Sangha Trinational

2020 Conservation Outlook Assessment

SITE INFORMATION

Country: Cameroon, Central African Republic, Congo
Inscribed in: 2012
Criteria: (ix) (x)

Situated in the north-western Congo Basin, where Cameroon, Central African Republic and Congo meet, the site encompasses three contiguous national parks totalling around 750,000 ha. Much of the site is unaffected by human activity and features a wide range of humid tropical forest ecosystems with rich flora and fauna, including Nile crocodiles and goliath tigerfish, a large predator. Forest clearings support herbaceous species and Sangha is home to considerable populations of forest elephants, critically endangered western lowland gorilla, and endangered chimpanzee. The site's environment has preserved the continuation of ecological and evolutionary processes on a huge scale and great biodiversity, including many endangered animal species. © UNESCO

SUMMARY

2020 Conservation Outlook

Finalised on 02 Dec 2020

SIGNIFICANT CONCERN

The values of TNS are currently considered to be intact, but pressures on the faunal values are intense in the buffer zone. In particular, elephant poaching has increased linked to the strong international demand for ivory and the local presence of war weapons. The long-term outlook for the ecological integrity of the site is relatively good, although concerns exist that the logging concessions surrounding the site, even those which have sustainable forestry management plans (low impact logging) or have (or are engaged in) FSC certification (this need promoting in the CAR segment), are not specifically managed to ensure the conservation of the OUV of the property, nor the preservation of its integrity based on the criteria for which the property is inscribed on the World Heritage List. The risk of habitat loss through forest clearance is low, although the development of dense road networks by logging companies brings other problems (notably the possibility to access areas for poaching). TNS collaborates actively with some of these companies to enforce wildlife laws and promote sustainable alternative revenue generation. However, results are variable and much greater commitment will be needed both from the logging companies and the Forestry Ministries in order for the buffer zones to provide effective protection of the site. Improved inter-ministerial cooperation, as well as improved cooperation between the staff of the three parks, is needed in and between all three countries to optimize the buffer zone's protection role for the TNS. Significant efforts must be made by the governments and the logging companies in the buffer zones to improve law enforcement, particularly those relating to hunting and the transport of meat, illegal settlements (new camps/villages) and the movement of people to logging camps, in order to ensure faunal diversity and abundance values are maintained. While protection and management inside the TNS function relatively well, there is clearly room for improvement.

Political commitment to cross-border collaboration for management of the TNS needs to be translated into more concrete actions on the ground. The growing capital endowment of the TNS Foundation indicates good progress towards financial sustainability and is a positive indicator that management effectiveness will continue to improve. The site has exceptional tourism potential, including in the buffer zone, despite an unfavourable context (insecurity, difficult access, unreliable local transport, and lack of sufficient competent local operators). TNS has exceptional opportunities for scientific research, which should be a higher priority in the core zone than tourism. Given the current budget, it would be desirable to greatly increase the number of ecoguards and permanent managers (including permanent research scientists) in the area and to integrate the populations through regular conservation jobs.

FULL ASSESSMENT

Description of values

Values

World Heritage values

▶ Extensive area of intact lowland tropical rainforest containing a wide range of habitat types and high biodiversity **Criterion:(ix)**

Astride the boundaries of three countries (Congo Republic, Central African Republic, Cameroon) the Sangha Trinational (TNS) is a very large area of interconnected and diverse lowland tropical rainforest habitats located in the transition zone between the Lower Guinea and Congolian floristic sub-regions of endemism. The property's characteristic large size and very large buffer zone, its intactness and minimal disturbance over long periods, have enabled the continuation of ecological and evolutionary processes at a huge scale, resulting in faunal and floral communities remaining largely intact. This includes the continuous presence of viable populations and natural densities of wildlife, including top predators and large mammals (World Heritage Committee, 2012), with plant assemblage of the TNS highly representative of the Congo basin flora (Wieringa and Sosef, 2011).

A dense hydrographic network also plays a critical role in the maintenance of habitat diversity, wildlife and their connectivity. There is a fully connected mosaic of very diverse habitats, including numerous types of ecologically remarkable forest clearings (bais and yangas) which attract major wildlife aggregations, particularly large numbers of mammals (World Heritage Committee, 2012), such as forest elephant, gorillas, bongo, giant forest hog (Hylochoerus meinertzhageni), sitatunga (Tragelaphus spekii), or forest buffalo (Syncerus caffer nanus), in search of food and mineral salts, many plant species otherwise not found in the forest landscape, and play a key role for intra-specific social interactions, acting as hubs for social and genetic exchanges.

Unlike many other forest protected areas, the property is not a remaining fragment but continues to be part of a much larger intact landscape with good conservation prospects. This is increasingly rare and significant at a global scale (World Heritage Committee, 2012).

▶ Presence of emblematic and endangered fauna **Criterion:(x)**

The TNS protects several endangered and charismatic large mammal species, including forest elephant (Loxodonta africana cyclotis), lowland gorilla (Gorilla gorilla gorilla), chimpanzee (Pan troglodytes troglodytes), bongo (Tragelaphus euryceros). These flagship species occur at high density in and around the property. Other rare animal species include the Oustalet's red colobus (Procolobus rufomitratus ssp.), oustaleti and the bare headed rock fowl (Picathartes oreas). A particularly important value of the site is the fact that tool using behaviors, unique to this site, have been documented in gorillas (use of branches to test water depth in bais; Breuer et al. 2005) and chimpanzees (tools to feed on honey, termites and ants; Sanz and Morgan, 2009).

▶ Presence of rare and endangered flora **Criterion:(x)**

The TNS represents a wide spectrum of the species-rich humid tropical forests in Central Africa's Congo Basin, and provides protection for a range of endangered and critically endangered species of flora. The flora is enriched by species occurring exclusively in the many types of forest clearings. TNS protects a large number of tree species which are heavily commercially exploited elsewhere, such as the critically endangered Autranella congolensis (known as Mukulungu) (World Heritage Committee, 2012).

Assessment information

Threats

Current Threats

High Threat

Bushmeat commerce, involving a long chain of actors (hunters, transporters, middlemen, suppliers of money and weapons) is intense in the peripheral zones of the TNS. Elephant poaching has also increased linked to the strong international demand for ivory and as an indirect consequence of local armed conflicts and circulations of war weapons (State Party report, 2019). As wildlife becomes impoverished here it is likely that pressure will increase on wildlife in the TNS. The rapid expansion of the road network, and the fact that the three countries are now linked by good roads, has significantly intensified the hunting pressure in this hitherto inaccessible forest block and means that greater quantities of bushmeat can be transported greater distances more rapidly. Controls on these trans-border roads are difficult to enforce and require the collaboration of government services that often do not meet the standards of good governance. Most of control road activities are financially supported by external funds raised by conservation NGOs. However where roads pass through logging concessions in the periphery of TNS that are FSC certified (or in the process of obtaining certification) controls of vehicles are more rigorous and there is constructive collaboration between the logging companies, park management authorities and their NGO conservation partners, which nevertheless needs to be further improved. Management of numbers of people living in logging camps, and regulating their activities, is a challenge for logging companies and has not always been a success. Hunting levels increase and outsiders are often involved. Where camps are located near the TNS (eg Loundougou in Congo) the risk of illegal activities in the park increases. Recent logging permits in the CAR buffer zone, including next to the property, are not following best practice (UNESCO/IUCN, 2016).

▶ **Hunting and trapping**

Very High Threat

(Ivory poaching)

Inside site, scattered(5-15%)
Outside site

Ivory poaching continues to be intense in and around the TNS (UNESCO, 2019). For example, in November 2018 at least 6 elephants were killed in CAR, and whilst the government reports that strong efforts against poaching are being made by the authorities, the situation continues to worsen, particularly due to regional instability and the increasing use of weapons by poachers (State Party report, 2019).

Recent forest elephant dung monitoring results indicate an overall decline of elephants in the wider landscape and with strong compression of elephants into the protected areas, where they still occur at moderate to high densities (N´Goran et al. 2016; Brncic et al., 2018; Beukou et al., 2019). Forest elephants have become much less frequent in the buffer zone of the TNS. Due to that local shift in abundance it appears that poachers now also make ivory poaching excursions into the remote areas inside the national parks and have even killed elephants close to research stations (and forest clearings) that have been free from poaching for more than two decades (IUCN Consultation, 2020).

Poaching does not only reduce the number of elephants and creates local shifts in elephant distribution, but leads to a demographic shift with fewer adults (particularly large males), heightened aggression and potential for human elephant conflict and reduced ecological and environmental services (Breuer et al. 2016, Poulsen et al. 2017; Berzaghi et al. 2019).

▶ **Crops**

Low Threat

(Slash and burn agriculture in the buffer zone)

Outside site

Slash and burn agriculture occurs in the buffer zone, but this is relatively small scale compared with the overall surface area of the buffer zone. Expansion of agricultural fields is particularly prominent in the proximity of villages, logging towns, and along roads and the Sangha river. Land conversion and forest loss removes wildlife habitat and creates increased potential for human wildlife conflict with crop raiding

species, particularly where fields are situated further away from settlements and are not guarded (IUCN Consultation, 2020).

▶ **Hunting and trapping**

High Threat

Outside site

(Sport/safari hunting)

Sport hunting concessions exist in all buffer zones, but are active in Cameroon and Congo. Trophy species include forest buffaloes and bongos (and in the past in Cameroon large tusk elephants). The quotas set by the government are not based on sound scientific data. In April-May 1997 a massive outbreak of a biting fly Stomoxys caused massive die off of Bongo and other ungulates. There are currently no data available to demonstrate that the population has recovered sufficiently to envisage sport hunting. On the contrary, landscape surveys still show extremely low Bongo dung encounters. However, the last survey carried out by WCS in 2017 on the Bongo population in the Safari hunting zone in the buffer zone of the NNNP, allowed the government of Congo to set up quotas according to these scientific results provided by this study (IUCN Consultation, 2020). Bongo hunting in the CAR buffer zone stopped in 2007 due to lack of trophies, an indication of over-hunting, and data are insufficient to justify hunting (Princée, 2011). Some safari hunters create artificial salt licks, that are afterwards targeted by poachers; some of these practices are not permitted but are difficult to control (IUCN Consultation, 2020).

▶ **Logging/ Wood Harvesting**

High Threat

Outside site

(Logging in the periphery of the property)

The TNS is surrounded by logging companies located in the buffer zone. Some logging companies are engaged in sustainable forest management and Forest Stewardship Council (FSC) certification and collaborate with park managers to control illegal hunting in their concessions and prevent transport of bushmeat in company vehicles. Unfortunately, not all concessions are FSC certified and the recent concessions in the CAR segment buffer zone are using practices likely to be highly detrimental to biodiversity (UNESCO/IUCN, 2016). The FSC concessions owned by OLAM in northern Congo are for sale (IUCN Consultation, 2020). Logging has negative impacts due to the expansion of logging roads (and associated access for poachers), not applying reduced impact logging practices creating gaps in the canopy (or destroying natural forest clearings) and the unsustainable extraction of large trees (such as Mahogany). Recent studies showed that logging activities negatively impacted chimpanzees and gorillas (Morgan et al., 2018 & 2019, Yuh et al., 2019). More generally, logging also leads to reduced carbon storage capacity and a conversion of formerly pristine rainforest. It is unclear how much of high value conservation forest is protected and whether zones for conservation are chosen based on economic or ecological value. Further investigation is required on how logging practices lead to increased risk of disease transmission to wildlife, local people´s livelihoods and global impacts in case of a pandemic (IUCN Consultation, 2020).

▶ **Roads/ Railroads**

High Threat

Outside site

(Expanding road network)

As a result of industrial logging, the expansion of the road network in the TNS landscape, particularly in the northern Congo sector (which has always been the most inaccessible sector of the three countries) has been very rapid indeed over the past 10 years. Motorable roads now link all three countries and this has a) rendered hitherto “pristine” areas accessible for hunting, b) greatly increased the speed with which bushmeat can reach markets and the distance that it can be transported to them (Bangui, Brazzaville and Yaoundé can now all receive regular supplies of bushmeat from the forests surrounding the TNS). As the forests in the periphery of the TNS are depleted of their wildlife there will be increasing pressure on the last remaining “healthy” wildlife populations inside the TNS. Effectively controlling what is transported along these transnational roads requires resources and a level of good governance (by a variety of government services) that is currently inadequate. Road accidents with wildlife are also increasing, although at the moment this does not appear to be a significant issue. A project of road exists between Ouesso and Bangui. The World Heritage Committee urged the States Parties to undertake an EIA for this project before the beginning of the works (UNESCO, 2019). The development

of the project for opening of the Sangha river is currently on hold (IUCN Consultation, 2020).

▶ **Mining/ Quarrying** — **Low Threat**

(Illegal artisanal mining in the periphery of the property) — Outside site

Artisanal mining for diamonds and gold is widespread in the buffer zones of TNS. In virtually all cases the activity is illegal. There are few controls on where the mining takes place, how it is done, and who is involved. The activity constitutes a threat to the TNS since mining is accompanied by deforestation, pollution (particularly of waterways in case of usage of mercury), associated livelihood impacts and poaching. It attracts many “hangers-on” – gold and diamond dealers, general tradesmen, hunters, etc. Artisanal gold exploitation still occurs in the Cameroon part of the site as well as diamond mining north of Dzanga Sangha Protected Areas. In 2019, the World Heritage Committee noted with concern the delivery of new licenses in the buffer zone of the Cameroonian part of the site in 2016 and requested the State Party of Cameroon to take action to ensure their cancellation. To prevent future cases of mining licenses being issued in the property or its buffer zones, the States Parties were requested to strengthen the information exchange between the mining and conservation departments before granting exploration or exploitation permits (UNESCO, 2019). States parties are developing surveillance patrols against illegal mining but recognize the "resilience" of this activity (State Party report, 2019).

▶ **Hunting and trapping** — **High Threat**

(Bushmeat hunting) — Inside site, widespread(15-50%)
Outside site

Unsustainable (and illegal) hunting of bushmeat continuous to be a major conservation threat for wildlife (particularly ungulates and arboreal primates) in and around the TNS. Although most of the bushmeat is taken outside the TNS, cases of poaching inside the site also occur and appear to be increasing, with several areas within the TNS experiencing high indices of illegal human activities. The rapid expansion of good roads makes it easier to supply the bushmeat markets in the urban centers and logging towns around the TNS, as well as cities further afield. Logging camps in the buffer zone of TNS constitute a threat, and logging companies have generally not been successful in controlling and limiting the numbers of people living in these camps (IUCN Consultation, 2020). As a result hunting pressure and deforestation for slash and burn agriculture tends to increase in the vicinity of the camps. Certain camps have become very large (e.g. Pokola whose population rose from 300 to approximately 15,000 inhabitants in 20 years) (State of Forests Report, 2008; Atok & Borner, 2012). The bushmeat market in Pokola, located some 70km from the nearest boundary of the TNS, is one of the biggest in the region. The nearer the camps are to the TNS boundaries the greater the threat to the site. New logging fronts create access to remote areas previously not experiencing poaching pressure (Morgan et al. 2019). There remains controversial data on whether levels of bushmeat offtake are sustainable (IUCN Consultation, 2020).

▶ **Hunting and trapping** — **Low Threat**

(Parrot and pigeon trapping) — Inside site, localised(<5%)
Outside site

There is also a significant illegal trade in grey parrots (Psittacus erithacus) and green pigeons (Treron australis) captured in forest clearings in the Cameroonian section of TNS. Parrot hunting has also started more recently in the Congo sector. The exact extend of this illegal trade on the bird populations remains to be studied (IUCN Consultation, 2020).

Potential Threats — High Threat

Several large scale industrial mining operations will be operational within 150-200km of the TNS in the near future. Construction of roads, railways, dams and other infrastructures are under way. The net result of all these activities will be to attract many tens of thousands of people into this vast forested area. It is almost bound to increase pressures on the TNS, notably for bushmeat. Inter-ministerial consultation between sectors impacted by mining is extremely limited so there is a high risk that mining decisions will be taken without due consideration for the negative impacts for biodiversity conservation in the TNS (IUCN

Consultation, 2020). Oil exploration has also emerged as a recent new potential threat.

▶ **Other**

High Threat

(Ebola hemorrhagic fever and other diseases)

Inside site, throughout(>50%)
Outside site

Great ape populations in north eastern Gabon and north western Congo were decimated by Ebola between the mid 90s and 2004 (Walsh et al., 2003). No cases appear to have occurred in TNS but there is a very real risk that it could appear in the future. Since no measures can be taken to prevent an outbreak occurring, nor to prevent it spreading from ape to ape once it appears, the threat to great ape populations, a key value of the site, is considered high. Other diseases, such as anthrax have been reported and the extent to which the new coronavirus might impact vulnerable primate populations remains to be studied.

▶ **Mining/ Quarrying**

High Threat

(Industrial mining)

Outside site

Although there are, as yet, no plans for large scale industrial mining in the immediate vicinity of TNS, where such activities are forbidden, several very large mining initiatives (mainly iron ore) are starting up within 150-200km of the TNS. Major infrastructures in support of these initiatives (roads, dams, railway line) are being developed and this will inevitably attract many people to the area. The environmental impact of this large influx of people into a forested region will be very significant and widespread (notably a significant increase in demand for bushmeat). Two mining exploration concessions granted in the Congo, and a mining exploitation permit in the CAR (gold and diamonds), all of which infringe on the property and its buffer zone, have been annulled (UNESCO, 2017).

▶ **Mining/ Quarrying**

High Threat

(Mining licenses granted for areas in the buffer zone)

Outside site

In 2019, the World Heritage Committee noted with concern the delivery of new licenses in the buffer zone of the Cameroonian part of the site in 2016 and requested the State Party of Cameroon to take action to ensure their cancellation. To prevent future cases of mining licenses being issued in the property or its buffer zones, the States Parties were requested to strengthen the information exchange between the mining and conservation departments before granting exploration or exploitation permits (UNESCO, 2019).

▶ **Oil/ Gas exploration/development**

High Threat

(Oil concessions)

Inside site, scattered(5-15%)
Outside site

In 2019, media reports that the Congolese government is opening up new areas for oil exploration in sections of the world’s largest peatland and Nouabalé-Ndoki National Park, with maps showing blocks overlapping with NNNP and others located in the vicinity of the World Heritage site (Mongabay, 2019), are highly concerning.

Overall assessment of threats

High Threat

Bushmeat commerce, involving a long chain of actors (hunters, transporters, middlemen, suppliers of money and weapons) is intense in the peripheral zones of the TNS. Elephant poaching has also increased linked to the strong international demand for ivory and as an indirect consequence of local armed conflicts and circulations of war weapons (State Party report, 2019). As wildlife becomes impoverished here it is likely that pressure will increase on wildlife in the TNS. The rapid expansion of the road network, and the fact that the three countries are now linked by good roads, has significantly intensified the hunting pressure in this hitherto inaccessible forest block and means that greater quantities of bushmeat can be transported greater distances more rapidly. Controls on these trans-border roads are difficult to enforce and require the collaboration of government services that often do not meet the standards of good governance. Most of control road activities are financially supported by external funds raised by conservation NGOs. However where roads pass through logging

concessions in the periphery of TNS that are FSC certified (or in the process of obtaining certification) controls of vehicles are more rigorous and there is constructive collaboration between the logging companies, park management authorities and their NGO conservation partners, which nevertheless needs to be further improved. Management of numbers of people living in logging camps, and regulating their activities, is a challenge for logging companies and has not always been a success. Hunting levels increase and outsiders are often involved. Where camps are located near the TNS (eg Loundougou in Congo) the risk of illegal activities in the park increases. Recent logging permits in the CAR buffer zone, including next to the property, are not following best practice (UNESCO/IUCN, 2016).

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Protection and management

Assessing Protection and Management

▶ **Management system** **Some Concern**

Management plans of the three national parks are either up to date or under revision and serve as a guide for annual workplans. Since these management plans follow the national model for management plans, there is substantial difference between sites and the management plans only to some degree address the transboundary issues of this World Heritage site. The three sites are managed independently under various protected area management models: a public private partnership in Nouabalé-Ndoki with an operational unit under the lead of WCS; a co-management system under the lead of WWF in Dzanga Sangha, and a state managed (MINFOF) national park in Lobéké with technical assistance by WWF. The management of the buffer zones is even more diverse, with a dedicated buffer zone project in the CIB logging concessions around Nouabalé-Ndoki National Park (NNNP). The TNS has various supervising and executing organs which meet irregularly and there is transboundary collaboration in various aspects of the management of the TNS. However, there is substantial room for improvement and intensification of the collaboration as the activities are not always planned in collaboration. Stakeholder participation in the planning and execution of activities remains limited. Local communities are underrepresented in supervising boards (IUCN Consultation, 2020).

▶ **Effectiveness of management system** **Some Concern**

As many protected areas in the Congo Basin, the management effectiveness in the TNS is not as strong compared to other locations in Africa because of lack of resources (shortage of properly trained, motivated and equipped staff, and limited funding for running costs). Issues of lack of motivation and corruption within the guard force are problems common to all three countries. The capacity of ministry staff remains overall low and largely concentrates on anti-poaching activities. For the NNNP, staff dedicated to protect the park are well trained by external consultants and the national army twice a year, and the biggest challenge is the limited funding for running costs (IUCN Consultation, 2020). In 2019, the World Heritage Committee noted with utmost concern that poaching, especially of elephants, is persisting within the property (State Party report, 2019 & UNESCO, 2019). The objectives of the management plans are being partly achieved and an adaptive management framework is only occasionally being applied, as the directions of activities are often guided by funding opportunities and grant topics. Each National Park has been evaluated separately (for example via IMET) and a common evaluation has been conducted using the Enhancing our Heritage tool. Environmental and social impacts

assessments are not systematically being conducted. Given the trinational nature of the TNS, more collaboration in planning and execution of transboundary activities is needed to maintain the site´s values.

▶ Boundaries

Some Concern

The TNS World Heritage site is situated in a much larger TNS landscape. At least 50% of the TNS boundaries are “artificial” in that they do not follow natural features. Most are poorly marked (if at all) and therefore require considerable resources to maintain. Recently, efforts have been made to mark the borders and here an effort should be made to maintain ecological connectivity (e.g. only painting trees and not creating a fence). In each country there is a defined buffer zone around the TNS protected area, mainly comprised of logging concessions of which some are certified. Collaboration with TNS PA managers is moderate, and unregulated activities in the buffer zone, and failure to follow best-practice, risk compromising its effectiveness for site protection.

▶ Integration into regional and national planning systems

Some Concern

The existence of the Tri National agreements, and the regular submission of a joint report on the state of conservation of the site, is an indication of a certain level of political commitment to integration in regional planning systems. However inter-ministerial collaboration and communication is very weak, particularly with respect to infrastructure development (roads) and extractive industries. As a result, major decisions in these sectors are taken without any consultation with TNS actors. The TNS land use plan has never been officially validated and needs revision as borders and land use is changing in the TNS (IUCN Consultation, 2020).

▶ Relationships with local people

Some Concern

Overall relations with local communities are difficult due to the level of poverty of local communities, their relative isolation and their high dependence on natural resources. Given this isolation, park managers are often expected to replace governmental development activities (e.g. running schools and health centers). In all three country sectors of the TNS, park management undertake community activities aimed at encouraging sustainable use of natural resources and sustainable income generating activities and mitigation activities (e.g. human-elephant conflict mitigation measures). Many activities are underway to increase local participation and benefits of classic development activities (health, education, agriculture etc) as well as employment and benefits from tourism (but not in Lobéké). Unfortunately, there is no document available that compiles all these approaches.

Stakeholder mapping has been conducted at all three sites but needs to be reconducted where necessary given the dynamic composition of people acting in the TNS. However, stakeholder involvement is limited and there are substantial differences in the degree of participation in each site. There are supervising bodies in which local representatives are present and there is increased effort to include all stakeholders in the planification and evaluation of activities. Multi-stakeholder platforms exist but need improvement in their operation. Consultation often applies Free Prior and Informed Consent (FPIC) methods. Several local NGOs and associations are directly being included in the TNS activities, such as ASBABUK, NDIMA KALI, or local hunting committees. Community hunting zones (for subsistence hunting) have also been set up in the buffer zones of CAR and Cameroon but again results are very mixed and there is evidence that hunting in these zones is not sustainable.

The World Heritage Committee still urges the States Parties to further strengthen efforts to better involve local communities and to recognize the rights and traditional livelihoods of the indigenous BaAka communities, as well as efforts to ensure the respect of human rights by park rangers (UNESCO, 2019). Despite outside criticism, there is particular attention being paid to improve the challenging situation of indigenous people. The human rights center in Bayanga and, more recently, in Mambélé, are important contributions. Grievance mechanisms are operational and there is a general trend in some (but not all sites) to move towards a rights-based conservation approach. There are also TNS supported projects to valorize the cultural heritage of indigenous people, for example through the Ndima Kali local association in Dzanga Sangha. Various projects in the TNS provide preferential health access for IPS. More recently, the signing of an agreement between MINFOF and ASBABUK was undertaken, to grant

access to natural resources within Lobéké NP and an inclusion of Baka into wildlife crime activities. Other traditional usage practices are tolerated, such as Raphia wine harvesting and fishing along the Sangha river.

Usage of local languages, different communication tools, and employment of local staff / IP staff and representatives (NDIMA Kali/ASBABUK) and community radios (particularly RFI Radio Ndjokou in Dzanga Sangha) helps to spread news and sensitize the local population, but with different degrees. While these activities help to promote local conservation activities, there remains improvement to promote the TNS as a whole. Relationships with local stakeholders helps to facilitate effective conservation, particularly when locals are included in anti-poaching activities. Further monitoring efforts need to be done to elucidate the links between these efforts, the perception of local stakeholders and the state of conservation (IUCN Consultation, 2020).

▶ Legal framework

Some Concern

The TNS is recognized as a model for transboundary collaboration within the COMIFAC. The TNS is governed by several agreements which define its functioning, accompanied by several bodies to ensure their implementation:
• A Tri National cooperation agreement between the three governments signed in 2000.
• A Tri National agreement on anti-poaching activities signed in 2005 (including provision for a Tri National Brigade, with a base near where the three parks meet on the Sangha River). This agreement formalizes the principle of joint bi- or tri-national patrols that have been conducted for the past decade.
• A Tri National agreement on the cross border movement of TNS parks personnel in 2007.
• Protocol on the organisation and the functioning of the tri national anti-poaching brigade signed in 2010.
• The Memorandum of Understanding on the establishment of the tri-national scientific committee of the TNS in 2019.
• A memorandum of understanding on the movement of tourists in the TNS signed in 2019.

The following organs are put in place:
• A Trinational Committee of Supervision and of arbitrage (CTSA): the supreme decision body of the TNS. It is composed of ministers in charge of Wildlife and Forests of the States Parties and the Executive Secretary of (OCFSA) as rapporteur.
• The monitoring body for decisions on the implementation of the CTSA (CTS).
• The body for planification and execution composed of TNS on the ground actors (CTPE) The recruitment of the members of the scientific comity (CST) has been announced in the end of 2020 While these agreements are essential (and ground-breaking for Africa) implementation of the agreements, in terms of concrete actions on the ground, needs improvement.

▶ Law enforcement

Some Concern

While the laws are strictly enforced within the borders of the TNS, the continuous deterioration of the buffer zone of the TNS is a very worrying trend. This leads to increased pressure towards the interior of the TNS. Enforcement largely concentrates on anti-poaching measures, but also the removal of illegal installations, such as mining operations. However, enforcement remains a challenge because resources, particularly numbers of guards, remain inadequate in relation to the size of the area to protect, particularly as a lot of effort is required to secure the buffer zone in order to avoid invasion into the interior of the TNS. Law enforcement efforts in Dzanga Sangha and Nouabalé-Ndoki have seen substantial improvement due to sophisticated training and supervisions, whereas ranger morale and performance in Lobéké NP requires improvement, which also concerns bi-national and tri-national patrols (IUCN Consultation, 2020). All 3 park sectors have been increasing patrols in recent years (UNESCO, 2015; 2017; 2019).

Law enforcement monitoring is underway, but there is not yet a common database (e.g. SMART), however there is substantial improvement in that direction. Efforts are being made to tackle illegal activities, with >500 arrests and >200 condemnations reported as being counted between 2016 and 2018 (State Party report, 2019), however successful prosecution of arrested poachers is inadequate due

to corruption and the dysfunction of the legal systems in each country. This ongoing problem continues to be one of the major constraints to effective law enforcement in the TNS, although the Congo government has undertaken various initiatives, including training for anti-poaching staff from all three segments, and more recently the prosecution of a major wildlife trafficker. High levels of corruption and complicity remains a serious challenge and poaching gangs continue to operate in the TNS. There are some concerns of the lack of response towards the illegal installment of artisanal mining sites within Lobéké NP. In general inter-ministerial cooperation is weak, so that other sectors may unilaterally make decisions which negatively impact the TNS. Improved coordination remains a key need at all levels, including between ministries at the national levels and at the trilateral level, and between law enforcement staff at the site level (IUCN Consultation, 2020).

▶ Implementation of Committee decisions and recommendations

Mostly Effective

Requests to the States Parties so far have largely been implemented; nonetheless new concerns have emerged and remain to be dealt with. So far, the States Parties of the Economic Community of Central African States (ECCAS) have adopted a short-term Extreme Emergency Anti-Poaching Plan (PEXULAB) and a medium and long-term Emergency Anti-Poaching Plan (PAULAB) (UNESCO, 2014). All three States Parties have also taken measures to ensure security in the area of the property by working with their respective military (UNESCO, 2017). In 2019, the World Heritage Committee requested the States Parties to continue implementing all of the recommendations of the 2016 Reactive Monitoring mission (UNESCO, 2019).

▶ Sustainable use

Some Concern

Wildlife viewing/ecotourism is permitted in the three national parks that comprise the TNS, however activities are on hold in 2020 given the COVID-19 pandemic. Baka indigenous people have the right to extract natural resources within Lobéké NP. In the buffer zone, safari hunting or community-based hunting is permitted, however safari hunting is generally poorly managed and supervised, particularly in the Cameroonian segment. The quotas are not set on the basis of sound scientific data and there is inadequate monitoring to measure the impact of the activity. With regards to community-based subsistence hunting and fishing activities in the TNS buffer zone, ensuring adequate control and supervision is proving very challenging and resources are overexploited as people circumvent or ignore the rules and regulations for hunting in the buffer zones (Management Plans). Surveys show decreasing wildlife outside the property in some areas of the buffer zone, and in 2019 the World Heritage Committee noted with utmost concern that poaching, especially of elephants, is persisting within the property (UNESCO, 2019) due to the presence of a new category of poachers, the ex wood industry workers (State Party report, 2019). Efforts have been made to support improved management of fishing to increase sustainability.

▶ Sustainable finance

Mostly Effective

The lack of government support is considered a significant weakness in the protection and management of these parks, and government contributions to fund the management structure remain inadequate (currently about 10% of overall budget for TNS, essentially for salaries) so there is still heavy reliance on external sources of funding. Revenue from tourism is not sufficient to sustainably finance the TNS, but there are promising trends in Dzanga Sangha. Overall, and compared to other protected areas in the Congo Basin, the TNS receives relatively adequate funding for its operation. The TNS Foundation, with a capital of more than €62 million, is a substantial long-term sustainable source of financial support for the TNS - both for general operational costs and for investment. The more recent withdrawal of US funding from the TNS is worrying, and funding is provided by the EU for some but not all sites. BMZ provides funds through FTNS and through projects via Engagement Global. Most other funds are related to activities and do not fund core costs, so that often activities must be modified according to funding priorities (IUCN Consultation, 2020). In 2019, the budget to manage the 746.300 ha/266 ecogards was at 8,5 Million Euros with some additional funding from the FTNS (UNESCO, 2019 & FTNS, 2019).

▶ Staff capacity, training, and development

Some Concern

Staff training and development in the three parks is supported by the long-term technical partners who have been working on the sites for over 25 years (WWF in PNL and DS WCS in NNNP). More recently, Chengeta Wildlife is providing advice and training for law enforcement operations in Dzanga Sangha. WCS and WWF mobilize a wide variety of public and private funding sources to support the staff training activities which include basic guard training and training in survey and monitoring techniques (wildlife and socio-economy). However ensuring follow-up and supervision of staff has proven to be challenging over the years. The absence of adequate motivation and career development possibilities (stable and secure salaries, appropriate working conditions, career advancement possibilities) is a problem that the respective governments need to address in order to maintain standards and avoid a stop-start approach to staff development. This has led to high turnover of national staff and recruitment of expat personnel, particularly in DS and NNNP. Efforts have been made to better equip park staff (IUCN Consultation, 2020).

▶ Education and interpretation programs

Some Concern

Education and sensitization activities are conducted by the various partners in the areas where they work. However, such activities are often only conducted sporadically. A very promising approach happened in Nouabalé-Ndoki where the nature club "Club Ebobo" has risen to the parcs environmental education and sensitization module with a scientific approach to evaluate effectiveness of communication tools and messages. It is hoped that TNS actors will make an effort to streamline their education approaches and establish educator modules in the segments or work together with specialized education organisation (IUCN Consultation, 2020).

▶ Tourism and visitation management

Some Concern

The TNS is one of the rare forest protected areas in the Congo basin that has genuine tourism potential. This is because of the abundance of forest clearings (bais) which attract large numbers of large emblematic mammal species including lowland gorillas, forest elephants, forest buffalo, bongo, sitatunga, giant forest hog and parrots. In APDS and NNNP there are also habituated groups of gorillas that are used for gorilla tracking. However, tourism in Central Africa remains a serious challenge and consequently tourism numbers are low. Whenever they rise, there are events that result in dramatic drops, such as political unrest in CAR, Ebola, tourism closure (in NNNP) due to insecurity reasons (aggressive elephants). Thus, the destination remains high risk (security, access, reliability of local operators) for most international tourism operators and the market will not develop fully until this situation changes. Operational costs are also high and private investors are lacking. A TNS tourism strategy has been produced and there has been investment in tourism infrastructure (accommodation, viewing platforms, trails) and a protocol for tourist movement in the TNS agreed (UNESCO/IUCN, 2016). More recently there has been improvement of tourism infrastructure in Dzanga Sangha and starting in Nouabalé-Ndoki and all actors are encouraged to collaborate beyond focusing solely on their individual businesses. Improvement of visitor management related to security and health aspects is required, particularly when dealing with habituated gorillas (IUCN Consultation, 2020).

▶ Monitoring

Some Concern

Monitoring activities are conducted in all three parks and in the buffer zones. Monitoring focuses particularly on populations of the emblematic wildlife species, such as forest elephants and great apes using standardized methodology across all sites. Large scale systematic wildlife surveys require considerable resources (time, people, funds) so it is not possible for these to be undertaken more than once every four or five years (and sometimes longer - for previous survey work see Maisels et al. 2012; Nzooh et al. 2003, 2006, 2009, Princée, 2013, N'Goran et al. 2016, Nzooh Dogma et al, 2016). Elephant monitoring work continues (Turkalo, 2018), however other species (gorilla, chimps, bongo, etc.) require long term monitoring. Wildlife surveys provide the most reliable data on wildlife abundance and illegal activities. However, these periodic wildlife surveys, looking at wildlife and hunting abundance indices are conducted during different time periods and applying different conversion factors (to convert indirect signs such as dung and nests into animal numbers). In the future it is hoped that all three parks

conduct one single inventory at a given time (which also removes the issue of elephant movements). Other monitoring methods, such as camera traps and acoustic monitoring to estimate elephant and large mammal numbers are promising and once these pilot studies are concluded, it is hoped that they can be integrated into a TNS landscape monitoring approach. Several forest clearings are regularly monitored as frequency of use is a good indicator of the population status of the key large mammal species. TNS' current LEM monitoring system is not yet sufficiently effective to provide the quality of empirical data on the levels of poaching and wildlife abundance that systematic surveys provide.

Other parameters that are monitored are tree phenology, community hunting, safari trophies, socio-economic parameters, demography and climate data. In particular, the socio-economic monitoring is not linked to the ecological status, and promising monitoring such as fishery data is not continuous. A transmissible disease monitoring programme for great apes and park staff has also been operational for several years. Nevertheless, there remains a need to strengthen synergies, coordination and harmonization of monitoring and data analysis between the three parks and it is hoped that the newly established scientific committee makes that a priority. Improvement is needed to include research and monitoring results into the general management (albeit that is done for anti-poaching operations). Furthermore, monitoring concentrates on the emblematic species, and does not directly measure the status of the OUV of the TNS - thus more efforts needs to be conducted to measure integrity and connectivity, water quality, evolutionary and ecological processes (IUCN Consultation, 2020).

▶ Research — Mostly Effective

Research in the TNS over the past 20 years by many scientists and organizations has revealed many remarkable insights into ecology and behaviour of forest animal species (including forest elephant, lowland gorillas, chimpanzees and bongo) and general forest ecology. Of particular interest is the discovery of tool-using in both gorillas and chimpanzees. The presence of research activities contributes significantly to the protection of sites where research is ongoing. The famous Dzanga and Mbeli bais in APDS and NNNP, where long term elephant and gorilla research has been conducted for many years, are particularly good examples of researcher presence improving the protection of an area. Also data from habituated gorillas and chimpanzees is providing crucial information on their natural history. The understanding of elephant biology is increasing, due to long-term research. There are various other research activities, too numerous to outline (a list of scientific references is provided in the “Proposition d’inscription”, pp 121-152, as well as in the references section of this assessment). Some research is also being conducted near Nouabalé-Ndoki on human-elephant conflict. The newly established scientific committee should make an effort to establish a targeted research programme as part of the adaptive management system of the TNS and establish cooperation programmes with academic and/or research centres.

Overall assessment of protection and management — Some Concern

Protection and management activities inside the TNS are operational, but could certainly be improved with more resources (funds, equipment and training), as well as strengthened coordination of efforts in order to optimize the available resources. In particular increased government budgetary support is needed. TNS is highly dependent on support from external partners. However the steadily increasing endowment capital of the Trust Fund (TNS Foundation) is a positive indicator that the quality of protection and management will continue to improve, as is the long-term commitment of partner conservation NGOs. Innovative inter-government agreements for the coordinated management of the TNS, a first for central Africa, indicates political commitment for TNS but this needs to be translated into more effective concrete actions on the ground (increased government budgets, sustainable development of parks personnel, effective law enforcement) and improved inter-ministerial cooperation within each country, with an emphasis on WH status. While the national parks are currently largely in good condition, management of increasing pressures in the core and buffer zone, particularly unsustainable bush meat hunting and ivory poaching, remains a major challenge for park management in the three countries (SP report, 2019), and monitoring of these issues needs to be strengthened. TNS is one of the rare sites in the Congo basin forest ecosystem that has considerable

tourism potential, but realizing its full potential is constrained by a number of factors beyond the control of park management (insecurity, difficult access, unreliability of local transport systems and tourism operators). Sport hunting (including for bongo and, in the case of Cameroon, elephant) is also practiced in the buffer zones and revenues are shared with local communities. However quotas are not based on sound scientific assessments and despite revenue sharing illegal activities continue in these areas. The TNS offers exceptional opportunities for research and ecological monitoring and current activities are providing remarkable scientific insights. Streamlining research efforts in relation to TNS values and adaptive management remains to be achieved.

▶ **Assessment of the effectiveness of protection and management in addressing threats outside the site** — **Some Concern**

Given the almost complete absence of effective inter-ministerial consultation between different sectors, both at the national and trilateral levels, park management authorities find themselves reacting to decisions rather than undertaking proactive management decisions. This decreases their effectiveness in addressing threats outside the TNS, which consequently makes it harder to ensure that the buffer zone maintains its protective role. There are worrying trends in buffer zone degradation and deforestation so that the TNS is becoming an island in a previously continuous forest block.

▶ **Best practice examples**

There are many examples of best practice. Given the current discussion on human rights and indigenous people, the experience of the human rights center in Dzanga Sangha and of the Ndima Kali indigenous local organization needs particular mentioning. The conservation education activities of Club Ebobo around Nouabalé-Ndoki have raised some international attention. Great ape research in the TNS both of habituated groups and at forest clearings (gorillas at Mbeli bai) is of highest importance for these species (IUCN Consultation, 2020).

State and trend of values

Assessing the current state and trend of values

World Heritage values

▶ **Extensive area of intact lowland tropical rainforest containing a wide range of habitat types and high biodiversity** — **High Concern** — **Trend:Deteriorating**

The structural integrity of the forest in the TNS is intact and not threatened by deforestation. Limited deforestation in the buffer zones due to occupation by logging concessions, most of which are engaged in low impact logging and are required by law to regulate the human activities in their concessions, is a low threat. Faunal diversity and abundance is threatened and deteriorating in the buffer zone because of unsustainable bushmeat hunting and ivory poaching. Floral diversity is intact. Impact of fishing and removal of other freshwater resources remains unstudied, including water quality. Particularly the illegal killing of forest elephants and their role as rainforest gardeners can potentially impact the ecological integrity of the TNS, as elephant paths can become closed, and understorey vegetation more abundant. In 2019, the World Heritage Committee, noted with utmost concern that poaching, especially of elephants, is persisting within the property and noted with concern that three mining licenses were awarded by the State Party of Cameroon in the buffer zone. The WHC also requests the States Parties to ensure that the construction of the Ouesso-Bangui road does not start until the EIA has been completed (UNESCO, 2019).

▶ **Presence of emblematic and endangered fauna**

High Concern
Trend:Deteriorating

Available survey and monitoring data indicate that populations of emblematic and endangered species within the boundaries of the TNS are probably not declining. However ivory poaching in the buffer zone is intense, indicated by carcasses and seizures of ivory, and there is clear evidence that elephants have undergone an overall decline in the TNS. The absence of scientifically based quotas for sport hunting of bongo (all three countries) and elephant (Cameroon) in the buffer zones is also a serious concern. In 2019, the World Heritage Committee, noted with utmost concern that poaching, especially of elephants, is persisting within the property and the status of the other (bongo, etc.) is not known (UNESCO, 2019). The status of other endangered fauna remains to be studied.

▶ **Presence of rare and endangered flora**

Low Concern
Trend:Data Deficient

Large tracks of the TNS have never been logged and therefore provide one of the most pristine rainforests remaining in the Congo Basin. While the floral composition might be largely intact within the borders of the TNS, large timber trees (e.g. mahagony, mukulungu) are becoming rare in the buffer zone (Morgan et al. 2019).

Summary of the Values

▶ **Assessment of the current state and trend of World Heritage values**

High Concern
Trend: Deteriorating

The structural integrity of the forest in the TNS is intact and not threatened by deforestation. Floral and faunal diversity inside the TNS is maintained, although abundance of forest elephants may be declining in the Cameroon segment. The TNS is currently maintaining its World Heritage values; however, there is clear evidence of intense pressure on wildlife resources in the buffer zone through subsistence and commercial bushmeat hunting and ivory poaching. This will tend to degrade wildlife populations in future, especially for wide-ranging species (such as elephants and bongo) and slowly-reproducing ones (such as great apes). Appropriate management of the buffer zone, to maintain structural and ecological parameters and to support healthy populations of the full complement of wildlife, will be important in maintaining the values associated with criterion (ix) in future.

Additional information

Benefits

Understanding Benefits

▶ **Water provision (importance for water quantity and quality)**

The TNS is covered by a dense river network which is important for maintenance of habitat diversity, fish diversity, and regulation of downstream water flows. Increase in sand and invasive species is being observed in the Sangha river.

Factors negatively affecting provision of this benefit :

- Climate change : Impact level - Low, Trend - Increasing
- Pollution : Impact level - Low, Trend - Increasing
- Invasive species : Impact level - Low, Trend - Increasing
- Habitat change : Impact level - Moderate, Trend - Increasing

▶ **Carbon sequestration**

The 746.300 ha of park, and the 1.787.900 ha of buffer zone around it, constitute an important carbon sink. This vast area of intact and continuous rainforest almost certainly has an important regulating effect on regional and continental climate systems. Presently, with agriculture, mining and logging, the buffer zone needs more protection/conservation. Large trees hold the highest carbon and are the key target for timber extraction. In line with that, forest elephants play a crucial role in that carbon sequestration and their decline can have wide ranging long-term effects on carbon storage.

Factors negatively affecting provision of this benefit :
- Overexploitation : Impact level - Moderate, Trend - Increasing
- Invasive species : Impact level - Moderate, Trend - Increasing
- Habitat change : Impact level - Moderate, Trend - Increasing

▶ **History and tradition,**
Sacred natural sites or landscapes,
Sacred or symbolic plants or animals,
Cultural identity and sense of belonging

The development of research and tourism with the BaAka and Baka peoples should allow them to develop and not to fall into the traps of civilization, alcoholism and other faults due to an abrupt change in lifestyle. Their multi-millennial culture may otherwise soon disappear without even having been scientifically studied in detail. More participation, benefits and usage agreement are becoming visible to allow maintenance of cultural a spiritual values. Direct support from the conservation projects is helping in the maintenance of culture and certain agreements (e.g. in Lobéké) allow them to "use" spiritual locations.

Factors negatively affecting provision of this benefit :
- Overexploitation : Impact level - Moderate, Trend - Increasing
- Habitat change : Impact level - Moderate, Trend - Decreasing

The factor to consider here is the indifference and lack of knowledge of a civilization unprepared to defend itself against another civilization using the same environment, while the BaAka and Baka, by tradition, have kept the ecosystem almost intact in respecting the forest considered as the basis of life, food and spiritual resources.

▶ **Legal subsistence hunting of wild game,**
Collection of wild plants and mushrooms,
Fishing areas and conservation of fish stocks

Usage of the interior of the TNS is generally prohibited, except for Lobéké NP, due to a community usage zone and an agreement for indigenous people (this includes sustainable wildlife offtake using traditional methods, NTFP, and fishing). Fishing is allowed along the Sangha River. The assessment only concerns the TNS and not its buffer zone, where habitat modification, unsustainable bushmeat hunting and poaching clearly impacts livelihood benefits.

Factors negatively affecting provision of this benefit :
- Climate change : Impact level - Low, Trend - Continuing
- Pollution : Impact level - Low, Trend - Continuing
- Overexploitation : Impact level - Low, Trend - Continuing
- Invasive species : Impact level - Low, Trend - Continuing
- Habitat change : Impact level - Low, Trend - Continuing

The impacts generally do not affect the TNS but its buffer zone.

▶ **Importance for research,**
Contribution to education

The various education and development and research projects allow improvement of knowledge of the local population and there are direct support projects related to school education with preferential support to indigenous people. The projects are multiple but significantly increase the level of knowledge

and education in an area where governmental support is generally lacking.

▶ **Direct employment, Tourism-related income, Provision of jobs**

The conservation projects are often the only job provider in those remote areas. They contribute significantly to the local economy and have a direct impact on the local livelihoods in the household level. There is often preferential employment of locals and tourism revenue helps to support development projects, such as the construction of a hospital. Crucial is that the revenue is managed locally and not in the capital.

Summary of benefits

The national and global benefits in terms of nature conservation (central African humid forest biodiversity) and environmental services (water, carbon, and climate regulation) are exceptionally important. The TNS and its conservation projects significantly contribute to local economies and livelihoods.

Projects

Compilation of active conservation projects

№	Organization	Project duration	Brief description of Active Projects
1	Relevant Forestry Ministries in Cameroon, Congo, RCA: • Ministère des Forêts et de la Faune (Cameroon) • Ministère de l’Economie Forestière et du Develpment durable (Congo) • Ministère des Eaux et Forêts, Chasse et Pêche (RCA)		In charge of park management in the three countries (either in the lead (Lobéké) or as a partner (in Dzanga Sangha and Nouabalé-Ndoki). The ministries nominate the park wardens (and National Experts in Dzanga Sangha) and recruit rangers and other park staff. The respective directors of fauna are leading the WHS process and sign off the state of conservation report. They receive support from NGO technical partners (in Lobéké), the TNS Foundation and international funding agencies (public and private). In the Republic of Congo there is the national parc agency (ACFAP) presiding the board of the Nouabalé-Ndoki Foundation.
2	World Wide Fund for Nature		WWF works to support all aspects of park management (surveillance, LEM, surveys, training), and buffer zone activities (animation of local CBNRM structures, micro-projects) in the Cameroonian and CAR sectors of the TNS. In Lobéké NP, they act as adviser and are co-manager of FTNS funds. In Dzanga Sangha they nominate the NP director and lead the park management. WWF mobilizes many sources of public and private funding including BMZ/KfW, USAID (CARPE), USFWS, UNESCO, EU, DGIS, BAD, TNS Foundation, WWF private donors.

№	Organization	Project duration	Brief description of Active Projects
3	Wildlife Conservation Society		WCS supports all aspects of park management (e.g. surveillance, LEM, surveys, training) and buffer zone activities in the Congo sector of the TNS. They lead the NNNP management unit and nominate the director of Nouabalé-Ndoki NP. WCS mobilises many sources of public and private funding including USAID (CARPE), USFWS, UNESCO, EU, OIBT, AFD/FEEM, TNS Foundation, Logging Compagnie (CIB), WCS private donors. The buffer zone activities are part of PROGEPP (Projet de Gestion des Ecosystèmes Périphériques du Parc national de Nouabalé-Ndoki), an initiative developed in collaboration with logging companies and the government since 1999 to integrate sound conservation principles into the management plans of collaborating logging companies (anti-poaching, regulated hunting, zoning, development activities, etc...).
4	Logging companies		- The most formalized collaboration with logging companies is with CIB (Congolaise Industrielle de Bois – part of the group OLAM), which has three FSC-certified concessions in the buffer zone of NNNP and has collaborated closely with the Ministry and WCS for over a decade, and has probably had the most lasting impact of any of the logging companies in terms of conservation. They are a partner of PROGEPP. - SINFOCAM exchanges with the Dzanga Sangha protected area in CAR; - Around Lobéké various logging companies are present and exchanges are less regular.
5	KfW		2018 Ex post evaluation – Tri-National de la Sangha (TNS). Objectives: The project goal (outcome) was to kick-start a transnational management scheme for the three interde- pendent protected areas. As the long-term overarching objective (impact), the transnational management scheme should contribute to the preservation of ecosystem services, by reducing greenhouse gas emissions, and in particular by protecting endangered species and habitat diversity (objectives adapted ex-post). Furthermore, a social component sought to improve the livelihoods of the local population by promoting sustainable income alternatives. Target Group: Governmental institutions with a mandate for forest protection and protected area management and (indirectly) the population in the project region. A global benefit is expected from the reduction of carbon emissions.
6	FTNS		The mission of the Sangha Tri-National Fund (FTNS) is to support the implementation of best practices for the conservation of biodiversity and the socio-economic well-being of communities and other stakeholders in and around TNS, in collaboration with other technical and financial partners; support the financing of protected areas, catalyze resources to promote the conservation of biodiversity in the Sangha Tri-National forests, through investment in sustainable community development. The capital of the trust fund at the end of 2019 was 62 million €. FTNS also receives other funds. such as CAWFHI, EU etc. All US funding is currently suspended. The FTNS also plays an implementing role in supporting the TNS organs, presenting TNS during COMIFAC meetings and many more. There are many financial supporter of TNS activities, such as BMZ/KfW, USAID, USFWS, EU, Zoos, private donors, etc.
7	Chengeta Wildlife		Chengeta Wildlife is a partner of Dzanga Sangha PA. They have a holistic approach to law enforcement.
8	Local NGOs		There are many local and indigenous NGOs that are partnering with the main TNS actors, such as Ndima Kali, Radio Ndjokou/RFI, MEFP, CEFAID, ASBABUK, SMA, ADIH, with an increasing role to play as civil society actors are more and more included in the TNS management. The involvement of local NGOs in the Congolese segment of the TNS is less due to the absence of local actors.

№	Organization	Project duration	Brief description of Active Projects
9	Groupe Sangha		Groupe Sangha is a IUCN led informal network of managers and researchers working in the TNS. It is a multi-actor collaboration of all actors in the TNS with the aim to act os platform for exchange and to obtain and track conservation and development indicators in the TNS over time.
10	Conservation Justice		Parnering with WWF and Dzanga Sangha Protected areas in the follow up of wildlife law breakers.

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