AFRICA IS CHANGING: SHOULD ITS PROTECTED AREAS EVOLVE?

PROTECTED AREAS, CONFLICT AND INSECURITY: UNDERSTANDING THE SITUATION AND DEFINING THE RULES

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THE PROGRAMME ON AFRICAN PROTECTED AREAS & CONSERVATION (PAPACO)

PAPACO aims at improving the management and governance of protected areas in Africa and their positive results on biodiversity conservation. They focus on 3 complementary domains which are: equitable governance, efficient management and long-term sustainability of PAs. PAPACO works with the World Commission for protected Areas (WCPA).

Foreword

This report is part of a series of studies commissioned by IUCN-Papaco. The intention of these studies is to contribute to the debate around topical issues related to conservation in Africa, especially the continent's protected areas.

Context: in 2050, the population of Africa will have reached 2 billion inhabitants. The needs of the population keep increasing, fragmentation is accelerating, "natural" land is becoming scarcer. In this context, pressures on protected areas increase rapidly and their ability to conserve biodiversity in the long run are more and more limited.

What can we do to address these threats?

Our approach is simple: we ask an expert on the matter to lay out an analysis to provide a basis for discussion. This report can then be used for this purpose, shared, commented on, criticised, expanded. The goal is that all those involved in the conservation of these territories raise questions, exchange and finally, we hope, envisage a positive future for nature conservation on the continent.

This report is called: *Protected areas, conflicts and insecurity: understanding the situation and defining the rules.*

The intention is to answer the following questions: does the illegal exploitation of fauna and natural resources truly contribute to conflict in Africa? More specifically, does it contribute to funding non-state armed groups? Isn't it rather that the conflicts themselves open new spaces for the illegal exploitation of natural resources? Who is really responsible for the situation and evidence supports this? Can research on arms and arms-trafficking allow to better understand the responsibilities of the exploitation of fauna? Can protected area "wardens" really contribute to human security? What are the conditions and what are the risks? What relationships do protected areas and managers have with local and international security actors, what are the risks involved and what rules are to be followed?

These questions are vital, and this report probably isn't enough to cover the full complexity of answers - but it most definitely will contribute to the debate.

Have a good read!

Dr Geoffroy Mauvais
PAPACO Coordinator

Summary

Today, many protected areas (PA) in Sub-Saharan Africa are located in areas of conflict. Some are subject to long-term unrest, or are faced with new security risks and forms of violence. Some PAs or parts of them, are even located in areas controlled by rebel groups. Insecurity poses a direct threat to staff and forces PAs to reduce the number of anti-poaching operations as well as any other management initiatives, or even suspend them entirely.

While this conflict does not essentially arise from the illegal exploitation of natural resources, the former does encourage the development of such activities. Armed groups, including terrorist organisations, have been blamed for the decline in certain wildlife species, namely elephants. They have also been accused of exploiting other natural resources in order to fund their militia activities. However, armed groups often have access to resources that are far greater than natural ones. In fact, natural resources are only essential to armed groups that do not have external support or other forms of funding. In this context, rather than putting the blame on State militia who are often directly responsible, conservation organisations and governments tend to point the finger at other armed groups, especially foreign ones. Arms and ammunition, captured or abandoned, are one of the few good means of identifying those responsible. Conservation organisations could invest more in research on this subject to respond to the pressure more effectively.

Some "protected area management" organisations claim to play a role that goes far beyond conservation. They transform the areas they manage into hubs for the security of individuals, sometimes replacing State security forces, and consequently demand funding (often public) in order to provide these security services, which do much more than simply protect wildlife. This transformation can prove unwarranted or impractical. Whilst some conservation operators can occasionally contribute to wider security, in a situation of conflict they tend to struggle to ensure the security of their own staff and can at best try to maintain a neutral presence. Furthermore, conservation operators' historical alignment with States, their funding through international partners who are also most often aligned with States, and their most recent quest for cooperation with international armed forces, mean that conservation organisations can be perceived as non-neutral parties in conflicts and taken as targets by non-State armed groups, or even local communities. Moreover, the local conservation staff are directly affected by the context and, depending on the latter and the fluctuating conservation funding, they can become combatants themselves; whilst the combatants can become either poachers or wardens.

In order to reduce these risks, rules need to be defined. First, it is important that security personnel in protected areas obey clear rules of engagement, giving priority to **non-violent, negotiated and preventive solutions**, notably through contact with local security operators, in order to avoid fuelling the conflicts. Second, it is crucial that the violence inherent to "armed conservation" is really counteracted by **participatory community measures**, which are the only ones capable of ensuring the co-existence of protected areas and communities. Thirdly, in conflict zones, conservation projects must as far as possible try to have **balanced relations with the different parties** (government, armed opposition, various communities), by affirming the principle of **neutrality** from political, ethnic and religious standpoints, following the example of humanitarian organisations.

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Introduction

Today, many protected areas (PA) in Sub-Saharan Africa are located in areas of conflict. Some are subject to long-term unrest, or are confronted with new security risks and forms of violence. Insecurity poses a direct threat to staff, and this forces PAs to reduce or even suspend the number of anti-poaching operations, as well as other management initiative.

Armed groups, including terrorist organisations, have been blamed for the decline in certain wildlife species, such as elephants, and of exploiting other natural resources in order to fund their militia activities.

Some "protected area management" organisations also claim to play a role that goes far beyond conservation. They transform the areas they manage into hubs for the security of individuals, sometimes *in lieu* of State security forces. They demand funding (often public) to provide these security services, which do much more than simply protect wildlife.

It is therefore crucial to examine the security of these protected areas, the causes and consequences of situations of insecurity that affect them and the effectiveness of the responses provided at different levels, from local to global.

This study is based on the author's personal research since the 1990s, both with regard to conservation issues and conflicts, and recently for a study for the European Commission (DEVCO) and a presentation at an IUCN conference in The Hague in June 2018.[1]

I. Protected areas, conflict and insecurity in Sub-Saharan Africa

Today, many protected areas in Sub-Saharan Africa are located in conflict zones, some being subject to long-term unrest.[2]

This is especially true for the Central African Republic (CAR)-South Sudan-Democratic Republic of the Congo (DRC) triangle.

South Sudan is a textbook case, as the bloody conflict in the region is without doubt one of the oldest in Africa. The First Sudanese Civil War between the government of Khartoum and the South Sudanese rebellion began in 1955, even before Sudan's independence, and

lasted until 1972. During just over a decade of relative peace, between 1972 and 1983, wildlife researchers and conservationists discovered that South Sudan, in particular to the east of the Nile, was one of the richest wildlife areas in Africa, and they launched conservation projects. This momentum was interrupted by the Second Civil War, from 1983 to 2005. After 2005, the Government of South Sudan (first an autonomous region and then independent since 2011) and international wildlife conservation organisations re-accessed the importance of the South Sudanese megafauna, some of which survived the civil war. The fauna then became a symbol for the South Sudanese State, which attempted to assert its identity. Wildlife protection became a means of keeping countless ex-rebel fighters busy: after the peace agreement was signed with Khartoum in 2005, limiting the numbers of South Sudanese armed forces, 16,000 rebel fighters were integrated into what was to become one of the largest wildlife services in the world. The situation changed with the South Sudanese Civil War of 2013. Like the other armed units, the game wardens of different ethnic groups were divided. Some joined the forces loyal to the Juba regime, others the new rebellion, and they killed each other. In theory, the protected areas, in particular Boma and Bandingilo National Parks to the east of the Nile, but also Southern, Lantoto and Shambe National Parks in the west, continue to be protected by the wildlife service of the new South Sudanese State, in partnership with international organisations. In reality, this area of open conflict complicates and limits management effectiveness.

A particularly complicated case is that of the Radom Biosphere Reserve, in the Kafia Kingi Enclave, which belongs to South Sudan. In fact, it is one of the areas disputed by Sudan and is *de facto* controlled by Khartoum, which in addition to its regular forces, also hosts numerous armed groups there: auxiliary Arab militia from the Darfur Region (the Janjaweed), South Sudanese rebels and Ugandan rebels from the Lord's Resistance Army (LRA), and Central African rebels. The Sudanese rebels from Darfur also operate there.

In the same region, armed groups, local and foreign rebels as well as auxiliary militia which are relatively well controlled by the States, are based or operate in protected areas. This is the case of the **CAR** where, since 2012, all the protected areas in the North-East, notably the Bamingui-Bangoran and Manovo-Gounda-Saint-Floris National Parks, are now controlled by the Patriotic Front for the Renaissance of the Central African Republic (*Front populaire pour la renaissance de*

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la Centrafrique, FPRC). This is the main branch of the former Séléka rebel militia group coalition, originating in this region. Further south, the Chinko Protected Area straddles the operating zones of another Séléka faction, the Union for Peace in the Central African Republic (*Union pour la Paix en Centrafrique*, UPC), and anti-Balaka militia opposed to the Séléka. Even before the rebellion, the LRA operated in the different protected areas in northeastern CAR.

Further south, in the **DRC**, crucial protected areas such as Virunga and Garamba National parks are occupied or operated by rebel groups and local militia. These armed forces stem from the conflict that has brought bloodshed to the country since the 1990s, but also include the Rwandan and Ugandan rebels, namely the LRA. In Garamba National Park, on the South Sudanese border, the South Sudanese army and rebels have been accused of poaching.[3]

Further north, **Chad** has been confronted with almost continuous rebellion since the 1960s. Although these have not occupied large areas of the country since the 1980s, they have regularly operated in protected areas, Zakouma national park in particular, where significant security risks remain.

The rest of the continent appears to have been less affected by the conflicts. In **West Africa** however, since 2012 northeastern Mali has been an open conflict zone, partially controlled by rebel and terrorist groups. Terrorist groups in particular have operated in the Gourma zone. In general, protected areas in West Africa face new security risks and new forms of violence, notably in the form of transboundary, extremely mobile terrorist groups, which use certain protected areas as refuge. Active groups in Mali have also been reported in the transboundary biosphere reserve, the W-Arly-Pendjari Complex, which encompasses W, Arly and Pendjari National Parks in Niger, Burkina Faso and

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3   Vira and Ewing, 2014, p. 37; Enough Project, 2013, p. 11; Anderson and
     Jooste, p. 2.
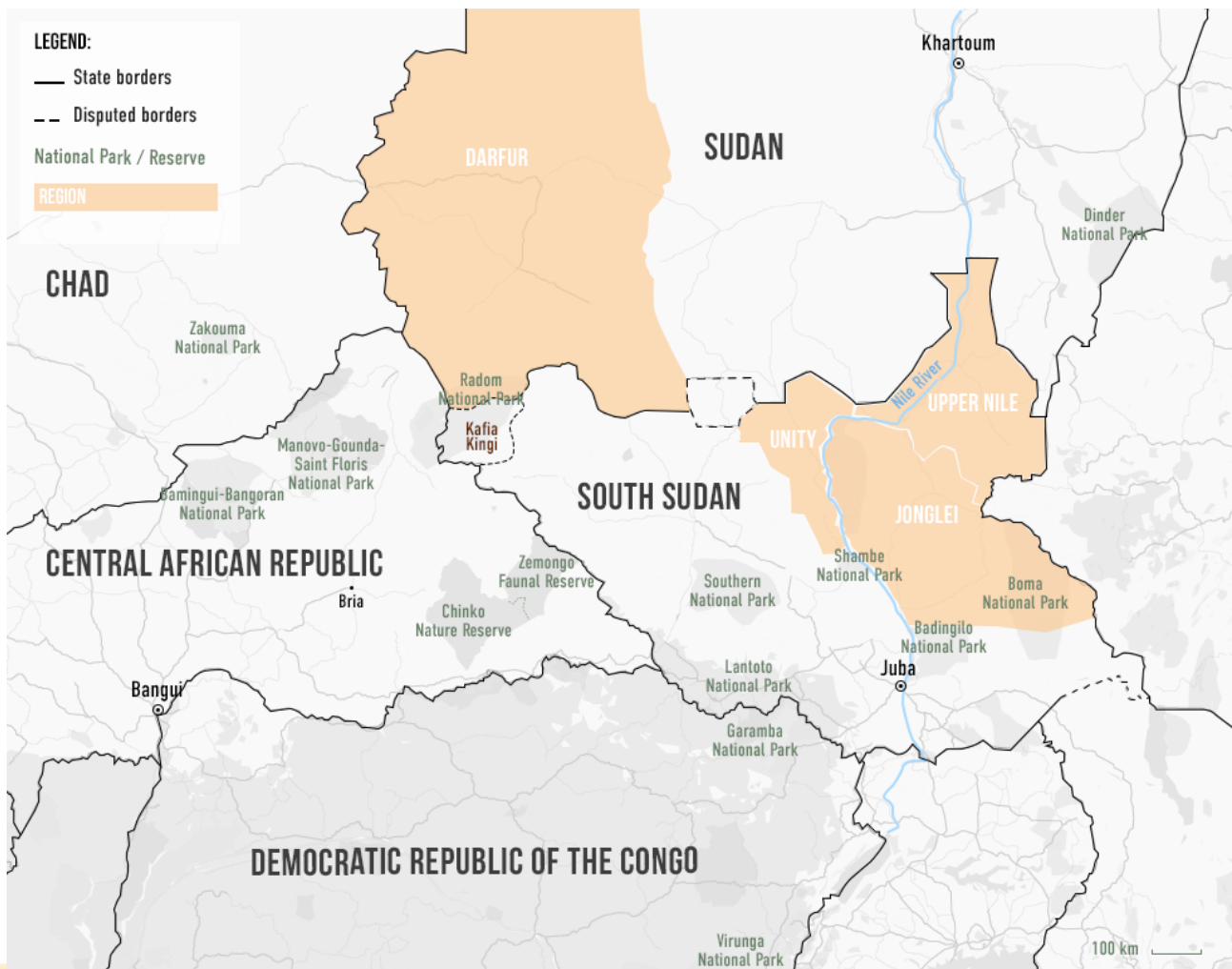
Protected areas in conflict areas in Chad and in the South-Sudan, CAR and DRC triangle.

Benin.[4] Not far from there, the Nigerian jihadist group, Boko Haram, has been reported in protected areas in northeastern Nigeria, and also in Waza National Park in northern Cameroon. In **East Africa**, members of the Somali jihadist group, Al-Shabab, have been reported in protected areas in Kenya and other jihadists have been reported in Dinder National Park in Sudan, although to a lesser extent.

The situation varies greatly from one location to another. Whilst in the CAR-DRC-South Sudan triangle long-term conflicts still oppose armed groups that occupy entire regions including protected areas, in the rest of Africa, except for Mali, the situation seems much calmer.

The terrorist groups that operate in some parts of West Africa have far more limited territorial control than the rebel groups and militias in Central Africa and in the two Sudans. However, the particular security threat they create can have a major impact, insofar as —just like a major armed conflict— it often forces protected area managers to take significant security measures, which can even involve temporarily abandoning the management of all or part of a protected area.

However, it would be wrong to think that the security situation in Sub-Saharan protected areas has fundamentally deteriorated due to such insecurities. The protected areas in Southern Africa and in most of East and West Africa are no longer (as some were during the second half of the 20th century) affected by insurgency, but by lesser forms of insecurity, in particular unarmed banditry.

Furthermore, even in the regions worst affected by conflict and insecurity, it is important to note that the protected areas are often geographically isolated from the epicentres of conflict. In South Sudan, since 2013 most of the violence has occurred in the three States inhabited by the Nuer community (Unity, Jonglei and Upper Nile), on the outskirts of protected areas such as Boma, Bandingilo or Shambe. In the CAR, although the original Séléka core originates from the northeast, the conflict is more concentrated in other regions, notably the diamond and gold-mining areas such as Bria, further south. This shows that natural resources other than wildlife are now of greater interest to armed groups (or that there is simply no wildlife left!). Yet, insecurity has a considerable impact on the management of natural resources, in particular because

protected areas, which are isolated from the epicentres of conflict are also isolated from the capital cities, and thus from the State itself (usually in contexts of extreme centralisation). Protected area isolation is exacerbated by the fact that the roads that connect them with capitals are very dangerous or controlled by armed groups. As a result, these groups obtain more resources from protected areas than from the actual exploitation of natural resources.

This isolation, actual insecurity and perceived insecurity that result from the presence of armed groups or terrorists, have often forced the managers of protected areas to reduce or even suspend their anti-poaching operations or any other management actions. Numerous rangers in protected areas have been killed by armed groups, especially in the DRC, with over 160 in Virunga National Park over the last decade. Since 2012-13, in the CAR and South Sudan, rangers have also either voluntarily or forcibly been recruited by armed groups or have taken part in combat. Material and equipment in protected areas have been looted, and some protected areas have been *de facto*, partially or entirely, abandoned by their managers due to insecurity.

Is the exploitation of natural resources a cause or a result of war?

Does the illegal exploitation of wildlife and natural resources really contribute to conflict in Africa? Or rather, does the conflict itself open up new areas to the illegal exploitation of natural resources?

The idea that the exploitation of natural resources, (especially mineral resources such as petrol or diamonds in Africa), is the essential cause of conflict, or at least a contributing factor thereof, is very common. Based on this idea, armed stakeholders such as rebel groups want to take control of natural resources (or of the State, because it controls these resources). This in turn suggests that rebel groups are motivated by financial gain rather than political interests. To nature conservationists, this idea is particularly appealing because it allows them to appear as players in conflict resolution: since the illegal exploitation of natural resources causes conflict, fighting against such exploitation would resolve conflict or contribute to its resolution. Conservationists could thus join other international stakeholders directly involved in conflict resolution, and stand united against common enemies that are a threat to both peace and nature. Wildlife conservation could henceforth be another tool for conflict resolution and even for combatting terrorism, which could benefit from funding aimed at

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4   See http://www.jeuneafrique.com/mag/288180/politique/securite-parc-w-ligne-de-mire/

tackling these issues.

This makes for a case that lacks subtlety given the complex realities of the current crises in Sub-Saharan Africa. In none of the conflict situations referred to here is the illegal exploitation of wildlife resources likely to be the primary cause of the conflict. This is not the key driver of the conflicts in South Sudan, CAR, DRC, Somalia, Nigeria, Mali or elsewhere. In some of these countries, mineral resources such as oil in the former Republic of the Sudan, diamonds in the CAR and metals in the DRC, may have helped generate conflicts or have been contributing factors. In all these countries, insurgencies, and even those of extremely violent groups such as the LRA or terrorists, are above all caused by the political marginalisation of certain regions or communities by non-democratic regimes. Whilst mineral resources may contribute to these conflicts, natural, non-mineral resources (fauna, flora) appear to be secondary factors, even if the exploitation of timber and fish may have played a role in the conflicts in the Great Lakes.

Rather than the exploitation of natural resources being a cause of conflict or a contributing factor, it appears that the conflicts themselves allow for the illegal exploitation and trafficking of these resources. Besides, in the CAR or in South Sudan, wildlife conservationists and political analysts agree that the illegal exploitation of natural resources per se is not really the cause of conflict or insecurity, but rather it is above all insecurity that allows armed groups –irrespective of their real or original motive– to engage in such exploitation. War may create conditions that favour the illegal exploitation of natural resources. Combatants themselves often freely engage in poaching as a source of food, or in trafficking certain resources of commercial value. War may also lead to a disappearance of stakeholders (both State and traditional) responsible for controlling the exploitation of natural resources, and also to the abandoning of activities aimed at conserving these resources. This results in complete loss of revenue –even minimal– generated by conservation, and the whole point of conservation may be called into question. Furthermore, conflicts are accompanied by the movement of populations that increase human pressure on the environment.[5]

The case of Sudan is rich in historical precedents. During pre-colonial times, the area now known as Sudan was a platform for the slave and ivory trade. Slaves and ivory were taken from what is now South Sudan (in the Upper Nile and Bahr el Ghazal regions) and Central Africa then exported to the Mediterranean and the Red Sea. The nomadic Arab tribes from the "Sudanese" belt, acted as intermediaries in this trade, both for the pre-colonial States and for private traders. Here, as elsewhere, colonisation interrupted this trafficking. The ivory trade resumed after the bloody wars that ravaged Sudan, and particularly South Sudan, from the 1950s on. During the First Sudanese Civil War (1955-1972), between the political authorities in the North and the rebels in the South, both the Sudanese army and the South Sudanese rebels carried out poaching in South Sudan. Some demobilised or retired Sudanese soldiers became professional elephant hunters in South Sudan, and made incursions into eastern CAR and northern DRC. During the same period, the first Chadian rebel groups of the 1960s and 1970s were poaching equally actively in the Chad-Sudan-CAR tri-border area.

From the 1980s until the mid-2000s, the Sudanese government formed a militia to fight the South Sudanese rebel groups by recruiting auxiliaries from the Arab tribes who were poaching elephants in South Sudan. These Arab militias were known as the Murahilin. From 2003 on, those who had formed against the Darfur rebellion were nicknamed Janjaweed. Thus, since the 1980s, with the war continuing in South Sudan and having spread to other areas bordering on Sudan, and even beyond the borders with Chad and the CAR, these well-armed militia and Sudanese paramilitary forces played a key role in the massacre of wildlife, and more generally in the insecurity in the two Sudans as well as in Central Africa.

Zakouma in Chad is another area where the decline in fauna has been going on for a long time and at least since Chad's independence in 1960. The start of the rebellion in Northern Chad, led to the poaching of elephants for ivory as a means to fund rebel activities in the Zakouma region. From 1986 and especially since 1991, although the rebellion and its causes persisted, the rebels no longer really tried to control land in Chad on a sustainable basis, or to exploit the country's natural resources to obtain funding. The conditions in Zakouma National Park improved. Animal populations recovered, notably the elephants, whose numbers rose from around 1,000 in 1986 to 4,350 in 2002. After 2003, and especially between 2005 and 2009, in addition to incursions by Sudanese militias, the war in Darfur led to a conflict between Chad and Sudan by proxy rebel groups, and to a high level of insecurity in Eastern Chad. Elephant poaching resumed on a large scale, and there were only 450 individuals left during the period between 2010

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5 Gaynor et al., 2016; FAO 2015.

and 2011.[6] In 2010, Chad transferred the management of Zakouma National Park to the private South African organisation, African Parks, within the framework of a public private partnership (PPP), with European Union funding. Since then, the elephant population has shown signs of a tentative recovery and the population now stands at over 500. However, as the managers themselves admit, the reduction in poaching is not so much due to changes in management or the management style, but simply because, after 2009-10, the Chadian Government managed to regain control of its country following a peace agreement signed with Khartoum in 2010. The Zakouma case is a good illustration of the extent to which links between the illegal exploitation of wildlife and the political and security context are of crucial importance.

Armed groups and the illegal exploitation of wildlife

In situations of conflict or high insecurity, various armed groups, including rebel and terrorist groups and more or less controlled government forces, have been accused of being responsible for the decline in certain wildlife species, including the elephant, and for exploiting other natural resources in order to fund their activities. However, these accusations need to be examined carefully, because specific contexts explain why a given armed group might engage in the exploitation of a resource: the availability of the resource; its demand on a local or global market; the armed group's capacity to exploit the resource; their needs and their access to resources other than natural ones (e.g. external funding); the control of their members by their leaders; and their economic and political priorities.

For several decades now, of all non-mineral natural resources, the illegal ivory trade has contributed most to the funding of armed groups, particularly in the years after several African countries gained their independence. The first African rebel groups that appeared during that period often poached for food and sold ivory to finance their operations. Elephant populations were significantly larger, and between the 1960s and the 1980s they started to decline brutally. Rebel groups had access to arms, which allowed them to hunt elephants *en masse*. They could easily transport the ivory (a resource that was easier to carry than others, and for a high price per kilo) and dispose of it on the international markets, for an attractive price, especially

for groups with limited access to international political support. This was indeed the case of certain Chadian rebel factions in the 1970s, but also of the Sudan People's Liberation Army (SPLA) in the 1980s.[7] Today, however, ivory is clearly of lower importance to armed groups, because there are fewer elephants, and therefore less profit to be made from ivory. Armed groups need much more funding as they require the best arms and vehicles, to match those used by the regular armies they are fighting against. They also need to provide for large numbers of combatants, far more than before, and the exploitation of ivory and wildlife alone doesn't cover such expenses. It can no longer be concluded, as has sometimes been claimed, that ivory is a vital source of funding for armed groups such as the Janjaweed militia in Sudan. They are accused of having massacred elephants in Chad, the CAR, Cameroon and the DRC, or even Al-Shabab in Somalia. The Sudanese Arab militia comprises thousands of men, and their loyalty towards the Sudanese Government can only be guaranteed by regular salaries.[8]

Nevertheless, ivory and other animal resources can be a valuable resource for smaller armed groups, especially when these have lost their initial financial support to cover arms and food. This is the case of the Lord's Resistance Army, which appeared to have become "specialised" in ivory when the Sudanese Government, its original supporter, distanced itself from the group.[9]

Wildlife is often a resource for combatants neglected by their leaders and for dissidents from larger groups, such as former rebels or militias excluded from peace or reintegration processes. If Sudan starts a sudden process to reduce the size of its militia, as Khartoum appears to be trying to do in order to strengthen its rapprochement with the United States, there is a risk that disenchanted Janjaweed members will turn to ivory, outside of Sudan, as an alternative.

The geographical context is key. The presence of certain armed or terrorist groups have been reported in protected areas. They may have been involved in poaching or in the exploitation of other natural resources as a source of funding and of food. This is mainly because these groups have chosen to base themselves, or have found

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6   WCS and APN, 2012; Tubiana, 2017, p. 9.

7   The latter was also accused of trafficking in bush meat and rhinoceros horn. WCS, 2014; Saïd, A., 2010.

8   Vira and Ewing, 2014, pp. 24–26; Stiles, 2014; Tubiana, 2017, p. 9. Haenlein and Smith also state that it is "unlikely" that ivory from conflict zones constitutes the majority of the illegal ivory traded, compared with a far more significant role in the global illegal ivory trade being played by subsistence hunting, opportunistic poaching and organised crime, Haenlein and Smith, 2016, p. 57, UNEP and Interpol: UNODC, 2016.

9   See Enough Project, 2013, p. 9; Vira and Ewing, 2014, p. 43.

themselves trapped, in remote, isolated natural areas, forests or marshland often rich in wildlife and other resources, where they feel safer. Protected areas are therefore attractive to armed groups, as they offer vast areas, far from capitals, often near borders, sometimes with dense plant cover, generally too large to be well managed and thus often partially abandoned, with little infrastructures, and often inaccessible during the rainy season. This is how Boko Haram was able to seek refuge in the game reserve inside the Sambisa forest in northeastern Nigeria and in the marshes of Lake Chad. It is also how W National Park was used as a rear base for jihadist attacks in Burkina Faso. The LRA too sought refuge in Garamba National Park in the DRC and other protected areas in the CAR, Sudan and South Sudan. Several armed groups were also able to settle in Virunga National Park and other protected areas in the DRC, etc.

Armed groups that are currently active often have other more important sources of income than wildlife, including natural resources such as charcoal in Somalia or diamonds in the CAR. Above all, the funding model that appears to have been adopted by the majority of armed groups in Sub-Saharan Africa the control of main roads. This requires far fewer human and material resources than the exploitation of or trafficking in natural resources and yields a lot more. Only a few troops need to be present at key points to collect taxes from all means of transport, including taxes linked to natural resources. This is the case with trafficking in bush meat in the CAR. Rather than poaching themselves, armed groups such as the FPRC simply tax those transporting bush meat by road, whilst turning a blind eye to the activities carried out by poachers that allow for this trafficking, and even supplying them with arms and ammunition.[10] In addition to maximising profit and minimising costs, this model allows non-State armed groups to avoid being seen as traffickers, and on the contrary to seem to be opposed to trafficking (the taxes can be presented as "fines"), whilst indirectly benefiting from this illegal trade.

II. Improving the identification of those responsible

Armed groups, including terrorists, have often been accused of being responsible for the decline in certain wildlife species, including the elephant, and of exploiting

other natural resources to fund their military activities. The exact identification of who to hold responsible for this faces numerous obstacles:

- the lack of specific evidence;

- the complexity of the context, especially in border regions where the communities are by nature transboundary and often very mobile, and where the combatants themselves are extremely mobile, moving from one armed group and one country to the next as opportunities arise;

- the limited knowledge of this context by those who conserve protected areas; and also,

- the tendency of conservationists, local communities and States to blame "foreign" poachers and armed groups, terrorists in particular, rather than local poachers and members of their own country's armed forces and administration, who remain essential partners.

According to a study focusing specifically on ivory, blaming armed groups for trafficking was, "for a number of African States who took up this subject – notably Kenya, Uganda and Zimbabwe– (…) a useful way of diverting people's attention from the corruption, networks, criminal organisations, the poor enforcement of the law and weak legal systems, which facilitated poaching and trafficking. (…). The African governments could also exploit the link between ivory and rebellion in order to obtain more Western support (…) for their own struggles against national or regional opponents. The new millennium saw additional American, British and French support for anti-poaching operations in Chad and from Gabon to Kenya, and additional help (…) in the fight against the LRA, Boko and Al-Shabab".[11]

Experts have noted that Sudanese militia have almost systematically been held responsible for the poaching of elephants in Chad, the CAR, South Sudan and elsewhere. Both governments and local communities in these countries had an interest in blaming the foreign Janjaweed and in minimising the role played by local poachers, including members of local communities, State security forces and civilian authorities.[12]

Thus, in Zakouma, in Chad, the decline in the elephant populations was largely attributed to Sudanese poachers, both in the media and by the Chadian Government,

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10 WCS and AGRECO, 2017.

11 Somerville, 2016.

12 Tubiana, 2017, p. 9.

although there is very limited evidence, and it does seem more likely that Chadian poachers were involved.[13] To complicate matters further, a number of Arab and Fulani communities have provided combatants to Sudanese militias living on both sides of the border between Sudan and Chad. Even if the active poachers in Chad and in the CAR are generally described as "Sudanese", they may in fact be either Sudanese or Chadian, or even have both identities and nationalities.

Similarly, in the CAR, expert Louisa Lombard noted that, "industrial hunters in the region are generally described as 'Sudanese', to deflect responsibility onto a foreign menace."[14] In the north east of the country, the distinction between local and foreign poachers by the managers of protected areas even seems to have been the *modus operandi* that allowed conservation projects to function and to be accepted by the populations. Foreign "Sudanese" or "Chadian" poachers were attacked violently, and when they were captured, often killed. On the other hand, the rangers, who are recruited locally, could not impose the same treatment on local poachers without risking alienating the local population and thus, they resorted to simply fine local poachers.

Likewise, according to one expert from the DRC, in Garamba National Park, local poachers were tolerated and all responsibility was attributed to "foreigners", in particular to the LRA and the Sudanese Janjaweed. The ivory poached by the LRA only seems to represent a small percentage of the ivory poached in the areas where the group operates.[15] In fact, the struggle against the LRA in the Garamba area which has spurred accusations against the group for participating in the illegal ivory trade, has also resulted in the deployment of DRC and Ugandan armed forces to the Garamba area. Deployed soldiers were involved in poaching activities, namely of elephants, in collaboration with local poachers. The Congolese armed forces have also been accused of collusion with local poachers, of lending them arms, and of arms trafficking. Similarly, in Virunga National Park, over 60% of the violations in 2017 were attributed to members of the regular forces.

In some instances, it also seems that there is collusion between theoretically opposing armed groups and the government forces, especially when they escape from the control of the central authorities. Nevertheless, when armed groups manage to control important territories,

whilst continuing to be politically opposed, governments and armed opponents reach tacit agreements over the sharing of land and natural resources. Occasionally, belligerents even agree to allow illegal trade in natural resources to transit the front lines, with each country taxing this transit on their own side of the border. A common interest in this exploitation of resources can thus lead to pacts of non-aggression, which may appear positive in political terms, but also make the warring parties prefer a financially profitable state of negative peace rather than seek a real resolution to the conflict. These situations, which sometimes last for decades, have caused serious damage to protected areas in Côte d'Ivoire, the CAR and the DRC.

The most recent accusations of the exploitation of ivory involving groups that are not simply armed opposition groups, but rather terrorist groups, make it even easier for the African States faced with this problem (Kenya, Chad, Nigeria and Cameroon) to obtain more help from the West. However, once again, this appears to be based on extremely limited evidence. In 2011, based on an anonymous tip from the group, the claim that 40% of Al-Shabab's income comes from the poaching of elephants in Kenya, seems greatly exaggerated.[16] More recently, since the presence of Boko Haram was reported in Waza National Park in the Far North Region of Cameroon, accusations that the jihadist group was poaching elephants and financing its operations through ivory trafficking were met with scepticism by regional experts. According to them, these claims "hinge on a single document, which uses only one, unnamed source". The authors consider that it is "highly unlikely" that Boko Haram could be funded by ivory, especially because the elephant populations in the areas where the group operates are "so low that this would be a faulty business plan to say the least". They conclude that such a simplification "diverts attention from corrupt conservation and government officials who may be complicit in poaching".[17]

Connecting protected area management and the fight against armed groups, terrorist or otherwise, would be ineffective if the latter are not mainly financed by the illegal exploitation of natural resources, and if other stakeholders are involved to a greater extent.

Arms as evidence

Can research into arms and their trafficking make it

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13 Ibid.; National Geographic, 2015.

14 Lombard, 2012, p. 236.

15 Haenlein et Smith, 2016.

16 Ibid.

17 Moritz et al., 2017.

possible to have a better idea of who is responsible for the exploitation of wildlife? Arms and ammunition – both captured and abandoned– are one of the ways of identifying those responsible for the illegal exploitation of natural resources.

In recent years, more precise information on arms flows has been made available through research (arms tracing) carried out by United Nations panels of experts or monitoring groups in charge of controlling the application of sanctions regimes, including arms embargoes, decided by the Security Council. A lot of information has also been disclosed by research organisations such as the Small Arms Survey or Conflict Armament Research.[18] The examination of the serial numbers and the dates stamped on the arms and the ammunition, followed by correspondence with States and private companies, provide tangible proof of the support given by certain States and companies to armed actors, and information on the loss of arms by national or international security forces (peacekeeping missions by the United Nations and the African Union). Research into ammunition appears particularly interesting insofar as even local armed actors, with limited numbers, and including poachers, seem to use significant quantities of ammunition, and are constantly asking for supplies. Comparisons between serial numbers on a large scale also seem useful for establishing links between actors who are, in some instances, distant in geographical or political terms, and sometimes allow for quantitative estimates. However, research into arms also appears to be of limited use without a detailed analysis of the context. Military events such as the brief seizure of power by the Séléka rebel coalition in the CAR, or the new civil war in South Sudan, have been marked by significant redistributions of arms between different actors. Given the widespread illicit movement of arms across the African continent, arms experts also regularly call on the users of their data, including States, international donors and the managers of protected areas, to exercise a certain degree of caution.

Unless poachers are captured alive, the arms and ammunition they abandon on the sites where they carry out their operations are sometimes the best, or even the only, elements for identifying them and determining whether they are members of government forces or not. It is important to remain prudent, because arms and ammunition seized from poachers are only limited

samples, in terms of those taken from armed groups.

Based on the seizures carried out in several different countries in Sub-Saharan Africa, we can first of all state that, even if poachers have "modern" arms and ammunition, these weapons appear much older than the equipment used by armies and armed groups. The Sudanese government militia fighting in Sudan have weapons manufactured far more recently than those used by the Sudanese poachers who operate on both sides of the Sudanese borders.[19] This means that the idea of massive deliveries organised by States for poachers, as has sometimes been suggested in the case of the Sudanese poachers operating on a cross-border basis, seems unlikely.[20] These poachers could have obtained their ammunition through local and regional non-State arms trafficking networks rather than directly from the Sudanese ammunition reserves and production, which is aimed at the Sudanese regular military and paramilitary forces and at allied armed groups.[21]

Whilst the study of the arms and ammunition seized from poachers tends to put the role attributed to the Sudanese government into perspective, it does suggest that the regular forces of other States could be just as heavily involved (directly or indirectly) in the illegal exploitation of wildlife as non-State armed groups. Arms and ammunition from armed forces of States such as Chad, the CAR, South Sudan, Uganda, the DRC, and Mozambique have thus been found in poaching sites.[22]

Research into the arms used for the illegal exploitation of wildlife has only just begun. Conservation organisations could invest more in this research, develop their discussions with the community of arms experts, who could specifically train conservation staff in arms research. This would make the tracing of arms and ammunition a more efficient tool for designing solutions aimed at fighting the illegal exploitation of wildlife.

III. Nature conservation or safety for humans?

Some "protected area management" organisations claim to play a role that goes far beyond conservation. They transform the areas they manage into hubs for the

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18 Wright et al. 2015; Wright et al., 2015; CAR (Conflict Armament Research), *The Distribution of Iranian Ammunition in Africa*, December 2012, p. 19, http://www.conflictarm.com/wp-content/uploads/2014/09/Iranian_Ammunition_Distribution_in_Africa.pdf

19 HSBA, 2016, p. 4, fig. 1.
20 Vira and Ewing, 2014, p. 28.
21 Tubiana, 2017, p. 9.
22 Vira and Ewing, 2014.

security of individuals, sometimes replacing the State security forces, and thereby demand funding (often public) in order to provide these security services that do far more than simply protect wildlife. Some organisations do not hesitate to describe themselves as "conservation humanitarian actors" and "*de facto* suppliers of governance and security", and to claim that protected areas already act as "centres of stabilisation and security" in numerous regions of Sub-Saharan Africa. Protected areas in unstable contexts or conflict zones such as Zakouma National Park in Chad, Garamba and Virunga National Parks in the DRC, as well as Boma and Bandingilo national parks in South Sudan, are cited as examples by their managers and donors.

Can protected areas and their "rangers" really contribute to human security? Under what conditions, at what price and involving what risks? The idea that conservation can provide security and that protected areas can serve as hubs for security is attractive. However, a virtuous circle such as this can only be created under very special conditions, and the fact that protected areas exceed the strict conservation mandate, even in the name of the common good, has its dangers, particularly in conflict situations.

Historically, in Sub-Saharan Africa, nature conservation appears to have been more of a factor contributing to tension –if not a cause– between the authorities in charge, conservation projects themselves and local communities, and often between local communities and states. In a postcolonial context often characterised on the one hand by authoritarian regimes, and on the other by conflict between central governments and local insurgencies on the edges, protected areas, often inherited from colonial powers, have been established and managed without consulting local populations and without their participation. Park authorities are extensions of states, rather than local communities. As a result, protected areas and their staff have become stakeholders in conflict and have often been the targets of insurgent reprisals, for example in Chad and Niger.[23] Protected areas can also be established on traditional land expropriated from local populations (from a local point of view, not unlike the grabbing of land for industrial farming) and thus cause conflict over the use of land and natural resources, including water resources. This has occurred in the Sahelian or Saharan areas of Chad and Niger, when shepherds have been denied access to strategic water points in protected areas. The conflict

does not necessarily involve direct violence against the park's staff or materials, but is reflected in attacks against the natural resources themselves (the poaching of emblematic species, the felling of trees, fishing and farming in the protected areas), which justify the "protection" of the area. Thus, natural resources are no longer exploited in order to provide food or financial profits, but instead so as to destroy them in the hope that the protected area will no longer have a *raison d'être* and will be eliminated, or else in order to create a rebellion against the protected area, as some authors observed in Virunga National Park and in Mozambique.[24]

Rangers in protected areas can however sometimes play a part in human safety by taking up the role of the army or the police, notably in isolated areas where these forces are under-represented or too far away. Nevertheless, this can only involve small areas and particular contexts, which are precisely not contexts of conflict but rather those of peace with state stability and conservation projects. This may have been the case, for example, in the parks in northeastern CAR between the mid-1980s and the end of the 1990s. At the time, despite the structural weakness of the State, the area and the conservation projects experienced their period of greatest stability, both in terms of security and external funding for conservation. However, in hindsight, this period only seems like a pause preceding the waves of insecurity and conflicts that started at the beginning of the 2000s. Meanwhile, conservation funding is decreasing and the projects, which are themselves subject to insecurity, can no longer claim to play a role in providing security.

The decade from 2002-2012, in northeastern CAR, is an example of the way a conservation project that up until then helped provide security can change abruptly and turn into a major, indirect cause of insecurity. This was due both to exogenous factors that go far beyond the scope of the conservation project, including the incursions of Sudanese militia and poachers, and to factors endogenous to the conservation project and its financial instability in particular. These are two reasons why, since the 2000s, rangers or former rangers (numbered at between 100 and 200), trained and equipped thanks to funding from the European Union, but weakened by the instability of their jobs, have joined successive Central African rebellions. In December 2012, with their military experience, these rangers, accompanied by defence militia who had also been encouraged by the conservation project to

23 Tubiana, 2007; Bourgeot, 1990.

24 Marijnen, 2018; Verweijen and Marijnen, 2018.

take arms against foreign poachers, formed the initial core group of the Séléka rebel coalition. They rapidly took control of northeastern CAR, including the bases of the project and the hunting zones, by recruiting more rangers (27 joined the Séléka between the end of 2012 and the start of 2013). The presence of rebels hampered conservation efforts in the region, but above all the insurgents, including the former rangers, looted and destroyed the infrastructure of the conservation projects and targeted the rangers considered loyal to the government. Furthermore, whilst some of them seized control and looted the confiscated ivory stocks in the capital, others, who remained in the northeast, turned to poaching.

When the wider security context deteriorates abruptly, even protected areas that were to date presented as "islands of stability" cannot remain impervious to external events. Irrespective of their loyalty to conservation, rangers and other local employees in the protected areas are, in the case of ethnic conflict, on the one hand potential targets for members of rival communities, including their own colleagues, and on the other hand under pressure from their respective communities and may feel obliged to take part in the conflict. In addition to the transformation of the rangers from northeastern CAR into insurgents, in the same period this was also the case of the wildlife wardens in South Sudan. As mentioned above, since 2005, different South Sudanese armed groups have been integrated into several regular forces, including a wildlife service that now comprises 16,000 men. In December 2013, when violent confrontations broke out between the Dinka community (loyal to the ruling power) and the Nuer community (joining the armed opposition), the members of these different forces split along ethnic lines and fought against one another or attacked civilians. Initially formed to neutralise armed groups whilst at the same time protecting wildlife, the South Sudanese wildlife service, like other forces, thus became a factor of insecurity both for the civilian population and the wildlife itself, since the new civil war favoured an expansion in poaching, in particular by the government forces, but also the wildlife wardens. Before the explosion in December 2013, Boma National Park was the site of the rebellion of the local Murle ethnic group, the repression of which by government forces had led to the execution of the director of the park and six rangers, all belonging to the Murle community. From December 2013 on, the protected areas and their staff were involuntarily viewed as stakeholders in the broader conflict and could no longer claim to play a stabilising role.

Even in more stable contexts, it is not always easy for protected areas to make a positive contribution to security. This is in particular linked to the fact that the rangers in protected areas are not necessarily better in terms of behaviour towards the civilian populations and respect for human rights than other forces. Some can be seconded from other regular forces, or be trained by officers from the latter, or else be former members of non-State armed groups. Mimicry between the rangers and other regular forces is often encouraged because a number of rangers would like to form part of these other forces whose status is often higher than that of a ranger in the eyes of the local society, both symbolically and in material terms: job security, right to a pension, but also greater likelihood of collecting abusive taxes and other practices related to corruption. The rangers sometimes reproduce physical violence towards the populations or other abuse (taxes), which are often the prerogative of the armed forces in Sub-Saharan Africa. Moreover, even if the protected areas often try to "re-train" their staff, notably to fight against corruption, their rules of engagement in the armed fight against poaching often allow for a certain degree of violence towards civilian populations, in particular towards nomadic shepherds. Often armed and transboundary, the latter are, in many contexts, systematically treated as "foreign poachers", justifying the use of greater violence towards them. However, the abuse towards civilian populations, local or otherwise, has always had clear negative effects on protected areas. Henceforth, considering protected areas as enemies, civilian populations have frequently become mobilised, even including the use of militarily action, against conservation. Some have supported or joined groups of poachers or rebel groups who have then taken protected areas as targets, justifying their attacks by the alignment of rangers with State forces or foreign forces.

A number of protected areas have however succeeded in counterbalancing the violence of the "conservation army" and their proximity with the States by the establishment of development services and projects benefiting local communities directly. Clearly, when the "community conservation" projects have been effective, they have contributed indirectly to local stability and security. However, these projects can only involve limited areas and populations, *de facto* creating the illusion of service and development islands, which in reality cannot be impervious to the underdevelopment that surrounds them. Furthermore, by replacing the role of the State authorities for periods that go beyond emergencies, the protected areas' investment in services

and development can in the long term worsen the absence and distancing of the State, indirectly justifying future insurgencies.

Development services and projects are, just like conservation actions *stricto sensu*, particularly vulnerable to the context. They can contribute to the prevention of park-community conflicts, and to reconstruction in post-conflict situations, but they are generally interrupted during the conflicts themselves. In these contexts, protected areas sometimes tend to respond to humanitarian needs caused by the conflicts by delivering emergency aid. In 2017, in eastern CAR, around 300 people, fleeing from the FPRC and the anti-Balaka rebels, took refuge in the central part of the Chinko protected area: the organisation responsible for managing the site, African Parks, then tried to respond to this displacement of the population by distributing food and water, and called on funding to address these needs. The idea was also to avoid the displacement of people –as has often been the case elsewhere, notably in Garamba and Virunga National Parks in the DRC– using the wildlife and flora in the protected area as sources of food.[25] However, interventions of this type remain limited, in particular because, although some conservation organisations have become involved in development issues, they rarely have the skills required to respond to humanitarian emergencies.

Over the last few decades, one of the main causes of insecurity in Sub-Saharan Africa appears to be lack of employment for young people. In the context of demographic explosions, the youthfulness of the population and rural or international exoduses in search of work in urban areas, a number of young unemployed people often join armed groups. Membership in these groups is not a job, but gives them access to what is seen as a potentially lucrative "profession".[26] However, in numerous remote zones, protected areas are often amongst the few possible employers. The jobs created are perhaps the most effective, indirect contribution to the maintenance of local security. On the other hand, conservation is rarely synonymous with "job security". As recalled in the case of the CAR mentioned earlier, notably regarding unstable funding, protected areas are often forced to lay off staff. Criticised for many other reasons, in Sub-Saharan Africa the state responds more to the demand for stable jobs.

Another limitation of the protected areas' contribution

to security is that it depends more on political processes that go far beyond the mandate and geographical framework of protected areas. Conservation organisations are rarely able to influence political processes. This happened, for instance, in northeastern CAR, where in 2006-7 the conservation project was able to play a one-off, informal role of mediator between the government and a rebel group in the area, helping them to reach a peace agreement. Subsequently, in 2007 and 2009, the rebels intervened to provide military support to rangers against Sudanese shepherds. The limitations of these kinds of intervention are clear: they can only occur as a result of personal links between employees (local or international) in a protected area and the parties in conflict, links that can be a double-edged sword. On the other hand, as in all types of mediation, the security and political risks in the case of failure, of a lack of neutrality or even a simple misunderstanding, can prove enormous, with the dissatisfied combatants easily being capable of targeting the protected area.

The most obvious limitation in terms of the security role played by protected areas is that they themselves are also in competition or conflict with other projects, including international projects, or endowed with international funding. Those other projects often benefit from more funding and political support that make them a priority over conservation. This is also the case with projects involving the development of agriculture, livestock rearing, roads and numerous others that involve territorial expansion as well as an increase in human populations and numbers of livestock. Just like conservation, these projects are not neutral in terms of security and can contribute to both security and insecurity. Be that as it may, it should be noted that conservation projects rarely have the same level of priority as others in the minds of local or international decision-makers.

However, it is precisely the most internationalised donors who are behind the very idea of a possible contribution to security by protected areas. This entails less actual capacity on the ground than a budgetary sleight of hand, which for a "good cause" –that of conservation– allows conservation to be funded by taking money from the security kitty, which has become the top priority. The donors are also behind an expansion of the public-private partnership (PPP) model, seen as a solution for redressing protected areas considered to be bankrupt (notably because of past conflicts) and seen as being better able to ensure the potential security around protected areas. However, whilst the model may sometimes turn out to be effective (notably in terms of

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25 See https://africanparksreports5.org/operational-updates/
26 Debos, 2013; Lombard and Tubiana, forthcoming.

the management of allocated funds) and more able to ensure financial stability, human security on the ground is another matter. Nothing indicates that this model is better suited to ensure it than other less fashionable ones, provided the same financial stability is guaranteed. In fact, no more than any others, this management model is a means of providing values and rules truly capable of safeguarding protected areas from the influence of a violent security context. And all the more so because, whichever model is adopted, armed conservation, when poorly managed, risks counterproductive violence and collateral victims.

IV. Relations with security stakeholders

What relations can protected areas and their managers have with the local and international security stakeholders? What are the risks and which rules should be followed? From their promoters' point of view, the protected areas' possible security role must involve close cooperation with State security actors, who are considered "legitimate". Historically, the protected areas in Sub-Saharan Africa have from the outset been linked to State armed forces: not only do rangers in principle constitute one of the components, but members of other units can also become protected area rangers, and joint operations can be carried out.

The current "success" of Zakouma National Park, in particular, is often attributed to the support provided to the park by the President of Chad, Idriss Déby, a career military officer who has been in power since 1990. This support has given rise to collaboration between the park rangers and other better-equipped armed forces. This is notably the case of the National and Nomadic Guard of Chad [*Garde Nationale et Nomade du Tchad*, GNNT]. Small units of the GNNT have been supplied with motorbikes and receive *per diem* payments from the park in return for patrolling the borders of the protected areas with a ranger. However, Chad's armed forces have been charged with numerous cases of abuse, including poaching and human rights violations. For these reasons, they are extremely unpopular with the local population, particularly the communities living around Zakouma National Park. The forces known to be abusive include the GNNT, but also a paramilitary force specifically dedicated to environmental protection called the "Mobile Brigade", the Water and Forest Inspection Agents and false agents colloquially known as "bogobogo". These forces and others use environmental laws to extort unfair taxes or fines from local communities, in particular peasants accused of felling trees and livestock farmers. The fact that these forces are associated with conservation does not help make them any more popular. In 2018, precisely after complaints from the populations about corruption among the Water and Forests Inspection agents, the Chad government brought together these agents along with the Mobile Brigade forces and protected areas rangers in order to form a new Forest and Wildlife Guard comprising over 2,000 men, capable of deploying well-equipped units in protected areas. However, there is no evidence that the new force, whose commander, like many of those holding key positions within the armed forces, is a cousin of President Déby, is capable of bridging the ever-widening gap between the Chadian State and its population. This gap constitutes a persistent threat for conservation that is perceived as much closer to the State than local communities, despite all the efforts aimed at achieving greater community participation.

In the DRC, Garamba National Park also considers its collaboration with the army a success and has signed a Memorandum Of Understanding with them. Since 2015, this has allowed them to set up joint patrols within the park, although before then, the armed forces were considered one of the primarily responsible for the illegal exploitation of natural resources in the region.

In the CAR, due to the context of war, the conservation project, unlike those in Zakouma and Garamba, is described as a failure. However, this context also imposed a *modus operandi* that could prove to be more sustainable than the proximity with the armed forces observed elsewhere. Since northeastern CAR has been under the control of a rebel group since 2012, it has only been possible to reintroduce the conservation project progressively –essentially starting in 2017– by negotiating its entry both with the Bangui government (rule by law) and the rebels (*de facto* authority on the ground), and by demonstrating neutrality between these two centres of authority. Thus, in 2017, almost fifty rangers led by a "senior national park warden"["*conservateur national*"], who is in fact a State official with judiciary police powers, resumed their patrols. These are the only people to carry arms in the region apart from the rebels. The FPRC appear to tolerate their presence, because in the past, conservation projects were one of the only sources of income and one of the few employers contributing to a rather positive, if not nostalgic, perception of conservation by local communities. On both sides, conservation is also seen as a useful link between the distant government in Bangui and the rebel zone.
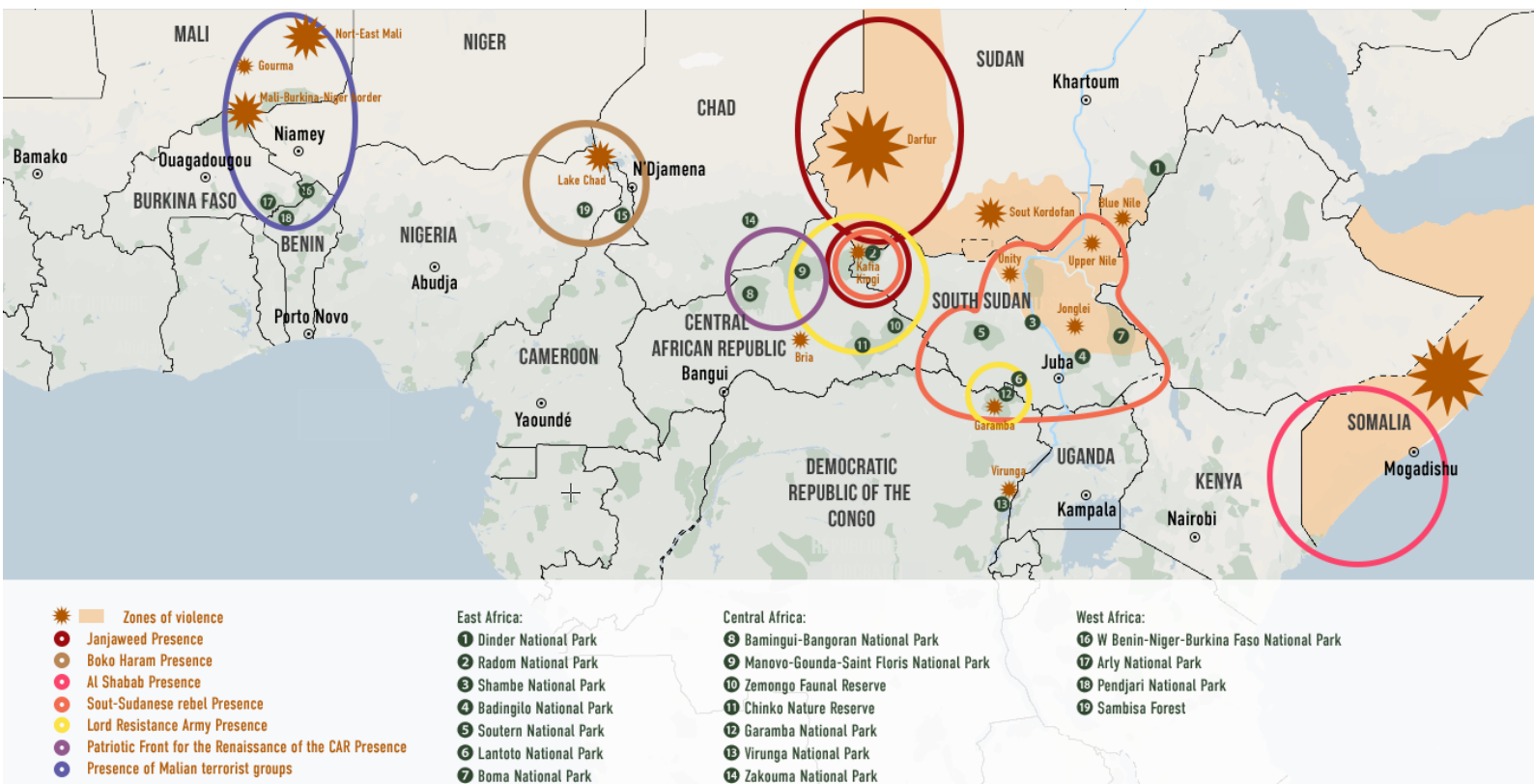
Eastern CAR and northeastern DRC have also been a testing ground for a more innovative "doctrine", namely protected areas' cooperation not only with State armed forces but also with international forces. This doctrine has been justified by the extension of the Ugandan LRA operations to the CAR and the DRC, and in response, by the deployment of international forces, in particular the Ugandan army, overseen by the United States Africa Command (Africom). It is above all Africom that has reached out to conservation organisations, by including the fight against the illegal exploitation of natural resources in its priorities. With conservation organisations being one of the few international presences in the region, and protected areas being the LRA's operations areas and targets, the conservation managers could, from a US point of view, prove a useful source of information on the movements of Ugandan rebels. Some conservation areas have openly exchanged information with Africom. However, nothing indicates that this information played an important role in the fight against the LRA, and the managers of protected areas are regularly presented as powerless in the face of a complex political and security context. Precisely perhaps because of the limited value of their information, some have also bemoaned unbalanced exchanges, with the American forces appearing more interested in receiving

information than in providing it.

The LRA was also a good starting point because the group was not a classical insurgency but directly threatened the protected areas and the wildlife itself, and could thus be presented as a common enemy of conservation and US intervention. Since, due to its extreme violence and sectarian aspect, the LRA is equated with a terrorist group, cooperation with this rebel group also paves the way for exchanges in regions where jihadist groups operate. Some conservation organisations thus consider it normal to exchange information with State armed forces and with international forces, whether it be Africom, other western forces deployed in Africa or United Nations peacekeeping missions, and they bemoan the fact that these forces are not always prepared for reciprocal exchanges.

It is interesting to note that, in comparison with humanitarian organisations operating in the same conflict zones, conservation organisations are clearly less reticent –or less prudent– when it comes to cooperation with State or foreign forces. Humanitarian organisations have no doubt been confronted with the risks involved in such exchanges for a long time now. Whilst terrorist groups may constitute a special case possibly justifying cooperation, in many African contexts, non-State armed groups and even some

Map of areas of conflit mentioned in the report.

Zones of violence
- Janjaweed Presence
- Boko Haram Presence
- Al Shabab Presence
- Sout-Sudanese rebel Presence
- Lord Resistance Army Presence
- Patriotic Front for the Renaissance of the CAR Presence
- Presence of Malian terrorist groups

East Africa:
1. Dinder National Park
2. Radom National Park
3. Shambe National Park
4. Badingilo National Park
5. Soutern National Park
6. Lantoto National Park
7. Boma National Park

Central Africa:
8. Bamingui-Bangoran National Park
9. Manovo-Gounda-Saint Floris National Park
10. Zemongo Faunal Reserve
11. Chinko Nature Reserve
12. Garamba National Park
13. Virunga National Park
14. Zakouma National Park

West Africa:
16. W Benin-Niger-Burkina Faso National Park
17. Arly National Park
18. Pendjari National Park
19. Sambisa Forest

terrorist groups, putting forward local demands, are not necessarily considered enemies by local populations. Meanwhile, State forces and international forces united against non-State armed groups are often considered enemies or even occupying forces by local populations, and are frequently accused of deliberate violence or collateral damage to civilian populations. By becoming allies, the managers of protected areas take sides, not only in the conflict between governments and armed oppositions, but also in the frequent conflict between States and local communities. The risk in becoming stakeholders in a conflict is to be considered a legitimate target by the non-State armed groups, and an enemy by local populations, irrespective of the efforts carried out elsewhere to help them.

Conclusion and recommendations

This study of the protected areas in zones of conflict or great insecurity invites us to put the influence of conservation (in Sub-Saharan Africa) into perspective. Even when, on the map, protected areas occupy considerable swathes of land, it is very difficult for conservation to have a really positive influence on the security context, whilst the security and political contexts have considerable impacts, generally negative, on conservation.

Hence, when protected areas are presented as security "hubs", it is less a matter of describing an ideal reality on the ground than of adapting to the alarming reality of developments in financial priorities. For a number of donors, especially the European Union and the United States, conservation seems to be a declining priority, if indeed it ever was one at all. The same can be said for local development and increasingly, security, in the strictest sense of the word. Above all, in Sub-Saharan Africa, the fight against terrorism and migration is sometimes hastily thrown together by the proponents of a security-based approach. Faced with this threatening reality, conservation organisations or their defenders try to ensure the continuity of the funding (often public) by presenting themselves as useful to security, even to the fight against migration, sometimes by resorting to a significant simplification of reality.

In recent years, these arguments have often gone hand in hand with the defence of a private-public partnership (PPP), which according to its defenders would be the only way of allowing protected areas to play a positive security role. If this model makes it possible to ensure private funds complement public funds by replacing them when the latter are lacking, it will at least have the specific advantage of allowing conservation organisations or projects to let go of a discourse that validates the security-based approach of the donors for whom protected areas as such will never be an absolute priority. More specifically, the PPP model, whilst it ensures more continuous funding than other models, can allow for the long-term sustainability of projects and jobs, and thus address a major cause of insecurity: job instability in Sub-Saharan Africa. We have seen that this situation directly justified the continued existence of armed groups which constitute an outlet for young people searching for income-generating activities. However, apart from this crucial point, nothing indicates that the PPP model is more capable than others of having a positive influence on the security context. Hopefully, regardless of the funding model they adopt, all protected areas try to ensure the sustainability of their funding and their human resources.

The experience of the management of protected areas in situations of conflict also shows that, irrespective of the model adopted, many risks are involved. The danger of insufficiently controlled violence that can cause collateral victims is inherent to "armed conservation". This danger can be reduced by strict rules of engagement for protected area rangers, with the priority being given to non-violent, negotiated and preventative solutions, and by the re-balancing of the fight against poaching through non-violent community conservation. In conflict zones, conservation organisations and projects must as far as possible try to have balanced relations with the different parties (government, armed opposition, various communities), by claiming neutrality from political, ethnic and religious standpoints, following the example of humanitarian organisations. Neutrality is not only a moral position, it enables the development of contacts with local community and political and security stakeholders of all persuasions, in order to ensure local membership that will survive crises. Even if it would be a mistake to think that protected areas can deal with conflicts, more neutral mangers are better able to respond to national and regional security crises. Neutrality does not mean isolation either. On the contrary: whilst the simple allocation of security funds to protected areas is unlikely to help security, improved coordination of security efforts, political processes, economic development and conservation is vital in order to avoid occasionally competing programmes clashing with one another.

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