

Technical Report

Preliminary Assessment of Upemba National Park
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Park Overview:

Upemba National Park is located between Latitude 9°5' and 8°45' South and Longitude 25°50' and 27°10' East. At the time of its creation on the 15th May 1939 the park had a surface area of 17,730km² and was the largest park in Africa. In July 1975, the limits were revised and today the integral park has an area of 10,000km² with an annex of a further 3,000km².

Upemba National Park consists of a number of distinct bioregions, which includes a savannah plateau (1,400m-1,800m) with rocky outcrops separating the affluent of the Lufira river which drops down into the Kamalando depression and from there into the marshes and lakes (585m) of the Upemba wetlands. In the north east the park is dominated by the Kibara plateau with its wooded foothills and high altitude savannah plateau, the centre by the basin of the Lufira from the Kiobo waterfall to the marshes that border the lake, and in the south by a straight and long grassy plateau from Kayo to the Lufira. The park's deep gorges, cliffs and waterfalls and its marshes and lakes form a striking contrast to its immense expanse of savannah, making arguably one of the most magnificent landscapes in the Democratic Republic of Congo.



FZS strategy:

Within FZS' portfolio of project areas, wetlands are currently under-represented, which makes Upemba an interesting prospect. The rivers, lakes and marshes of Upemba National Park form the source of the Congo River and represent one of the most important wetland areas in Africa. Looking at the range of habitat within DRC's protected area network, Upemba is quite unique and extremely important, and ranks 2nd of 125 different Protected Areas within this Eco-region for amphibian irreplaceability. Furthermore, population pressure and agriculture is low around the periphery of the park boundaries.



Funding opportunity:

The ICCN has informally approached FZS with a view to being a possible partner on an EU funded project to provide support to Upemba National Park. The size of the grant remains unclear, but is likely to be in the region of 2-4 million Euros over a three-year period. There are also a number of more ethical mining companies who appear to be willing to invest in conservation initiatives as a way of offsetting the environmental damage caused by mining activities and promoting greater environmental awareness and responsibility within the mining sector as a whole. Such support would probably be coordinated by the NGO PACT, who would be willing to act as the keystone facilitator.

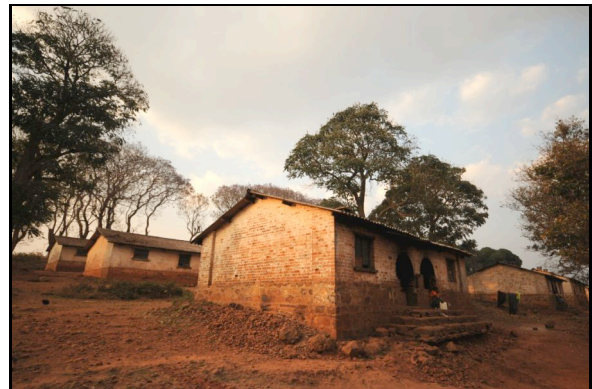
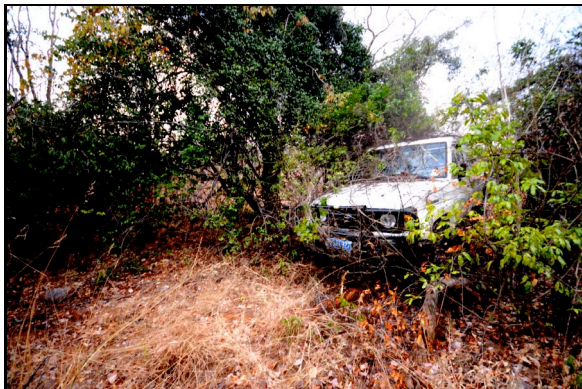
Human Resources:

The park is divided into two sectors, the northern sector has 52 rangers and 15 administrative staff, and the southern sector has 33 rangers and 16 administrative staff. Approximately 1/3 of the rangers are not officially recognised by the ICCN, and while these rangers represent the younger and arguably more physically capable of the ranger force, it must also be noted that they were recruited on an *ad hoc* basis in the absence of any official recruitment criteria. Officially, the only function of the rangers in Upemba is law enforcement. There are no monitoring or research activities, no community conservation initiatives, no tourism related activities and no park ecologists.



Infrastructure:

The ranger accommodation within the northern sector headquarters of Lusinga was initially built in 1945 and improved and expanded in 1958. Although for the most part structurally sound, the buildings are in a state of disrepair due largely to the lack of proper care and maintenance as well as gratuitous destruction at the hands of the Mai Mai in 2004. There was a 20kw hydro-electric turbine supplying electricity to the station using water from the source of the Lusinga river. Although the water channels are still in good condition the turbine has not functioned for many years. All buildings, including ranger accommodation, administrative offices, the garage and tourist lodges, need renovating. Most of the roads within the park are in relatively good condition except those lying within forested areas, which have now become heavily overgrown with trees and vegetation. The road leading to the park between Kiobo and Lusinga is in a bad state of disrepair and remains impassable during the rainy season. All bridges within the park have either totally collapsed or can no longer be used due to major structural damage.



Health and education:

There is no health centre at the Lusinga station, although one is under construction at Mutwaba with support from the Catholic Church. If there is a need for medical intervention, a sick or injured person has to travel 45km to Mutwaba, a two-day walk if no other transport is available. There is no school at Lusinga and the 103 children of primary school age are taught in a makeshift schoolhouse within the deserted Chief Park Warden's house. Once the children reach secondary school age, they are sent to live with friends or families in nearby villages where they have greater access to better schools.

Security:

Due to the presence of a significant number of Mai Mai within the park between 2004 and 2006 the ICCN could only control around 25% of its area. On 28th May 2004, Lusinga Station was overrun with Mai Mai who, during a five hour rampage, caused considerable structural damage to many of the stations buildings, looting and pillaging for food, clothes and equipment before leaving with three wives and four children taken as hostages. One of the wives could not keep up and was killed. The

remainder managed to escape after two or three months and eventually made it back to the station. In response to the attack on the station, over 100 FARDC soldiers were brought in from the 6th Military Region and co-occupied the station for 24 months until such time as the Mai Mai were moved out of the park to Mutwaba, from where most were repatriated to their local villages. To date 2-300 Mai Mai remain in Mbwe village in a small area in the northern sector of the park. Apparently they moved there in 1993 following a declaration by the Governor of Katanga that they could re-claim their ancestral land. To date the situation has not been redressed, but the ICCN confirms that relationships with the Mai Mai are good and that they are in regular contact with them.

Habitat and Fire:

The general habitat appeared to be largely intact, although further exploration is needed around the park limits. What was striking however was the extent to which controlled and uncontrolled burning of grassland was taking place. What was once savannah has now become a vast expanse of small green herbaceous shrubs and by mid-July 2008 only an estimated 5-10% of the plateau comprised unburned savannah grassland. The reason given by the ICCN for such extensive burning was to provide improved grazing for the wildlife, but the small group of poachers we came across confirmed that they lit fires regularly to facilitate the hunting of rats and other small mammals. It is also possible that the fires help poachers drive what larger wildlife remains into traps or areas where they can be more easily poached, and the lack of tall grasses over huge expanses of the park makes the remaining wildlife extremely vulnerable to poaching due to improved visibility.



Mining:

Mining appears to be widespread throughout the province of Katanga and is the principle economic activity within the region. We have been informed that there are 9 artisanal mines in the southern sector of the park with between 30 and 60 miners digging for coltan and casiterite.

Wildlife and Poaching:

We saw several small herds of zebra, a few isolated pairs of oribi and several troops of baboons. All had a large flight response and would only come to a stop when in excess of a kilometre from us, regardless of whether we were on foot or in a vehicle. The low numbers are linked to extensive poaching which appears to be systemic throughout the park and often carried out with the complicity of certain members of the ICCN. The presence of military and Mai Mai within the park has also taken its toll. There appears to be a well-established bushmeat trade operating within the park whereby corn flour brought in by bicycle is exchanged for the same value in meat, which is then sold for exorbitant prices in the restaurants of Lubumbashi.

The park's resources are now so depleted that poachers are turning away from their usual prey species and are going after rats. Such a shift is symptomatic of an area that is over-hunted and a number of studies have shown shifts from hunting larger mammal species such as duiker and monkey, to hunting rats as a direct consequence of population crashes brought about by uncontrolled and unregulated harvesting of prey species.



Fishing:

There are ten large fishing lakes subject to legal exploitation of their resources. Fishermen have formed local cooperatives and they fish between the months of March and November but how well this is enforced is difficult to assess. There is evidence to suggest that fishing continues throughout the year and that the use of illegal nets is common practice. There are estimates of between 4,000 and 10,000 fishermen using the lakes with each fisherman paying 10,000 CFR a year (approx 20 USD) for the right to fish. There are also 4 fishing lakes in the Hunting Reserve controlled by the northern sector of the park where fishermen are charged 5,000 CFR a year for fishing rights. Fishing is largely for Tilapia and Capitaine but other than in the 'off-season' there are no further restrictions and nothing is known with regards to the lakes' carrying capacity, optimal harvesting yields or current off-take levels.



Self-financing mechanisms:

Receipts from fishing taxes represent the park's only source of finance for patrol rations and other management costs. Of the monies collected, 40% goes to the General Direction in Kinshasa, 30% goes to the Provincial Direction (4 person administrative office) and 30% goes to the Park (approximately 115 rangers).

Tourism:

There are good tourism opportunities but at present none of these could be linked to wildlife viewing. The landscape is however quite breath-taking and the first lodge is already under construction at Kiubo at the foot of an impressive waterfall. Thousands of South-African miners working on some of the larger mining sites have limited recreational amenities and would welcome the opportunity to get out of the town to spend the weekend in a nearby park. A lodge is currently under construction in the hunting reserve at Kiubo to cater to this potential market, although there are a number of outstanding

issues that need to be addressed concerning proper recognition for ICCN's authority by Congo Safari, the company who is managing the project.



Other Players:

Other than FZS there are three players who have also shown an active interest in Upemba National Park - namely WCS, APF and BAK. WCS has secured funding from USFWS for a wildlife census later this year, but to date they do not appear to have secured funding for further activities. This is likely to be subject to the findings of the census. APF are interested although hesitant, particularly following a difficult start in Garamba National Park, although now back on track. They have submitted a note of interest to the EU in the hope of attracting some funding, but to date have received no response. BAK, who greatly facilitated our mission, both logistically and in terms of making some important contacts, have a preliminary contract drawn up expressing their intention to manage all protected areas in Katanga, which has been signed by the Minister of the Environment and the ICCN. Given BAK's limited experience in protected area management, Michel Hassan (Director of BAK) has stated that should there be an official agreement giving BAK management control of the parks, he would consider stepping back and letting FZS or APF carry out the day-to-day management of the park with ICCN.

Recommendations:

There is no doubt that a project in support of Upemba National Park would which neatly compliment FZS' Africa portfolio by addressing the needs of an important wetland area. However, given the fact that the total rehabilitation of both the park and its natural resources is required, an activity that will take many years to achieve and will come at considerable financial costs, FZS needs to examine how well such an undertaking will fit in with its core conservation activities, and put such an investment in the context of the more immediate conservation requirement of a number of other parks in DRC that still retain significant levels of biodiversity, species richness and endemism.

Should FZS consider taking on a project in Upemba National Park in support of the ICCN, there are a number of areas that should be addressed as a matter of priority:

1. The restoration and rehabilitation of critical infrastructure; buildings, power, communications, roads and transportation.
2. The establishment of park management systems for the effective planning, implementation and monitoring of conservation strategies.
3. The establishment and implementation of participatory management structures governing the fisheries.
4. The translocation and reintroduction of key wildlife species (once the park has been adequately secured and a proper management structure is in place), such as zebra, buffalo and a number of antelope species. A second translocation phase should address the reintroduction of black rhinos, and extirpated carnivore species such as wild dog, lion and leopard.