sangha Trinational; and
- the Memorandum of Understanding on the Establishment of the Sangha Trinational Scientific Committee, whose role is to strengthen the scientific contribution of the Sangha group.

These last two instruments, signed on 17 October 2019, were widely popularized among the various actors involved in the chain of their implementation.

An example of an endogenous cross-border conflict prevention and resolution system

One of the great scourges at the root of the problems of insecurity of persons and property, as well as crises affecting the heritage of peoples, is the conflicts that prevent the full development of the latter. This is why some have resorted to endogenous methods of conflict resolution that can involve transnational cooperation and allow for the effective management of World Heritage sites, as in the case of the Sangha Trinational. The *Nga’a Mo* (rite of peace, harmony and balance) is an

example of one such method of conflict resolution. It was trialled in 2010 to protect villages in Cameroon bordering the CAR, from the attacks of the rebel groups. This method of using traditional conflict resolution knowledge has helped to maintain a climate of peace between the border populations of Cameroon and the CAR. Practised only by initiated women, the *Oko'o Gan Mo* (women of peace), this purification rite of the Gbaya society, present in eastern Cameroon and the CAR, has helped preserve the natural habitat of the populations around the Sangha Trinational.

Benefits and limitations of cross-border cooperation

Benefits of cross-border cooperation

Faced with the challenges of adjusting procedures linked to the implementation of the 1972 Convention, transnational cooperation helps countries to overcome obstacles in a concerted manner, and also to help each other. It makes subregional integration possible through exchanges and the establishment of better management and protection systems for cultural and natural properties, for which the countries concerned decide to combine their efforts for effective implementation. Also, it enhances the skills of professionals, good practices and the harmonization of the management and monitoring mechanisms of the sites. Moreover, it allows the realization of an economy of scale and the creation of employment.

In addition, cross-border cooperation is crucial in resolving conflicts, security issues and helping to preserve biodiversity and manage heritage risks.

Limitations of cross-border cooperation

In general, the development of a cross-border project takes much longer than a national project. There is no doubt that this difficulty is linked to the inadequacy of legal instruments, the complexity of procedures, the length of time projects take to develop and the heterogeneity of decision-making processes among the various stakeholders. In addition to these factors, there is insufficient capacity building for professionals in charge of cross-border issues, due to the inadequate mobilization of financial resources.

However, these various difficulties linked to the effectiveness of transnational cooperation are not serious enough to threaten the interest and validity of this cooperation in the preservation and security of World Heritage properties.

Conclusion

In spite of the cumbersome administrative procedures, there is a real awareness within Cameroonian institutions of the effective implementation of the 1972 Convention through the steps taken by the ministerial departments concerned, which have so far enabled the start of the implementation of these projects. However, the option of putting in place a national strategy for cross-border cooperation is necessary, in order to enable the government to ensure continuity within the framework of the Convention and to strengthen the actions underway, so that the mechanisms set in motion are implemented in a sustainable manner. This would consist of showing the importance of the concerted management of transnational sites in sub-Saharan Africa through a few examples of success, ongoing projects and possible projects. Indeed, transnational cooperation is an effective and sustainable management tool that Cameroon, through the Sangha Trinational, has been able to trial with the States sharing this site. It therefore wishes, thanks to the initiatives undertaken, to continue along this path by nominating other properties such as the DGB cultural landscape, and the Cross River-Korup Takamanda (CRIKOT) national parks with the State of Nigeria, and to reflect on other projects. In general, cross-border cooperation is a tool that helps to bring countries closer together, to promote peace and the mixing of cultures; specifically, heritage unites people and is a vector of peace. However, in the context of improving this tool and adapting it to endogenous methods of conflict resolution, some proposals might be made. In this case, firstly, it would be desirable, as far as possible, to create a framework for consultation with a view to pooling efforts in the management of the African cultural and natural heritage for better protection and development of the territories; secondly, to effectively put in place a strategy that should constitute the roadmap or one of the priorities for the States Parties wishing to carry out transnational cooperation actions in this particular field of conservation for the benefit of present and future generations; thirdly, to strengthen and encourage the use of traditional knowledge, through inventories of traditional know-how, their codification and the organization of cultural festivals (the proliferation of these festivals would make it possible to revive endogenous methods which tend to disappear in African societies); and, finally, to further encourage States Parties to set up National Commissions of the World Heritage Committee for a better implementation and effective monitoring of the World Heritage Convention.

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The Sangha Trinational: An example of cross-border biodiversity management in Central Africa



Achile Mengamenya Goué and Romain Kana

Historical and geographical context of the Sangha Trinational

The Sangha Trinational (TNS) is the first cross-border management initiative in Central Africa set up in the aftermath of the Yaoundé Declaration at the Summit of Heads of State held in 1999. It was established on 7 December 2000 through the signing of the Cooperation Agreement between the Governments of the Republic of Cameroon, the Central African Republic and the Republic of Congo. As provided for in this agreement, several specific regulatory texts were subsequently signed by the States Parties to facilitate the implementation of the axes and objectives of cooperation, notably the Memorandum of Understanding on the fight against poaching signed on 28 June 2002; the Memorandum of Understanding on the free movement of TNS personnel signed on 04 February 2005; the Memorandum of Understanding on the organisation and functioning of the Anti-Poaching Brigade (BLAB) signed on 12 November 2009 and more recently in October 2019, the Memoranda of Understanding on the movement of tourists and the Trinational Scientific Committee.

Located in the northern part of the Congo Basin, the TNS covers an area of about 4.4 million ha (see Figure 1). Its vegetation consists largely of dense semi-deciduous and evergreen forest, with three contiguous protected areas at its core: the Lobéké National Park (LNP) in Cameroon, the Dzanga Sangha Protected Areas (DSPA) in CAR and the Nouabalé-Ndoki National Park (NNNP) in Congo.

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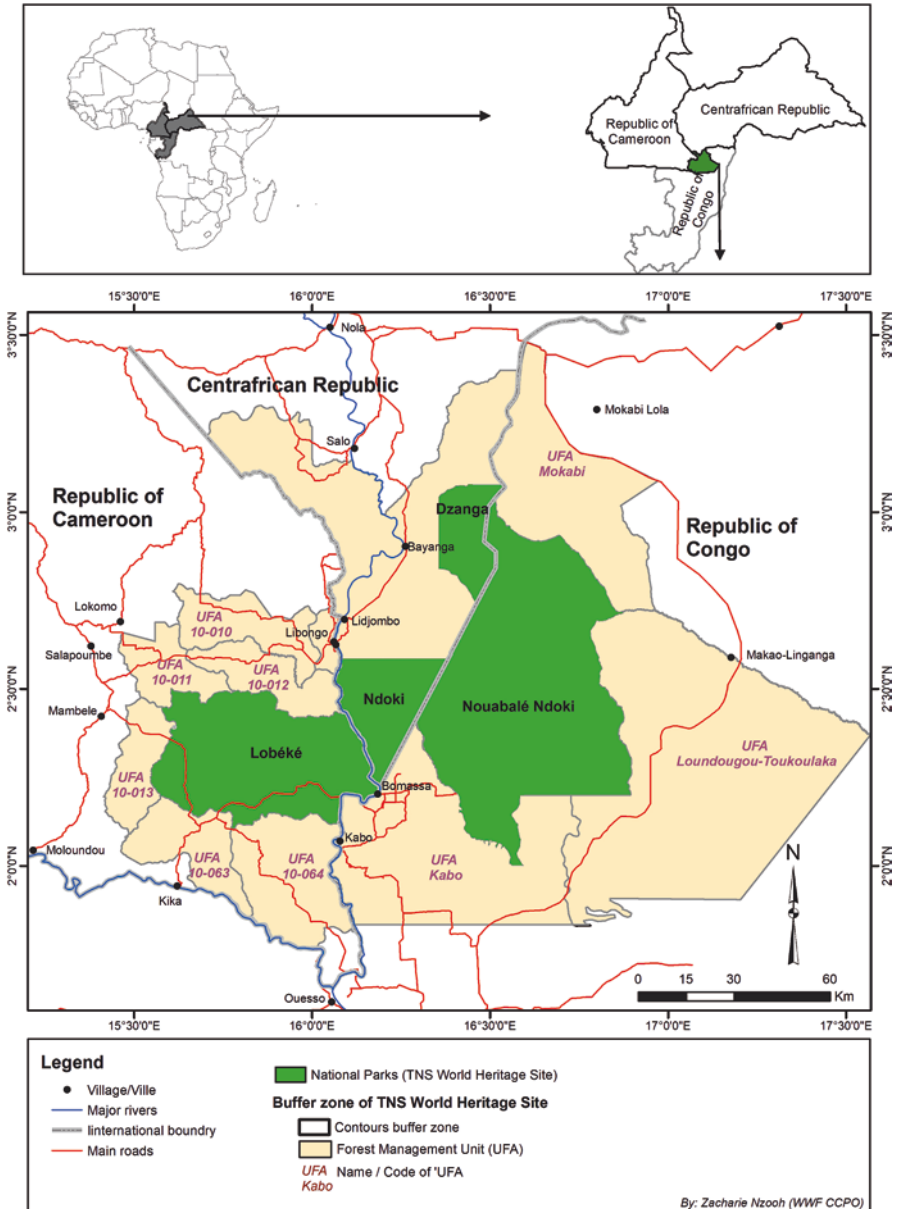


Figure 1. The Sangha Trinational cross-border complex. *Source:* Achile Mengamenya Goué and Romain Kana (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations).

The TNS was inscribed on the World Heritage List under criteria (ix) and (x) on 1 July 2012 at the 36th session of the World Heritage Committee held in St Petersburg, Russia, under number 1380. The property and its buffer zone represent 2,542,586 ha, or about 57% of the total area of the TNS. Its established Outstanding Universal Value is reflected in the existence of ongoing ecological and evolutionary processes on a very large scale in an essentially intact forest landscape. Numerous and diverse habitats such as tropical deciduous and evergreen forests, a wide variety of wetland types including swamp forests and periodically flooded forests, and many types of forest clearings of major conservation importance are thus connected at the landscape level. This mosaic of ecosystems supports viable populations of complete assemblages of fauna and flora, including large predators and rare and endangered species such as forest elephants (*Loxodonta africana cyclotis*), gorillas (*Gorilla gorilla*), chimpanzees (*Pan troglodytes*) and several species of antelope such as the sitatunga (*Tragelaphus spekei*) and the iconic bongo (*Boeocercus euryceros*). Some clearings (still called Bais) attract several groups of these large and medium-sized mammals simultaneously (over 100 elephants at Dzanga Bai clearing) and others are home to thousands of pigeons and parrots, notably the red-tailed parrot (*Psittacus erythacus*). They are exceptional centres of social and genetic exchange (Figure 2).

Regionally, the TNS Landscape is recognized by the Congo Basin Forest Partnership (CBFP) as one of the highest priorities for forest conservation in Central



Figure 2. Images of some attributes of the Outstanding Universal Value of the TNS. © FTNS.

Africa. It is also an exceptionally high priority site for chimpanzee and lowland gorilla conservation, with the latter species' unparalleled characteristics, abundance and density according to several studies (Breuer et al., 2005; Sanz and Morgan, 2007, 2009, 2010; Sanz et al., 2010; Stokes et al., 2010).

The aim of this paper is to present the management model in place and the results of trilateral cooperation that contribute to the preservation of the outstanding biodiversity of the TNS transboundary World Heritage site. We conclude by highlighting the important challenges that need to be addressed to improve and sustain the results achieved.

Management structures and operations

The management of the transnational complex involves two types of structures: the management bodies of the national parks and the governance bodies of the transnational cooperation. In addition, it incorporates special funding mechanisms.

Management of the three national parks

The three national parks are managed on the basis of a management plan drawn up and implemented by mandated structures.

- In the Cameroon and Central African Republic segments, the management of the parks is carried out in a collegial manner, involving the state services and technical assistance represented by an international organization specializing in conservation;
- In the Congo segment, the park is managed by the Nouabalé-Ndoki Foundation, under a public-private partnership agreement signed in April 2013 between the Government of Congo and WCS.

Cross-Border governance structure

The cross-border cooperation operates through four governance bodies:

- The Tri-National Supervision and Arbitration Committee (CTSA), the supreme decision-making body, composed of the ministers in charge of wildlife and forests of the States Parties and its rapporteur, the Executive Secretary of the Organisation for the Conservation of Wildlife in Central Africa (OCFSA). The CTSA meets in principle once a year and is also responsible for signing specific protocols of agreement to regulate the various areas of cooperation. In this respect, five memoranda of understanding have already been signed and are being implemented;

- The Tri-National Scientific Committee (CST), an advisory body, which can meet according to the needs expressed by the CTSA. After the signature of the protocol following its adoption in 2019, the CST is operational and must develop and ensure the implementation of a harmonized research programme across the landscape;
- The Tri-National Monitoring Committee (CTS), a body for monitoring the implementation of the decisions of the CTSA and composed of various local political, technical and institutional representatives (Trinational Zone). The CTS meets in principle once a year and is also responsible for the prevention and resolution of potential border conflicts that may arise during the implementation of cross-border cooperation operations; and
- The Tri-National Planning and Implementation Committee (CTPE), the planning and implementation body behind the TNS activities, which is composed of representatives of conservation projects in the protection and peripheral zones. The CTPE meets together in principle twice a year.

In addition to these four statutory governance bodies, the TNS landscape is governed by a common action plan for the conservation and sustainable management of natural resources. As such, periodic meetings are held between conservators and their TNS partners to consolidate TNS cooperation and to carry out joint patrols along the common borders, to conduct specific studies on transnational socio-economic activities and to seek long-term funding for its activities.

These joint efforts to combat illegal hunting were facilitated by the signing in 2002 of the anti-poaching Protocol Agreement and in 2005 of the Protocol on the free movement of personnel of institutions involved in the functioning of the TNS landscape. The TNS has also put in place surveillance infrastructure and equipment, as well as landscape-wide monitoring of elephant movements for planning and surveillance purposes (see Figure 3).

In 2010, a TNS anti-poaching brigade (BLAB-TNS) was created in Nyangouté, on Central African territory, under the terms of the memorandum of understanding (MoU) on the organization and functioning of this brigade, which also has an operation manual and an autonomous command structure composed of officers from the three countries.

Dedicated and Stable Funding Structure

Globally, the number of protected areas listed by the UN has increased considerably over the last 50 years. The total coverage of protected areas has increased from 2.4 million km² in 1962 to over 46 million km² in 2018 (UNEP-WCMC, 2018). However, funding has not kept pace with this expansion. Estimates in 2004 showed a total annual funding gap for existing protected areas of US\$1–1.7 billion, depending on the author (Bruner et al., 2004). The result of this funding shortfall is a lack of staff, vehicles, fuel and other basic management needs. A direct consequence of insufficient investment is often the progressive degradation of the biological resources for whose conservation the protected areas were established.

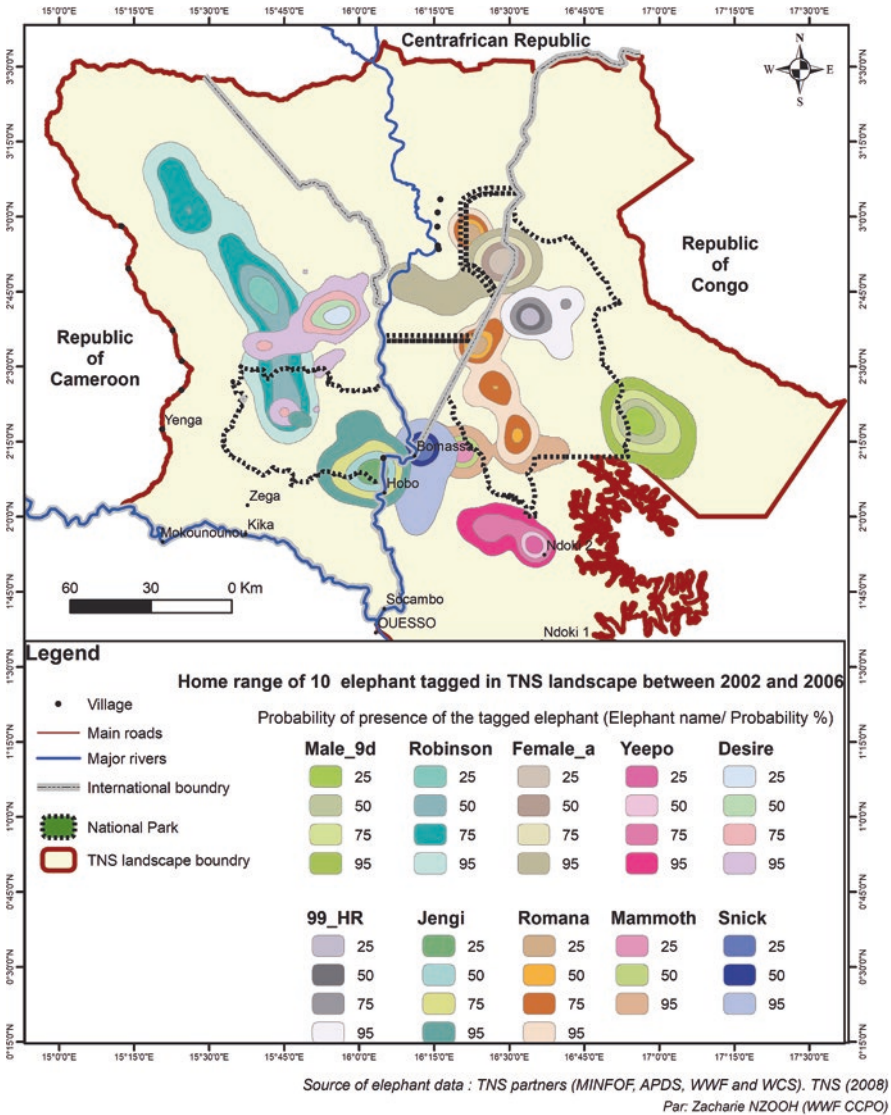


Figure 3. Elephant corridors in the TNS. *Source:* Achile Mengamenya Goué and Romain Kana (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations).

The implementation of a range of reliable funding mechanisms must therefore accompany the establishment and management of protected areas. In the case of the Sangha Trinational complex, a trust fund, supported by the Foundation for the Sangha Trinational (FTNS), was created in March 2007, some seven years after the creation of the TNS, to accompany the processes of trans-boundary management and cooperation. Its business model of mobilizing, investing and using capital revenues ensures a predictable and reliable source of funding that protects the three

parks and cross-border operations from the fluctuations of project grant cycles, which are often unpredictable and subject to ‘donor fatigue’. With an initial target of €35 million at inception, the capital at the end of 2019 is around €60 million with a revised target of €100 million.

Apart from the FTNS, the Central Africa World Forest Heritage Initiative (CAWHFI) developed by UNESCO with the financial support of certain donors plays a major role in the structuring and operation of cooperation activities. For example, this programme supported the establishment of the BLAB-TNS in 2010 and has mobilized funding for cross-border patrols. In addition, the programme supports the implementation of harmonized monitoring and management tools for the three protected areas (Figure 4).

Major achievements of the Sangha Trinational in the field of cooperation

The results of this cross-border cooperation are realized by regular patrols at cross-border level, the development of concerted tools for monitoring the effectiveness of management and, above all, the preservation of faunal and floral biodiversity.



Figure 4. Group photo from the workshop for the elaboration of the TNS State of Conservation Report organized through CAWHFI/European Union funding in Doula in November 2018. © FTNS.

Regular cross-border patrols

Cross-border patrols involving officers from the three countries and operating up to 5 km on either side of the borders help to secure wildlife migration corridors in the TNS and to contain illegal wildlife trafficking at the borders. Over the past five years, more than 300 patrols corresponding to 11,781 working days of surveillance effort have been mobilized as part of BLAB-TNS activities (see Figures 5 and 6). These

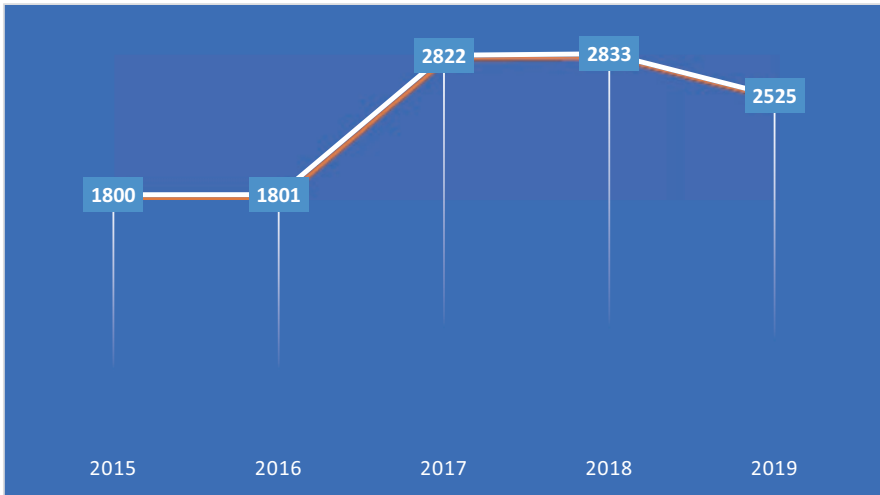


Figure 5. BLAB-TNS annual working day patrol efforts between 2015 and 2019. *Source:* Achile Mengamenya Goué and Romain Kana.

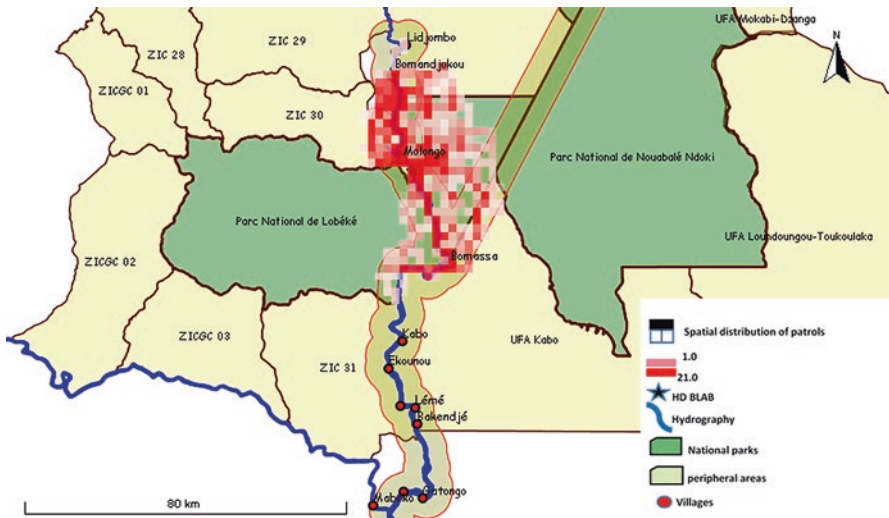


Figure 6. SMART report on the spatial coverage of BLAB-TNS patrols in 2019. *Source:* Achile Mengamenya Goué and Romain Kana (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations).

patrols are characterized by their regularity and, above all, by a regular increase in effort in line with the evolution of the threat.

The use of the SMART tool allows for good monitoring and adaptive management of threats on the ground.

Agreed monitoring and evaluation frameworks and tools

A key element of cooperation is the adoption of agreed tools for monitoring landscape management effectiveness. Important tools such as SMART (Spatial Management and Reporting Tool) and IMET (Integrated Management Effectiveness Tool) have been operational in the protected area management structures and BLAB-TNS since 2019. A central SMART database has been set up to share information on anti-poaching operations in real time. These tools are part of a monitoring and evaluation system adopted by all managers, which provides for the harmonized conduct of wildlife inventories and the setting up of a satellite monitoring system with a centralized database for the entire landscape by 2022 (Figure 7).

The Sangha Group, a multi-stakeholder assessment framework coordinated by the International Union for Conservation of Nature (IUCN), has been running an information system for the TNS for more than ten years, providing information on socio-economic and conservation trends. This monitoring system is based on some 30 selected indicators that allow for the monitoring of evolutionary trends in

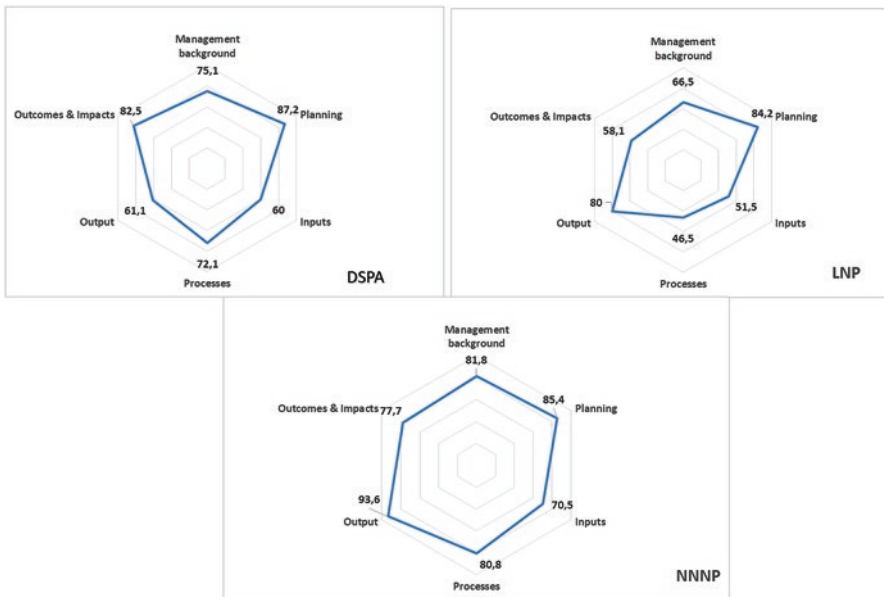


Figure 7. IMET results in the three TNS protected areas in 2019. *Source:* Achile Mengamenya Goué and Romain Kana.

conservation, governance and development aspects within the TNS landscape, thus serving as a tool to support decision-making on strategic orientations aimed at improving governance and achieving a functional balance between biodiversity conservation and the socio-economic development of local populations. The situation at the end of 2018 is shown in Figure 8.

In 2016, for example, the overall situation seemed very worrying in terms of both conservation and human development. Actions were immediately initiated to readjust the situation in the TNS (reallocation of funding to sensitive areas, intensification of actions for sustainable resource extraction, taking into account the living conditions of the populations, etc.).

Maintaining outstanding values since its designation in 2012

The TNS was designated a World Heritage site under criteria (ix) and (x). The first criterion relates to the characteristics of the natural ecosystem and the second relates to the biodiversity of the fauna and flora.

The integrity of the property has remained intact. The rate of forest cover loss has remained at a fairly low level in the landscape.¹ The most recent wildlife inventories on threatened species (elephants, great apes ...) show a stability in the overall population for about 10 years (N’Goran et al., 2016; Brncic et al., 2017; Beukou et al., 2019).

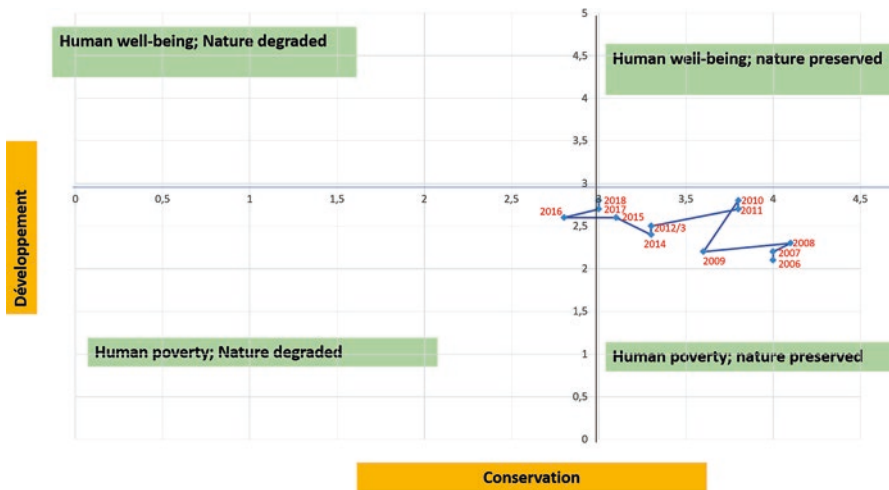


Figure 8. Trends in nature protection and population well-being in the TNS between 2006 and 2018. *Source:* Achile Mengamenya Goué and Romain Kana.

¹0.03% according to analyses by Global Forest Watch. In comparison, the rate of forest cover loss in the Congo Basin is around 0.7%.

Major challenges and prospects

Despite the achievements presented above, challenges remain important and should be addressed to enable better cooperation and ensure the sustainability of the exceptional biodiversity of the TNS landscape.

Harmonization of wildlife legislation and stability of the socio-political framework

Although the transboundary complex of the Sangha Trinational is the foundation of subregional cooperation in conservation in Central Africa, it is currently facing two major challenges: the harmonization of forestry and wildlife legislation on the one hand, and the management of the security implications arising from the socio-political unrest in some member states on the other.

Indeed, national law enforcement is one of the weaknesses on which rogue traffickers rely to scour the biological resources of the TNS. Thus, they will tend to commit offences in segments where the penalty is lower.

Moreover, the socio-political unrest in some member states has encouraged the circulation of weapons and ammunition of war used for poaching, especially of elephants. Hundreds of weapons are seized annually in the context of the fight against poaching.

Heritage development

Compared to South Africa and Rwanda, which cover 70% of the management costs of their respective national protected areas through revenues generated by parks and reserves (Wilkie and Carpenter, 1998; GVTC, 2012), the TNS receives barely 1000 tourists per year despite its ecotourism potential. To enhance its potential natural attractions and its World Heritage label, the TNS can now rely on a favorable regulatory framework with the signing in October 2019 of an MoU on the movement of tourists that makes it possible to visit the three parks with a single visa from one of the TNS countries.

The feasibility of developing an incentive framework for private investment to foster a competitive tourism sector in the TNS is being considered. All the evidence suggests that the private sector could supplement the existing management structures by providing additional technical expertise and financial resources.

Integrated land use planning

In 2010, the States Parties adopted a land-use plan in order to have a comprehensive and coherent vision of current and future land use that meets the objectives of sustainable development and biodiversity conservation. However, this plan does not take into account the projects of all the other sectors of activity (major infrastructure works, mines, industries, etc.). This very often generates intersectoral conflicts, particularly between the forestry and wildlife sector and the mining sector. Over the past five years, the TNS governance bodies have requested and obtained the cancellation of several mining permits granted in the buffer zone of the property. Revising the present land-use plan by integrating other forms of use in a holistic vision with all the sectors involved would limit potential conflicts and ensure integrated management of the TNS landscape.

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The transnational management regime of the Virunga Conservation Area across the Congolese, Rwandan and Ugandan borders: Challenges and opportunities



Allan Kenneth Birabi

Introduction

The Virunga Transboundary Conservation Area (VTCA)

The Virunga Transboundary Conservation Area (VTCA) shown in Figure 1 is a 434 km² natural heritage/wildlife complex. One part comprises a 240 km² portion of the mountainous Virunga National Park, which was created in 1925 inside the Democratic Republic of Congo (DRC). As such, Virunga National Park, with a total land area of 7,800 km² (Figure 2), is not wholly located in the VTCA. The main focus of this paper is the Mikeno sector of the park, an area of approximately 250 km², which happens to be part of the VTCA territory (Figure 2). The entire park was placed on the World Heritage List in 1979 and pronounced a World Heritage Site in Danger in 1994. The second part of the VTCA is an alpine area covering some 160 km² of Rwanda's Volcanoes National Park, which was created in 1929 and designated as a Biosphere Reserve (Figures 1, 2 and 3). The third part, also mountainous, is a 33.7 km² area within the Mgahinga Gorilla National Park (MGNP) in Uganda (Figures 1, 2 and 3). The MGNP was established in 1964 as a reserve to protect the mountain gorilla and it was inscribed onto the World Heritage Tentative List in 2007. This 'three-in-one' natural heritage area lies between 1°21'50" S and 29°38'17" E.

As documented by the Greater Virunga Transboundary Cooperation (GVTC) in 2017, the VTCA is the richest part of the African continent in terms of vertebrate species, given that it plays host to 292 species of mammal, 890 species of bird, 135 species of reptile, 91 species of amphibian, 177 species of butterfly, 366 species of fish and 3,755 species of plant. More conspicuously, this vast conservation area is renowned for endemic, threatened and migratory species, including lions,

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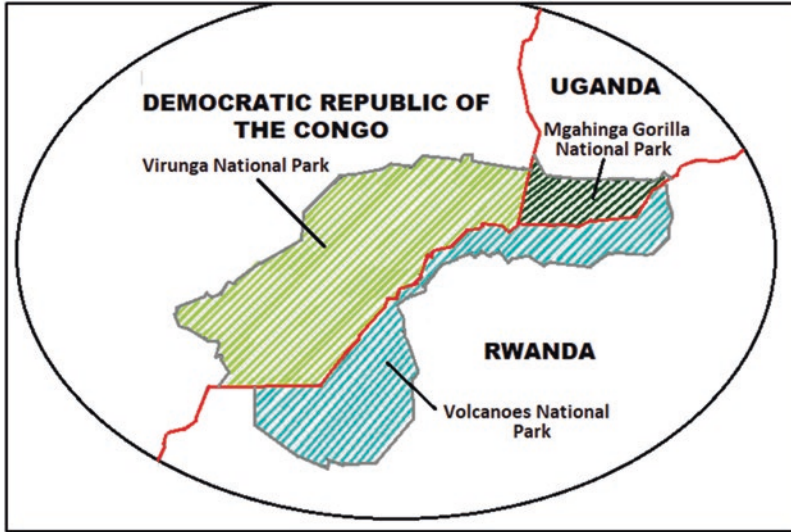


Figure 1. Location of Virunga Transboundary Conservation Area (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations). *Source:* Adapted from Maps of the World, 2016 and Williamson, 2008.

hippopotamus, chimpanzees, baboons, monkeys, leopards, okapi, golden cats, crown eagles, buffaloes, lesser flamingos, vultures, Rwenzori sitatunga antelopes, elephants and many others. Crucially, the area is the last remaining habitat of the critically endangered mountain gorilla (*Gorilla beringei beringei*), now on IUCN's Red List of Endangered Species. The mountain gorilla is plausibly the key trigger for transnational collaboration.

The VTCA is also a refuge for biodiversity and high levels of endemism in the Albertine Rift of Central East Africa. The animal species in question have moved freely across what are now international borders among the three countries, and some species have arguably needed this larger landscape for millennia in order to sustain their populations, (Plumptre et al., 2007). However, this joint territory underwent partition following the scramble for Africa among the European powers at the Berlin Conference in 1884, during which the present borders of the DRC, Rwanda and Uganda were drawn up, along with several other African countries, based on European imperialism, (Rodney, 1973; Babatola, 2014). Koponen (1993, p. 118, 124) condemns this as a selfish work of official imperialism '... among holders of state power, i.e. sovereigns, top ministers and a handful of high officials in the major European countries...' to address Europe's own economic and political rivalry, and the unequal development of its industrial capitalism. Quite obviously, the Africans and their wildlife were neither represented nor accorded any say in that conference. Nevertheless, the natural ecological processes of this landscape have remained immune to the acts of that infamous Berlin conference to this day.

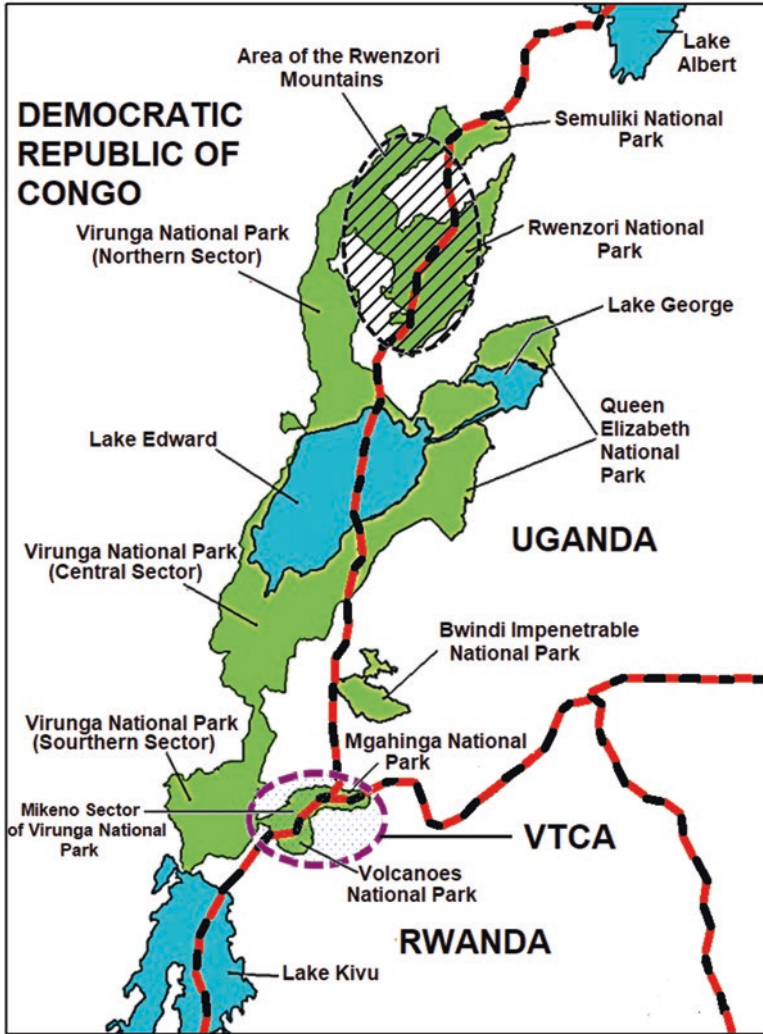


Figure 2. The complete territory of the Virunga National Park and neighbouring contiguous parks (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations). *Source:* Author.

A historical perspective of the VTCA’s conservation management regime

Prior to the VTCA’s formal configuration in 2015, the three wildlife territories were managed as separate entities by the national wildlife authorities in each of the noted partner States, both in the colonial era and the first couple of decades after independence, (Lanjouw et al., 2001). As such, no distinctive transnational conservation

Figure 3. Holistic location of Volcanoes National Park in Rwanda (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations). *Source:* Author.



management regime prevailed. Rather, it remained simply a possibility, hardly discussed by the three States. How exactly this conservation area kept going, with no clear transnational management regime until the recent signing of a formal transnational collaboration treaty in 2015, is worthy of consideration at this point. Since the partner States were largely responsible for the management of their own territory before the treaty, these can be examined on a case-by-case basis in the following sections.

Virunga National Park, Democratic Republic of the Congo (DRC)

As mentioned earlier, Virunga National Park is a 7,800 km² natural heritage site that stretches from the Virunga Mountains in the south to the Rwenzori Mountains in the north, in the eastern part of the DRC, bordering Volcanoes National Park in Rwanda and both Rwenzori Mountains National Park and Queen Elizabeth National Park in Uganda (Figure 2). It was created in 1925 by Belgium's King Albert I as Africa's first national park in his name (the 'Albert National Park'), primarily to protect the mountain gorillas domiciled in the Virunga mountain forests, and became one of the icons of Belgian imperialism. A further colonial trophy was added when the park was expanded northward to include the Rwindi plains and the Congolese areas of Lake Edward and the Rwenzori Mountains (Figure 2).

After independence in 1960, the new Congolese State deteriorated rapidly, and so did the park. However, in 1969, President Mobutu Sese Seko began to take a particular interest in conservation, and the park was revitalized. In the process of Mobutu's Africanization drive, the 'Albert National Park' was renamed 'Virunga National Park' and the first Congolese Wildlife Authority was established. In 1979, Virunga National Park was inscribed onto UNESCO's World Heritage List. Since

then, the park has been managed by the Congolese National Park authorities but principally by the Institut Congolais pour la Conservation de la Nature (ICCN) and its partner, the Virunga Foundation. However, from about 1988, the park and the surrounding area in North Kivu province experienced near-constant violent conflicts characterized by widespread suffering, death, rape, displacement, sickness and starvation. Regrettably, innocent and highly dedicated park rangers also fell victim to this violence and lawlessness. For instance, in this period on the Virunga side alone, out of a park ranger strength of 500 men, 105 were gruesomely shot dead while on duty, (IUCN, 2017). Inevitably, the effects of these conflicts tended to spill over into the contiguous Mgahinga and Volcanoes national parks. The epicentre of the violence in the DRC has been in North and South Kivu (the Kivus), and to a considerable extent in neighbouring Rwanda; following a kidnapping incident near Goma in May 2018, the park was closed to visitors on 2 June 2018 for some time.

Volcanoes National Park, Republic of Rwanda

Volcanoes National Park (VNP), also called the Parc National des Volcans (PNV), is located in north-west Rwanda, along the borders of the DRC and Uganda (Figures 1, 2 and 3). It was established in 1929 as part of the then Belgian Congo's Albert National Park. However, upon Rwanda gaining political independence on 1 July 1962 from Belgium, the Rwandan side of the Albert National Park broke away and it was named the Parc National des Volcans. Anxious to manage the park, and with little existing expertise, the new African leadership passed the governance of the park to the Ministry of Agriculture between 1969 and 1973. As a consequence, and in line with the predominant agricultural school of thought, about 40% of the park (approximately 100 km²) was decommissioned and cleared for the cultivation of pyrethrum, with the consequent reduction of habitat space for the growing population of mountain gorillas. This period is said to have caused some of the worst moments in the history of the park's gorilla habitat, since the gorillas were forced to dwell at higher altitudes and in smaller areas, coupled with the loss of their bamboo forest habitat. It is no wonder that a census in 1970s yielded the shocking fact that there were barely 250 mountain gorillas still in existence in Volcanoes National Park.

Aware of earlier inadequate efforts to manage the mountain gorillas' habitat, a dedicated American primatologist, Dian Fossey, founded the Karisoke Research Center with support from Cornell University in 1967. Her individual research programme and care of the mountain gorillas was a crucial factor in the drastic reduction of poaching, and drew their plight to the attention of the whole world. Ms Fossey's efforts were complemented by a remedial gesture by the then President of Rwanda, Juvenal Habyarimana, who withdrew administration of the park from the Agriculture Ministry in 1974 and placed it under the newly created Office Rwandais du Tourisme et des Parcs Nationaux (ORTPN), (Rwandan Office of Tourism and National Parks).

Since then, the park has been administered by ORTPN, which is overseen by the Rwanda Development Board (RDB). The mission of ORTPN is to guarantee the conservation of biodiversity in protected areas, together with promoting sustainable tourism. There are three national parks in Rwanda that constitute ORTPN's main sphere of operation: Volcanoes National Park, Nyungwe National Park and Akagera National Park, and Ms Fossey became an influential link for international support. Tragically, however, she was murdered in 1985 by unknown assailants in her camp cabin inside the park. It is strongly believed that her death resulted from her stand against wanton internal and cross-border wildlife criminals who targeted the mountain gorillas, and who could best be tackled via transnational conservancy. Although the assassination of Ms Fossey was a major blow to conservation management, she was buried alongside the graves of 25 mountain gorillas killed by poachers, and since then, this burial site has galvanized stakeholders to work together in their protection and conservation efforts.

Incidentally, whereas the shifting sands of Rwanda's political terrain and rising insurgency became problematic to conservation management efforts in the late 1980s, early 1990s and a couple of decades that followed, the current political climate has resulted in a somewhat conducive setting for some recognizable attempts at transnational conservation management along with partner States of Uganda and the DRC, with their attendant wildlife properties of Mgahinga and Virunga national parks, respectively.

Mgahinga National Park

As depicted in Figures 1, 2 and 3, Mgahinga National Park is the smallest of the three national parks in the VTCA. It derives its name from *gahinga*, which locally means a pile of stones cleared from farmland at the foot of the volcanoes. The park is located at a high altitude – between 2,227 m and 4,127 m – in a conglomeration of dense forests. Besides being a natural heritage property, Mgahinga is the part of VTCA that is cherished by the Indigenous Batwa as a corporate cultural heritage site, enshrining their hunter-gatherer customs, traditions and rituals of forest dependence. They perform different rituals at a number of places, such as caves, hot springs, swamps, rivers, hills, big stones and pits, (Fauna & Flora International, 2013).

Retrospectively, the British colonial administration deemed the VTCA worthy of a game sanctuary in 1930 to protect the mountain gorillas, which had roamed freely within the Virunga region since time immemorial. The park was placed under the technical management of the Uganda Game and Fisheries Department. The Department was established by the colonial government and it continued to operate right up to the mid-1990s. In 1991, the Park was gazetted as a national park on the orders of Uganda's President, Yoweri Museveni.

For the purposes of management, the government of Uganda decided to merge the Game and Fisheries Department with Uganda National Parks in 1996 and

formed the Uganda Wildlife Authority (UWA). This followed the enactment of the Uganda Wildlife Statute, which was transformed into an Act of Parliament of Uganda in 2000. Thereafter, Mgahinga National Park, together with 9 other national parks, 12 wildlife reserves, 5 community wildlife management areas and 13 wildlife sanctuaries, came under the jurisdiction of the UWA. The UWA is mandated to guarantee the sustainable management of wildlife resources and administer wildlife activities in Uganda, both inside and outside the protected areas, together with managing the country's tourism industry. With regard to the management and conservation of wildlife and biodiversity within these parks and sanctuaries from the onset, the UWA faced challenges of poaching, competition in the regional tourism market, human-wildlife conflicts and numerous wildlife crimes on both sides of the border with the neighbouring DRC and Rwanda, and this constituted a severe problem for all the three States Parties.

In a similar way to Dian Fossey in Rwanda's Volcanoes National Park, Ruth Morris Keesling, another American wildlife conservationist, dedicated her life and resources to the plight of the Mgahinga mountain gorillas. Born in 1930 in New Jersey, USA, and an alumnus of the University of Colorado, Ms Morris Keesling generously contributed to the repopulation of the mountain gorillas directly in the field and by equipping Makerere University's College of Veterinary Medicine, Animal Resources and Bio-Security (COVAB). From 1986 to 2014, she continued the legacy of the late Ms Fossey by dedicating her energies, finances and time to continue the gorilla conservation throughout the VTCA. In 1996, she successfully initiated a collaboration with Makerere University. Furthermore, she financed an honorary lecturer position to build capacity in wildlife health management from 1996 to 2006, and went on to provide supplementary funds for selected Bachelor of Veterinary Medicine (BVM) final-year students to carry out research and acquire skills in gorilla health. The graduates are now part of the vibrant team of mountain gorilla and other primate health management specialists in the region. Targeting mainly the VTCA, she also succeeded in negotiating the establishment of the Department of Wildlife and Animal Resources Management (WARM) in 1997 at Makerere University, with a commitment to provide supplementary budgetary resources for the running of WARM over the years (Makerere University, 2014).

Ms Morris Keesling succeeded in increasing the mountain gorilla population from 248 in 1986 to about 880 by the end of 2014, i.e. ten months before the signing of the Greater Virunga Transboundary Collaboration Treaty on Wildlife Conservation and Tourism Development (GVTCT) (Greater Virunga Transboundary Collaboration Secretariat, 2015). One of the highlights of her numerous Virunga transboundary conservation achievements was funding the establishment of the Virunga Veterinary Center (VVC) in 1986, dedicated to research into caring for the gorillas and capacity-building in local veterinarians to handle gorilla health. Initially based on the Rwandan side of the GVCA, Ms Keesling's conservation efforts expanded into the DRC, and eventually into Uganda. Subsequently, in recognition of this excellence in transnational conservation, she was awarded an honorary Doctor of Science (D.Sc.) by Makerere University (Makerere University, 2014). Through this, Ms Keesling's efforts generated further interest from the UWA in the prospective

transnational conservation management school of thought from the late 1990s until the 2010s. Sadly, Ms Keesling did not live to see the fruits of her efforts now enshrined in the fully formed GVTCT/GVCA. She died at her home in April 2018 (*Summit Daily*, 2018).

Origins of the collaborative Virunga transboundary wildlife conservation management regime

In the previous era of individualism, the governments of the DRC, Rwanda and Uganda each endeavoured to glory in the pride of managing the affairs of each of their contiguous national parks separately. However, some of the challenges they encountered, partly from outside their national borders, were the drivers for political exchange and the move towards transnational initiatives to protect and conserve the livelihoods of those parks.

Also, after the mid-2000s, local, regional and international technical experts increasingly persuaded the concerned States Parties to accept the fact that they were all dealing with faunal migratory species whose sovereignty and livelihood were independent of international borders or boundaries. Thus, the notion that it would be of benefit to them all if they were to manage the Virunga conservation landscape under a formal transboundary initiative became far more appealing to the three States Parties. This idea was reiterated and demonstrated by experts at a number of intermediate and high-level regional and international seminars, symposia, conferences and workshops, coupled with incidental publications in scientific journals and other periodicals.

Furthermore, encouragement from international stakeholder bodies, namely multilateral entities and NGOs such as the International Union for the Conservation of Nature (IUCN), the Wildlife Conservation Society (WCS), the World Fund for Nature (WWF), Fauna & Flora International (FFI), the International Gorilla Conservation Programme (IGCP) (a coalition of Fauna & Flora International and WWF), the Dian Fossey Gorilla Fund International (DFGF-I), the Mountain Gorilla Veterinary Project/Gorilla Doctors (MGVP), the Albertine Rift Conservation Society (ARCOS), the Institute of Tropical Forest Conservation (ITFC), etc. bore fruit, and the three States Parties embraced a number of multilateral environmental agreements (MEAs). All these agreements encourage a transnational conservation management regime. Their memberships of ten pro-transnational management agreements favourable to the VTCA are highlighted in Table 1.

These MEAs can be applauded for having become the corporate drivers of an ideological, conceptual, theoretical and contextual framework for the DRC, Rwanda and Uganda to envision a viable tripartite transnational cooperation initiative to cover the Virunga wildlife landscape. Although the MEAs do not offer precise descriptions of exactly how the day-to-day transnational conservation management regime initiative should operate, they introduced the three States Parties to general

Table 1. MEAs signed or ratified by the DRC, Rwanda and Uganda which led to transnational cooperation for the effective management of their wildlife sites in the VCA

Name of MEA	Date of signing	Ratifications (or similar)		
		DRC	Rwanda	Uganda
African Convention on the Conservation of Nature and Natural Resources	15 September 1968	1976	2004	1977
Convention concerning the Protection of World Cultural and Natural Heritage	16 November 1972	1974	2000	1987
Convention on Wetlands of International Importance Especially as Waterfowl Habitat	2 February 1971	1996	2000	1988
Agreement on the Conservation of Gorillas and their Habitats	26 October 2007	2008	2008	2014
United Nations Framework Convention on Climate Change	9 May 1992	1995	1998	1993
Paris Agreement under the United Nations Framework Convention on Climate Change	12 December 2015	2016 (Signed but unratified)	2016	2016
Convention on Biological Diversity	5 June 1992	1994	1996	1993
Convention on International Trade in Endangered Species of Wild Fauna and Flora	3 March 1973	1976	1980	1991
Convention on the Conservation of Migratory Species of Wild Animals	23 June 1979	1990	Not yet	1980 (Signed but unratified)
Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity	29 October 2010	2015	2012	2014

Source: National Model United Nations, 2018.

and precautionary principles, as well as clues to standards, policies, best practices, best value frameworks and attainable goals. The subsequent operationalization of this initiative was initially informal, first through communication among the technical authorities of the three contiguous parks of Virunga (DRC), Volcanoes (Rwanda) and Mgahinga (Uganda), together with their sister park, the Bwindi Impenetrable National Park. The parties understood their common purpose and destiny, initially to curb poaching and ensure the safety of the mountain gorillas. Thereafter, from about 2006, the park authorities collaboratively and inter-territorially built the necessary mutual trust and understanding, (UWA, 2011).

Looking back at this transnational capacity-building initiative, the UWA (2011) affirmed in a celebratory press release:

Based on the initial success of the informal collaboration between park staff, the three protected area agencies, i.e. the Congolese Institute of Conservation of Nature (ICCN), Rwanda

Development Board (RDB) and Uganda Wildlife Authority (UWA), working with various partners within the region, established the Greater Virunga Transboundary Collaboration (GVTC) as a mechanism for strategic, transnational, collaborative management of the Greater Virunga landscape.

Formalization of the transnational management regime for the Virunga Conservation Area

As affirmed by the UWA literature (2011) in the previous section, the Greater Virunga Transboundary Collaboration (GVTC) was formally established in December 2007 with a ‘December 2007 – December 2011’ four-year funding support of €4.1 million from the Netherlands through its embassy in Rwanda, in collaboration with the International Gorilla Conservation Programme (Greater Virunga Transboundary Executive Secretariat, 2010; Musasizi, 2011). With a head office in Kigali, the GVTC is made up of six sections: (1) the Regional Transboundary Forum; (2) the Summit of Heads of State and Government; (3) the Council of Ministers; (4) the Board; (5) the Executive Secretariat; and (6) the Regional Technical Committees (Figure 4).

GVTC’s performance since its inception

Background

The GVTC was established with the purpose of promoting and upholding the sustainable conservation of the biodiversity of the entire stretch of the Albertine Rift, in which the VTCA is also located. The Greater Virunga Transboundary Executive Secretariat (2010, p. 1) presented the objectives for its formation as ‘a long-term conservation and socio-economic development through (1) strategic trans-boundary

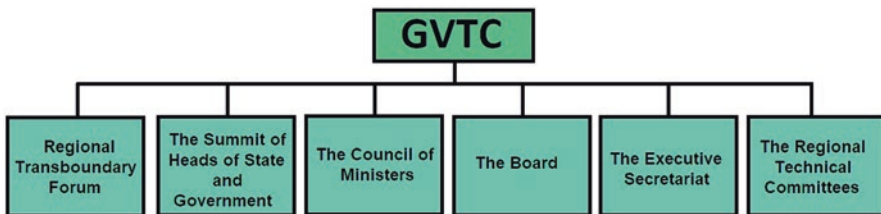


Figure 4. Overview of the Greater Virunga Transboundary Collaboration structure. Source: Author.

collaborative management and (2) equitable sharing of conservation benefits with local communities’.

From this solid ‘two-in-one’ objective, two key outcomes became the basis for the GVTC’s 2007–2011 first work plan, which the Greater Virunga Transboundary Executive Secretariat (2010, p. 1) further substantiated as follows:

(a) trans-boundary collaboration process (among others: the support, institutionalization of, and developing of a sustainable financial mechanism for the Trans-boundary Core Secretariat – T.C.S.) and (b) revenue sharing and conservation practices (among others: the evaluation of existing revenue sharing approaches, support of community tourism infrastructure and the coordination of the implementation of livelihoods and income generating projects, etc.).

Achievements

At the first meeting of the GVTC’s Regional Transboundary Forum, held in Kampala in October 2011, the Executive Director named the key significant achievement of the transnational collaboration since its inception as the repopulation of the mountain gorillas. This was affirmed by the Greater Virunga Landscape Annual Conservation Status Report (2016, p. 2) as follows:

By working together and taking stock of the effects in the 2016 ACSR, we have seen success in the fight against poaching and wildlife crime and improved conservation in the Greater Virunga Landscape.

The Greater Virunga Landscape Annual Conservation Status Report (2016, p. 5) further noted that there was ‘... a decline in the number of snares discovered and destroyed – dropping to 1,310 in 2016 from 4,240 in 2015’. Also, satellite imagery analysis showed that the rate of deforestation fell from over 100 km² in 2001 to an insignificant 15 km² in 2016. With regard to poaching, it became evident that the amount of ivory confiscated among the counties of the Greater Virunga Landscape had also dropped significantly – in Kampala alone, the amount of impounded ivory fell to 389 kg in 2016 from 2,813 kg in 2015.

Challenges

Being a border region drawn along natural features of great biological interest and high conservation value, together with huge mineral wealth attractive to rebel groups, the VTCA has incurred serious damage during the past 25 years. Apart from the obvious humanitarian tragedies, this has also had a detrimental effect on the last remaining mountain gorillas on the planet. The instability is rooted in a complex antiquity of colonial and post-colonial mistakes, consequent civil strife, cross-border suspicion and mistrust, competition for natural resources, insurgency and jungle law. These factors are also infused with politics of global neo-colonialism

and intrigue associated with a craving among foreign and regional powers to access the DRC's mineral wealth partly located in the VTCA and its periphery or buffer zone. Since the causes of these conflicts appear to be rooted in a multiplicity of colonial demographic transpositions, with consequences across the entire Great Lakes Region, it is important to include them in the scope of this paper, in order to appraise their origins and to examine the ways in which they are now problematic for the growth and operationalization of VTCA's sustainable transnational conservation management regime. The next section explores this appraisal.

A complex history of incidents and mistakes

In hindsight, the damage to which the VTCA has been subjected in the past decades is a consequence of demographic transpositions, along with outbreaks of war and insurgency in the region. With regard to the latter, the damage is associated with the actions of troops, rebels, poachers and refugees, together with unscrupulous exploitation of its natural resources.

To date a multiplicity of conflicts, which seem to recur cyclically and go beyond humanitarian crises, keep threatening both floral and faunal species, habitats and human communities that depend on the VTCA parks for their survival. Thus, the VTCA's governance systems operate in a tense setting. Its boundaries are encroached upon by surrounding locals and the refugee populations. Its habitats continue to be destroyed through overfishing and charcoal production, and its animals are poached for meat, ivory and the younger ones for pets. Destruction partly arises from the high human population density in the areas surrounding the parks, (Lanjouw et al., 2001). It is abundantly clear that most of the threats to VTCA's ecosystem come from all these factors operating in its shared transnational landscape and its buffer zones.

Technical conservation management planning gaps among the MEAs

A critical reflection on the MEAs in Table 1 with regard to the governance of the VTCA is that they corporately envision the following benefits:

1. Fostering of a robust and overall transnational regulatory regime conducive to the VTCA's sustainable management.
2. Nurturing regionally, bilaterally, multilaterally-centred environmental policies, laws, legislation, and/or protocols that empower the DRC, Rwanda and Uganda to forge synergies of best-value frameworks, policies and laws instrumental in the conservation/preservation of the VTCA's biological diversity; endangered species of wild flora and fauna; migratory species of wild animals and avian migratory species, their habitats and migration routes, to ensure their favourable

conservation status across their migratory ranges; protection of their probable outstanding cultural, natural or mixed heritage within its landscape; protection of plant genetic resources for food, agriculture and medicines; control of transnational movements of hazardous wastes and their disposal; transnational control of organic/inorganic pollutants, hazardous chemicals and/or pesticides; transnational control/mitigation of wildlife trafficking and poaching; and wetlands and their resources.

3. Proliferation of a corporate managerial, protective, planning, organizational, administrative and enforcement regime for attendant policies, laws, legislation, and/or protocols, and penalties in instances such as criminal activities, including fines, prison terms, forfeiture of tools used in the commission of a crime, as well as the fruits of the crime, and revocation of licences.
4. Propagation of mutual trust and corporate operationalization of fair and equitable sharing of benefits arising from co-ownership and mutual utilization of transnational wildlife and other resources in and around the VTCA.
5. Inter- and intra-State Party coordination, effective control and prevention of malicious introduction and spread of pests and/or flora and fauna potentially problematic to the VTCA's landscape.
6. Inter- and intra-State Party prevention and/or stabilization of greenhouse gas concentrations in the atmosphere against dangerous levels of anthropogenic interference with the VTCA's climate system.
7. Inter- and intra-State Party cooperation in the control of activities detrimental to the livelihood of the VTCA's ecosystems, such as prohibited land uses, encroachment, deforestation, conflicts/terrorist activities, etc.

However, while the MEAs are rich in referential text to acquaint the three States Parties with the above benefits, there is little detail as to how these initiatives might be implemented. Also, the procedures that can be adopted to make them function smoothly on a day-to-day basis, the safeguards, checks and balances, troubleshooting and intervention actions, and their implementation and improvisation, are somewhat elusive. In this regard, the complex antiquity of colonial and post-colonial mistakes, consequent civil strife, cross-border suspicion/mistrust, competition for natural resources, insurgency and jungle law, noted earlier, have tended to diminish the MEAs, rendering them virtually ineffective. In other words, despite the DRC, Rwanda and Uganda having endorsed or ratified most of these MEAs, and having made some earlier conservation progress, the destruction of the VTCA's fauna and flora continues.

This ineffectiveness of the MEAs is worthy of further scrutiny. Although the Greater Virunga Transboundary Collaboration Treaty on Wildlife Conservation and Tourism Development (GVTCT) has been in existence informally since 2007, and formally since 2015, the reality on the ground is that the joint management of its transnational sites has remained complex, indeterminate and frequently demanding (Manz et al., 2017). Due to political tensions emanating from past skirmishes, mistrust and mutual suspicion between the DRC, Rwanda and Uganda, the actual management of the VTCA has tended to slip back into a state of

compartmentalization into the three mother territorialities, which in itself constitutes a threat to the GVTCT.

It therefore comes as no surprise that the formal adoption of the GVTC took longer than expected, with the belated signing of the treaty in 2015. The procedure to fully institutionalize and operationalize the GVTC proved to be much more complex than initially assumed by all parties involved in the preparation of the ten-year Transboundary Strategic Plan for the period up to 2016 (Greater Virunga Transboundary Executive Secretariat, 2010). The process led to a hitherto unanticipated drafting of a transboundary treaty. In the same way as the Brexit turmoil resulting from Britain's departure from the European Union, the whole process of negotiating the content and drafting of the treaty, and as well as lobbying the line ministers to draw up the supporting bills for adoption by the Congolese, Rwandan and Ugandan parliaments proved to be complex, indeterminate, conflictual and unpredictable. In some instances, the three States Parties were completely divided in terms of other regional and geopolitical interests (Sloat, 2018; Sartori et al., 2018).

Incidentally, as formal institutionalization took so long, collaboration between the three park authorities remained inadvertently irregular, informal and ad hoc. The prolonged shelving of the treaty constrained the comprehensive operationalization of the GVTC as a legal and authoritative entity. As such, the local park authorities remained powerless to take legally binding decisions on behalf of their member States, and most anticipated outputs of the GVTC that would normally have been straightforward remained shelved for a long time. For instance, the financing mechanism for the transboundary Collaboration Secretariat could not be developed in time in the legally required context. Decisions on large-scale funding were also often declined or postponed.

Cocooning, cold wars, counter-accusations, mistrust and inter-state suspicion

As nature abhors a vacuum, the three park authorities – the Congolese Institute of Conservation of Nature (ICCN), Rwanda Development Board (RDB) and Uganda Wildlife Authority (UWA) – continued to go their own separate ways and to develop master plans in isolation for their corresponding parks, in a typically cocooned model framework. It is also not surprising that the UWA stuck with its own self-governing General Management Plan 2014–2024 for Mgahinga National Park (MGNP), (UWA, 2014a, b). Tensions run deep inside the managerial machinery of the Greater Virunga Transboundary Executive Secretariat; seemingly united, there are undercurrents of mistrust which permeate the culture and administrative ways of the three States Parties. There are differences in legal, planning and statutory frameworks, as well as policies, laws, legislation and protocols, financial matters and penalties for criminal activity. All this is aggravated by the different means of communication or languages in the partner countries, which further complicates

managing the VTCA on a day-to-day basis, (Manz et al., 2017). Correspondingly, the management systems in each of these countries have tended to gravitate back to the pre-GVTCT days of individual national park authorities, where each of them also had to deal with internal conflicts. These include issues such as political interference, ambiguous financial management systems and a clash between conservation on the one hand and exploitation and theft of the heritage elements, together with corruption and a lack of transparent revenue-expenditure mechanisms, on the other.

It is also apparent that the MEAs were unsuccessful in eliminating the enduring suspicion between the DRC, Rwanda and Uganda, due to past and present skirmishes, with each casting blame on the others for their individual vulnerabilities. Such a blame game does not go well for a sustainable transboundary conservation management regime.

Oil extraction versus natural/environmental/wildlife conservation

As confirmed by the Greater Virunga Landscape Annual Conservation Status Report (2016, p. 6), over 80% of the Greater Virunga landscape has hurriedly been partitioned into oil concession blocks. The pattern of this rushed and haphazardly planned extractive activity, particularly in both the DRC and Uganda, is no different from the California Gold Rush of 1848 to 1855, (Clay and Jones, 2008). Since the DRC and Uganda are both signatories to the 1972 Convention Concerning the Protection of the World Cultural and Natural Heritage, conflicts have emerged between sustaining the VTCA's ecosystems and/or biosphere on the one hand and developing the oil extraction industry in and around the entire Greater Virunga landscape on the other.

Through their own rigorous independent social and environmental impact assessment (SEIA) initiatives, those organizations have empirically ascertained that this activity is liable to leave the local populations in danger from air pollution, lung disease and water contamination, jeopardizing the habitats of invasive species or causing habitat loss in VTCA's fragile ecosystem, (GTCDR, 2015). From their SEIA biodiversity-sensitivity reconnaissance missions, the organizations have established that the whole Greater Virunga Landscape is critically biodiversity-sensitive, with the areas around Lake Edward being the most biodiversity-sensitive. In this regard, GTCDR (2015) also affirms that roads being built to facilitate operationalization of the oil extraction activities are already beginning to open up pristine areas, thereby exposing them to poachers. There is also the potential that the increased human population, attracted by the oil extraction industry, will proliferate cultures that may be incompatible with the ideals of sustaining VTCA's ecosystems and environments.

Effects of high population growth, poverty and illicit socio-economic trade

According to the Annual Conservation Status Report (ACSR) (2015), cited in the Greater Virunga Landscape Annual Conservation Status Report (2016, p. 14), the Greater Virunga Landscape has ‘... the highest rural population density in Africa, ranging from 100 to over 1,000 persons per square kilometre...’. The consequences of this for the VTCA are clear. Human population pressure has subjected the communities adjacent to the VTCA to high levels of poverty and unscrupulous socio-economic survival mechanisms, including

‘... struggles between humans and wildlife, leading to retaliatory killing of wildlife; and charcoaling and associated illicit charcoal trade’.

Opportunities

A wealth of opportunities lie on the VTCA’s doorstep, but are currently underexplored due to the state of general insecurity. The following sections examine some of these in more detail.

Immense tourism potential

There is tremendous potential across all three contiguous parks (Virunga, Volcanoes and Mgahinga) for biodiversity-based enterprises, such as mountain niche products (high-value medicinal plants), as well as a great, yet currently underused, impetus for mountain tourism. There is also the opportunity for the local populations to earn additional income from tourism. It is therefore in the best interests of the three States Parties to put aside their past differences and come together to ensure absolute security in the VTCA in order for this potential to be unlocked.

Potential for financial support from the international community

In terms of financial support from development partners, several NGOs, multilateral bodies and private individuals and organizations are extremely interested in VTCA’s wildlife conservation. This is evident from the number of such entities already operating in the area, despite the numerous incidents of insecurity and loss of life, even of their own staff. Again, it is essential for the three States Parties to

put aside their past differences and work together to guarantee security in the VTCA. This would, in turn, encourage other financial support for the area's conservation agenda.

Potential for resource-sharing collaborations in public-private partnerships (PPPs)

Due to the ongoing poor relations between the three States Parties, PPP-led and eco-friendly enterprise supportive of VTCA's conservationist agenda has not yet been fully developed. Some of the enterprises, such as hydro- or solar power production have the potential to mitigate the damage done to the VTCA by activities such as charcoaling. Other kinds of enterprise development include leisure and hospitality, hotels/motels, leisure and eating facilities, to name but a few. In order for this potential to be realized, the DRC, Rwanda and Uganda governments should endeavour to help supplement the GVTCT with strategic PPP-based action planning and development, and not mere rhetoric.

Exploiting the VTCA's potential as a peace-building and conflict resolution tool

The VTCA is not often considered in terms of its potential to solve wider problems, particularly with regard to the critical need to address combative insecurity. Even though the VTCA is a natural resource, it is possible to weave the entire complex into a peacebuilding tool for pacifying the severely destabilized border landscapes of the Albertine Rift, in a manner akin to cultural diplomacy.

Through awareness-raising initiatives among the rebel groups, warring factions, belligerents and stakeholder communities about the benefits to all for winding up conflicts in and around the VTCA, this landscape can become the most practicable, affordable, viable and sustainable means for achieving lasting peace in this troubled part of the Great Lakes Region. Needless to say, the VTCA can be reinvigorated, revitalized and rekindled beyond its present state as the tool for peaceful co-existence among the three States Parties. There is an untapped opportunity for the VTCA to become the driver for ending the deprivation of secure incomes, employment, health, education, skills and training, happiness, infrastructure, housing and social services among the neighbouring communities, (UNESCO, 1983, 1997, 2010).

Conclusion

A prospective framework model for a sustainable transnational conservation management regime for the Virunga Conservation Area and beyond

In conclusion, a promising framework model for a sustainable transnational conservation management regime for the Virunga Conservation Area and beyond may be the best way forward, and could be adapted for similar properties in Africa and elsewhere. For this to happen, the challenges detailed above need to be overcome and the suggested opportunities should become mechanisms for value addition. The wise words of Kaiser (2017) in Manz et al. (2017, p. 5) are worth quoting in full:

... additional requirements with regard to international coordination processes must be met. This, of course, always takes effort, but the focus is on cooperation and achieving common goals, which acts as a driving force. It is about supporting each other to create something great together. Only together do the parts make a whole. And here, it becomes clear that this peaceful cooperation is very much in keeping with the UNESCO principle of bringing nations together, and forms a contraposition to the destruction of UNESCO World Heritage sites.

Recommendations

In the same way that the 1972 Recommendation Concerning the Protection, at National Level, of the Cultural and Natural Heritage was added to the 1972 Convention Concerning the Protection of the World Cultural and Natural Heritage to provide further guidance on fundamental issues at the levels of regional development and national planning, this paper deems it a matter of urgency for UNESCO to work with other stakeholders to develop a procedural instrument, or set of instruments or guidelines, to accompany the pro-transnational MEAs sympathetic to an inherent transnational conservation management regime.

It would be profitable for the prospective instrument or set of instruments to highlight the following aspects, which are not catered for in the current stock of pro-transnational MEAs:

- The transnational heritage property management treaty to be equipped with a strong SEIA policy(ies), obliging concerned States Parties to demonstrate clear capacity for monitoring and implementation of the said SEIA policy(ies);
- How to kick-start a transnational cooperation for effective management of World Heritage sites;
- Possible transnational management scenarios and their alternatives, including hierarchical structure(s)/organograms, lines of authority and responsibility;

- Suggestions for scientific and technical, administrative, legal, financial systems that can make a transnational management enterprise function at its best, including possible public involvement;
- How a managerial transnational enterprise could function in instances of conflictual geopolitical interests of concerned States Parties, and also in instances of serious intra-State instability, corruption, mistrust, associated armed conflicts, poaching, habitat loss, disease and attendant insecurity;
- How managers of a transnational management regime can attract political attention, diplomacy, financial support, and regional and international law vis-à-vis their concerned States Parties to obtain environmental security, in order to prevent conflict, instability and unrest in and around the given transnational landscape;
- How transnational governance can be given judicial powers to institute severe penalties for ‘crimes against the environment’ and its attendant human and non-human features, particularly of high conservation value;
- Self-appraisal/evaluation mechanisms for a transnational enterprise; and
- Encouraging the adoption of alternative cooking energy sources for the local communities, such as hydro-power production and solar lighting, in order to cut down on deforestation.

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Lake Chad Cultural Landscape: An uncommon transnational potential in the midst of multiple challenges



Bryan Koffi, Bandiougou Diawara, and Sébastien Moriset

Introduction: A unique cultural landscape

In the heart of the Sahelian belt, on the borders of Chad, Cameroon, Niger and Nigeria, lies the Lake Chad Cultural Landscape, one of the largest inhabited lacustrine landscapes on our planet. This immense freshwater expanse in the middle of a desert is shared by Chad, Cameroon, Niger and Nigeria and currently covers 17,000 km². This area offers a great diversity of wetland ecosystems that makes it a great source of life for many animal species in this semi-desert environment. On the shores of the lake, the desert sands and the water meet in a complex network of meanders, sometimes turned into areas for cultivation and breeding by the inhabitants. Lake Chad is unique in that it is covered by hundreds of islands, many of which are inhabited by several communities that rely on its resources and perpetuate sober lifestyles that ensure their resilience. This cohabitation between Man and nature, which dates back to the Palaeolithic era, gives a true dimension of cultural landscape to this vast lake.

Given the richness it provides in a harsh climatic context, Lake Chad has been an unavoidable crossing point for thousands of years, where both economic routes and political currents linking sub-Saharan Africa to the countries on the southern shore of the Mediterranean converge. Owing to these continuous trans-Saharan exchanges,

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Lake Chad is also a place where nomads and sedentary people have been living together in a spirit of balance and reciprocity, promoting complementary vocations between peoples. This oasis provides food to its entire basin through adapted forms of agriculture, fishing and farming. Even today, the products of Lake Chad reach the Atlantic coast, Cameroon and Nigeria in particular. In May 2017, UNESCO and the Lake Chad Basin Commission (LCBC) signed a partnership agreement¹ to implement the project entitled 'BIOSphère et Patrimoines du Lac Tchad' (BIOPALT), in order to contribute, among other things, to the inscription of the Lake Chad Cultural Landscape on the World Heritage List, thus offering the countries a unique opportunity for cooperation and sub-regional integration to promote peace, safeguard and valorize natural and cultural resources, and improve the resilience of local communities. The BIOPALT project is coordinated by UNESCO's Natural Sciences Sector within the framework of the Man and the Biosphere (MAB) Programme. It is a component of the Programme for the Rehabilitation and Strengthening of the Resilience of Ecological Systems in the Lake Chad Basin (PRESIBALT) of the LCBC.

The Lake Chad Cultural Landscape: The first quadripartite transnational cultural landscape to be inscribed on the World Heritage List

During the Summit of the Heads of State and Government of the LCBC member countries held on November 1, 2010 in Ndjamena, Chad, an appeal was made to UNESCO for the inscription of Lake Chad on the World Heritage List, in order to make it a protected area and develop it, with the priority of preserving its biodiversity and ecosystems. In 2013, in close collaboration with the LCBC, UNESCO conducted a feasibility study on the nomination of Lake Chad as a World Heritage Site and Transboundary Biosphere Reserve. This study concluded that Lake Chad has the potential to achieve these international recognitions. Through the BIOPALT project, funded by the African Development Bank (AfDB), the four riparian countries (Cameroon, Niger, Nigeria and Chad) initiated the process of preparing the nomination file for the inscription of Lake Chad on the World Heritage List, during a regional workshop held in N'Djamena in April 2018.

All the consultation, elaboration and validation phases of the management plan were carried out and resulted in 2018 in the harmonization of the tentative lists of the four countries by including the Lake Chad Cultural Landscape on the basis of its cultural and natural values. The proposed transnational site is home to approximately two million people who rely directly on it for their livelihood. This area has a great diversity of wetland ecosystems that make it a great source of life for many animal and plant species. The site bears unique testimony to the Sao civilization (criterion iii), demonstrates a considerable exchange of influences over the centuries (criterion ii), represents an area of natural beauty and aesthetic importance (criterion

¹With an initial period of three years, this agreement was extended to end in December 2021.

vii), and exhibits a high diversity of ecosystems unusually found in arid regions (criterion ix). In addition, archaeological excavations undertaken around the lake have also proven that human presence there dates back to the Palaeolithic era. Today, several hundred islands in the lake are still inhabited by local communities including the Kotoko, Hausa and Barma, descendants of the ancient peoples of the region. These communities live off the lake’s resources and perpetuate ancestral traditions, making the lake a living cultural landscape (Figure 1).

From a natural perspective, the environment of Lake Chad presents an exceptional mosaic of plant formations interspersed with oases and wetlands of international importance. Such a variety of ecosystems is rare in arid regions. These areas are home to a great diversity of wildlife. Among the remarkable species are the hippopotamus, crocodile, monitor lizards, terrestrial and aquatic turtles and otters. The ichthyofauna is also rich and varied with about 100 species of fish inventoried (Magomna, Lévêque, 2015). In addition, Lake Chad is an important ecological niche for millions of migratory birds. More than 350 species of birds have been documented. Lake Chad includes four wetlands of international importance (Ramsar sites), one in each country (Chad, Cameroon, Niger and Nigeria). Despite anthropogenic pressures on its natural resources, the ecosystems of Lake Chad are globally well conserved with associated ecosystem services and cultural values. The relatively small human population and the absence of polluting industries in the vicinity

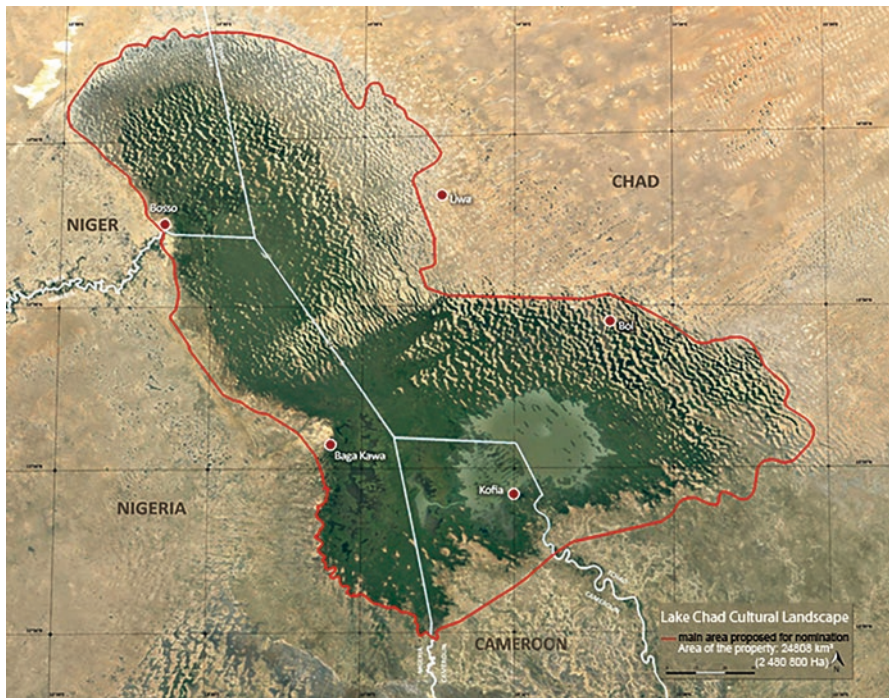


Figure 1. Boundaries of the nominated property. *Source:* Google Earth satellite images. (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations).

of the lake contribute to the preservation of this remarkable biodiversity. As part of the protection and management of this area, each of the four riparian countries has taken legal measures to preserve the site through its inscription on the national heritage list by decree (Niger), or order (Cameroon, Chad, Nigeria). To support the nomination process, several activities were then organized within the framework of the BIOPALT project. For example, in collaboration with the UNESCO office in Yaoundé, the International Centre on Earthen Architecture (CRAterre) strengthened the capacities of national experts in the preparation of a nomination dossier and the identification of the cultural and natural values of the proposed site.

Furthermore, the multidisciplinary, regional, inclusive and participatory approach promoted by the BIOPALT project has proven to be relevant to the sustainability of the achievements. Indeed, a participatory and inclusive approach always builds a relationship of trust with the stakeholders and especially with the local communities who appreciate the consideration of their traditions and know-how. The nomination was submitted to the World Heritage Centre in January 2020. The next step will be the organization of the evaluation mission by the Advisory Bodies (IUCN and ICOMOS). Unfortunately, the latter has been postponed for security reasons (Figures 2 and 3).

An innovative protection and management system that straddles the line between modern and traditional

The will of four States to have Lake Chad recognized as a remarkable element demonstrates the resolution of Chad, Cameroon, Nigeria and Niger to do everything possible to safeguard this property that has been shared for thousands of years by all the peoples of the basin. The desire to monitor and protect Lake Chad is not new and the main initiative implemented for better management of this area is the creation, as early as 1964, of the Lake Chad Basin Commission (LCBC). This transnational entity was initially founded by the four nominating countries and was later joined



Figure 2 and Figure 3. Community consultation session in June 2018 in Cameroon. © Sébastien Moriset.

by the Central African Republic in 1996 and Libya in 2008. The Commission's mandate is to 'manage Lake Chad and other shared water resources in its basin in a sustainable and equitable manner, preserve the ecosystems of the conventional Lake Chad Basin, and promote regional integration, peace and security throughout the basin.' Namely, it attempts to harmonize the management procedures of the basin, and of the lake in particular.

Moreover, Lake Chad has overcome numerous political crises and climatic hazards (exceptional drops in water levels), owing to traditional management systems that are still in place, allowing for the regulation of inter-community relations – trade or fishing for example. The traditional forms of social management and natural resource management still exist, with many intangible practices ensuring respect for natural resources. The local authorities established by the central administration of the four Lake Chad countries rely on these traditional management mechanisms without conflicting with them. The people who manage this immense cultural landscape are the administrations (mayors, sub-prefects, prefects, governors) who work in close collaboration with the traditional authorities (Chiefs, Imams, Sultans) and the traditional managers of the lake, which include, among others, professional groups such as farmers, fishermen, breeders, etc., who have one person in charge per group. Each country has its own specificities, but this principle of co-management between conventional administrative authorities and traditional authorities is a permanent feature throughout the lake. There is no conflict of management between both; the contact is permanent.

There are also many local traditional celebrations and ceremonies, some of which take place across borders but are little known and little publicized outside of the lake dwellers who host them. Overall, there are many opportunities to spread and promote local and cross-border social and cultural activities among communities in the Lake Chad Cultural Landscape that have shared traditions and a long history of interaction and exchange.

All in all and in an innovative way, the protection of the cultural and natural values of Lake Chad is guaranteed by the population and its traditional social structures. To this is added a set of administrative services from the four States. These national measures are reinforced at the regional level by the LCBC. In parallel to the preparation of this nomination, a management plan was developed by two experts mandated by the BIOPALT project. Their participatory work has allowed the formulation of an action plan for 2020–2025.

Cross-Border cooperation as a solution to the challenges of the Lake Chad Cultural Landscape

Lake Chad is crucial to the history of humanity. The 7 million year old Toumaï skull, the ancestor of humanity, was discovered in the Lake Chad Basin, on the border between Chad and Niger. Unfortunately, the lake area is among the areas with the lowest development index on the planet.

The most significant changes in the environmental and socio-economic profile of the Lake Chad Basin all appear to be related to the impacts of climate change, the deteriorating security situation in the region and to development activities. In order to ensure that the proposed site is inscribed on the World Heritage List, it is necessary to analyse all of these issues in a holistic way, to understand how they have become risk multipliers in recent decades, to anticipate how they will evolve in the future, and to strengthen transnational cooperation.

The Islamic fundamentalist movement Boko Haram, which emerged in Nigeria in the early 2000s, and its terrorist activities have caused numerous casualties and acts of violence against local populations, resulting in significant population displacement. These migrations and the demographic pressure they cause are also believed to result in increased conflict and a lack of redistribution of resources. The activities of the Islamist movement have also had economic repercussions, notably with the evacuation of many islands in the lake, depriving fishermen of their means of subsistence. The demographic pressure generates migrations of population, which thus affects the functioning of the ecosystem of the lake.

Also, this region has long been a crossroads in trans-Saharan economic and political exchanges. Fortunately, economic development activities have had little impact on the ecosystem. Current pollution is limited to the use of motorized pumps for agriculture and motorboats that cause air and water pollution from oil and hydrocarbon spills. There are also industrial facilities in the lake basin but far from the shoreline, such as the oil operations in Diffa, Niger. On the other hand, if industry were to develop on the shores of the lake, because of the discovery of oil, for example, in Chad, the risks of pollution would be much higher than today. This region is already the scene of one of the most complex conflicts on the continent, and oil development within the boundaries of the nominated site would jeopardize its inscription on the World Heritage List. Indeed, the World Heritage Committee has consistently stated that mining, oil and gas exploration or exploitation are incompatible with World Heritage status. While the World Heritage Convention promotes the exploitation of the potential of World Heritage properties and heritage in general, to contribute to sustainable development and thereby increase the effectiveness and relevance of the Convention, it does so while respecting its primary purpose and mandate of protecting the Outstanding Universal Value of World Heritage properties.²

On top of these scourges, the manifestation of climate change with its corollary of increasing temperatures and oscillating rainfall can be added. The numerous droughts and floods of the 1970s have already had a long impact on this ecosystem. Climate forecasts for Lake Chad, although contingent, predict significant temperature increases. The German International Development Cooperation Agency predicts a loss of water resources of 4–10% by the end of the century, and

²Heritage has long been absent from mainstream debates on sustainable development despite its paramount importance to societies and the widespread recognition of its great potential to contribute to social, economic and environmental goals. On November 19, 2015, the 20th General Assembly of States Parties to the World Heritage Convention adopted a Policy on the Integration of the Sustainable Development Dimension into the World Heritage Convention Processes <https://whc.unesco.org/en/sustainabledevelopment/>

the evaporation will potentially lead to a loss of water that could cause a change in the surface area of the lake. These ecosystem changes in the basin will undoubtedly have impacts on livestock, fisheries, agriculture and possibly water quality.

As well, the current COVID-19 pandemic has exacerbated the pressures. The socio-economic fallout from the measures taken by governments to contain the spread of the virus is having a significant impact on local populations. Initially, the closure of borders has had an impact on the economy of border communities with a significant drop in income. In addition, measures such as the closure of markets, lockdowns and curfews have exacerbated the already existing food crisis. The pandemic is also having an impact on the security situation, as extremist groups are taking advantage of the current fear and chaos, and cross-border authorities, who are on the front lines of managing both cross-border trade and population migration, are not always adequately equipped to respond to this health crisis.

Despite its unique potential, there is no doubt that the Lake Chad Cultural Landscape is the scene of a profound security, ecological, economic and humanitarian crisis. The possibilities for responding to these issues are equally diverse and varied. The Lake Chad Basin Commission has already undertaken several actions. For example, in order to address the declining viability of biological resources in the lake, the LCBC and its partners have launched a Sustainable Development Program to counter the proliferation of invasive aquatic species and reduce pollution for better conservation and management of fisheries resources. The fight against youth unemployment, the revitalization of economic activities, the strengthening of capacities to adapt to climate changes and the resilience of populations through increased income are all important measures to be implemented and which would be cross-cutting responses to the various problems of the region. Consequently, the BIOPALT project contributes to poverty reduction (SDG 1) and the restoration of degraded ecosystems (SDG 15) through the implementation of income-generating activities (IGAs) based on the green economy for fragile communities. For example, in the Lake Chad Basin, 30,000 people (including 13,000 women) have benefited directly and indirectly from several IGAs that also help mitigate the socio-economic impacts of the COVID-19 crisis: production and sale of oil and soap from *Balanites*, rehabilitation and fish stocking of a pond, valorization of the Kouri cattle breed and improvement of income and food security.

The BIOPALT project also promotes the culture of peace (SDG 16) through training and capacity-building activities targeting nearly 5,000 people and dealing with the peaceful management of natural resources (PCCP approach: from Potential Conflict to Potential Cooperation), the Man and the Biosphere Program, and the World Heritage Convention.

The BIOPALT project is also working to improve knowledge of the biodiversity, cultural heritage and hydrology of Lake Chad through dozens of scientific studies, and to develop strategies and policies to consolidate regional and national capacities and strengthen the resilience of nearly 200,000 people vulnerable to the effects of climate change (SDG 13).

This dynamic, appreciated by the states, has had a federating effect and has reinforced the transnational conception of Lake Chad. The involvement of various civil

society actors has also helped to perpetuate this vision and ensure the sustainability of the achievements. If the first phase of the BIOPALT project was a success, several actions can still be carried out. The implementation of these actions should be done in the same spirit, i.e., in an inclusive, participatory and transnational manner. A second phase of the BIOPALT project would then be appropriate and could focus on strengthening income-generating activities, ecological restoration and the promotion of intercultural dialogue to resolve various conflicts.

Conclusion and prospects The inscription of the Lake Chad Cultural Landscape on the World Heritage List is a ray of hope.

In view of the negative impacts that oil exploitation in the Lake Chad area could generate, an alternative solution must be found. This solution should consist of sensitizing the Government of Chad to cancel the oil concessions in the lake area and replace them with concessions in non-transnational areas that are less rich in cultural and natural heritage. For the inscription of the Lake Chad Cultural Landscape on the World Heritage List will have the value of international recognition of the richness of its cultural and biological diversity, which will provide a sense of pride to countries and contribute to restoring the dignity of local communities. By strengthening transnational mechanisms for safeguarding and sustainable management for future generations, this status would further bind the destinies of these nations and peoples and strengthen sub-regional cooperation and integration for the promotion of peace. In addition, the site will receive more attention from the international community and could more easily and quickly obtain funding for both site conservation and community development projects. World Heritage designation is also likely to stimulate tourism activities with positive consequences for the local economy.

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Preventing violent extremism in cross-border villages in the Lake Chad Basin countries: A lesson in cross-border cooperation



Allahissem Hervé

Introduction

Lake Chad is a common heritage of the states of Cameroon, Chad, Niger and Nigeria. These four countries founded the Lake Chad Basin Commission (LCBC); the accession of the Central African Republic (CAR) in 1994 and Sudan in 2000 allowed the surface area of the Lake Chad Basin to grow to 966,955 km².

Cohabiting communities in this basin include populations of riparian countries, stateless populations and nationals of other African States, such as Guineans, Senegalese, Malians, Ghanaians, etc.

The predominant communities in the Lake Chad region are the Hausa, Foulbé, Boudouma, Kanouri Arab and Kotoko. All these populations live together in a diversity of customs and practices.

Economic activities in the Lake Chad basin

The economic activities of the populations of the Lake Chad Basin are mainly agriculture, livestock, fishing and related artisanal processing activities.

Thus, in this region, there are three types of agriculture: rain-fed agriculture, flood-fed agriculture and irrigation agriculture, which is currently in the minority.

Agriculture in the Lake Chad Basin is essentially concerned with food production for the local populations. Crops include maize, wheat, millet, rice, potatoes, melons, tomatoes, peppers, garlic, onions, etc.

Fishing, which used to be the most attractive activity, is now facing enormous difficulties, including the continuous drying-up of the waters of Lake Chad, which

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has considerably reduced fish-farming activities and led fishers to change to agricultural or pastoral activities. In addition to natural constraints such as climate change, the scarcity of rainfall and the increase in population are further accentuating these difficulties.

It should be noted that inter-village commercial activities are also significant in this region.

Examples of regional projects managed by the Lake Chad Basin Commission

The LCBC is implementing several projects in the Lake Chad Basin, which aim to optimize and better manage the heritages of the Lake Chad Basin. These include:

- a project for the safeguarding of the Kouri cattle breed, which is a species that lives only in this area; and
- the Lake Chad Basin Water Resources Planning and Management Project.

The influence of the Boko Haram jihadist group in the Lake Chad Basin

The Lake Chad region, which is known as an agricultural, fishing and livestock production area, has been seriously challenged by insecurity in recent years. According to Buchanan-Clarke and Lekalake (2016): ‘The region seems to reflect an image of ungoverned spaces, porous borders, poor security organs, human rights violations, and high youth unemployment. A set of conditions that allow violent extremist groups to thrive’.¹

This paper gives an overview of the current situation of the lake, which persists in spite of the efforts made by the States and their various technical and financial partners. A simple but illustrative fact emerges from our investigation, which shows the weakness of State control in the Lake Chad Basin area.

The people of the Lake Chad Basin do not have the same perception of Boko Haram as the authorities in their countries. While many are coerced by Boko Haram, it is important to recognize that some are not brought in by force and have left voluntarily. This is a problem that policy either ignores or does not really try to identify.

The Boko Haram group has thus found a favourable environment for development.

¹ Cited in Ekpon, 2017.

Advocacy and education of the transnational village populations of the Lake Chad Basin

A large proportion of the population (18%)² living in the border villages of the Lake Chad Basin are stateless, in the sense that they do not have a nationality of one of the basin States and are therefore excluded from the traditional education systems. According to our 2017 survey, more than 30% of the youth in the region do not attend school. These youths are mostly engaged in banditry activities and are highly vulnerable to enrolment by the Boko Haram sect.

To address this situation, the Youth Organization for Peace and Development (YOPD) focuses on two instruments:

- Advocacy with governments and international NGOs
- Literacy and vocational training.

Advocacy with governments and NGOs

The YOPD advocates with the governments of the Lake Chad Basin States, the LCBC, donors and humanitarian NGOs such as Action Against Hunger, UNDP, UNFPA, etc.

In general, the YOPD sends the partners study reports and recommendations, and organizes conferences to raise awareness on the issue of statelessness, the schooling of young people and the problem of employment in the basin.

Literacy and vocational training

The YOPD provided three programmes of literacy classes for stateless and non-status populations in 2018. Each programme lasted three months and involved three villages. This enabled a total of 200 youths to learn to read and write.

Figure 1 gives a breakdown of the number of learners by village.

Vocational training took place in Koulfoua (Chad) and Fotokol (Cameroon) in subjects such as mechanics, tailoring and carpentry. In 2018, this training provided 160 underprivileged youths with life skills to empower themselves and not succumb to the temptation of joining the Boko Haram group.

For the village of Koulfoua, the breakdown of training beneficiaries by trade is shown in Figure 2.

For the village of Fotokol, the breakdown of training beneficiaries by trade is shown in Figure 3.

²Source: YOPD Survey, 2017.

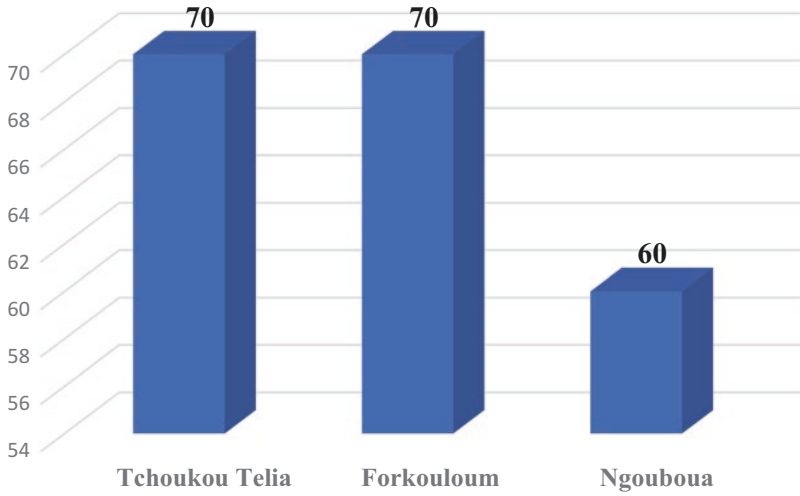


Figure 1. Breakdown of literacy learners by village. *Source:* YOPD, 2017.

Figure 2. Distribution of training recipients by occupation in Koulfoua. *Source:* YOPD, 2017.

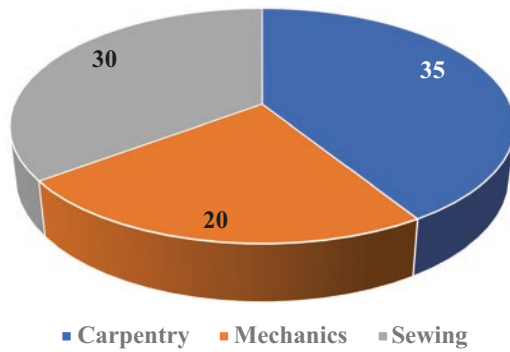
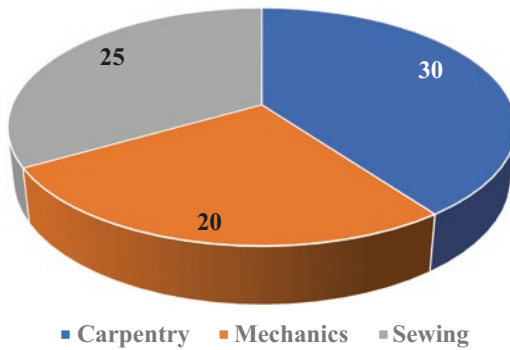


Figure 3. Distribution of training recipients by occupation in Fotokol. *Source:* YOPD, 2017.



Promotion of peaceful cohabitation in cross-border villages

The YOPD has organized awareness campaigns on peaceful cohabitation between young Chadians, Cameroonians and Nigerians of different religious denominations living in cross-border villages in the Lake Chad Basin. The YOPD carries out activities to encourage young people to mix and discover each other's culture (e.g. through dance concerts, wrestling tournaments, etc.). These activities took place in Diffa and Nguigmi (Niger), Bagassola (Chad) and Darak (Cameroon), thanks to the collaboration of some local associations in these border villages.

The YOPD also provides support to imams, Koranic schoolteachers and community leaders in cross-border villages and involves them in raising awareness of peaceful cohabitation and peace between the various populations living along the shores of Lake Chad. These leaders are very influential in their communities and contribute greatly to the fight against violent extremism, particularly by explaining to the population the distinction between Islam and Islamism and by deconstructing the discourse of the Boko Haram group.

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Developing sustainable transnational collaboration in the post-armed conflict areas of the Democratic Republic of the Congo, Rwanda and Uganda



Musoke Deokratias

Background to the study

The Virunga National Park (Parc National des Virunga) is situated in the Albertine Rift Valley in the eastern part of the Democratic Republic of the Congo (DRC), the south-western part of Uganda near Lake George and Lake Edward, and the north-western part of Ruhengeri in Rwanda. It was created in 1925 and is one of the first protected areas in Africa, enlisted as a UNESCO World Heritage property in 1979. The park is host to one of the world's most famous populations of mountain gorillas but it has been hit by rising instabilities, an influx of refugees, poaching, smuggling activities and violence caused by various rebel groups, such as the Mai-Mai militia and other smugglers, including the recent killing of 12 rangers and the abduction of 2 British tourists in 2018.

Virunga is also surrounded by Uganda's beautiful Semuliki River, the Rwenzori Mountains, the Queen Elizabeth National Park and, to the south, by Rwanda's Volcanoes National Park.

The biodiversity balance is enhanced by good climatic conditions, moderate temperatures and mean monthly rainfall, with El-Niño in some parts from September to November. This kind of intertropical convergence zone has led to the growth of montane forests, riverine forests, canopies formed by bamboo species, and attractive habitats provided by the flowing rivers for various species of fauna like lions, African bush elephants, golden monkeys, giant pangolins and Nile crocodiles from the Semuliki River. Birds species include blue-headed sunbirds, handsome francolins, African olive pigeons, African hobbies, mountain greenbuls, red-eyed doves and brown-necked parrots, among others.

The numerous armed conflicts between Rwanda, Uganda and Goma (DRC) from 2003 onwards and the rebel activities across these three states have been the cause

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of considerable instability and loss of life. Burke (2018) indicates that over 175 rangers have been killed, property and even conservation works have been destroyed, and tourism and other protected areas have been adversely affected. Therefore, considerable efforts will be required to strengthen the presence of responsible authority through restoring cooperation mechanisms; clear communication with the local communities; creating a buffer zone; developing a joint interstate security department; developing a sustainable funding mechanism from all three countries responsible for this park; and attracting international funding in order to establish a high-standard, sustainable heritage site.

The overall objective of this study is to achieve a sustainable and a peaceful Virunga Park, free from the instabilities brought about by interstate militias and rebels, with local communities and neighbours fully engaged in and benefiting from this heritage site through activities such as eco-tourism, bee-keeping, arts and crafts, intercultural festivals, carnivals, etc. The rationale behind all this is to efficiently and effectively formulate a sustainable, transnational collaborative strategic plan of the Virunga protected area.

A variety of methods were used, including bottom-up approaches such as Participatory Rural Appraisals, Environmental Impact Assessments, Peace Conflict Impact assessments and the Sustainable World Heritage Tourism Checklist (SWHTC), in order to analyse data both quantitatively and qualitatively. Computations of variables were analysed and interpreted, and a report was then generated.

Statement of the problem

The DRC, Rwandan and Ugandan governments have found that the greatest impediment to achieving sustainable economic development within the study area is the lack of peace and stability caused by multiple armed groups and militias operating in the protected areas of Virunga.

Therefore, a transnational joint strategic plan for tourism and heritage needs to be put in place to sustainably and effectively safeguard the tourism sites and other economic activities, together with the surrounding communities of the three neighbouring countries of this Great Lakes region.

Specific objectives of the study

- To actively involve the local neighbouring communities in a strategic heritage programme.

- To support community-based economic activities, such as eco-tourism, art and craft shops, bee-keeping and agro-forestry systems.
- To form a joint transnational operational network of security and surveillance game rangers.
- To support education and training activities for all key stakeholders, e.g. site managers, rangers and local leaders.

Research questions

- How can we prevent instabilities and armed conflicts in the transnational protected site of Virunga?
- What are the likely major challenges facing the Virunga transnational protected area?
- Suggest possible practical solutions to address the problems/challenges facing the Virunga transnational protected area.

Scope of the study

The study covered the surrounding communities of Uganda, Rwanda and Congo as key representatives in this region, guided by local and inter-state authorities from all three countries. Meetings were held with a random sample of 17 key informants, using snowball sampling and standardized in-depth interview techniques. Quantitative data from the field was edited, coded and tabulated, whereas qualitative data was systematically analysed.

Significance of the study

The study's contribution is to provide valid information and methods to the governments of the DRC, Rwanda and Uganda to enable the optimal management and sharing of their transnational natural resources.

The research provided data to the local, regional and inter-state communities and authorities on the multiple benefits that could be achieved if this park were well promoted and maintained by all the key stakeholders. Job opportunities and businesses would increase, leading to improved incomes, peace and stability, and more revenues to local authorities from tourism activities.

Conceptual framework

The research focused on the state-of-the-art knowledge and technology needed to develop an innovative and sustainable strategic plan, in order to produce viable frameworks and policies based on independent variables to attract investment in the protected areas of the Virunga heritage site, and to attract global attention through international heritage development and community engagement projects in the different surrounding communities.

There are a number of interventions that can lead to positive outcomes or changes in sustainable transnational collaboration and development projects within these protected areas of Virunga. For example: forming joint security committees, training and educating game rangers, local leaders and involving whole communities in development projects – a key strategy in this research.

The dependent variables are showing the expected outcomes now that this programme is more fully implemented, i.e. improved peace and stability, increased tourist numbers, job creation, environmental protection, conservation of rare species formerly targeted by poachers, and a slight reduction in charcoal burning in the park.

Literature review

This section examines the socio-economic factors underpinning practical solutions and the outcomes obtained from the strategic transnational collaborative plan, which were then put into practice by the member states sharing this protected area of Virunga.

Inclusive local community development projects

Whiteman (2004) noted that the following elements are necessary to build sustainable communities: (i) ideas for inclusive projects or groups; (ii) making innovative and impactful efforts to ensure that all marginalized communities become part of the mainstream programme; and (iii) everyone takes part in decision-making at different levels of their community – no one is left behind.

This means involving local communities in any project within their localities. Research has shown that these projects are likely to be successful.

Therefore, if we are to develop a successful tourism industry in Virunga, this must entail the involvement of all the local communities.

Creating sustainable small regional economic communities (RECs)

According to Adetula et al. (2016), this category should include various activities, events and projects to connect stakeholders, and must seek ways to creatively harness the involvement of different community groups, members or stakeholders in activities that can connect them to other people from Uganda, Rwanda, the DRC – even international tourists. Various economic activities can serve as a platform to this end, e.g. arts and crafts businesses, trade skills, bee-keeping, hotels and travel businesses, among others. This kind of economic integration increases friendships among these border communities, leading to the creation of conflict-resolution roles and peace-support operations, thereby helping to sustain peace and reduce conflict within these areas of the Virunga Park.

Forming a transboundary protected area (TBPA) network

To create a network beyond the political boundaries of multiple countries, allowing free movement of species, there must be a single management plan with shared objectives that span all boundaries. Forming this network will involve certain operational steps, such as: (i) Identify key stakeholders from all three countries; (ii) Conduct an initial scoping exercise to identify key natural resource issues; (iii) Identify relevant agencies, landowners and community members; and (iv) Adjust management practices, such as staff exchanges, etc.

However, McNeely (2003) states that most governments do not recognize that protecting biodiversity is ‘a common concern of humankind’ and a crucial part of the development process. This calls for the establishment of protected areas to conserve biodiversity, while promoting environmentally sound development around these areas and, in so doing, directly complementing the World Heritage Convention.

Creating a regional and international security section

Verweijen and Marijnen (2016) indicate that a security section must attract the attention of international donors and national authorities, and work closely with regional organizations and international financial institutions to support countries emerging from conflict. Its key functions include mobilizing relevant actors to develop integrated strategies for post-conflict peace-building and recovery.

However, Braack et al. (2006) argue that although local, regional and international agreements play a pivotal role in facilitating transnational protected area peace processes, many international conventions, treaties and other legal instruments have not prevented armed conflicts such as Mai-Mai, M23, etc. Poaching and

the killing of gamekeepers has continued until 2018, despite the signing of various global and regional treaties.

Methodology

This study was both qualitative and quantitative in nature, and a descriptive research design was applied to generate answers to research questions. Survey design is concerned with describing, recording, analysing and reporting conditions that exist or existed. The descriptive design was appropriate for this study, since the researcher was able to obtain information from a large group of people, which was used to explain how best they could effectively manage and reduce armed conflicts in Virunga, identify possible challenges and offer practical solutions to effectively bring peace and stability.

Data collection

Primary data was collected from the field using the interviewing method. Self-administered questionnaires, paper and face-to-face surveys were also used to solicit information from all categories of respondents, especially those in rural communities, wardens, game-rangers, site managers, security personnel, tourists and international community representatives.

Sample size

Table 1 shows the categories of key informants who took part in a focus interview and who provided valid information concerning this transnational park.

Table 1. Key stakeholders of Virunga Park from the three countries

Key informants	Countries			Total
	Uganda	Rwanda	DRC	
Site managers	2	1	1	4
Security personnel	2	2	1	5
Local leaders	1	2	3	6
International donor partners	1	1	1	3
	6	6	6	18

Source: Author's own data.

Data processing and analysis

This is the organization, interpretation and presentation of collected data (Oso and Onen, 2005) in statistical tabulation format for easy storage and access for future use. The bottom-up approaches of participatory rural appraisals (PRAs), environmental impact assessments (EIAs), peace, conflict impact assessment (PCIA) approaches/techniques and the sustainable tourism checklist (SWHTC) were applied to obtain useful information such as supportive decision-making and valid interpretation, plus conclusions.

Peace conflict impact assessment (PCIA) approach

We used the PCIA to do the mapping of the conflict and armed group positions in the Virunga area. A joint security working group was formed to coordinate all the security agencies from the three neighbouring states sharing the Virunga park (see Table 2).

The data in Table 2 show that a joint security working group was formed among the three states, each contributing personnel from different security agencies. The DRC contributed the largest number of police officers (15), followed by Uganda (10) and lastly Rwanda (5).

The DRC has the largest share due to the fact that a large number of rebel groups have their bases there, resulting in frequent violence and armed conflict. This is in contrast to Rwanda and Uganda, where their security forces have made efforts to expel the rebels from their side, resulting in a limited police contribution towards this joint security working group.

Through their continued security intelligence network, Uganda and Rwanda have been able to secure relative peace in their Virunga transnational side compared to their counterpart the DRC, which has become a safe haven for rebel groups, disrupting peace and security for tourism and the communities around the

Table 2. Joint security working group between three states

Security agencies	Uganda	Rwanda	DRC	Total
National TBPA's	5	2	6	13
National security working group	4	2	5	11
Defence forces	3	3	5	11
Police	10	5	15	30
Intelligence	2	1	3	6
Immigration	4	2	5	11
Conservation rangers	8	3	8	19
Totals	36	18	47	101

Source: Author's data.

Virunga area. The knock-on effects have been felt in the neighbouring states, where many refugees have arrived from the DRC while fleeing towards Uganda and Rwanda.

As a result of the continued combined efforts of all three neighbouring states sharing a border with the Virunga transnational park, and the support of international development partners such as the UN and other international agencies, there has been a tremendous improvement in peace and security. The significant community transformation in terms of economic activities and tourism is a testament to their outstanding work to ensure that peace prevails in this area.

Participatory rural appraisal (PRA)

It was discovered during the field research that over four million people live around the Virunga transboundary protected area (TBPA) – a concerted effort is therefore required to help these communities that have been adversely affected by the armed rebel groups. A number of projects, including rehabilitation, community mapping, problem identification, analysis and ranking, have been carried out.

Key community stakeholders were identified and interviewed to ascertain the nature of the problems. A number of approaches have been employed and projects designed to make sure that all the communities around the Virunga area live a better life.

Of the 300+ locals interviewed about their economic status, 180 of them reported that they could not afford the basic necessities of life, such as going to health centres for medication and getting three meals a day; many lived in poor grass-thatched houses and their children could not go to school. Furthermore, the researcher discovered that these people were very mobile, refugees looking for survival, and therefore income-generating activities had to be deployed to make these communities active and start earning a living for their families to survive.

The international development partners were lobbied for support to extend small income-generating activities to these local people around the Virunga area, as a way to improve their incomes and lift themselves out of abject poverty.

Training in local income-generating activities

Almost 700 local people have been trained in different vocational and life skills activities within the communities neighbouring the Virunga TBPA – this local initiative has substantially improved the lives of the poor communities, who are now able to earn money by selling their products and even offering services like transport, creating a mutually beneficial co-existence between the local community and the tourists who come to visit this park (Table 3).

Using this bottom-up approach of including the local communities in economic development activities has had a positive impact socially, as it has also reduced the number of unemployed youth who were joining rebel groups as a means of survival.

Environmental impact assessment (EIA)

The researcher used EIA as another approach to clearly identify the value of all the economic activities and projects in and around the Virunga area. A number of parameters and benchmarks were applied to various projects, such as mining and deforestation activities, which are undertaken by both local and international companies. These projects impact the existence of flora and fauna in the park – wildlife migration, death and poaching for ivory and meat were rampant, according to the interviews carried out.

As shown in Table 4, it was discovered that a number of negative environmental activities were being carried out by different communities staying near this park. Charcoal burning and large-scale tree felling made up the largest share, with 2 and

Table 3. Number of locals trained in income-generating activities in the Virunga TBPA

Activities	Number of locals trained
Bee-keeping	63
Arts and crafts	180
Tailoring	80
Salon and hairstyles	96
Fashion design	67
Carpentry	84
Mechanics	32
Building and construction	72
Total	674

Source: Author's data.

Table 4. Negative environmental practices in the Virunga area

Negative environmental practices	Number of cases	% of total cases
Poaching	15	13.4%
Charcoal burning	25	22.3%
Deforestation	32	29%
Mining activities	14	12.5%
Rebel groups bases	4	3.6%
Poor cultural practices	6	5.4%
Ethnic groups	11	9.9%
Infrastructural developments	5	4.5%
Total	112	

Source: Author's data.

32 cases respectively, with poaching contributing 15 of the cases discovered by the researcher.

It was also discovered during the field research that mining activities were being carried out within the park (14 registered cases), which had an adverse effects on nearby wildlife. Rebel groups also used this park as their base, and have inflicted a great deal of environmental damage on this natural entity.

Interpretations, the way forward and conclusions

Sustainable transnational collaboration between the three states sharing the Virunga National Park brings great economic, political, social and cultural benefits, especially in the tourism sector. The rare mountain gorillas are mostly confined to this park, and this can lead to an increase in revenues for all states of this region.

The data obtained from the field research show that the communities around this transnational park were not aware of the multitude of opportunities available to them once this natural resource began to be well maintained by the key stakeholders. The first to benefit from this improvement are the local people; however, further sensitization campaigns need to be undertaken in order to promote and safeguard this resource.

The data shows a certain laxity in promoting peace and security – some member states do not respond quickly enough when tourists and local communities are terrorized by rebels, creating large movements of refugees to more peaceful neighbouring states. This must be addressed in a collective manner to eliminate all the armed rebel groups from the park.

It was also observed that further efforts were needed to attract more potential international and regional development partners to help in promoting the park. Additional funds are needed to attract tourists and to create more income-generating projects with the local communities, as a way of including them in the development of the area.

Investment in culture and creativity, cultural heritage values and identity must be encouraged among the local people. Locals should be involved in businesses such as arts and crafts, fashion design using local fabrics, transport, foods, etc. All these activities attract more tourists to the park, thereby increasing the incomes of the marginalized and vulnerable poor communities in the surrounding area.

At a regional level, member states sharing this heritage must think of advanced regional infrastructural developments, such as a network of roads across the three states, to facilitate the movement of tourists across all border points, and a unified system of visa-free, standard hotels and personnel to deal with customers in a more organized way.

Having a uniform immigration system within the three member states to free up tourist travel across the whole park can be achieved through the states participating in a roundtable discussion. There is the potential to increase foreign exchange

earnings, but this can only be achieved when a steering committee is put in place to coordinate this work efficiently and effectively.

Applying practical solutions to preserve and promote African heritage is the best option for all Africans to adopt if we are to achieve middle-income status.

Ethical considerations

This research involved the covert observation of individuals, especially in rebel-controlled areas, where intelligence data had to be kept secret.

The research involved people giving their personal opinions about other groups in the region. The researcher had to be careful to keep these views confidential in order to avoid conflict within the communities.

The research also necessitated the use of local resources, such as plants and other community facilities. This meant that the researcher had to be very flexible and lenient with local people in order to obtain all the required information.

The research involved local communities in capacity-building activities, trainings and the design of community-based projects. Given that the communities were made up of ethnic groups with a history of conflict and violence between themselves, the researcher used persuasive, probing techniques and peaceful methods in order to avoid further clashes.

There was a general feeling of insecurity in some places, with many interviewees very reluctant to answer questions; some withheld information for fear of being reprimanded. All of these issues had to be handled in a sensitive and ethical way in order to avoid any misconceptions among the local people.

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Regional cooperation for the conservation of biodiversity in the Congo Basin forests: Feedback on actions carried out in the TRIDOM-TNS landscapes



Tales Carvalho Resende and Avenir Geradine Meikengang

Biodiversity does not adhere to political boundaries. Globally, more than 50% of all terrestrial species have a range that crosses an international border. This includes more than 50% of all mammals, 25% of all amphibians and almost 70% of all birds. Of the threatened species, over 20% had a transboundary range (Mason et al., 2020). Covering a total area of more than 1.5 million km² in six Central African countries (Cameroon, Gabon, Equatorial Guinea, Central African Republic, Republic of Congo and Democratic Republic of Congo), the so-called Congo Basin forests are the second largest tropical forest in the world after the Amazon Basin. They form the most diverse assemblage of plants and animals in Africa, and are home to some 10,000 species of plants, 1,000 birds, 700 fish and 400 mammals, including many iconic species such as forest elephants, lowland gorillas and chimpanzees. Currently, almost 15% of the total forest area of the Congo Basin has protected area status. The management of these protected areas is now based on a new paradigm: the landscape conservation approach. Twelve landscapes have been identified as priorities in the Congo Basin because of their relative taxonomic importance, overall integrity, and the resilience of the ecological processes they represent. Among these landscapes, the TRIDOM (Trinational Dja-Odzala-Minkébé) (Cameroon, Congo and Gabon) and TNS (Trinational Sangha) (Cameroon, Congo and Central African Republic) stand out as hosting the majority of the last remaining forest elephants, lowland gorillas and chimpanzees in Central Africa. The presence of four¹ of the

¹Dja Faunal Reserve (Cameroon), Sangha Trinational (Cameroon, Congo, Central African Republic), Ecosystem and Relict Cultural Landscape of Lopé-Okanda (Gabon), Ivindo National Park (Gabon).

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eight² natural World Heritage sites in the Congo Basin forests testifies to the exceptional importance of these two contiguous transboundary landscapes. This article will review the evolution of regional cooperation for the conservation of biodiversity in the Congo Basin forests by providing feedback on actions carried out in the TRIDOM and TNS landscapes.

Regional cooperation for the conservation of biodiversity in the Congo Basin Forests

The first biodiversity conservation actions in Central Africa began during the colonial period, at the beginning of the twentieth century. These actions were based on the strategy of resting sites in the face of potentially abusive exploitation of large fauna or timber. The first national parks were created in the 1920s and the number increased after the Second World War. It was mainly in the 1960s and 1970s that some countries strengthened their network of protected areas. From the second half of the 1980s and following the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, initiatives were set up to respond to the challenges of the degradation of protected areas in Central Africa and the difficulties of justifying conservation actions to countries wishing to pursue a development strategy centred on the exploitation of natural resources. It was in this context that the ‘Conservation and Rational Use of Central African Forest Ecosystems’ (COFAC) Programme and the Central African Regional Programme for the Environment (CARPE) were initiated in 1992 and 1995 respectively by the European Union and USAID. The regional cooperation process was strengthened by the Conference on Dense and Humid Forest Ecosystems of Central Africa (CEFDHAC) in 1996, and then by the first summit of Central African Heads of State on the Conservation and Sustainable Management of Tropical Forests in Yaoundé (Yaoundé Declaration) in 1999.

Since the 2000s, regional dynamics have been strengthened, particularly from an institutional and functional point of view. In response to the United Nations General Assembly Resolution 54/214 of February 2000, which called on the international community to support the implementation of the Yaoundé Declaration, regional cooperation was consolidated with the establishment of the Central African Forest Commission (COMIFAC) and the Congo Basin Forest Partnership (CBFP). COMIFAC has thus become the regional institution responsible for guiding and harmonizing forestry and environmental policies for the conservation and sustainable management of the region’s forest ecosystems.³ Launched at the World

²Dja Faunal Reserve (Cameroon), Sangha Trinational (Cameroon, Congo, Central African Republic), Ecosystem and Relict Cultural Landscape of Lopé-Okanda (Gabon), Ivindo National Park (Gabon), Virunga National Park, Kahuzi-Biega National Park, Salong National Park, Okapi Wildlife Reserve (Democratic Republic of Congo).

³See: <https://www.observatoire-comifac.net/africa/ap>

Summit on Sustainable Development in Johannesburg in 2002, the CBFPA aims to coordinate the initiatives of the various partners in order to improve the coherence and effectiveness of their programmes and policies for the sustainable development of forest ecosystems.⁴

The strengthening of the institutional and functional framework put in place enabled many donors to intensify their financial support and international conservation NGOs, such as the African Wildlife Foundation (AWF), African Parks (AP), the Wildlife Conservation Society (WCS), the Worldwide Fund for Nature (WWF) and the Zoological Society of London (ZSL) to establish themselves in the region through various programmes and projects at national and regional level. It was in this context that the UNESCO World Heritage Centre and its partners launched the Central Africa World Heritage Forest Initiative (CAWHFI) to promote a trans-boundary network of protected areas and new World Heritage sites in the region.

The rise of the landscape approach for conservation in the Congo Basin

The forests of Central Africa are an exceptional natural heritage and home to a significant part of the world's biodiversity. However, while species diversity is high in these forests, their abundance is decreasing (de Wasseige et al., 2015). The current conservation system, based on limited coverage of the forest area by protected areas and variable protection capacities, is not effective in ensuring long-term protection of all species and ecosystems. This has led to a shift in conservation strategies in recent years with the emphasis on the landscape approach to conservation.

This landscape approach aims to plan and undertake integrated conservation and land management actions at a scale that encompasses entire ecosystems and takes into account the interests of stakeholders such as local communities and the private sector (logging, mining and agro-industrial concessions on the periphery of protected areas). This facilitates more effective conservation, rational and sustainable use of natural resources, and greater social and economic involvement of communities. For conservation, the landscape approach helps to ensure the integrity and connectivity of protected areas and their peripheral zones. The strategy is to manage the impact of human activities on ecosystems in such a way as to maintain genetic flows and biological processes, thus preventing habitat fragmentation and protected areas from becoming isolated pockets of biodiversity.

The landscape concept is a central axis of the COMIFAC strategic plan. Twelve landscapes covering an area of almost 700,000 km² are prioritized by COMIFAC (Figure 1) because of their relative taxonomic importance, overall integrity and resilience to ecological processes:⁵

⁴ See: <https://pfbcbcfp.org/pfbc-en-bref.html>

⁵ See: <https://www.comifac.org/convergence>

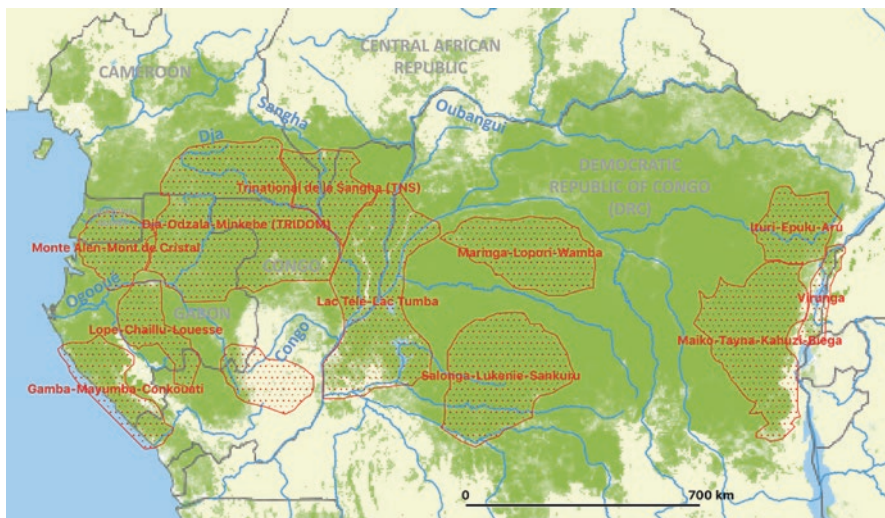


Figure 1. Priority landscapes for conservation in the Congo Basin (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations). *Source:* COMIFAC.

- Monte Alen-Mont de Cristal (Gabon, Equatorial Guinea),
- Gamba-Mayumba-Conkouati (Congo, Gabon),
- Lope-Chaillu-Louesse (Congo, Gabon),
- Dja-Odzala-Minkebe (TRIDOM) (Cameroon, Congo, Gabon),
- Trinational de la Sangha (TNS) (Cameroon, Congo and Central African Republic),
- Leconi-Bateke-Lefini (Congo, Gabon),
- Lac Tele-Lac Tumba (Congo, Democratic Republic of Congo),
- Salonga-Lukenie-Sankuru (Democratic Republic of Congo),
- Maringa-Lopori-Wamba (Democratic Republic of Congo),
- Maiko-Tayna-Kahuzi-Biega (Democratic Republic of Congo),
- Ituri-Epulu-Aru (Democratic Republic of Congo),
- Virunga (Democratic Republic of Congo).

Since some of the ecological landscapes straddle international borders, transboundary collaboration is an important element in promoting coordinated actions. Among the 12 COMIFAC priority landscapes, TNS and TRIDOM are recognized by international agreements signed in 2000⁶ and 2005,⁷ which encourage cooperation between the countries concerned for environmental monitoring and law enforcement.

⁶ See: https://www.acfapcg.org/wp-content/uploads/2018/04/accord_coop_tns.pdf

⁷ See: <https://archive.pfbc-cbfp.org/actualites/items/Dja-Odzala.html>

The Greater TRIDOM-TNS: A cross-border landscape under increasing pressure

The Greater TRIDOM-TNS landscape covers a vast expanse of over 250,000 km² of almost continuous tropical rainforest that straddles the borders of four countries (Cameroon, Congo, Gabon, and Central African Republic). Covering about 15% of Central Africa's forests, this nearly intact transboundary forest landscape comprises two sub-landscapes: the TRIDOM, which covers more than 178,000 km² in Cameroon, Congo and Gabon, and the TNS, which covers more than 40,000 km² in Cameroon, Congo and the Central African Republic. Given that the habitat linking them is virtually contiguous and the socio-economic context is similar (i.e. logging and mining concessions on the periphery of the protected areas), the so-called Greater TRIDOM-TNS also encompasses the Lopé National Park in Gabon, a mixed World Heritage site (both natural and cultural), as well as the Lac Tele Community Reserve in Congo (an important area of swamp forest recognized as a Ramsar site).

The Greater TRIDOM-TNS offers a good representation of the fauna and flora of the Congo Basin, and is notable for hosting the majority of the last remaining forest elephants, lowland gorillas and chimpanzees in Central Africa. The Greater TRIDOM-TNS covers 17 protected areas including 6 in Cameroon, 5 in Congo, 4 in Gabon and 2 in the Central African Republic (Figure 2). It has four sites on the World Heritage List, three sites on World Heritage Tentative Lists,⁸ two UNESCO-recognized biosphere reserves and seven Ramsar sites (Table 1), and testifies the importance and exceptional biodiversity of this landscape. Some of these protected areas may even have multiple international designations.

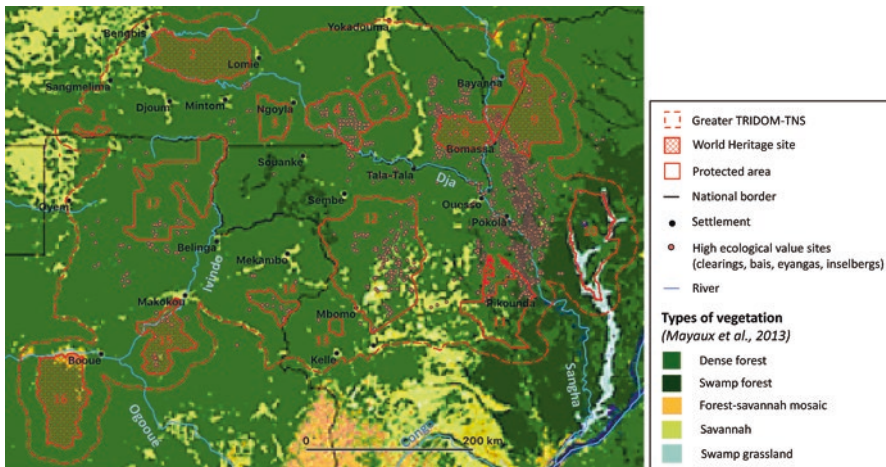


Figure 2. Protected areas and vegetation types in the Greater TRIDOM-TNS landscape (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations). *Source:* UNESCO.

⁸ Inventory of properties which each State Party intends to nominate for inscription on the World Heritage List.

Table 1. Greater TRIDOM-TNS protected areas

	Protected areas	Country	Landscape	Area (km²)	Date created	International recognition
1	<i>Dja Faunal Reserve</i>	Cameroon	TRIDOM	5266	1950	World Heritage Site since 1987 Biosphere Reserve since 1981
2	<i>Mengame Gorilla Sanctuary Complex</i>	Cameroon	TRIDOM	267	1994	
3	<i>Ngoyla Faunal Reserve</i>	Cameroon	TRIDOM	1566	2014	
4	<i>Boumba-Bek National Park</i>	Cameroon	TRIDOM	2362	2005	World Heritage Tentative List
5	<i>Nki National Park</i>	Cameroon	TRIDOM	3130	2005	World Heritage Tentative List
6	<i>Lobéké National Park</i>	Cameroon	TNS	2153	2001	World Heritage Site since 2012 (Sangha Trinational) Ramsar site since 2008
7	<i>Dzanga-Ndoki National Park</i>	Central African Republic	TNS	752	1990	World Heritage Site since 2012 (Sangha Trinational)
8	<i>Dzanga-Sangha Special Reserve</i>	Central African Republic	TNS	498	1990	World Heritage Site since 2012 (Sangha Trinational) Ramsar site since 2009
9	<i>Nouabalé-Ndoki National Park</i>	Congo	TNS	4150	1993	World Heritage Site since 2012 (Sangha Trinational) Ramsar site since 2009
10	<i>Lac Télé Community Reserve</i>	Congo		4390	2001	Ramsar site since 1998
11	<i>Ntokou Pinkouada National Park</i>	Congo	TRIDOM	4272	2013	Ramsar site since 2012
12	<i>Odzala-Kokoua National Park</i>	Congo	TRIDOM	13546	2005	Biosphere reserve since 1977 Ramsar site since 2012 World Heritage Tentative List
13	<i>Lossi Gorilla Sanctuary</i>	Congo	TRIDOM	350	2001	
14	<i>Mwagna National Park</i>	Gabon	TRIDOM	1167	2002	
15	<i>Minkébé National Park</i>	Gabon	TRIDOM	7535	2002	
16	<i>Ivindo National Park</i>	Gabon	TRIDOM	2967	2002	World Heritage site since 2021 Ramsar site since 2009
17	<i>Lopé National Park</i>	Gabon		4942	2002	World Heritage Site since 2007

Source: World Database on Protected Areas – WDPA.

Although about a quarter of the Greater TRIDOM-TNS area has protected area status, pressures and threats on the periphery and in the inter-zones linking them are increasing. Indeed, almost all the forest between the protected areas is under the control of extractive industries (forestry, mining and agro-industry) (Figures 3 and 4).

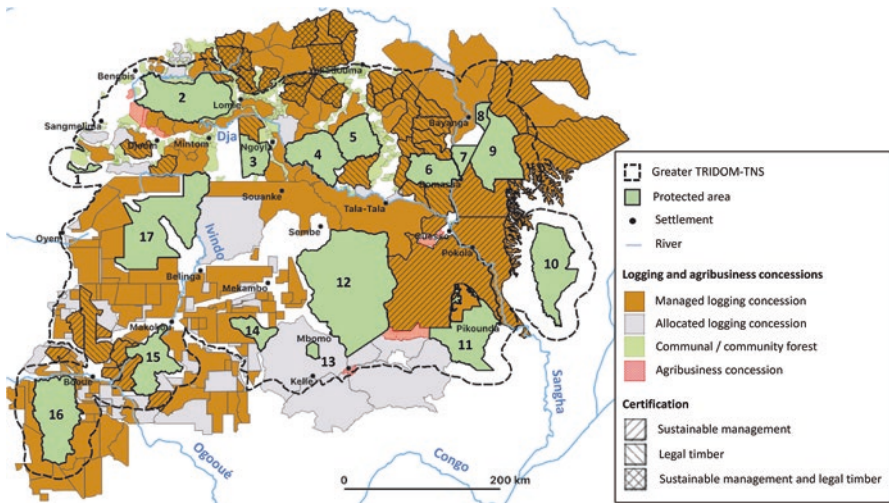


Figure 3. Forestry and agro-industry in the Greater TRIDOM-TNS (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations). *Source:* UNESCO.

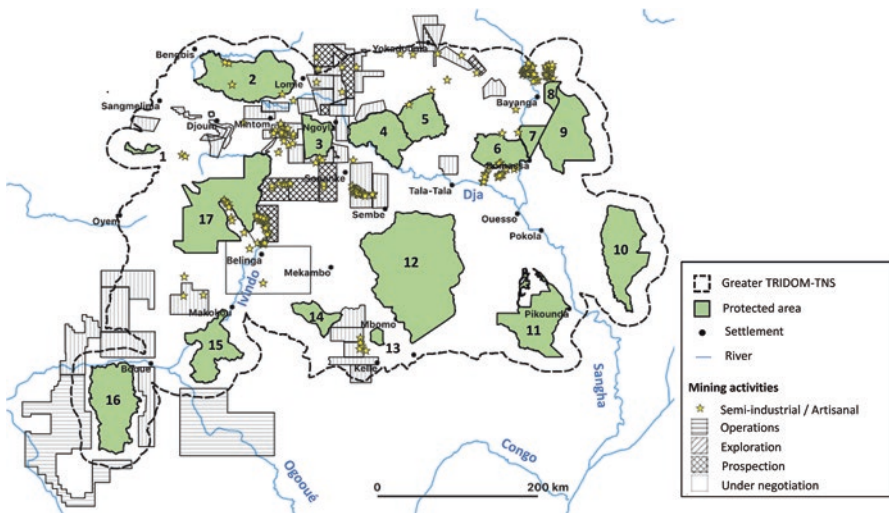


Figure 4. Mining activities in the Greater TRIDOM-TNS (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations). *Source:* UNESCO.

Other threats, such as infrastructure development (roads, dams, etc.), poaching and unsustainable natural resource extraction have intensified in recent decades, leading to higher rates of deforestation and increased habitat fragmentation (Figure 5). Transboundary cooperation is therefore a crucial element in addressing these growing pressures in a coordinated and concerted manner.

Towards a transboundary network of protected areas and new World Heritage sites in the Greater TRIDOM-TNS

The Convention concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) adopted by the UNESCO General Conference in 1972 has as its main mission the identification and protection of sites of ‘Outstanding Universal Value’ (OUV) to humanity. The World Heritage Convention has become one of the most robust international instruments for recognizing the world’s most outstanding natural places, characterized by their biodiversity, ecosystems, geology or remarkable natural phenomena.

Launched in 2002 by UNESCO’s World Heritage Centre, the Central Africa World Heritage Forest Initiative (CAWHFI) aims to promote the importance of the natural heritage of the Congo Basin, to improve the geographical representation of World Heritage sites in this region, and to support the establishment of a transboundary network of protected areas based on the World Heritage Convention (UNESCO, 2010).

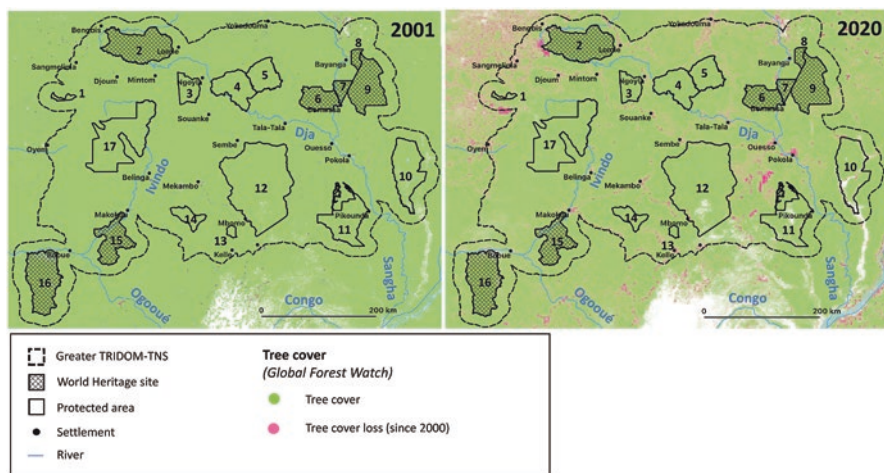


Figure 5. Tree cover changes in the Greater TRIDOM-TNS landscape since 2000 (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations). *Source:* UNESCO.

At the time of the launch of CAWHFI, with the exception of the Dja Faunal Reserve in Cameroon, all World Heritage sites in the Congo Basin forests were in the Democratic Republic of Congo (DRC). Building on the strengthening of the institutional and functional framework in the Greater TRIDOM-TNS in the early 2000s, CAWHFI was able to provide technical support to the authorities of the countries concerned in the preparation of new nomination dossiers. This effort led to the inscription of three outstanding sites on the World Heritage List:

- the Ecosystem and Relict Cultural Landscape of Lopé-Okanda in Gabon in 2007: the first mixed site (nature/culture) in Central Africa;
- the Sangha Tri-National (TNS) in Cameroon, Congo, Central African Republic in 2012: the first natural tripartite transboundary site; and
- the Ivindo National Park in Gabon.

CAWHFI also supported the preparation of nomination dossiers for the Odzala-Kokoua (Congo) national park that was officially submitted in 2021. This dossier is currently undergoing technical evaluation by the International Union for Conservation of Nature (IUCN), an independent advisory body designated by the World Heritage Convention. If this site is inscribed, the Greater TRIDOM-TNS will have five World Heritage sites, covering about 15% of its area and 50% of the protected areas in the landscape.

The inscription of a site on the World Heritage List is not an end in itself. The state of conservation of properties is regularly reviewed by the various monitoring mechanisms of the World Heritage Convention. To this end, site managers and local authorities work continuously with the technical support of the World Heritage Centre to ensure the management, monitoring and preservation of these properties. Between 2016 and 2020, European Union funding of €5 million has enabled CAWHFI to strengthen the management of a transboundary network of protected areas and World Heritage sites in the Greater TRIDOM-TNS through the multiplication of anti-poaching patrol efforts (more than 3,500 patrols and 300,000 km covered), the use of innovative technologies (SMART, trap cameras, drones and remote sensing, etc.) and the training of more than 350 eco-guards. CAWHFI's support has also improved site management through the rehabilitation of infrastructure, the promotion of eco-tourism, the involvement and training of local communities (over 1,000 people) and the updating/production of wildlife inventories (e.g. elephants, gorillas and chimpanzees). All these field actions have facilitated the exchange of experiences between managers of different protected areas (Figure 6) as well as



Figure 6. Exchange visit of CAWHFI site managers (Dja Faunal Reserve, 28 to 31 October 2020). © UNESCO.

decision-making at the landscape level. For example, CAWHFI supported the process that led to an agreement in principle for the integration of an ecological corridor into the TRIDOM land-use planning and sustainable development schemes in Cameroon.

Perspectives for strengthening cross-border cooperation in the Greater TRIDOM-TNS

The strengthening of the institutional and functional framework put in place in Central Africa in the early 2000s has allowed many donors to increase their financial support and international conservation NGOs to establish themselves in the region on a sustainable basis through various programmes and projects at national and regional levels. The landscape approach to conserving the biodiversity of the Congo Basin forests has fostered regional cooperation and enabled the integration of other stakeholders, such as local communities and the private sector, into decision-making processes. The emergence of a transboundary network of protected areas and new World Heritage sites in the Greater TRIDOM-TNS based on the World Heritage Convention can therefore be used as a lever to strengthen forest governance in the landscape. Despite these significant advances, forest governance in the Congo Basin countries is still weak. Coordination between institutions on land and forest governance issues is insufficient and there is a crucial need to harmonize sectoral policies at national level to strengthen transboundary cooperation. Thus, the consolidation of partnerships with the private sector, the certification process in favour of sustainable forest management (FSC), and the promotion of integrated and sustainable planning tools (environmental and social impact studies, land use planning, etc.) remain encouraging vectors for good forest management at national level.

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From the inscription to the extension of Koutammakou, the Land of the Batammariba, World Heritage Site: An example of successful transnational cooperation between Benin and Togo for the preservation of the site



Alyssa Barry, Paul Akogni, Franck Ogou, Evelyne Alitonou, Xiangling Chen, Lucie Tidjougouna, and Sébastien Moriset

Introduction

Koutammakou is a vast mountainous region of about 271,826 hectares shared by Benin and Togo. This living cultural landscape is an authentic reflection of the way of life of the Batammariba people who live there, a people constantly seeking harmony between humankind and nature and for whom the Sikien,¹ remarkable earthen tower houses, still represent an exceptional symbol of identity.

In 2004, the Outstanding Universal Value (OUV) of Koutammakou was recognized by the World Heritage Committee at its 28th session (Suzhou, China), but with the inscription of only the Togolese part of the site on the World Heritage List. This inscription was made under criterion (v), highlighting the site as an

¹Also called *Betammaribé*, although more commonly used on the Benin side.

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outstanding example of a traditional settlement structure that is still living and dynamic, subject to traditional and sustainable systems and practices, and reflecting the unique culture of the Batammariba; and criterion (vi) defining Koutammakou as an eloquent testimony to the strength of the spiritual association between peoples and landscape (Figure 1).

Fifteen years later and thanks to the clear will of Benin and Togo, this ecosystem was inscribed on the Tentative List of Benin as a transboundary site in 2020.



Figure 1. Geographical location of Koutammakou. © CRAterre/Arnaud Misse. (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations).

Thereafter, Benin firmly committed itself to the process of elaborating the site's extension dossier in 2020, thanks to a combination of its own resources and UNESCO's support through the China Fund for the Safeguarding of World Heritage in Africa and the World Heritage Fund. This initiative is part of the dynamics of a proven transnational cooperation between the Beninese and Togolese States aiming at restoring the territorial integrity of Koutammakou. Moreover, the extension constitutes a major challenge towards improved management of the site for the benefit of the resident communities who keep it alive.

Koutammakou, the Land of the Batammariba: A World Heritage site already inscribed in Togo

The Koutammakou is a vast transboundary cultural landscape that stretches from the north-east of Togo to the north-west of Benin. Covering an estimated total area of 271,826 ha (240,658 ha in Benin and 31,168 ha in Togo), this ecosystem is home to the Batammariba, or 'those who shape the Earth', a people whose settlement around the Atakora mountain range is believed to date back to the sixth century. Inspired as much by their environment as by the spirits and breaths that inhabit it, the Batammariba have developed a culture in which the technical, social and spiritual aspects are mutually complementary.

The Koutammakou is also a living, evolving landscape representing the features of an agricultural society working in harmony with the landscape and the environment, and in which nature is central to the beliefs, rituals and daily lives of its inhabitants. It is composed of material elements such as sacred rocks and groves, dwellings, fields, sources of building materials, wild and domesticated animals, as well as immaterial elements, including beliefs, craft skills, songs and dances.

A remarkable feature of the Otammari landscape, the Takienta is a family dwelling that perfectly reflects the culture and beliefs of the Batammariba, housing both the living beings and the ancestors. This earthen architecture complies with construction rules that combine the profane and the sacred, and respond to functions, signs and symbols. It bears witness to a know-how that has been perpetuated through time, constituting one of the foundations of Otammari culture. The total number of Sikien in the whole of Koutammakou is now estimated at 3,000, and an inventory is currently being carried out in each of the two countries to determine the exact number (Figure 2).

It was in the early 2000s that Togo initiated the process of inscribing Koutammakou on the World Heritage List. In 2001, Togo requested preparatory assistance for the preparation of the 'Bètammaribè Vernacular Habitat' nomination dossier for inscription on the World Heritage List. This was approved by UNESCO, and was implemented over the following three years in partnership with the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) and the International Centre for Earthen Construction (CRAterre). At the same time,

Figure 2. Example of the Takienta.
© CRAterre/Sébastien Moriset.



the site was selected as a ‘*Projet Situé*’² in the framework of the Africa 2009 programme. This initiative led by African cultural heritage organizations, the World Heritage Centre, ICCROM and CRAterre was implemented from 1998 to 2009 with the objective of strengthening the national capacities of sub-Saharan African States for the management and conservation of their immovable cultural heritage. The important work carried out in this framework led to the inscription on the World Heritage List of Koutammakou, the Land of the Batammariba in Togo, in 2004.

In parallel to these activities, from the end of 2000, the Directorate of Cultural Heritage of Benin had requested support from the French Embassy to launch a first inventory of the Sikien. This work was carried out in 2002 with the technical assistance of CRAterre. In 2009, Benin in turn submitted to the World Heritage Centre a preparatory assistance request in view of implementing the ‘project for the elaboration of the extension dossier for the inscription of the “Bètamarribè vernacular habitat” site on the World Heritage List’, which was finally not realized. In 2020, the inscription of Koutammakou, the Land of the Batammariba on Benin’s Tentative List with the support of the Togolese government testifies to the strong will of the two countries to finalize the dossier for the extension of the site. The project, implemented by the Beninese authorities in partnership with UNESCO and CRAterre, led to the submission of the complete extension dossier by Benin to the World Heritage Centre in January 2021.

A modern management system at States level

The protection and management of the Koutammakou is governed by a fairly well-developed legal arsenal in both Togo and Benin.

²The aim of the ‘*Projets Situés*’ was to ensure that the Africa 2009 programme was deeply rooted in the realities on the ground, while addressing the specific needs of the selected sites.

In Togo, tangible cultural heritage, of which the Koutammakou is an integral part, is governed by the general law No. 90-24 of 23 November 1990 on the protection of Togo's cultural heritage. The Koutammakou is also protected by a set of legal and administrative texts, such as the Cultural Policy of Togo approved by Decree 2011-046/PR of 30 March 2011; Decree No. 2010-173/PR of 15 December 2010 relating to the National Commission for Cultural Heritage; Decree No. 2009-175 of 12 August 2009 on the establishment of a general inventory of Togo's cultural heritage and Decrees No. 010/MJS/CAB of 17 July 2003 and No. 012/MC/CAB of 28 October 2004 on the inclusion of sites and monuments on the National List of Cultural Properties. It also benefits from the provisions of Order No. /MAC/CAB/SG/13 on the organization of the Ministry of Arts and Culture which, in its article 28 paragraph 2, entrusts the Directorate of Cultural Heritage with a set of functions relating to the protection and conservation of the site.

In Benin, Koutammakou is a national cultural heritage under the terms of Article 3 of Inter-ministerial Order 2020 No. 271/MTCA/MCVDD/MEF/DC/SGM/CTJ/CTC/DPC/CCJ/SA058SGG20 of 11 December 2020, fixing its geographical limits and determining its components. It is governed by Law No. 91-006 of 25 February 1991 on the Cultural Charter in the Republic of Benin which, in Article 11, highlights cultural heritage as a national cultural identity to be safeguarded, protected and promoted. This legal framework is reinforced by Law No. 2007-20 of 23 August 2007 on the protection of cultural heritage and natural heritage of cultural nature, which sets out the needs and modalities of protection of heritage sites. Benin's Koutammakou also benefits from Decree No. 2019-521 of 27 November 2019 on the attributions, organization and functioning of the Ministry of Tourism, Culture and Arts, specifying the responsibilities of the latter with regard to the protection of national cultural heritage. Furthermore, the interministerial order No. 2018-048/MTCS/DC/SGM/DPC/SA39SGG18 of 6 November 2018 on the attributions, organization and functioning of the Directorate of Cultural Heritage provides important details on the latter's role in the protection of cultural heritage. Finally, Article 10 of Law No. 2007-20 provides for the establishment of the National Commission for the Protection of Cultural Heritage.

In Togo, the management of Koutammakou has been entrusted since 2004 to the *Service de conservation et de promotion du Koutammakou* (SCPCK) within the Directorate of Museums, Sites and Monuments set up within the framework of the Africa 2009 programme. This service, which is responsible for safeguarding the site, making an inventory of its tangible and intangible elements, collecting entrance fees and organizing cultural activities, is currently affected by the lack of means at its disposal. This is due in particular to the fact that the legal text that should give this service a legal existence has remained at the draft stage until now. In spite of this, the service is carrying out site management activities in liaison with the canton and village chiefs.

Since 2019, UNESCO has been supporting the Togolese government in strengthening the management of the site through the project 'Improvement of the state of conservation of Koutammakou, the Land of the Batammariba (Togo)' financed by the Government of Norway. The first phase of the project is planned until the end of 2021,

and is implemented by the *Ecole du patrimoine africain* (EPA) and CRAterre through activities related to the inventory and mapping of the Sikien, capacity building of the management team and local communities of the site, updating and technical support of the validation process of the management plan and implementation of a methodology for the reconstruction of the Sikien. Discussions are underway with the partners involved to develop a second phase for this project.

The conservation of Koutammakou in Benin is currently carried out by the Committee of Volunteers for the Local Conservation of Koutammakou, an ad hoc institution created through collaboration between the Directorate of Cultural Heritage and the National Ditammari Language Commission. It brings together volunteers from the Koutammakou area who are knowledgeable and able to inform any visitor about the values and geography of the area and to defend its boundaries locally, and serves as a link between State bodies and the communities until a more structured management committee is defined. The 2021–2025 management plan for the site, which presents its challenges, dangers and weaknesses and recommends actions to address them, provides for the creation of a management and promotion service. This service, to be created in 2021, will be in charge of safeguarding the site, updating the inventory of tangible and intangible elements, warning of threats to the site and organizing promotional activities. A regional steering framework is also envisaged from 2021 to ensure the transnational management of the site.

A traditional management system ensured by local communities

The Otammari territory is a collective and community property whose spatial entity was, according to legend, originally circumscribed by *Kuyé*, the creator God, architect of the World, who built the first Takienta for humankind and the divinities and inspired the Batammariba to develop their environment. Land is an undivided asset belonging to all the members of the community and is allocated and managed according to clan norms that are deeply rooted in society.

Koutammakou, whether in Benin or Togo, is traditionally managed collectively, with each individual being aware from an early age of his or her role, duties and rights in the perpetuation of its conservation. This is based on a strong tradition founded on respect for the ancestors, the observance of prohibitions and taboos, the weight and audience of initiations, the codification of society and the perpetuation of the material and immaterial structure of the Takienta. Each Takienta is linked to the others by traditional mechanisms of co-management and peaceful cohabitation. The ternary cycle of construction-destruction-reconstruction of these dwellings is regularly renewed thanks to the mastery of knowledge and know-how that is passed on from father to son, mother to daughter, and generation to generation, but also to the notion of community that is still very much present. Labour-intensive activities, such as the construction of Sikien or agricultural activities, allow the Batammariba to exchange and maintain a good understanding and contribute to the conservation of the cultural landscape (Figure 3).

Figure 3. Difonni ceremony (initiation rite for boys) in front of the Takienta. © Evelyne Alitonou.



In Benin, management is also complemented by a range of organizations working on the site. The Ditammari National Linguistic Commission enables the elders and resource persons grouped within it to meet periodically to discuss current events in the cultural landscape, thus contributing to its conservation. The establishment of a new Commission office in February 2020 reinforces this action. The non-governmental organization ECO-Benin, which works to promote ecotourism and local development projects throughout Benin, promotes the cultural values of Koutammakou and works to strengthen communication between traditional managers. In particular, the organization is behind the ‘*Route des Tatas*’ project, which supports communities in the conservation, enhancement and promotion of the Otammari culture, of which the Tata³ is the main material pillar.

Transnational cooperation for integral and sustainable conservation of Koutammakou

The overall Koutammakou landscape reflects every aspect of the Batammariba’s life as well as the social, economic and cultural system that is present on both sides of the Beninese-Togolese border. Although the Beninese side has the advantage of

³Synonym of Takienta.

hosting the historical cradle of the Batammariba and major religious sites, of having the five major types of Takienta known to date, and of covering an area seven times larger than that of Togo, the two sides form a coherent and complementary continuum with the same cultural, anthropological and historical characteristics. With the proposed extension of the site to Benin on the World Heritage List, the governments of Benin and Togo intend to restore the overall integrity of this system in order to better preserve it: by joining the two parts, the integrity of the Koutammakou as recognized by the Batammariba will be delimited and protected.

In recent years and thanks to this process, collaboration between the Cultural Heritage Directorates of Benin and Togo has been strengthened, notably through works implemented by the *Ecole du Patrimoine Africain* for the conservation of heritage on both sides of the Koutammakou. In addition, a management plan setting out the guidelines for transnational management in the two countries is currently under consideration. This document, the result of effective transnational cooperation between Benin and Togo, is already a major asset that could contribute to strengthening the management and conservation of the site.

Finally, the organization of joint cultural activities allows the site to be celebrated in its entirety. For example, the biennial FACTAM (Festival des Arts et Cultures Tammari) – created in 2002 on the initiative of the National Ditammari Linguistic Commission of Benin – and FESTAMBER (Festival Tamberma) – created in 2011 on the initiative of the civil society of Nadoba, in Togo, are opportunities for the Beninese and Togolese Batammariba to meet. The two parties are considering a fusion that would favour the establishment of a single festival bringing together the Batammariba from both sides of the border.

These different initiatives demonstrate the strong will of Benin and Togo to carry out transnational cooperation for the effective conservation and management of Koutammakou.

Conclusion and recommendations

Koutammakou, the Land of the Batammariba, is certainly a unique example of an African transboundary site that bears witness to the cultural strength and richness, as well as the resilience of the local communities that have contributed to its preservation over the centuries.

It took more than 15 years of effort, a strong will of the Togolese and Beninese States associated with the support of multiple partners, for the inscription of the Togolese part of the site on the World Heritage List to be completed by a proposal for the extension of its Beninese part, thus making it possible to envisage a rediscovered integrity for this exemplary cultural landscape that is Koutammakou.

The transnational cooperation between Benin and Togo, initiated through the process of extension of the site, represents a major asset for an integral and sustainable management and conservation of the site, involving both States Parties and their partners and combining modern management with a functional traditional

system. This cooperation needs to be continued and strengthened, and extended to scientific, technical and financial cooperation as well as integrated planning to ensure the sustainability of the site and the local communities who are its custodians. Both parties are only hoping for the validation of the extension of the Koutammakou inscription to start the cycle of meetings that will reinforce this active transnational cooperation.⁴

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⁴This is one of the main recommendations of the validation workshop of the Koutammakou Management Plan, held in December 2020 in Koussoucouingou (Benin).

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Extension of Sukur Cultural Landscape in Nigeria to incorporate the 16 DGB sites on the Wandala Cultural Landscape in Cameroon as a serial transboundary World Heritage site



Anthony Sham

Introduction

As a result of a dispute between Nigeria and Cameroon over the ownership of the Bakasi Peninsula during the last two decades, other international disputed boundary areas have also been identified and properly delineated from the far north in Borno State to the Bakasi Peninsula in Cross River State, with a view to establishing international cooperation and a bilateral relationship that will bring peace and development between the two countries. To further strengthen the cordial relationship, experts and authorities of the African World Heritage programme jointly entered into an agreement in 2016 at Yaounde, Cameroon, for the joint preparation and submission of Korup Hill in Cameroon and Oban Hill in Nigeria as a transboundary World Heritage site.

Similarly, at the far north-east border of Nigeria, there is a wealth of opportunity to extend the Sukur Cultural Landscape as far as the Wandala Cultural Landscape on the Cameroonian territory, which will incorporate the historical areas identified in the early 1990s, when the Maya Wandala Project began archaeological and ethnohistoric investigations into the peoples of Mandara. In addition, the Mandara Archaeological Project (MAP) began again, with further research carried out in 2002. In 2007, 16 archaeological sites were mapped out as *diy-geδ-bay* (DGB) sites, which could all be used for extending a serial transboundary World Heritage property.

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The civilization of the Wandala Cultural Landscape

The site is located at approximately 11°7'N and 14°10' E on the Cameroonian territory. The landscape lies on the Mandara Mountains, which straddle the border between Cameroon and Nigeria. Culturally, the area was inhabited by multiethnic groups which are dominated by the Maya-speaking group. The landscape is among the most ethnically diverse regions in Africa, with over 40 ethnic groups recorded in the Extreme North Region alone (Seignobos, 2000; cf. Kimberly, 1996).

The Maya civilization emerged as a centralized state over the past 600 years in the same way as many of their neighbours, both on the mountains and on the plains, including Sukur. In addition, the peoples all speak languages belonging to the Chadic family. The Wandala landscape in the southern Chad basin encompasses the Maya civilization in the Cameroonian territory and the Sukur civilization on the Nigerian side of the lofty plateau of the Mandara highlands. The two civilizations were contemporaneous from the sixteenth century AD (David, 1993) without defined boundaries until the colonial period and the subsequent partition of Africa.

The literature examined investigates a number of concepts, analogies, artistic and literary works of the Maya civilization on the great Wandala landscape in the southern Chad basin, with evidence of cultural identity, socio-economic activities, and the popular and cultural evolution in the region over the last six centuries into a centralized polity.

The people are also known by the name 'Mandma', the label given to them by their Kanuri neighbours from the historic Bomo State to the north-west (Kimberly, 1996). On the other hand, some individual massifs such as Gudur, Diamare and Mpaskali are named after the Montagnard people who live there (David and MacEachern, 1988). In general, however, the communities living on the Mandara highlands practise similar socio-economic activities and have actively altered their terrain, e.g. terracing on the mountains and surrounding inselbergs which slows down erosion for as long as the terraces are maintained, adds water retention qualities to the soils and increases agricultural yields.

Research and documentation on the peoples of the Mandara has been carried out by various scholars in both the Nigerian and the Cameroonian territories. In the early 1990s, the Maya Wandala Project, headed by Nicholas David, began archaeological and ethnohistoric investigations. This was followed by the MAP, headed by Scott MacEachern, which started in 2002 and explored the historical evolution of the diverse ethnic groups. Thereafter, the DGB project, also headed by Scott MacEachern, followed in 2007, where 16 archaeological sites were investigated and documented. The 16 DGB sites were characterized by drystone architecture in the form of walls, corals, gates and silos, among others.

The Mandara International Peace Park

The Mandara International Peace Park is located on the Mandara highlands at the border of north-west Cameroon and north-east Nigeria. The project was jointly proposed by Nigeria and Cameroon, in order to enable the States Parties to (i) establish a cordial relationship between the communities, with a view to reducing the incursions of the Boko Haram sect in the region; and (ii) to extend the World Heritage site of Sukur to the Cameroonian territory, since there are similarities in the communities' living heritage and socio-economic activities. The park seeks to reunite peoples on the border who have been displaced by insurgency, and to imbue a culture of conservation through the development of sustainable eco-tourism on the plateau, enabling visitors to enjoy the benefits of the surrounding cultural and natural resources.

Immediate actions to facilitate inscription and management

In an area as large as the Mandara highlands, characterized by natural environmental beauty and a high-density population in absolute poverty, it is imperative that people know and understand the benefits of the beautiful cultural heritage and the aesthetic importance of the landscape before their actions destroy them.

The extension will require expanding the core area and the buffer zone of Sukur Cultural Landscape in order to incorporate the 16 DGB sites on the Wandala landscape, making a single transboundary World Heritage property. It will further involve expanding and incorporating other physical attributes, intangible heritage and tour packages, which were examined in the available literature, along with historical information and maps for defining the boundary. The Cameroonian Government needs to put in place structures and a management committee similar to those of Sukur Cultural Landscape, which will facilitate liaison and enable them to sustainably manage and develop their own site.

The two States Parties should jointly examine the natural features of the entire tangible and intangible heritage to produce an acceptable statement of Outstanding Universal Value, which will present the state of integrity and authenticity and describe the values of all the attributes. Items of intangible heritage include festivals and ceremonies, folklores, rites and incantations. The site on the Cameroonian territory should equally have a separate management plan for the purpose of conservation and protection, to align with the recommendations of the 1972 UNESCO Convention.¹

In addition, the two States Parties must jointly produce a serial transnational conservation management plan, based on a cycle of at least five years, in addition to the existing individual site. The management plan should contain elements from the

¹ See: <https://whc.unesco.org/fr/convention/>

existing plans, such as management, conservation, protection, sustainable development, research and documentation. The plan should also specify actions, partnerships, synergies and community involvement, and identify the stakeholders for a participatory management system.

The traditional management system of each site should be enshrined in the modern conservation and management systems developed for the serial transboundary World Heritage property. The Central Conservation Management Plan should clearly detail community participation in the conservation and preservation of dry-stone architecture, vernacular buildings, terraced farming system, animal husbandry and iron metallurgy. The involvement of private partnerships will help in getting the local communities to see the benefit of their heritage.

The two State Parties should convene another round-table conference to articulate the importance of the International Peace Park and to draw up a memorandum of understanding (MOU). The MOU should include the utilization of the park and the benefits that will accrue to both States Parties in the areas of poverty eradication, community sensitization, socio-cultural ceremonies and the construction of a centre to provide a basic infrastructure for sustainable development.

Justification for the extension of the World Heritage property

The two landscapes are located in close proximity to one another, with very few international restrictions among the border communities, which could potentially facilitate movement across the diverse expanse of land area. Culturally, the civilizations have demonstrated an important interchange in human values on the Mandara highlands over time, in particular with regard to socio-religious values and the worship of ancestors, socio-economic activities, such as the terrace system of farming, and cattle fattening. In addition, the drystone technology and the vernacular architecture show the great impact of human interaction on the environment, which has continued to define the existence and relationships of the hilltop communities.

On settlement patterns, most of the communities are situated on high plateaus in northern Adamawa and the Kapsiki area of French Cameroon, with unique stone architecture and adaptations with the environment. The Maya civilization, just like Sukur in the region, is a supreme repository of the dynastic concept of divine kingship, with centralized institutions of traditional authority, and enjoys a spiritual pre-eminence in the same way as other notable kingdoms in West Africa.

On the tradition of origin, David and Sterner (1992) supported the claims of oral traditions of the Sukur people that they migrated to the present-day settlement not from Gudur, but from Mpsakali (a toponym possibly related to Mpasakali), a massif on the edge of Diamare plain, some 10 km east of the Gudur massif in the French Cameroon territory (Figures 1, 2 and 3).

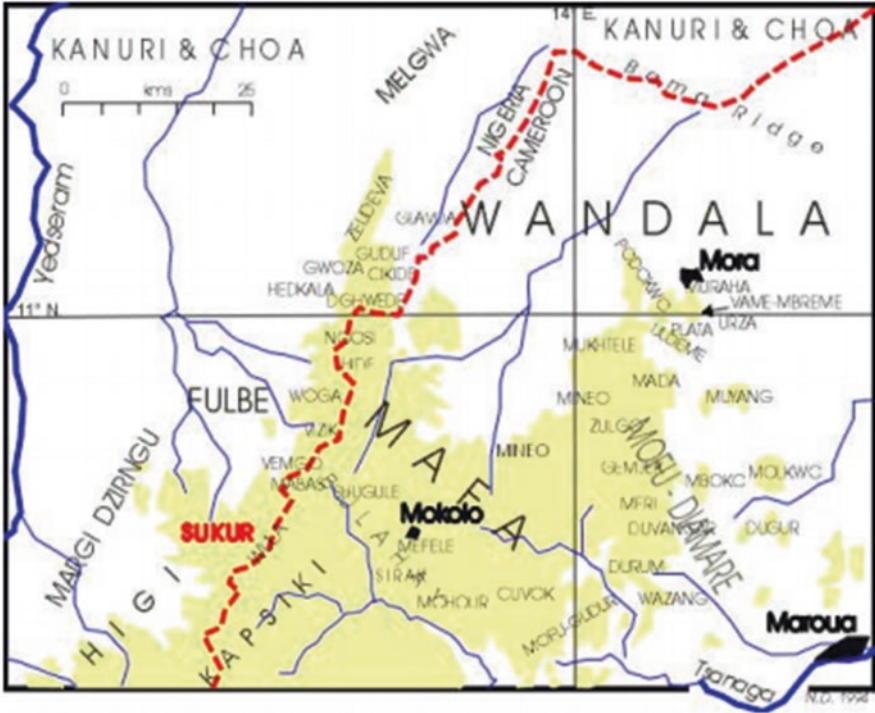


Figure 1. Map of Sukur and Wandala landscape (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations).
Source: Anthony Sham.



Figure 2. Drystone vernacular architecture of the peoples of the Mandara highland ©Anthony Sham.



Figure 3 Terracing of farmlands on the Mandara highland © Anthony Sham.

Attributes conveying Outstanding Universal Value

1. The 16 DGB sites are complexes of drystone architecture with platforms on the Maya landscape. Other features include staircases, passageways, internal chambers, silos and courtyards. They are the earliest well-established evidence of human occupation of this mountainous region, with the largest and most complex examples of stone architecture known to date from Central Africa.
2. Terraced farmlands with step-level benches are still maintained, which reduces soil erosion and stabilizes the soil nutrients for adaptable hilltop farming.
3. There is evidence of iron smelting technology with different types and sizes of furnaces on the archaeological sites.
4. From the scientific and conservation point of view, the biodiversity is unique, with different species of plants and animals.
5. The presence of local indigenous crafts to support livelihoods, such as brass casting, pottery and basketry, among others, are evidence of cultural continuity.
6. The unique geological formations include spectacular rock formations of massive outcrops, boulders and overhang.

Prospects

Maya and Sukur are both living heritage, faithfully evolved from the Wandala language phylum on the Mandara plateau, with common cultural practices and beliefs.

The two civilizations are in close proximity to one another, with limited barrier movement, despite the international boundary.

The proposed establishment of the International Peace Park will provide an enabling environment for socio-economic activities, enhance relationships between the communities and bring peace and development to the border communities on the highland.

With regard to civil unrest, the communities are now beginning to realize and understand that unity and peace cannot be compromised because of the adverse effect of Boko Haram on the communities in the region. Therefore, the people are now ready to live in peace, and to protect their lives and properties.

The conservation, preservation and protection of the heritage will be enhanced through participatory conservation and management systems, in order to derive the benefits needed to sustain livelihoods.

Conclusion and recommendations

The ethnic groups from the Wandala language phylum in the Mandara region are numerous, but the Maya and Sukur civilizations – although identical – evolved side by side as a living heritage, with active cultural practices, belief systems, and artistic and literary works of Outstanding Universal Value. The extension criteria will require the conservation and preservation of these landscapes through traditional and modern systems, so that the authenticity and integrity of their physical attributes will not be significantly modified.

In view of the above, a single comprehensive conservation management plan needs to be produced, using strategies for conservation and management according to the Operational Guidelines of the 1972 UNESCO Convention.

Heritage experts working in Nigeria and Cameroon should include the establishment of the International Peace Park Project in the MOU to stimulate actions that will bring unity and peace to the border communities, so that they can understand how to benefit from their natural resources and remove civil unrest.

The two States Parties should immediately begin the process of compiling a nomination dossier, through their appropriate agencies, for the extension of Sukur Cultural Landscape to the 16 DGB sites on the Wandala Landscape as a serial trans-boundary World Heritage property. This will involve collaboration with heritage experts, host communities, governmental and non-governmental organizations.

The DGB sites, historic settlements and sacred sites on the Wandala Landscape should be mapped out as the core area, while cultural festivals, ceremonies, ritual

rites and other cultural practices of the living communities should be documented as intangible heritage for the extension, and a buffer zone should be created.

There should also be a round-table sensitization conference for the communities around the World Heritage property on the wise use of heritage and the role of the community in its safeguarding. This will be jointly organized by the authorities in Nigeria and Cameroon. In addition, regular consultative stakeholder meetings should be included in the early management system for the border communities, in order to undertake all actions on the site with honesty and dedication.

In preparation for the production of the extension dossier, the responsible agency of the Republic of Cameroon should begin the following processes as soon as possible:

- Mapping out of the site
- Production of the conservation management plan
- Litigation for protection of the site
- Listing the attributes that convey values.

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Transboundary conservation of large carnivores in West Africa: The case of the WAP complex



Etotépé A. Sogbohossou

Introduction

The degradation of biodiversity is one of the most important problems facing humanity today. Every day, species are disappearing due to a combination of factors, mainly linked to anthropogenic activities. Fragmentation and degradation of habitats and illegal wildlife trade are among the most important factors that threaten wildlife (Wilkie and Carpenter, 1999; Ceballos and Ehrlich, 2002). In this context, protected areas are emerging in many places around the world as the last refuges for a large number of species and are therefore critical for safeguarding biodiversity (Geldmann et al., 2013). The larger they are, the more they present a guarantee for effective and sustainable conservation of animal resources (Newmark, 1996). This is often a characteristic of transboundary protected areas. Do these transnational areas manage to guarantee the safeguarding of biodiversity better than national protected areas? Moreover, a transboundary national area implies concerted management between several countries and several regions, which is neither obvious nor easy.

Among the wildlife species that are highly threatened by human activities are the large carnivores. Because of their important space requirements, their position in the trophic chain and their economic importance, large carnivores are for the most part threatened with extinction (Woodroffe, 2000; Ripple et al., 2014), particularly on the African continent. In West Africa, the situation is particularly alarming, with these species being reduced, more so than in other parts of the continent, to protected areas. The lion is an iconic large carnivore species whose range includes West Africa.

This synthesis seeks to address, through a brief literature review and an analysis of actions on the conservation of the lion and other large carnivores in West Africa and in the W (Benin-Burkina Faso-Niger)-Arly (Burkina Faso)-Pendjari (Benin)

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transboundary complex, also known as WAP, the challenges of transnational management for the successful conservation of threatened species.

Conservation status of large carnivores in West Africa

Large carnivores are considered valuable indicators of the sustainability of protected area systems and ecosystems because they occupy a high position in the food chain, require large territories and are highly susceptible to human activities (Woodroffe & Ginsberg, 1998). Their conservation is therefore crucial for the preservation of biodiversity in general.

The term 'large carnivores' refers to the lion, hyena, cheetah, leopard and wild dog species. The most abundant of these species is the spotted hyena, classified as Least Concern on the IUCN Red List (Bohm and Höner, 2015). Nevertheless, very few studies have been conducted on the population dynamics and ecology of the spotted hyena in West Africa. The leopard, on the other hand, is considered Vulnerable in Africa and Asia (Stein et al., 2016). Present in just over a dozen countries, it remains little studied in the region. As for the cheetah, it is considered Vulnerable in Africa and Asia (Durant et al., 2015) and Critically Endangered in West and North Africa (Belbachir, 2008). Four populations occur in West Africa in five countries, the largest of which is the one in the transboundary WAP complex. The wild dog is considered Endangered in Africa and Critically Endangered in West Africa (Woodroffe and Sillero-Zubiri, 2012). It is the most threatened large carnivore in West Africa. The Red List reports the species in four West African countries, in the WAP complex and in Senegal. However, the only recently confirmed population is in the Niokolo Koba Park in Senegal, which does not appear to be sustainable. The lion, considered Vulnerable in Africa, is Critically Endangered in West Africa (Henschel et al., 2015). The WAP complex supports approximately 90% of the West African lion population (Henschel et al., 2016).

Due mainly to anthropogenic activities and their corollaries, including habitat degradation and fragmentation, direct persecution of species, conflicts with humans, poaching, trade in live animals and by-products, populations of these species are all decreasing in Africa, and particularly in West Africa. Insecurity and armed conflict in the subregion pose an increasing threat to these species (Bauer et al., 2020). The status of the species assessed in the subregion (lion, cheetah, wild dog) shows that they are more threatened than in the rest of the continent. While in Southern and Eastern Africa, several large populations of large carnivores are found outside protected areas, these species are confined to protected areas in Western Africa. In this part of Africa, conservation is often not a priority for governments, and protected areas are under great pressure from people (Bauer et al., 2020) and do not guarantee the survival of the species.

Wildlife management in the WAP complex

The WAP complex is composed of the W transboundary biosphere reserve extending over Benin, Burkina Faso and Niger, the Arly Park and its associated areas in Burkina Faso, and the Pendjari Biosphere Reserve in Benin (Figure 1). It covers more than 30,000 km² in the three countries concerned. The protected areas that make up the reserve were created in the mid-1950s and have seen their status evolve, as well as their surface area for some. Each country has its own rules, and the protected areas making up the complex have different conservation statuses (biosphere reserve, national park, hunting area, wildlife reserve, World Heritage property), so the management methods differ. As in several protected areas in the subregion, management is highly dependent on projects, often financed by international donors. This operation favours, between projects, the illegal occupation of areas, often reducing to nothing the efforts made. This problem is aggravated by the connectivity of the areas, which can encourage the spread of threats. The Protected Ecosystems in Sudan-Sahelian Africa (ECOPAS) programme, established in early 2001, has made it possible to move towards concerted management, which has been strengthened with the various regional projects that have followed, such as the *Programme d'Appui aux Parcs de l'Entente* (PAPE) and the current GIZ-RBT-WAP project. An analysis at the beginning of this process had highlighted, among other things, the

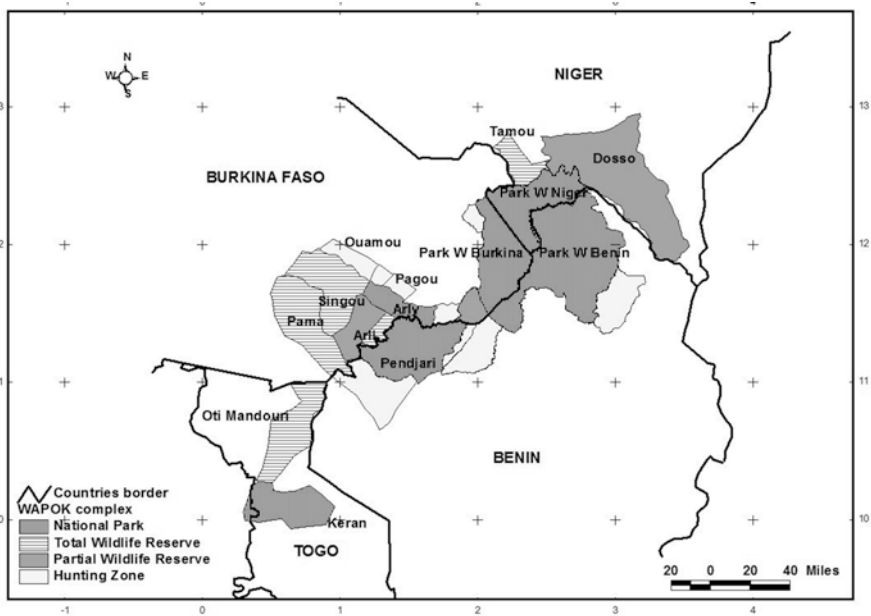


Figure 1. Location of the WAP complex (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations)

Source: Sogbohossou, 2011.

limited and unequal competences of the managers, the differences between the policies and strategies and the weak involvement of the riparian populations in the management (UNDP, 2014). More than 15 years later, the situation has positively evolved, thanks to efforts to harmonize and strengthen actions (Amahowé et al., 2013). Regional anti-poaching initiatives have been implemented; regular exchanges between the different teams allow knowledge and know-how to be shared. Even if differences remain between countries and efforts still need to be made, the WAP complex represents a privileged area for wildlife conservation in West Africa. It is home to the largest population of elephants in the region, important populations of species typical of the African savannah, such as the buffalo, and rare species, such as the manatee and the cheetah.

The active consultation framework within this complex has probably favoured the recent inscription of the Benin and Burkina Faso parts onto the World Heritage List, after the Niger part of the W Park, which has been a World Heritage property since 1996.

Lion conservation in the WAP complex: Research status and threats

The lion, like several species of large carnivores, is an iconic wildlife species. The species' range, reduced by 75% in Africa, has been reduced by 99% in West Africa (Riggio et al., 2013). The lion is now found in five countries in the region, but only the transnational population in the WAP complex in Benin, Burkina Faso and Niger is the most viable (Henschel et al., 2014).

For a long time, the lion and other large carnivore species were neglected in West Africa. Awareness began in the early 2000s with the Limbe workshop on the status and conservation needs of the lion in West and Central Africa in Cameroon in 2001 (Bauer et al., 2001). The West and Central African Lion Conservation Network (ROCAL) was formed in 2002 following several meetings and a few initiated projects. Regular monitoring of the lion population thus began in the Pendjari Biosphere Reserve, and then throughout the WAP complex as of 2002 (Di Silvestre, 2002; Sogbohossou and Tehou, 2007; Sogbohossou, 2009). Counts on a regional scale (Henschel et al., 2014, 2016) have highlighted the threatened nature of the species and the crucial importance of the WAP Complex population for lion conservation in West Africa. Indeed, the WAP complex population was estimated in 2012 to be 350 lions corresponding to 90% of the lion population in West Africa (Henschel et al., 2014). The species is more abundant and better distributed in the Arly-Pendjari block than in the W block and appears to be at least stable based on the results of the 2014 count. Collaring individuals between 2007 and 2010 (Sogbohossou, 2011), and again from 2018 (African Parks Network, personal communication) showed movement of individuals between Pendjari and Arly and between Pendjari and W. The average territory size of a lioness which was $256 \pm 154 \text{ km}^2$ (100% MCP) (Sogbohossou, 2011) confirms the high space requirement of the species.

Other aspects were discussed, such as human-lion conflicts, genetics, ecology of the species, threats such as sport hunting and trade in by-products.

Genetic studies, including samples from the WAP complex, have confirmed the need to focus on the lion in West Africa. Indeed, the West and Central African lion is more closely related to the Asian lion than to the South and East African lion and is therefore quite different genetically from its continental brethren (Bertola et al. 2011, 2015). Although this difference is not sufficient to classify the West and Central African lion into a specific subspecies, it is significant enough to justify the need to conserve this diversity at the species level.

On the Pendjari side, Sogbohossou et al. (2011) and Efió et al. (2018) showed that hyena, lion and baboon were the main perpetrators of livestock depredation, while crops were mainly attacked by baboon, warthog and elephant. Fishermen complained of crocodile and hippo attacks. The costs of conflicts with large carnivores have been estimated at US\$138 per household around the W Niger and US\$196–350 around the Pendjari (Bauer et al., 2010). These conflicts have decreased in the Pendjari, with costs ranging from US\$77 to US\$207.2 (Efió et al., 2018). Of the methods used, guarding and fires were the most effective, even if in general, conflict reduction methods remain inefficient. Improved enclosures have proven to be effective (Bauer et al., 2010) but have not been promoted because of the relatively high cost to herders. While on the Pendjari side, lion revenge killings were not known, cases have been observed around the W. In 2018, three lions were poisoned by local people in W Benin.

Apart from human-wildlife conflicts, the trade in by-products, which encourages lion poaching, is a major threat to the conservation of the species in the subregion. Investigations, concentrated on the Benin side (Sogbohossou, 2006; Ipavec/ZSL, personal communication), have shown that lion by-products are everywhere on the markets and come from both the countries of the complex and from Central African countries.

Sport hunting, although controlled, appears to have drawbacks for lion survival in the WAP complex (Sogbohossou et al., 2014). It is one of the factors whose management varies very significantly between the countries of the complex. Indeed, this hunting is absent on the Niger side. In Benin, which hosts about 43% of the complex, the annual quota for all hunting areas, halved since 2002 after the first monitoring results, is five lions. Hunting reports indicate that on average one lion is killed for sport hunting each year. In Burkina Faso, where 36% of the complex is located, the quota was around 20 lions with an average of 11.9 lions killed per year (IUCN/PACO, 2009). It has been significantly reduced to six lions per year since 2015, after the development of the large carnivore conservation strategy in the WAP. This is an important achievement in collaborative management in the complex.

General discussion and outlook

The WAP complex in West Africa represents the last hope for saving the lion and many other species in the region. Biodiversity conservation in this ecosystem is complicated by its transnational nature. Fortunately, for nearly two decades, collaborative efforts have been made to harmonize management and research actions in the complex. Such collaborative initiatives are not legion around the world (Linnell and Boitani, 2012) and the example of WAP should be encouraged. With the various projects, the level of management has improved in all countries. The existence of a regional conservation plan for large carnivores in the WAP complex is evidence of this collaboration, although some resolutions, such as periodic regional counts of lions and other carnivores, are not automatic and the reduction or even abolition of the lion hunting quota is not supported by all parties. Research, which should guide management efforts and ensure that management is effective, needs to be improved. Studies are more national than regional, and research efforts are unevenly distributed. Several authors have shown in the case of carnivores that transnational-scale studies generate more accurate results, density and survival estimates than national-scale studies (Bischof et al., 2016; Gervasi et al., 2016; Vitkalova et al., 2018). National-level studies often tend to overestimate abundance and do not fully appreciate the consequences of differential management between protected areas. Regional counts within the WAP should therefore be continued, and this regionalization should be extended to other types of studies. The large carnivore count planned for 2019 is part of this framework, and the initiative should be continued.

Because of the lion's large space requirements, the WAP complex offers the best habitat in the West African subregion for the species to thrive. This space must therefore be safeguarded from all sides. Even the involvement of surrounding communities in conservation must be harmonized between countries, so that conservation efforts in one part are not wiped out in another.

Actions are favoured by the fact that all the countries of the WAP complex have ratified international agreements (Convention on Biological Diversity, CITES, CMS, World Heritage Convention, etc.) and even regional agreements aimed at safeguarding wildlife, including the lion. The problem of harmonization of laws therefore does not arise, except perhaps with regard to sport hunting.

Because of the lion's space requirements and position in the trophic chain, the WAP complex represents an important ecosystem for safeguarding the species in West Africa. Harmonization of management and research actions and sharing of results are essential, and should continue to be promoted.

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Transnational cooperation for effective management of World Heritage Sites in Africa: Case of the biodiversity of the Gourma, Mali



Nohan Sow

Introduction

The Gourma region of Mali (hereafter ‘the Gourma’) is located in the Sahelian zone; it comprises 18 communes, divided between 3 administrative regions (Mopti, Timbuktu and Gao). In 1959, part of the Gourma region (about 1.25 million hectares) was classified as an ‘Elephant Reserve’ by *Law n° 59-53/AL/RS of 30 December 1959. It was inscribed onto the UNESCO Tentative List in August 2017.*

The Gourma is roughly bounded by the Niger River to the north and east, the Inner Niger Delta to the west and the borders of Burkina Faso to the south. The vegetation is composed of a herbaceous steppe, including *Salvadora*, *Leptadenia*, *Aristida* species, and woody with *Balanites aegytiaca* in the extreme north. The north and centre are also herbaceous with *Salvadorastipoides*, *Cenchrus* and *Schoenfeldiagracilis* species. The woody areas include *Acacia* and *Chomiphora Africana* species. Finally, in the south, there is a shrubby savanna with *Acacia nilotoca*, *Anogeisusleiocarpus*, *Guierasenegalensis*, *Ziziphusmauritiana*, etc.

In summary, the area known as ‘the Gourma’ is a diverse set of landscapes – ponds, lakes (notably Inadiatafane, Banzena, Gossi), dunes, tiger bushes and sandstone promontories, plains and inselbergs – and unique biological features, such as the continent’s most northerly herd of 350 elephants.

The presence of these various ponds, inselbergs and bushes have made the Gourma an attractive traditional meeting place for transhumant herders. Also, this area is frequented in all dry seasons by thousands of heads of livestock (cattle, sheep, goats) and by the last herd of Sahelian elephants, the northernmost population of elephants in Africa, who live harmoniously with the human populations of the area, finding food in the bush and water at water points (Figures 1 and 2).

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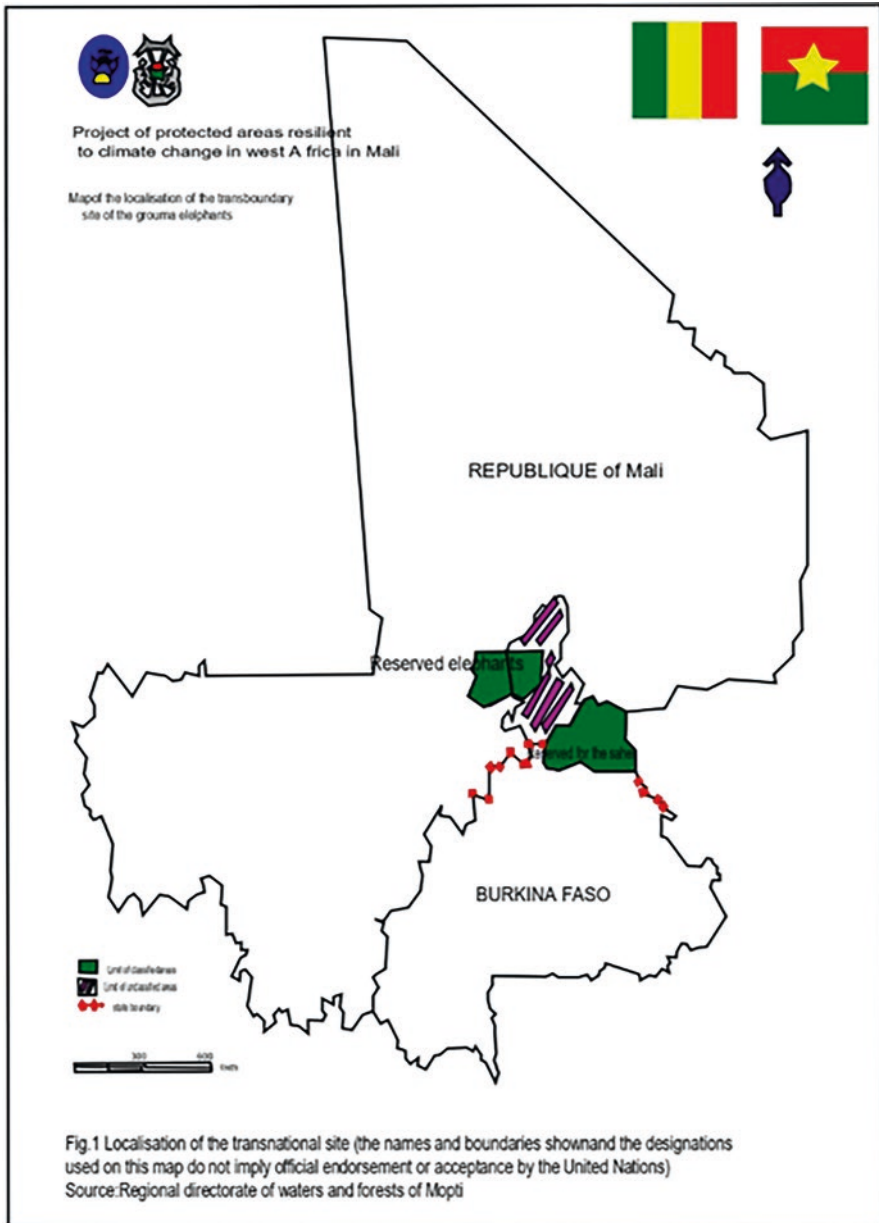


Figure 1. Location of the transnational site (The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations).
Source: Direction régionale des eaux et forêts de Mopti.



Figure 2. Elephants in the Malian Gourma. © Direction régionale des eaux et forêts de Mopti.

Elements of the national strategy

In Mali, the proper conservation of any site through its classification as national cultural heritage and/or its inscription onto the World Heritage List favours its protection and enhancement, enabling communities to live their heritage by perpetuating their sociocultural practices, knowledge and know-how, while respecting the traditions and specificities of neighbouring groups and keeping them safe from anomie.

As part of the protection and promotion of our rich cultural heritage, Mali has adopted several legislative and regulatory texts, including:

Law No. 10-061 of 30 December 2010 amending and relating to the protection and promotion of the national cultural heritage, which provides in its first article that the protection of cultural heritage is ensured by the State, the territorial authorities and the communities; and

Decree No. 2016-0951/P-RM of 20 December 2016 setting out the details of the competences transferred from the State to the territorial authorities at the levels of the municipality, the circle and the region in the field of culture, intends to enhance the role of the territorial authorities in the creation, management, promotion, animation and dissemination of culture.

The Malian State, through the Ministry of Culture, issued Decree No. 203/PG-RM of 23 August 1985, establishing the National Commission for the Safeguarding of the Cultural Heritage and its regional and subregional branches,

and bringing together almost all the ministerial departments. This commission rules on any proposal for classification in the natural heritage, thus promoting synergy or establishing links between the Ministry of Culture and the Ministry of the Environment and Sanitation in the specific case of the conservation and management of the Gourma Biodiversity *Reserve*. Institutionally, the protection and management of cultural heritage is the responsibility of the Ministry of Culture, which has central services at the national level, and regional and subregional services at the regional and local levels.

As for the protection of fauna and flora, this is the responsibility of the Ministry of Environment and Sanitation. This department *has an active structure that works on the valorization and protection of the Gourma biodiversity: the Project for the Conservation and Valorization of the Gourma Biodiversity and Elephants (PCVBGE)*.

These different structures work in perfect synergy with NGOs to improve the management of biological diversity and the living conditions of populations, with the support of grassroots organizations such as the IUCN, etc.

Thus, in order to ensure a better involvement and a participatory approach by the communities in the safeguarding, promotion and management of our heritage, the amended Law n° 10-061 of December 30, 2010¹ relating to the protection and promotion of the national cultural heritage, stipulates in its first article that the protection and safeguarding of cultural heritage are ensured by the State, the local authorities and the communities.

Decree No. 2016-0951/P-RM of 20 December 2016 setting out the details of the competences transferred from the State to the local authorities at the commune, circle and region levels in the area of culture, intends to enhance the role of local authorities in the creation, management, promotion, animation and dissemination of culture.

Constraints or threats to biodiversity management in the Gourma

There are several threats to the Gourma, including:

The difficult coexistence of elephants that share the same natural rangelands during the dry season as the domestic livestock of the many transhumant herders who have settled in the area in an anarchic manner, without considering the presence of the pachyderms that need peace and quiet in their movements.

Due to the pressure exerted by populations on resources, the Gourma has been subjected for more than three decades to the harsh ordeals of climatic hazards, negatively affecting the balance of natural ecosystems that are already fragile due to the strong competition between the various users mentioned above. This

¹Law No. 10-061 of 30 December 2010, amending Law 85-40/AN-RM of 26 July 1985, on the protection and promotion of the national cultural heritage.

competition is most often to the detriment of elephants, whose territory has been shrinking over the years.

A hitherto unknown phenomenon of elephant poaching, with the authorities in charge of their protection (water and forestry services) being powerless to stop it. The abandonment of the Gourma by the administration and the security forces following the occupation of the area by criminals (consisting of jihadist groups, drug, arms and ammunition traffickers) (Figure 3).

Results of management activities

The State of Mali, concerned about the preservation of the Gourma's biodiversity, has engaged the help of several NGOs in the area to improve the management of biological diversity and the living conditions of the populations, with the support of grassroots organizations.

In order to better reinforce ongoing interventions through large-scale actions in the field of biodiversity preservation in the Gourma, Mali requested financial support from the World Bank and the French Global Environment Facility to implement the Gourma and Elephant Biodiversity Conservation and Development Project (PCVBGE).

This project, which is part of the implementation of the Convention on Biological Diversity signed and ratified by Mali on 29 March 1995, aims, among other things, to reverse the degradation of the environment and support local development initiatives, including animal husbandry in seven sites, corresponding to the elephant movement circuit.

The Ministry of Culture, through the National Heritage Directorate and its decentralized services (cultural missions), carries out awareness-raising and information activities for political, administrative and community authorities on the protection and promotion of the tangible and intangible cultural heritage.



Figure 3. Elephants in the Malian Gourma. What will happen to Mali's elephants if the current poaching phenomenon continues?. © Direction régionale des eaux et forêts de Mopti.

The Department also encourages elected officials at the commune, circle and regional levels to include safeguarding and promotion actions in their five-year development plans to ensure their better involvement in the management of natural and wildlife resources in the general interest of the Gourma populations. It promotes cross-border cooperation with Burkina Faso, with both financial partners and UNESCO for the effective management of this common heritage.

These measures have led to a number of successful outcomes, including:

the establishment and management of conservation areas;
strengthening of communal and inter-communal capacities;
partnership through transnational coordination with PAGEN of Burkina Faso. Better still, a draft Mali/Burkina Faso agreement on the transnational management of shared ecosystems was the subject of a communication during the ninth session of the Joint Grand Commission on Cooperation between the governments of Mali and Burkina.

It should also be noted that, in addition to these administrative, political and community management initiatives, several NGOs and partners are also involved in the conservation of the Gourma's biodiversity and its elephants: the Wild Foundation based in Douentza, the Embassy of Japan in Mali, the United Nations Development Programme (UNDP), the Liptako Gourma Authority (ALG), the Embassy of the United States of America in Mali and the International Union for Conservation of Nature and Natural Resources (IUCN) and Save the Elephants, among others.

Vision

In the face of the various threats and constraints to national biological diversity in general, and that of the Gourma biodiversity and elephants in particular, the conservation of biological diversity has become a development concept.

Mali has adopted a vision with several commitments and clear and concise priorities. This vision is summarized as follows: 'Mali, while developing, must preserve the variety of biological resources, the particularity and beauty of its landscapes. It will ensure that their values are appreciated both by its people and by the international community. It will ensure the sustainable use and security of this wealth for the benefit of present and future generations'.

Thus, through this vision, Mali aspires to ensure the conservation and sustainable use of biological diversity resources for the benefit of present and future generations.

Challenges

The Gourma Biodiversity Reserve faces several challenges, including:

The fight against the shortage of water and pasture and its consequences (animal and human pressure, which has been particularly strong in recent years in areas where elephants spend a long time, such as Banzena). One example is the arrival of large herds of cattle from western Niger and northern Burkina Faso, also in search of water and pasture following poor rainfall in their respective areas.

Cohabitation with transhumant herders, who are becoming sedentary, and the settlement of farmers on elephant-sensitive rangelands (Figure 4).

Cross-border cooperation practices and needs of the region

In the past, people in the Gourma were nomads. However, trends towards sedentary transhumant herders and the settlement of farmers on elephant-sensitive rangelands are a major factor in the depletion of space, making it impossible to ensure long-term feeding of elephants.

In order to ensure the preservation of the Gourma biodiversity, the following actions are needed:

Strengthening transnational cooperation with Burkina Faso on the transnational management of shared ecosystems.

Development and implementation of the terms of reference for the development of a joint Mali-Burkina Faso communication plan.

Identification and realization of hydraulic pastoral and grazing infrastructures on appropriate sites.

Establishment of a framework for periodic consultation between the State, partners, officials and elected representatives of both countries.

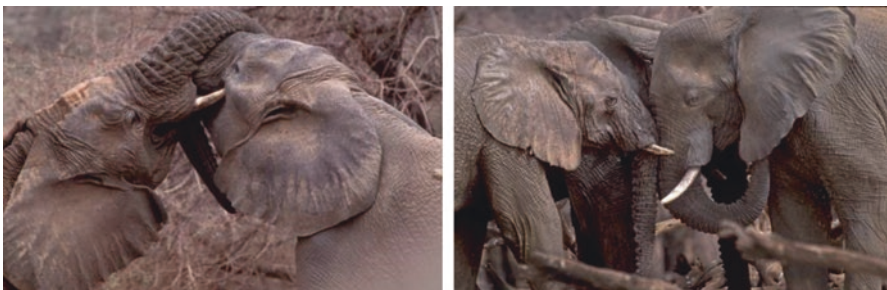


Figure 4. The social life of elephants. © Direction régionale des eaux et forêts de Mopti.

Strong awareness-raising and information campaigns for transnational communities in favour of elephants. This will include:

- persuading all stakeholders to accept the sharing of space and resources with elephants;
- becoming aware of the ecological, economic and cultural importance of the elephant;
- collaborating with dedicated staff in actions to safeguard elephants and their habitat;
- involving the population in all discussions, strategies and actions to protect elephants;
- responding to the priority needs of the population;
- providing economic benefits from elephants to the local population; and
- inscription onto UNESCO's World Cultural Heritage List.

Conclusion

The Gourma Biodiversity *Reserve*, home to the northernmost population of elephants in Africa, is currently facing a number of threats (anthropogenic and natural). In view of the issues mentioned above, the region's needs in terms of cross-border cooperation must be centred on the promotion and exchange of information, zoning and rules for animal husbandry and movements, so that they are in harmony on both sides of the border.

Nonetheless, it is important to emphasize its inclusion in the UNESCO World Heritage List (Figure 5).



Figure 5. Intervention area, Gossi pond. © Direction régionale des eaux et forêts de Mopti.

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Transnational cooperation for effective management of World Heritage sites in Africa



Ogechukwu Madeleine Arinze

Introduction

Transnational cooperation is taking place at a staggering rate across a broad group of countries commonly referred to as the ‘Third World’ or ‘the South’. To complicate matters more, this cooperation is also taking place in the context of massive technological change, which is remapping the world’s economic geography. According to Dicken (1998), globalization is the financial, economic, social and political response to technological change.

The term ‘transnational’ refers to cross-national boundaries.

Cooperation: A platform for effective management of World Heritage sites in Africa

With golden sand dunes, thundering falls and the world’s largest population of giant tortoises, Africa’s World Heritage sites will encompass staggering beauty and diversity without effective transnational cooperation.

For organizational development to be effective, people must be willing to share their ideas candidly with others; they must be willing to accept uncertainty, and they must be willing to show concern for others, especially members of their own team (Greenberg and Baron, 2003). This implies that for transnational cooperation in the Africa region to be effective, nations must be willing to share their resources openly with other nations; they must be willing to show concern for others, especially nations of their own region.

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One of the documents of the Vatican Council (1965) rightly declares that ‘Common good refers to the sum total of social conditions which allows people, either as groups or as individuals, to reach their fulfilment more fully and more easily’. This implies that nations should perform their obligations at both national and international levels – Anozie (2018) opined that there can be no adequate global society where there is no adequate consciousness of the national common good. This indicates primarily that there will be no real peace in the world if there is no true notion of effective transnational cooperation.

Cooperation, therefore, is a pattern of behaviour in which groups or organizations work together towards shared goals for their mutual benefit. It is a form of coordination in work settings, largely because by cooperating, the individuals or groups involved can accomplish more than is possible by working alone. In view of transnational cooperation for the management of World Heritage sites in Africa, more will be achieved if the African nations cooperate effectively.

Factors affecting cooperation

According to Greenberg and Baron (2003), there are many factors which determine whether an individual chooses to cooperate with others in situations involving mixed motives. The following three motives are relevant to this research:

- The reciprocity principle. This principle is the application of the ‘golden rule’, which tells us to ‘do to others as we would have them do to us’. However, this does not accurately describe the way people behave. Instead of treating others as they would like to be treated, most people tend to treat others the way they have been treated in the past by them. We are more inclined to follow a different principle – ‘an eye for an eye and a tooth for a tooth’. Social scientists refer to this as the ‘principle of reciprocity’.
- Personal orientation. While some people tend to be naturally more cooperative, other people tend to be far more competitive.
- Organizational reward system. It is not only differences between people that lead them to behave cooperatively or not but also differences in the nature of organizational reward systems. With an eye towards eliminating these, and fostering cooperation, a system of team-based rewards should be adopted. The key task in establishing cooperation among nations is straightforward: getting it started. That is, one nation’s cooperation encourages cooperation among other nations. Therefore, to encourage transnational cooperation, nations should first attempt to get the process underway.

In the past, the joint use of transnational rivers was often seen as a potential cause of major security-related conflict. In the late 1980s, and particularly the 1990s, blaring headlines such as ‘water more precious than gold’, or ‘water seen as fuel for military conflicts’ made people aware of the potential disputes around existing uses

of transnational water bodies. A much-cited example was the conflict among the riparian countries along the Nile and Tigris-Euphrates river system.

While cooperation in transnational river and lake basins is a necessity, it is not at all a matter of course. If it is not possible to satisfy the accumulated demands of all riparian countries sharing a river or lake system, then the result may be water-use conflicts of many different kinds. These conflicts are generally concerned with the quantity and quality of water, which can usually be resolved by a higher level state authority or by informal means, i.e. by the users themselves. One particular feature of transnational water-use conflicts is that they can only be resolved through negotiation between sovereign states. However, there is some evidence that domestic conflicts among water users results in violence if the authorities are not able to balance interests and enforce the law. Developments in Southern Africa clearly show that access to transnational water resources depends on political and economic power relationships between the riparian countries. Furthermore, the different levels of economic power and administrative capacities between riparian countries have an important influence on their ability to engage in cooperation.

Africa is a continent exceptionally well endowed with river basins and large inland lakes that extend over the territories in several countries. Both crises-prone hot spots and a good number of promising approaches to transnational water management can be observed. Today, there are international agreements in effect for 20 of Africa's 63 river basins, and in 16 river basins there are institutionalized forums that have the task of coordinating national initiatives. This will be discussed later in this paper.

In addition, the Southern African Development Communities (SADC) provide an overarching political framework conducive to efforts aimed at transnational cooperation. Another important success factor is the incremental, pragmatic approach that has been pursued in the development of transnational water organizations. There have been many promising developments for older river-basin organizations, such as the Organisation pour la Mise en Valeur du Fleuve Sénégal (OMVS), the Niger Basin Authority (NBA) and the Lake Chad Basin Commission (LCBC), and new initiatives for cooperation are presently underway on Lake Victoria. The founding of the African Ministers Council on Water (AMCOW) in 2002 in Abuja, Nigeria, has established a continent-wide context that has placed transnational water cooperation firmly on the agenda, including promoting cooperation, security, social and economic development and poverty eradication among member states.

By comparison, cooperation along the region's 38 or so transnational ground water systems is weakly developed, and examples of cooperation may be found only in North Africa on the Nubian Sandstone Aquifer System and the North Western Sahara Aquifer System. Even though some African countries have increasingly been tapping groundwater resources for agriculture and to supply household needs, very few forms of institutionalized cooperation have been established thus far.

Transnational water management in Africa with reference to selected rivers and lakes

This section presents key hydrological, economic and political framework data on selected water bodies: the Orange-Senqu, the Zambezi, the Limpopo, Lake Victoria and Lake Chad.

These are used as a basis to access risks and conflict factors, as well as needs and the potential for cooperation.

Orange-Senqu

The Orange River is roughly 2,300 km in length. Its immediate riparian countries are Lesotho (source), the Republic of South Africa (RSA) and Namibia (estuary). Botswana also shares the Orange River basin, which has an area of close to 1 million km². The RSA holds the largest share of the basin, followed by Namibia, Botswana and Lesotho. The Orange River Basin is one of the most highly developed basins in all of Southern African. There are a total of 37 large-scale dams with a height over 25 m, and a storage capacity over 12 million l³. The mean annual run-off (MAR) is 11,000 million m³. The river's most important tributaries are the Senqu in Lesotho, the Vaal in the Republic of South Africa and the Fish in Namibia.

Zambezi

The Zambezi is some 3,000 km in length. Its basin encompasses an area of roughly 1.4 million km², making it Africa's fourth largest river. It has eight riparian countries: Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia and Zimbabwe, with Zambia holding the largest share of the river's basin. With an annual run-off of 94,000 million m³, its resources are used by households as well as for irrigated agriculture, mining, power generation and, to a lesser extent, industry, fishing and shipping.

Limpopo

The Limpopo is roughly 1,800 km in length. Its riparian countries are Botswana, Mozambique, the Republic of South Africa and Zimbabwe. The Republic of South Africa holds the largest share of about 44%. The upper course of the Limpopo (Crocodile River), forms the border first between the Republic of South Africa and Botswana and then between the Republic of South Africa and Zimbabwe. The

Limpopo MAR is 7,330 million m³. The riparian countries contributed as follows: RSA 66%, Zimbabwe 16%, Mozambique 12% and Botswana 6%. The Limpopo is intensively exploited to supply urban centres, industry and agriculture. Its basin is home to around 14 million people. It is thus one of the African's most densely settled and urbanized river basins.

Lake Victoria

Lake Victoria has an area of about 69,000 km² and a basin of 193,000 km². This makes it the world's second largest, and African largest, lake. It has a volume of 2,760 km³, its shoreline is 3,450 km long (1,750 km in Tanzania, 1,150 km in Uganda and 550 km in Kenya). It has an average depth of 40 m, and a depth of 80 m at its deepest point. The lake is 412 km long from north to south and 355 km wide from east to west. The water of Lake Victoria overflows into the Nile and into Uganda through the Ripon Falls/Owen Falls.

The lake's three riparian countries are Kenya (6% of the surface), Tanzania (49%) and Uganda (45%). The basin is home to some 35 million people, which is roughly one third of the overall population of the three countries. The lake and its resource are used to supply water to households, industry and agriculture, fisheries, transportation, to acquire building materials, to generate power, and for waste disposal. The lake basin is fertile and is farmed intensively for coffee, tea, cotton and sugar cane.

Lake Chad

The Lake Chad Basin has an area of roughly 2.39 million km². The lake surface is extremely variable, fluctuating as a function of season and macroclimatic events (droughts). One of the striking features of the lake is its dramatic shrinkage since the mid-1960s, a development due on the one hand to climate change and on the other to human environmental degradation, through over-exploitation of the lake's water, over-grazing, deforestation and non-sustainable irrigated agriculture. In extreme cases, the river area has even shrunk to 2,000 km². The lake is very shallow, with an average depth of 1.5 m and a maximum depth of 12 m. The countries that share the lake Chad Basin are Chad, Niger, the Central African Republic, Nigeria, Algeria, Cameroon, Libya and Sudan. The Lake Chad Basin is home to some 22 million people, and provides livelihoods for over 150,000 fishers.

An overview: Institutions managing the selected African waters

The Lesotho Highlands Water Project and the Lesotho Highland Water Commission

The Lesotho Highlands Water Project (LHWP) was conceived as a means of meeting South Africa's need for a secure water supply, by tapping the water-rich Sengu in Lesotho to meet water needs in the Gauteng region. The project is designed to divert the waters of the Sengu (in Lesotho) to Gauteng via a complex system of dams and tunnels and at the same time to generate hydroelectricity. The idea is that water transfer and power generation will benefit the development of both countries.

Zambezi Water Commission (ZAMCOM)

The creation of ZAMCOM has meant a real breakthrough for basin-wide water resources management. This development significantly increases the likelihood of cooperative arrangements, especially in view of the fact that the ZAMCOM Agreement makes explicit reference to the 1997 UD Convention and the Revised SADC Water Protocol of 2000.

Lake Victoria Fisheries Organisation

The organization came about via the contract for the Lake Victoria Environmental Management Project (LVEMP). The Lake Victoria Fisheries Organisation is responsible for fishery management and research.

The Limpopo Basin Permanent Technical Committee (LBPTTC) and the Limpopo Water Commission (LIMCOM)

In 1986, in Harare, the riparian parties signed an agreement on funding the Limpopo Basin Permanent Technical Committee, which advised the parties in their efforts to develop the Limpopo Water Commission.

Lake Chad Basin Commission

On 22 May 1964, the four riparian countries Cameroon, Niger, Nigeria and Chad signed the Fort Lamy (now N'Djamena) Convention, creating the Lake Chad Basin Commission (LCBC). In March 1994, the Central African Republic became the fifth member of this intergovernmental organization. In July 200, Sudan was also granted membership. The LCBC is Africa's oldest river/lake basin organization.

The parties commit themselves to a shared use of the basin's natural resources. In practice, however, these obligations have been violated again and again by certain member countries, where dams are constructed without prior notification.

Following the Fort Lamy Convention, the largest project underway aims to stop the lake shrinkage by supplying it with water from the Congo River Basin. The plan is to divert 900 m³ of water from the Oubangui River in the Congo Basin to Lake Chad through a pipeline and a navigable canal of some 2,400 km in length. The project's progress is as yet unclear.

Senegal River Development Organisation

The Senegal River Development Organisation is responsible for overall policy.

Methodology

This study is limited to a few selected rivers and lakes in Africa. They are Orange-Senqu, the Limpopo, the Zambezi, Lake Victoria and Lake Chad. The exploratory survey method of investigation was used. The researcher used data collecting instruments other than questionnaires, as suggested by Aina and Ajiferuke (2002).

Data collection was by documentary analysis or source. According to Uhegbu (2009), documentary sources are a method of collecting data used in social science research. Documents are records accumulated by government, its agencies, institutions or departments, organizations and corporate bodies, and even individuals over time.

The research aimed not only to collect data per se, but also to discover the meaning of the collected data, so that facts and events could be better interpreted, explained and understood (Nwizu, 1998). In order to display the results more clearly, tables, figures and simple percentages were used.

Discussion of the findings

This discussion of the findings is based on Tables 1, 2, 3, 4 and 5.

Information-Sharing: A platform for effective transnational cooperation management

The availability of information is determined by the accessibility of data and information, and their transmission through communication. Accessibility may be differentiated into private, shared and public information. Privately accessible information is available only to one negotiating party. During negotiations, a party may choose not to transmit information for strategic reasons, or for fear of its value. Strategic withholding of information in negotiation leads to a bargaining dilemma, since negotiations of course draw strength from the exchange of information. This is not healthy for the effective management of transnational cooperation. While shared information may also be the result of common observation, i.e. those made in the framework of a joint monitoring programme. In this case, there is no information asymmetry of the kind found in principal-agent constellations. And if there is any information asymmetry, it exists between the negotiating parties on the one side and outsiders on the other (e.g. the public, uninvolved government authorities, donors or organizations).

Public accessibility is given, for example, when one or more parties publishes its information, either on paper or the internet, and this information is accessible to everyone.

One aspect of communication important to us here is if a party takes the deliberate decision to accept or reject the information communicated to it – despite receiving the communication and understanding the information, the party denies the underlying data, and the effects of information, communication, and understanding are invalidated. This further emphasizes the need for stakeholders at all levels to reach agreement on the accuracy or acceptability of the available baseline data.

The joint fact-finding information method is the most suitable for effective cooperative transnational management. This concept rests on few key ideas – the first is that rather than withholding information for strategic advantage, the interested parties pull together relevant information. A second feature is that joint fact-finding involves face-to-face dialogue between technical experts, decision-makers and other key stakeholders. Usually, a nonpartisan facilitator or mediator assists in orchestrating this dialogue. Another significant aspect of the process is that while joint fact-finding is geared to building consensus, it tries to clearly ‘map’ areas of scientific agreement, and to narrow areas of disagreement and uncertainty. It was observed that the countries in Tables 1, 2, 3 and 4 agreed to the this method.

Table 1. Countries within the Limpopo Basin

Countries	Area of countries within Limpopo River Basin (km ²)	Percentage of countries in the Basin
South Africa	184 150	45
Mozambique	79 800	20
Botswana	81 400	20
Zimbabwe	62 900	15
Total	408 250	100

Source: Owen, 2011.

Table 2. Countries within the Lake Chad Basin

Countries	Areas of countries within Lake Chad Basin (km ²)	Percentage of countries in the Basin
Chad	1 046 196	43.9
Niger	691 473	29.0
Central African Republic	219 410	9.2
Nigeria	179 282	7.5
Algeria	93 451	3.9
Cameroon	50 775	2.1
Sudan	101 048	4.2
Total	2 381 635	100

Source: www.fao.org

Table 3. Countries within Lake Victoria

Countries	Area of rivers within Lake Victoria Basin (km ²)	Percentage of countries in the Basin
Kenya	4 100	6
Tanzania	33 700	49
Uganda	31 000	45
Total	68 800	100

Source: https://en.wikipedia.org/wiki/Lake_Victoria

Table 4. Countries within Orange-Senqu Basin

Countries	Area of countries within Orange-Senqu Basin (km ²)	Percentage of countries in the Basin
Botswana	79 000	7.9
Lesotho	34 000	3.4
Namibia	245 000	24.5
South Africa	642 000	64.2
Total	1 000 000	100

Source: ORASECOM, 2007.

Table 5. Countries within the Zambezi River

Countries	Area of the countries within the Zambezi River Basin (km ²)	Percentage of the countries within the Basin
Angola	235 423	17
Botswana	12 401	0.9
Malawi	108 360	8.0
Mozambique	162 004	12.0
Namibia	17 426	1.3
Tanzania	27 840	2.1
Zimbabwe	213 036	15.8
Zambia	574 875	42.5
Total	4 909	100

Source: Chenje, 2000.

Benefit-Sharing: An obstacle to effective transnational cooperation management

The need for benefit-sharing arises when the optimal use of present or planned resources is associated with distributive effects that are not viewed as acceptable by all the countries concerned.

The coordinating problems are:

- **Infrastructure provision:** Generally speaking, the countries concerned will have parallel interest in realizing certain measures for the cooperation to be beneficial to all parties.
- **Management of transnational water bodies:** The countries concerned may achieve cooperation-related benefits by working together with international water bodies. One example would be the joint management of groundwater resources in times of scarcity.

In Table 2, Libya is among the countries within the Lake Chad Basin but has less than 0.5%, which is too low to be captured on the resource table. So too in Table 3, Rwanda and Burundi are among the countries within Lake Victoria but they were merged in resource-sharing with Tanzania. The question is what will happen when the benefits are to be shared? This is certain to hamper effective cooperation.

Upstream-Downstream dichotomy

The researcher found that upstream-downstream issues are among the classic problems encountered in transnational management. Activities on the upper course of a river are inevitably bound up with positive or negative externalities. This limits the possibilities of engaging in cooperation, in that an individual country may have no interest in coming up with cooperation solutions (see Table 4).

International donors as a catalyst for transnational cooperation management

In promoting transnational management in Africa, international donors can promote the development of effective, just and sustainable management institutions.

Nosce te ipsum – ‘know thyself’ – is the first step towards effective donor involvement. Donors may have motivations other than the promotion of effective transnational management. These should be recognized explicitly – only then will it be possible to see whether and how they can be accommodated and which priority they should be accorded. Donors should also recognize their possibilities and limitations, such as their financial resources, political influence, expertise and experiences – ‘know thyself’ is important for all stages of transnational management.

Donors should build on development and promote ownership, and should be aware that they cannot organize transnational management from the outside. They can influence transnational management in several ways, by getting all stakeholders involved, and not just ‘states’. This being said, it is no easy task to involve all stakeholders in transnational management. However, before any development project is approved, a proper stakeholder analysis is needed to prevent the project being appropriated by one national group (GEF, 2000, p. 131). In order to improve donor coordination, the evaluation should not only be through collecting and analysis data but by visits to the sites, and through reviewing and establishing an adequate internet presence. A good example of this is the IWLearn¹, although an internet site may not be enough for improving donor coordination. From Table 4 above, the researcher found that Orange-Senqu needed international donors in its negotiations, having observed that South Africa’s percentage of 64.2% overshadowed the other riparian countries.

Negotiating a win-win process to curb conflict

As we might imagine, cooperation does not work when parties rigidly adhere to their positions and ‘stick to their guns’. For cooperation to be effective, the parties involved must be willing to adjust their stances on the issues at hand. And for the African nations to be willing to make such an adjustment, they must believe that they will have an acceptable outcome – one that allows them to claim victory in the negotiation process. For cooperation to be most effective in reducing conflict, this must be the case for all countries within a region. This allows them to believe that they have ‘won’ the negotiation process. This result is known as a win-win solution and means all the nations gets what they want. Of course, getting each side to feel successful can take some effort. And that effort is one of the purposes of this research.

¹ See: <https://www.iwlearn.net/iw-projects>

Conclusion

Experience shows that transnational water resources – with the World Heritage Sites in mind – are far more likely to serve as the engine of transnational cooperation management in Africa than violent conflict between nations.

This focal area will enable Member States to improve their institutions, strengthen professional capacities and develop regulations for the sustainable management and environmentally sound protection of transnational aquifers. More than half of the large continental aquifers are shared between two or more riparian countries. UNESCO IHP has developed wise practices and guidance tools concerning shared ground water resources management.

The international donor community has played an important role in the foundation of nearly all river and lake basin organization in Africa. It has contributed important financial and technical support for the building and development of such organizations, e.g. the German Federal Ministry for Economic Cooperation and Development. Apart from international donor organizations, regional actors like SADC Water Division, the Water Division of the Economic Community of West African States (ECOWAS), AMCOW and the African Union (AU) via the new partnership for Africans Development (NEPAD), also played a role here.

Since the end of the apartheid regime in South Africa, it is precisely Southern Africa – as a region with an exceptional number of transnational rivers – that has recorded a number of positive developments to show in this regard. No wonder it is an ‘A’ group in the UNESCO list of World Heritage sites, with a total number of ten. In other regions as well, Africa’s heads of state and government have set their sights on a cooperative management that has been affirmed in many declarations, and in bilateral and multilateral agreements. It is therefore expected that the authorities should be able to balance interests and enforce laws in order to avoid domestic conflicts.

Cooperation is the main aim of this research. Countries preparing for accessing or implementing the outcome of this research should naturally reflect on the benefits that cooperation can generate, such as accelerated economic growth, improved human well-being, enhanced environmental sustainability and increased political stability. If these principles are adopted, there will be effective transnational cooperation which, in turn, will promote World Heritage sites.

Recommendations

In view of the fact that there is no automatism involved in the development of transnational cooperation, incentives can be an important stimulation in this area. The benefit-sharing concept favoured by the World Bank is based on this idea, following the line of argument pursued in the Klaphake Report (2005).

Secondly, it is important to strengthen information exchange and management by using different analytical instruments, in order to determine what kinds of information are needed for a given management task and what level of differentiation there should be to avoid duplication of data acquisition.

Further, the establishment and work of river and lake basin organizations should be supported, and public participation in transnational management strengthened. This will promote supraregional coordination between groups and associations, breathing life into the effective management of World Heritage sites, especially those in Africa.

I strongly suggest that more heritage sites be created, especially in Nigeria, which is the giant of Africa. I recommend Oguta Lake in Imo state, where two angry rivers flow side by side and never come together.

I also recommend Agulu Lake, with its hundreds of protected crocodiles and turtles, and the Oron Museum, established in 1958, which accommodates hundreds of ancestral figures.

Finally, the effective teaching of history must be enshrined in all African Schools, from primary to tertiary. This flies in the face of a popular saying that 'if you want to hide something from a black man, put it in writing'. Africans can read now, and this will facilitate the future tasks of international bodies and the interventions of NGOs, and help them to promote the effective management of World Heritage sites in Africa.

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Further reading

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Conclusion

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The management of transnational properties within the framework of the Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) is a demanding exercise that requires the involvement of political as well as technical and financial stakeholders at local, national and international levels.

The Operational Guidelines for the Implementation of the World Heritage Convention set out the general principles to which States Parties should adhere, including the primacy of a consultation process prior to the proposed inscription of a transnational property on the UNESCO World Heritage List. The management and protection requirements must ensure that the Outstanding Universal Value (OUV) of these natural, cultural or mixed properties is maintained. The management system will therefore be joint but also participatory at all levels to ensure its effectiveness.

In order to be effective, the coordinated management system should take into consideration the following essential aspects. First, it should be based on a good knowledge of the values of the property, the attributes that underpin the OUV and their distribution overall, and in each of the parts – i.e. how the property functions as a ‘system’, as there may be functional complementarities but not necessarily similarities. All the actors in the management process should know the property in its entirety. Second, a good mutual knowledge of the governance and management systems in each country where the property is located. This should facilitate understanding of the opportunities, constraints and means available to each.

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Finally, the awareness that the vision of the property must be shared, i.e. how all stakeholders envision the future of the property, imagine it, and would like to see it, and which specific means or instruments will be needed to implement that vision. Indeed, each part of the property may have distinct needs, difficulties and potential that will need to be taken into account.

Fortunately, enthusiasm for the coordinated management of transnational World Heritage properties is high, but it is still a complex and difficult task. The articles selected in this publication tell us about a number of challenges and the solutions jointly developed in several African countries. They also anticipate the difficulties and pitfalls that need to be overcome, so that cooperation does not only take place when problems arise but also contributes to the achievement of the Sustainable Development Goals and the AU 2063 Agenda.

Sustainable development is defined as a comprehensive approach to the rational and moderate management of natural, cultural, human and economic resources that ensures the indefinite maintenance of biological productivity for the benefit of present and future generations.

In order to be in line with the Policy on the integration of a sustainable development perspective into the processes of the World Heritage Convention adopted in 2015, African transnational World Heritage conservation policies should result in a balance between heritage conservation and economic development needs.

In terms of legislation, the protection of the transnational UNESCO World Heritage sites should be strengthened, not only in the texts that govern the conservation of natural and cultural heritage, but also in other sectors that negatively impact on the heritage such as mining, oil, agriculture and hydroelectric infrastructures.

In terms of finance, African States Parties should allocate more resources to the structures in charge of heritage management, but above all promote sustainable funding mechanisms.

Furthermore, territorial development planning should also be enhanced around transnational UNESCO World Heritage sites to better protect them against the pernicious effects of economic development that does not respect the protection of natural and cultural values.

At the community level, African subregional organizations should implement all the directives relating to subregional cooperation for the preservation of transnational UNESCO World Heritage sites through cooperation in project development, and also those relating to scientific and technical cooperation, and the exchange of experience and good practices in the conservation of natural and cultural World Heritage.

As the first publication on the management of transnational UNESCO World Heritage sites in Africa, the experience shared here offers a good opportunity for reflection on the effectiveness of current management of transnational World Heritage sites in Africa, and serves as an inspiration to explore better coordination mechanisms and their application to other regions.