

BEFORE THE FLOOD

How an 'illegal' dam project could destroy forests and biodiversity in one of Congo's oldest national parks

December 2021



KEY FINDINGS

- > 160-megawatt Sombwe Dam in the Democratic Republic of Congo would be “in violation of the law”, as it lies in a national park, says EU ambassador’s letter seen by Global Witness.
- > The initial environmental assessment for the dam was ‘seriously flawed’, claims leaked EU-commissioned study.
- > Businessman who controls 49% stake was previously embroiled in controversial transactions with Congo’s central bank.
- > Dam builder PowerChina has previously been backed by international banks including China Construction Bank, Standard Chartered and Société Générale. Major US investment houses including BlackRock and Vanguard hold shares in the company.
- > By submerging tracts of forest, the dam could increase overall emissions equivalent to 1.3 million tonnes of CO2 by the end of the century – more than the emissions created by burning 3 million barrels of oil, undermining the positive impact of what might otherwise appear a green, renewable project.
- > The project comes against a backdrop of recent high-profile pledges on deforestation, emissions and biodiversity made at the COP26 climate summit in the UK and the 2021 UN Biodiversity Conference in China.
- > Global Witness calls on dam builder PowerChina, and on banks that provide it with billions of dollars in financing, to push for review of the Sombwe project due to environmental risks.

We approached subjects for comment prior to publication; their responses are included where appropriate throughout this report. Following publication Kipay Investments made a further statement in response to our report which can be found [here](#).

INTRODUCTION

A \$500 million Chinese-backed dam project could jeopardise forests and wildlife conservation efforts in a major national park in Democratic

Republic of Congo (DRC), according to leaked reports and diplomatic correspondence seen by Global Witness. The dam aims to provide energy for international mining companies in DRC’s copper and cobalt belt.

World leaders, including China, the DRC, the EU, UK and US, committed at the COP26 climate summit to reverse forest loss by 2030. The summit also saw commitments by banks, such as Standard Chartered, to achieving ‘net zero’ by 2030 and a \$1.5 billion donor commitment to protect the Congo Basin forests and peatlands. China recently hosted the UN Convention on Biodiversity, where leaders pledged to improve the effectiveness of protected areas and reverse the current loss of global biodiversity by 2030.

But developments on the ground in DRC’s Upemba National Park suggest such declarations could turn out to be little more than hollow promises. They also raise troubling questions about how serious companies and their



Upemba National Park has faced the challenges of neglect, violence and poaching since its creation in the Belgian colonial era. *KD Dijkstra*

commercial banks truly are about reducing the impact of their investments on forests, emissions and biodiversity.

Upemba National Park, in south-eastern Democratic Republic of Congo (DRC), is almost four times the size of America's Yosemite National Park. It is home to a dwindling population of [rare species](#), including savannah elephants, yellow baboons, southern ground hornbills and DRC's last remaining zebras. Engineering colossus PowerChina – one of the world's biggest dam builders – is due to complete the 160 megawatt [Sombwe Dam](#) there by 2024. Large swathes of tropical dryland forest, known as [miombo](#) woodland, would be flooded to create a reservoir up to one billion cubic metres in size. Situating the project within a national park appears to contradict DRC's [law](#) on conservation.

PowerChina is majority-owned by the Chinese state, but also receives underwriting and investment from commercial banks, including the UK's Standard Chartered and France's Société Générale, as well as a number of well-known Chinese [banks](#). Major US investment houses including BlackRock and Vanguard have bought stakes in it through the Shanghai Stock Exchange.¹ The hydropower giant is a key player in the [Belt and Road Initiative](#), China's project for creating a '21st century Silk Road' through massive overseas infrastructure investment.

PowerChina is partnering in the project with Kipay Investments, a company belonging to a well-connected Congolese businessman called Eric Monga. Between 2013 and 2015 Mr Monga was reportedly linked to millions of dollars of controversial [transactions](#) involving companies tied to associates of the country's former president, Joseph Kabila. Mr Monga and his company Kipay Investments have [defended](#) their environmental measures and claim the dam will

not be located in the park itself, but rather in a reserve next to it with a lower level of protection.

Global Witness has now plotted the exact location of the project based on official and company documents, throwing serious doubt on these assertions. Mr Monga got the green light from the Congolese authorities for the project after a seemingly truncated approvals process, clearing the way for him to strike up a deal with PowerChina, which gave his company Kipay 49% ownership of the entire project. Kipay is understood to be seeking further investors for the project, which is to be 70% [financed](#) through debt.

In Upemba National Park, wildlife populations are hanging by a thread, according to conservationists. The area's once-abundant wildlife has been devastated by successive waves of [poaching](#). The park's managers plan to reintroduce wildlife – first new elephant populations, and eventually the iconic black rhino. But its team of approximately 200 rangers are contending with a host of pressures. Militias have launched deadly and repeated attacks on them over the years; and there is opposition from within local communities, angered by the restrictions that conservation imposes on their right to farm and fish. Park rangers have faced antagonism from the military in the area, which has at times targeted rangers. Last year, an army captain was jailed for "threatening assassination" against the chief warden and his deputy after an [altercation](#) at a roadblock, bringing Upemba's tensions to public attention in DRC.

The Sombwe dam project intensifies these pressures and may pose the greatest environmental threat to the park to date, as well as undermining recent commitments by

¹According to the Eikon Refinitiv finance database.

governments and financial institutions to halt forest and biodiversity loss and reduce emissions.

DAM THREATENS INTEGRITY OF PARK - EU AMBASSADOR

Documents seen by Global Witness show that the EU - one of the biggest funders of DRC's national parks, including Upemba - has made a scathing assessment about the likely impacts of the Sombwe dam. A November 2020 letter from the EU ambassador to DRC, Jean-Marc Châtaigner, sent to the head of DRC's conservation authority *Institut Congolais pour la Conservation de la Nature* (ICCN), was accompanied by two EU-commissioned technical studies. These raise serious concerns over the proposed dam, to be located downstream of one of DRC's most dramatic waterfalls.

The reservoir for the dam - to be sited on the River Lufira, a tributary of the immense Congo - could submerge 48km² of forest and savannah, warned the 50-page review of a preliminary Environmental and Social Impact Assessment of the dam commissioned by Kipay Investments. The EU's review noted that the environmental assessment's "disregard for the national park status of the project site is an unacceptable omission". The review also warned the reservoir would block the annual migration of wildlife, which includes elephants and zebras, from Upemba and the neighbouring Kundelungu National Park. It said Kipay's environmental assessment was biased, "presents serious faults", and did not take into account the "potential permanent impacts of the dam (and) reservoir".

When contacted by Global Witness, Kipay's CEO Mr Monga said through a representative that the information relied upon by Global Witness was "completely biased". Kipay's concession agreement was "properly and lawfully entered into with the Democratic Republic of Congo", Mr Monga stated, adding that DRC's Energy Minister had confirmed this following the EU's study.

He said the environmental assessment reviewed by the EU's experts did not appear to be the correct version, stating that he had "no knowledge of this much-talked-about environmental assessment that has been wrongly attributed [to us]". He said that Kipay finalised its environmental assessment in February 2019, after the EU's review had been written.

Kipay's [website](#) says that it had a 'preliminary' environmental assessment approved by DRC's authorities in 2016.

When Global Witness asked to see a copy of the 2019 environmental assessment we were told by Mr Monga that it "belongs to the Congolese state". He also said that the area submerged by the reservoir would be smaller than 20km² - less than half the area predicted by the EU's study - and claimed that this would be outside of Upemba. Kipay says on its [website](#) it has also commissioned a new environmental assessment to be undertaken by a South African engineering firm.

PowerChina, which holds 51% of the joint [venture](#), has been silent on the environmental issues and did not respond to Global Witness requests for comment.

Neither Kipay nor PowerChina have publicly acknowledged that the dam would be within Upemba National Park. Kipay's August 2016 environmental assessment ignores the status of Upemba National Park, something the EU-commissioned review says is an "unacceptable omission" and the company has gone so far as to claim that the dam would not be within the park at all, but rather in an area between Upemba and Kundelungu National Parks. But Global Witness has mapped out the location of the dam site, as provided in documents prepared by Kipay's engineers, and compared them with the government's official boundaries of Upemba National Park. It seems beyond doubt that the dam and a significant part of the reservoir would be located within the park.



The Sombwe dam would flood a section of the Lufira valley, in southeastern DRC. *Ligne de Front*

In a June 2020 letter to campaign groups opposing the dam, Kipay defended its project, saying: “We believe that by expanding energy provision in our country, where 96% of the population has no access to electricity, [Sombwe] will in the long-term reduce poverty, create job opportunities, develop rural communities and, crucially, protect the natural environment.”

Ambassador Châtaigner told then ICCN chief Cosma Wilungula in his letter: “It is the biological and territorial integrity of the complex [Upemba and surrounding protected areas] that is threatened by Sombwe. As well as its illegal location within Upemba Park, which is against the Law on the Conservation of Nature, the Kipay project was conceived on the basis of an Environmental and Social Impact Study with serious faults.” Mr Wilungula was head of ICCN until August 2021 when he was suspended from his post, reportedly in connection with [corruption concerns](#).

The ambassador wrote that the EU wishes to continue funding Upemba, but that this “will only have a real impact if it is managed in a stable, sustainable manner and the integrity of the park isn’t threatened”. The EU is a [major donor](#) to Upemba and three other Congolese national parks. This is despite concern over violence by eco-guards against communities near the [Salonga and Kahuzi-Biega national parks](#), which has rocked DRC’s conservation

authority and caused some major donors to suspend funding to DRC’s protected areas.

It appears that viable alternatives to the dam site within Upemba national park may exist. A second document attached to Ambassador Châtaigner’s letter is a detailed, EU-commissioned study looking at alternative sites for the hydroelectric project outside the protected area. The report – produced by a consortium of consultancy groups that studied 23 potential hydroelectric sites – concluded that a collection of eight sites outside and to the west of the park could produce well over twice the amount of electricity planned at Sombwe, at a far lower cost per megawatt.

In September 2021 the Congolese human rights NGO Justicia also [warned](#) about the implications of Sombwe, stating that the project was “a real violation of the law” and “risks depriving many people living in the [neighbouring] territories of their main livelihood, which is fishing”. The following month a [letter](#) signed by over 200 Congolese and international NGOs denounced “illegal” encroachments on DRC’s national parks, citing Sombwe dam as an example.

Kipay’s CEO Mr Monga told Global Witness that the dam would help reduce DRC’s huge electricity deficit and bring “more security, access to water, better living conditions and healthcare” to those living nearby. He denied that the project was in



The dam reservoir would be downstream of the dramatic Kiubo Falls, a known landmark between the Upemba and Kundelungu National Parks. *KD Dijkstra*

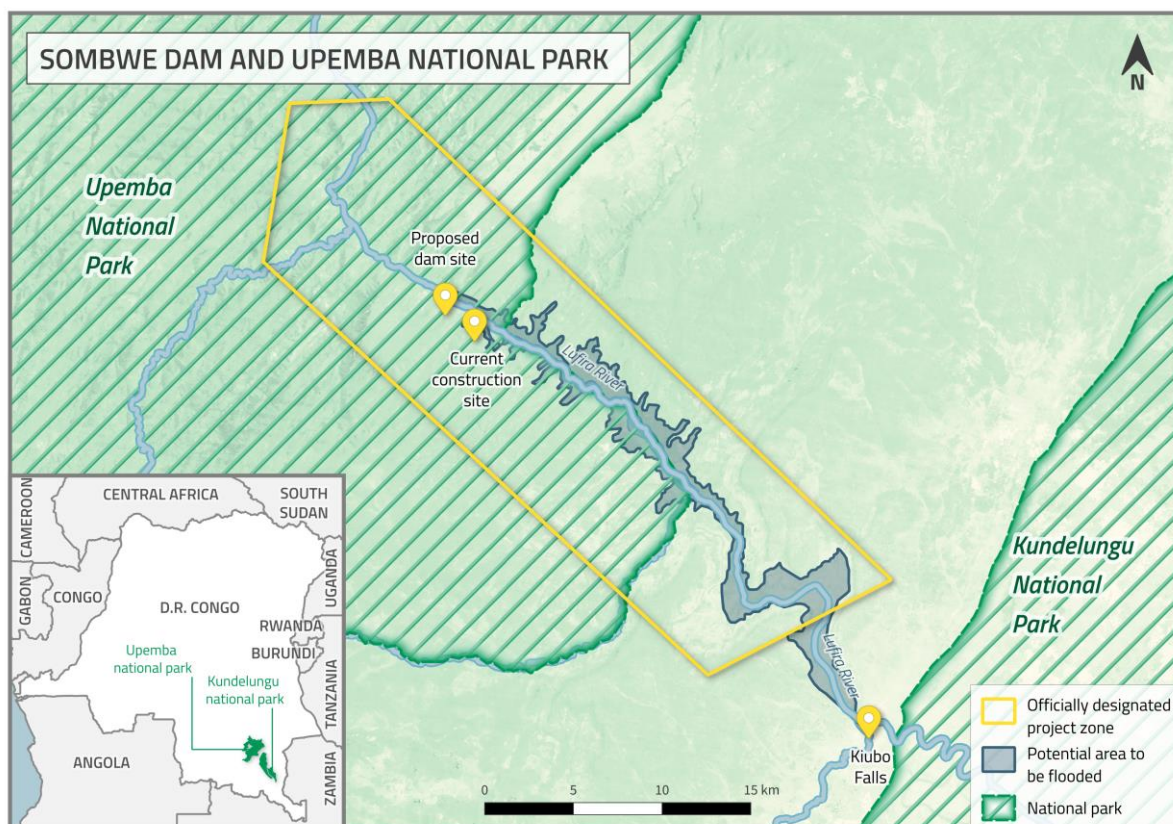
breach of DRC law, adding that the Energy Ministry had confirmed the project was lawful after having seen the EU’s analysis. He further claimed that conservationists and the EU were opposed to his project because they are building or planning hydropower projects of their own in Upemba and other Congolese national parks, such as Virunga.

Conservationists say that hydropower schemes built for communities around Virunga are all outside of the park boundaries, and that any similar schemes near Upemba in the future would also be outside of the park.

UPEMBA: A PARK UNDER PRESSURE

The former Katanga province in which Upemba lies once abounded in wildlife. In the nineteenth century, European colonial expeditions would

recount killing huge numbers of rhinoceros, hippos and elephants, and tell of Arab traders’ caravans exporting vast amounts of ivory. The Belgian colonial regime created Upemba National Park in 1939 to protect the threatened fauna in the region. But this did not put a stop to poaching: Katanga’s last black rhino died in 1950s. Dictator Mobutu Sese Soko – who dominated the country for over 30 years – gave some respite to the wildlife at the expense of the park’s human inhabitants in the 1970s, after he expelled communities along the Lufira river. But Upemba was not spared from the armed conflict that was later to engulf the country, first as Katangan rebels mounted doomed secession bids and then when a full-blown civil war broke out in 1996. It was a conflict that sucked in neighbouring nations and led to the deaths of millions, only formally ending in 2002.



Credit: Global Witness. Date sources: *DRC Forest Atlas (Ministère de l'Environnement et Développement Durable)* <https://cod.forest-atlas.org>; Kipay company website www.kipay.cd; EU-commissioned review of Kipay’s Environmental and Social Impact Assessment; *Contrat de concession relatif à la production de l'énergie électrique au site de Sombwe sur la rivière Lufira dans la Province du Haut-Katanga*; Hansen/UMD/Google/USGS/NASA; OpenStreetMap © OpenStreetMap contributors]

Meanwhile in Upemba, the successive conflicts are said to have resulted in militarised poaching that had a catastrophic impact on wildlife populations in and around Upemba.

In 2016 the ICCN signed an agreement with US-based NGO the Forgotten Parks Foundation to manage the new [Upemba-Kundelungu Complex](#), which brought together Upemba and other nearby protected areas. Conservationists have worked to reverse the catastrophic decline in the population of elephants, zebras and other wildlife. But a well-tended cemetery at the park headquarters of Lusinga serves as a stark reminder of the scale of the task. Buried at the cemetery are the bodies of five people, killed in a 2004 [attack](#) by a group of notoriously brutal “Mai-Mai” rebels. Mai-Mai groups forced an estimated 150,000 people to flee their homes during this period and killed hundreds of civilians according to reports by [human rights NGOs](#).

In 2004 Mai-Mai [attacked](#) the park headquarters, killing the commander of the park guards and the wife of the then Chief Warden. Eight years later, a Mai-Mai group ambushed and [killed](#) Chief Warden Atamato Madrandele as he was returning to the park by motorbike.

Following each of these incidents, troops from the Congolese army responded with attacks on Mai-Mai, as part of a wider military campaign in which government soldiers carried out their own atrocities against civilians.

With the threat of violence hanging over them, park guards must also contend with other pressures, including local communities asserting rights to hunt, fish and farm within Upemba and Kundelungu.

SOARING ELECTRICITY DEMAND PROMPTS HYDROPOWER PUSH

It was in 2014 that Kipay waded into this powder keg, raising fears among conservationists that the planned dam could deal a fatal blow to efforts to revive Upemba. That same year, DRC passed a

new [law](#) liberalising the electricity market and ending the national power company’s monopoly on production. Kipay was one of the first companies to step in, its CEO Eric Monga keen to service electricity demand from huge copper and cobalt mines in Katanga. Copper and cobalt mining constitute DRC’s economic [lifeblood](#), but are stymied by a shortage of [electricity](#) from the country’s dilapidated national grid.

Katanga’s mines, beset by [controversy](#) over atrocious labour conditions and corruption scandals, are now widely coveted – the country accounts for two-thirds of global production of cobalt, a mineral widely used in the batteries that power electric cars. And Katanga’s mining companies are crying out for new sources of electricity to power their mammoth smelters and metal “concentrators”. It is this industrial demand, not that of DRC’s population – over 80% of its 89 million people are [without electricity](#) – that has spurred the growth of hydropower.

THE MAN BEHIND THE DAM

Eric Monga, who has been at the forefront of the Sombwe dam project, is a man of many trades. He served as the head of the [chamber of commerce](#) in his province of Katanga – home to Congo’s biggest mines. He is the director of Trade Services, a company that deals with the Congolese customs agency on behalf of its clients. It was “created with the aim of helping companies no longer worry about interminable debates with government agencies”, according to Trade Services’ own website. Trade Services claims that its clients include some of DRC’s largest mining companies, including the vast Sicominex joint venture between DRC and Chinese state companies.

Mr Monga is reported to be [close](#) to former Congolese President Joseph Kabila, who was [revealed](#) by Bloomberg to have constructed a secret business empire reaching “into every corner of Congo’s economy”, during his time at the helm between 2001 and 2019. Mr Monga also

used to work closely with the late Katanga Governor Katumba Mwanke. Mwanke was considered the power behind President Kabila's throne and the architect of mining [deals](#) made infamous for alleged corruption. Mr Monga told Global Witness that although he had known Katumba Mwanke "since school", this had played no role in the growth of his business empire, which he said he had built "normally" and "in full transparency".

In 2017, an investigative consortium led by the Platform to Protect Whistleblowers in Africa (PPLAAF) [revealed](#) highly controversial transactions involving a frozen food company called Entreprise Générale d'Alimentation (EGAL), which was pumped with millions of dollars of public money by DRC's central bank in apparent contravention of Congolese law. Mr Monga and several senior Kabila allies were among EGAL's directors at the time.

Another company created with some of the same directors, including Mr Monga – the Namibia-based Samaki Ltd – was the biggest recipient of EGAL's cash, receiving nearly \$23 million from July 2013 to July 2015, according to PPLAAF. The payments to Samaki were purportedly for deliveries of fish from Namibia.

But PPLAAF reported that cash from EGAL was also used to stock President Kabila's private farm in Katanga with many hundreds of exotic animals, imported from Namibia. Kabila went on to [create](#) a South African-style safari reserve outside DRC's capital Kinshasa.

An exposé of the affair by the Organised Crime and Corruption Reporting Project [concluded](#) that EGAL "said it would supply inexpensive food to the people of the DRC (...) only for the money to disappear into accounts linked to the president's cronies."

When contacted by Global Witness Mr Monga rebutted these claims, saying that during his time at EGAL the firm had imported more than 20,000 tons of fish into DRC and helped to

lower fish prices in Kinshasa by more than 100%, compared to the company's competitors. He also said that he had left his positions at EGAL and Samaki in 2014, before the reported shipments of exotic animals to President Kabila's farm took place.

Spokespeople for EGAL have previously [denied](#) the allegations, saying they were "without irrefutable proof" and the company had succeeded in providing more affordable food imports to DRC's population.

RANGERS FEAR LOSING 'ALL OF UPEMBA'

In 2014, while in the midst of his dubious fishing venture, Mr Monga began lining up his hydropower scheme. He submitted "prefeasibility studies" for Sombwe to DRC's energy minister on 14 August 2015, according to a letter from the ministry seen by Global Witness.

DRC moved rapidly to approve the project. Within a fortnight, the energy ministry set up a committee to review the prefeasibility studies, but the documents seen by Global Witness show that before it even met, the Energy Minister and Kipay signed a 7 September "protocol agreement", in which the Congolese government agreed to collaborate with Kipay "with the aim of carrying out the technical feasibility studies for the building of the Sombwe hydroelectric plant". Within three weeks of submitting his documents,



Eric Monga, the CEO of Kipay Investments, is well-known in Congolese business circles. *Ligne de Front*

Eric Monga's Sombwe project seemed to be a done deal.

Five days later, the study committee gave its approval for the Sombwe project, saying that Kipay had provided clear details on all major areas on the technical and environmental fronts. Kipay had identified the "major environmental constraints" in its prefeasibility report, it said, while recommending further environmental studies, notably on the impact on fish in the Lufira. The committee's report made no mention of Sombwe being located in a national park.

In December 2015, Upemba park rangers saw helicopters landing in the park with teams of geologists, according to a well-placed source. The rangers took pictures and otherwise documented the activities for a report to the Kinshasa headquarters of DRC's conservation agency the ICCN, saying that the visitors appeared to be "looking for something". Kipay had begun work on opening a road that reaches into "the heart of the park" and runs through a protected area called Lubudi-Sampwe, their report said.

Despite concerns within the ICCN, Kipay pushed ahead. Documents indicate that in June 2016 Mr Wilungula, the head of the ICCN at the time, warned Kipay not to venture into Upemba National Park in a sternly worded letter, saying "if your activities touch the park, you are asked to move all relevant installations outside of the site, in order to avoid all destructive impact on biodiversity". But this had no noticeable effect and, despite concerns within the ICCN, Kipay pushed ahead.

On 30 September 2016, a team of 15 rangers, led by then Chief Warden Rodrigue Katembo, left on a visit to Kipay's road and base camp, where they encountered two engineers. "We gave them the possibility to leave ... without being arrested but the next time they are in [Upemba National Park] they will be arrested and brought to the Court of First Instance in Lubumbashi", says the rangers' report.

A map produced by consultants to the EU indicates that the Sombwe project would create a vast reservoir along a stretch of the Lufira river valley that runs from the dam to the dramatic Kiubo falls, a stand-out attraction for visitors on the outskirts of the park. A major 2008 [survey](#) of wildlife in Upemba and Kundelungu parks by the New York-based Wildlife Conservation Society said that to safeguard the parks, "the best and only solution would be the protection of the greater Lufira valley". This would allow elephants – and possibly other animals, including endangered African wild dogs and lions – to move between their habitats in north-eastern Zambia and papyrus swamps in north-western Upemba.

In their 2016 field report, the rangers raised fears that the dam could prove devastating, writing: "It is subjective to talk about Upemba National Park without the area of the Lufira valley because that's where the major part of the fauna of this site is. Losing it would be to lose all of Upemba National Park."

The restoration of the Lufira valley as an "ecological corridor" is key to the revival of the elephant population in Upemba National Park. Elephants and other wildlife have generally kept clear of the valley for many years, scared away by snares and hunting by the [Mai-Mai rebels](#). Almost all the 300 or so Mai-Mai in Upemba demobilised in 2016 but a handful remain – responsible for atrocities so terrible that their home villages will not take them back. The ICCN has been in discussion with the Mai-Mai about eventually relocating away from the valley.

But the creation of the dam and reservoir would pose an insurmountable obstacle to re-establishing the Lufira valley as a wildlife corridor.

In its June 2020 letter to civil society groups, Kipay said the project posed no threat to elephants: "The elephants you refer to... live mostly outside the Upemba park. When they migrate during the rainy season they migrate into

the north part of the Upemba park—more than 120 km away from the site of our hydropower project.”

KIPAY’S UPBEAT ENVIRONMENTAL ASSESSMENT

In August 2016, Monga’s company Kipay produced a preliminary environmental assessment. Conducted for Kipay by the “Office of Environmental and Mining Studies” - a little-known private company whose only online presence appears to be an empty [Facebook page](#) - the study again omitted to mention that the dam would be located within the boundaries of a national park and was almost entirely upbeat in its assessment.

“The environmental and social impact will not be major in comparison to the electricity production and the positive changes generated,” it said. The assessment concluded that Sombwe would “absorb the increasing pressure on Upemba park through the reduction of poaching, artisanal mining [and] the eradication of armed groups.”

By the end of 2016, the preliminary environmental and social impact assessment was approved by the Agence Congolaise de l’Environnement and a contract was signed between Kipay and the energy ministry, published in DRC’s government [bulletin](#).

Kipay alone has exclusivity on the licences for the Sombwe hydropower project and all operations of the project. If environmental or social disputes arise, the Congolese state would have the responsibility of resolving them.

As with the impact assessment and the findings by the energy ministry’s study committee, the contract did not say the dam would be in a national park. But the environmental risks had not escaped the attention of Upemba’s major funder, the European Union.

Dams and forests

While dams are widely seen as a “green” way of generating energy, scientific research has cast doubt upon this image, particularly when large dam reservoirs are created in tropical forests. Once timber and other organic matter are submerged, they decompose leading to the release of large quantities of methane, a greenhouse gas [28 times](#) more damaging than carbon dioxide. This phenomenon, which has led one prominent scientist to describe some dams as “[methane factories](#)”, comes on top of the lost potential for carbon storage when forests are flooded by reservoirs.

The Sombwe dam may prove to have a similar climate impact. The project is expected to create a 48 km² reservoir, permanently flooding vast tracts of Miombo forest – a type of tropical dryland forest that covers much of central and southern Africa. An expert analysis undertaken for Global Witness by [researchers](#) at the University of Edinburgh’s School of GeoSciences indicates that flooding this forest could increase overall emissions by 1.3 million tonnes of CO₂ by the end of the century¹ – more than the emissions created by burning 3 million barrels of oil.

As well as undermining commitments to halt deforestation made at the COP26 climate summit, it could also dent DRC’s own emission reduction efforts, and should be a cause for concern for international donors who recently [pledged](#) to mobilise \$1.5bn to protect Congo Basin’s forests and critical carbon stores.

CAPTAIN JAILED FOR ‘THREATENING ASSASSINATION’

In 2015, the EU had launched a new international conservation programme called [Biodiversity for Life](#), aimed at combating rising wildlife trafficking and “emphasising the economic benefits of protecting biodiversity”. Under this programme, the EU provided €130 million to four Congolese

national parks considered “sites of biological priority”, including Upemba.

Soon the EU’s Upemba funding began to be channelled towards [Forgotten Parks](#), now working under a contract signed with DRC’s national parks authority, the ICCN. Forgotten Parks received nearly \$8m in EU funding from 2017 to 2020.

The EU’s efforts to ramp up its support for Upemba have not been without incident. In June 2019, three EU experts were embroiled in a confrontation that illustrated the dangers facing the rangers, and the fraught context that Kipay and PowerChina were operating in. The EU environmental experts were visiting Upemba to assess a new funding proposal for the park, and were escorted to the park by Mr Katembo and other rangers. On the way back, they found their way barred by a makeshift military roadblock.

In court hearings, aired on Congolese television, the rangers recounted how inebriated soldiers pointed their rifles at them and ordered them “to not dare to take a step”. Mr Katembo told the court that the army captain in charge, Ngoie Mwanabute “even gave the soldiers the order to shoot”, repeating the command three times, but that the soldiers did not obey – Mr Katembo had managed to talk them down. Captain Mwanabute was [found](#) guilty by a local military tribunal in October last year of “threatening assassination” and sentenced to an 11-month jail term.

There is no evidence that the incident was connected to the dam, and it seems to have been linked to local grievances over restrictions imposed on community land rights by conservation measures.

Mr Katembo is familiar with the dangers that local tensions and corporate power play can bring. The park ranger has won international prizes, including the prestigious [Goldman Environmental Prize](#) in 2017, for his work protecting Virunga National Park in north-eastern DRC from multiple threats, including poaching,

local mining and plans by a London Stock Exchange-listed company to drill for oil there. His clash with the firm Soco International was recounted in the Oscar-nominated documentary *Virunga* in 2014, and in Global Witness’s accompanying report [Drillers in the Mist](#).

The ranger suffered arrests and beatings for his efforts at the hands of the military in September 2013. Believing his life was in danger in Virunga, he relocated to Upemba in 2015, where he served as Chief Warden, then working as Robert Muir’s deputy from early 2017.

During the 2019-20 court proceedings over the confrontation at the roadblock, the public prosecutor said Mr Katembo received text messages, telling him he would die “like Atamato”, a reference to the murder by Mai-Mai of his predecessor Atamato Madrandele.

Atamato and others murdered in the course of their duties are revered as martyrs by today’s rangers in Upemba, but opinion within the ICCN on how best to protect the park is split. Despite the rangers’ fears of losing “all of Upemba National Park” as a result of the dam, the position of those in overall charge of the wildlife authority has been far more ambiguous.

KIPAY SWAYS NATIONAL PARKS CHIEF

Cosma Wilungula – the head of the ICCN until his [suspension](#) in July 2021 – had told Kipay to move out of the park in 2016. Yet by the time Kipay and PowerChina launched the construction of Sombwe in 2019, Mr Wilungula had become one of the dam’s biggest supporters.

“We no longer conserve for the sake of conservation,” he said at the [launch](#). “The DRC has put in place an approach that reconciles conservation and development. Hydroelectricity is clean energy that we can capitalise on, in that it will be useful for our communities and for the park.”

Mr Wilungula also spoke in favour of the dam at parliamentary hearings in Kinshasa last November, saying “environmental impact assessments have not yet brought the necessity of the project into question.”

In its letter to campaign groups, Kipay said it was developing Sombwe “in close collaboration” with the ICCN.

The Congolese parliament’s environment and tourism commission concluded its hearings by saying there should be “a partnership between Kipay and the ICCN”. It also issued a broadside against the EU, [saying](#) that “our foreign partners must be made to understand that a project developed by a Congolese compatriot has the support of parliamentarians”.

Since Mr Wilungula’s June 2016 warning letter, he had started to view the dam as more of an opportunity than a threat. According to a source familiar with the affair, in mid-2017 he met with Eric Monga and requested five megawatts of the dam’s envisaged 160MW for the ICCN’s Upemba headquarters, and for a tenth of all the electricity produced to be provided local communities. Mr Wilungula was also pushing for a significant percentage of Sombwe’s revenues to go to the ICCN, though it is unclear whether any revenue sharing was agreed upon. When asked about this, Kipay conceded to Global Witness that “royalties and certain fees will be paid to the ICCN,” an apparent conflict of interest, given that the ICCN was responsible for approving the project. Further details were not provided.

Mr Wilungula did not reply to requests for comment.

A *quid pro quo* between ICCN and a private company would not be unprecedented. In 2011, Mr Wilungula had initially strongly opposed UK-based oil company Soco exploring for oil in Virunga, before concluding secretive agreements with the company, under which the ICCN would support Soco in return for it providing hundreds of thousands of dollars in ICCN [financing](#). It was



ImaginechinaLtd / Alamy

only revelations of corruption and abuses and an international campaign that forced Soco [out of](#) Virunga in 2014.

The agreement with Soco caused similar divisions to those resulting from the Sombwe dam project. While Mr Wilungula had become a champion of the dam, other conservationists have been critical.

ENTER POWERCHINA

In April 2019 Kipay signed up to a joint venture with PowerChina, one of China’s largest state-owned companies, which reportedly controls over 50% of the global market [share](#) for hydropower construction. Although PowerChina agreed to build the dam, the project would be 70% financed through borrowing, [Bloomberg](#) has reported, suggesting that significant loans and investments would be required to make the project a reality.

PowerChina’s subsidiaries include Sinohydro, an established player in DRC’s hydropower and mining sectors, with which it [merged](#) in 2012. As a partner in DRC’s mammoth Sicominex “minerals-for-infrastructure” deal, Sinohydro [agreed](#) to build hydropower and other infrastructure projects for DRC. In addition, it constructed the 150MW [Zongo II](#) hydropower dam near Kinshasa, completed in 2018. The firm has been criticised for the environmental impact of some of its projects (see box).

PowerChina, its bankers and the environment

Both PowerChina and its subsidiary Sinohydro have been criticised over the impact of overseas dam projects in the past. The Nam Ou series of dams built in Laos by Sinohydro has been [linked](#) with “huge losses in unique fish species and led to the displacement of thousands of people”. Critics have warned that the company’s dam projects threaten the destruction of orang-utan habitats in [Indonesia](#) and a chimpanzee reserve in [Guinea](#).

PowerChina has also attracted [criticism](#) for its continuing role in building new coal power plants in Africa, at a time when climate concerns are prompting many investors to turn their backs on coal.

Neither Sinohydro nor PowerChina have published robust environmental policies. According to the NGO [International Rivers](#), Sinohydro drafted an ambitious set of policies in 2012, which included ruling out working in World Heritage sites and national parks. But the company backslid a couple of years later, instead committing only to abide by local laws and regulations. PowerChina does not appear to have a publicly available environmental or social policy.

PowerChina is supported financially by a range of private commercial and state-owned banks, primarily through the underwriting of bonds through which it has raised billions of dollars since 2011. Its bond issuances have been underwritten by a raft of mostly Chinese banks - including the Industrial and Commercial Bank of China and China Construction Bank.

But UK bank Standard Chartered has also been involved, most recently by coordinating the launch of a \$300 million Hong Kong [bond issuance](#) in October 2019. Standard Chartered’s [policies](#) expect hydropower clients to abide by the International Finance Corporation (IFC) Good Practice [Note](#) on Environmental, Health, and

Safety Approaches for Hydropower Projects, a policy which advises against undertaking projects in protected areas such as national parks. France’s Société Générale helped to underwrite a \$300 million PowerChina bond issuance in 2018. Its [policy](#) on hydropower dams says that clients’ impacts on critical habitats and protected areas should be evaluated. The Chinese lenders do not appear to have specific policies on infrastructure projects within national parks, though they do have procedures in place to screen clients for social and environmental risks.

Shares in PowerChina can be bought on the Shanghai Stock Exchange. While 58% of equity shares in the firm are held by the Chinese state, the remainder are mostly held by Chinese asset funds. However, some western investors hold substantial stakes, including US firms Blackrock (US \$17m in shares), Vanguard (\$12.8m) and Dimensional Fund Advisors (\$ 5.6m).

Many dam projects undertaken in Africa by PowerChina and its subsidiaries have relied heavily on financing from China’s state-owned EximBank. For example, DRC’s Zongo II hydropower project, completed by Sinohydro in 2018, was financed with an EximBank [loan](#) to the tune of \$360 million.

China’s recent announcement that it will no longer provide international finance for coal fired power stations outside China signifies a growing awareness of the impact of its financing globally on the climate. But concerns about Chinese-backed hydropower projects could call into question recent pledges to halt deforestation and biodiversity loss made at the COP26 climate summit in the UK and the [UN Biodiversity Conference](#) in China.

Global Witness contacted PowerChina and the banks and asset managers cited in this report but they made no comment.

EU PROPOSALS FALL ON DEAF EARS

The EU-commissioned review of Kipay’s environmental assessment took a very different stance to the ICCN and the Congolese parliament, finding that by virtue of being located in a national park, the project is contrary to DRC’s 2014 [Law](#) on Nature Conservation. That law states that “any activity incompatible with conservation objectives is forbidden” in DRC’s national parks. An article in the law does provide for exemptions, in the form of a decree approved by DRC’s Council of Ministers, and only on condition that activities are in the “public interest” and “there is no other satisfactory solution that doesn’t damage ... the relevant species of fauna and flora”. Exemptions can also be granted by ICCN in certain exceptional circumstances. Global Witness understands that the Sombwe project has not received such an exemption. When we asked Kipay and the ICCN if such an exemption had been granted, we did not receive a response.

“The proposed project is situated in a national park in violation of the law,” said the EU-backed review, adding that the lack of consideration to this point in Kipay’s environmental assessment “constitutes an unacceptable omission”. The report continued: “The dam, where it is currently proposed to be located, seems to be illegal and cannot be justified”.

The Congolese parliament’s environmental committee said it was “opposed to the idea of relocating the project, considering that this Congolese [citizen] has already invested in it and that the project will address the energy deficit in Katanga, the seat of many mining companies”.

The report on alternative hydropower sites outside the park, commissioned by the EU and undertaken by a consortium of international consultants led by Canadian firm Stantec, found that eight potential sites on the Lualaba and Lubudi rivers together could produce 400 to 500MW of electricity, compared to the 160MW to be produced at Sombwe.



The region around Upemba is known for its [Miombo](#) woodlands. *KD Dijkstra*

“The placing of the [proposed] sites has been determined to limit as much as possible the construction costs,” says the report. The areas concerned are little populated, largely because they are already prone to flooding, it added.

While the report says its findings “can in no case be considered as reflecting the position of the European Union”, it had clear backing from Ambassador Châtaigner. He told Mr Wilungula in his November 2020 letter that the report showed ready alternatives existed, which “would allow on the one hand to bring energy to the populations of the region, and on the other hand to avoid building works within the Upemba-Kundelungu complex itself”. He wrote that Mr Wilungula had himself asked the EU to commission the study on alternative dam sites, and that he had approved the terms of reference.

Mr Wilungula’s about-turn on the Sombwe project put him at apparent loggerheads with the EU, one of DRC’s most important donors, and placed the future of Upemba National Park in the balance.

But in July 2021 Mr Wilungula was suspended from his post as head of the ICCN by DRC’s Environment Minister Eve Bazaiba for “[mismanagement](#)”. Reuters [reported](#) that the suspension was “linked to the suspected embezzlement of tourism revenue from Rwanda relating to Virunga national park in eastern Congo and other corruption concerns” according to a senior government official. Mr Wilungula later offered his [resignation](#), dismissing the accusations against him as unfounded. In the wake of Mr Wilungula’s replacement it remains to be seen whether the ICCN will change course and ensure that Upemba remains intact.

CONCLUSION

The fate of Upemba National Park seemingly hangs in the balance – threatened by a hydropower project that is backed by a Chinese conglomerate, linked to international banks and driven by the need to power mining firms

extracting DRC’s mineral wealth to feed global markets. This case shows the damage that international investment – including in ‘renewable’ energy projects if done without due care – can wreak on conservation efforts in a fragile protected area, and demonstrates how easily global pledges on forests, emissions and biodiversity can be undermined on the ground. It highlights the need for governments to regulate companies and financiers, obliging them to mitigate the environmental risks of their investments in a far more rigorous way. Only by addressing this will the grand promises made at international climate and biodiversity conferences stand a chance of becoming a reality.

RECOMMENDATIONS

- > PowerChina should immediately suspend any further work on the project and work with Kipay Investments to identify an alternative site that complies with DRC law and best practice environmental and social standards.
- > Banks and investors with existing relationships with PowerChina – including ICBC, China Construction Bank, Standard Chartered and Blackrock – should engage with PowerChina on the concerns outlined in this report. If PowerChina chooses not to act on this information, banks should undertake their own due diligence to investigate the project – which should include meeting with CSOs who have concerns about the project, adjacent communities and representatives of Upemba National Park. Concerns should be meaningfully addressed by PowerChina in line with relevant international standards.
- > Other financiers considering financing the project should not go ahead while the current site is as proposed. Financiers should ensure that best practice guidelines on lending to hydropower projects – such as the *International Finance Corporation (IFC) Good Practice Note on Environmental, Health, and Safety Approaches for Hydropower Projects* - are upheld.

- > The Chinese government should consider opportunities to provide clearer guidance to the financial sector on how due diligence on environmental and social risks should be undertaken in future. This should include a revision to the Commercial Banking Regulation.
- > DRC government should explore proposed options for an alternative hydropower site – including evaluating possible environmental and social impacts of potential sites.
- > The EU and other international donors should continue to raise concerns about the dam with the DRC government at the highest levels and encourage the consideration of alternative sites outside of Upemba National Park.
- > If they are to deliver on their pledges to tackle deforestation loss, biodiversity loss and reduce emissions, all governments and financial institutions should back mandatory rules to require financial institutions to undertake due diligence checks on the environmental, deforestation and human rights impacts to ensure they don't finance or facilitate projects which could have a devastating impact on the environment, biodiversity and global climate, including dams in national parks.