

Virunga National Park

2020 Conservation Outlook Assessment

SITE INFORMATION

Country: Democratic Republic of the Congo

Inscribed in: 1979

Criteria: (vii) (viii) (x)



Virunga National Park (covering an area of 790,000 ha) comprises an outstanding diversity of habitats, ranging from swamps and steppes to the snowfields of Rwenzori at an altitude of over 5,000 m, and from lava plains to the savannahs on the slopes of volcanoes. Mountain gorillas are found in the park, some 20,000 hippopotamuses live in the rivers and birds from Siberia spend the winter there. © UNESCO

SUMMARY

2020 Conservation Outlook

Finalised on 02 Dec 2020

CRITICAL

The status of landscape attributes relating to criteria (vii) (superlative natural phenomena) and (viii) (outstanding examples representing major stages of earth's history) are good and are likely to remain so. However, the biological attributes relating to criteria vii (exceptional large mammal biomass) are severely degraded and remain under pressure throughout much of the park. Although some recent progress is seen with increasing numbers of some of the charismatic large mammals, the management capacities to deal with the pressures are permanently overstretched (despite significant recent improvements). Possible future oil exploitation remains a significant threat since, although the government in 2019 stated that extractives are not currently a threat, it has not unequivocally confirmed that it will not undertake extractive activities within Virunga NP in future, which under Congolese law would involve degazettement of parts of Virunga NP. In a country racked by conflict and corruption, oil exploitation in the park is likely to fuel conflict and greatly intensify pressure on the site's unique attributes. The trend of decline in biodiversity attributes is reversible if strong political leadership is given to support park management's law enforcement and conservation actions. Unequivocal high-level political support for the park's values is essential for the survival of the park into the future.

FULL ASSESSMENT

Description of values

Values

World Heritage values

- ▶ **Aesthetically spectacular afro-montane and alpine landscape of Rwenzori Mountains** Criterion:(vii)

Snow-capped peaks located on the equator. Third highest peak in Africa (5,109m). Uninterrupted gradient of intact habitats from ca 800m to >5,000m within a horizontal distance of only 30 km. Largest expanse of glaciers on the African continent (World Heritage Committee, 2012).
- ▶ **Spectacular Virunga volcanoes with frequent volcanic activity** Criterion:(vii)

Chain of two active and six extinct volcanoes. Highest peak 4,500m. Nyamulagira and Nyiragongo are two of the world's most active volcanoes, with frequent eruptions over the past decade. They account for 2/5 of historic eruptions on the African continent. The lava is extremely fluid, which makes for visually spectacular rivers of lava during eruptions and a major tourist attraction (World Heritage Committee, 2012).
- ▶ **Aesthetically spectacular concentrations of large mammal fauna in the savannah plains** Criterion:(vii)

The site also contains important concentrations of wildlife, notably elephants, buffalo and Thomas cobs, and the largest concentration of hippopotamuses in Africa, with 20,000 individuals living on the banks of Lake Edward and along the Rwindi, Rutshuru and Semliki Rivers (World Heritage Committee, 2012). The hippopotamus population in the Central Sector (Rwindi plains) was the highest known density in Africa at the time of inscription (population estimated at 29,000 in 1974). The mammal biomass of the Rwindi plains in 1960 was one of the highest known (26.7 tons/km²) (Languy & De Merode, 2006) (World Heritage Committee, 2012).
- ▶ **Active and extinct volcanoes as a result of ongoing tectonic movements along the Albertine Rift** Criterion:(viii)

Virunga National Park is located in the centre of the Albertine Rift, of the Great Rift Valley. In the southern part of the Park, tectonic activity due to the extension of the earth's crust in this region has caused the emergence of the Virunga massif, comprising eight volcanoes, seven of which are located, totally or partially, in the Park. Among them are the two most active volcanoes of Africa - Nyamuragira and nearby Nyiragongo - which between them are responsible for two-fifths of the historic volcanic eruptions on the African continent and which are characterized by the extreme fluidity of the alkaline lava. The activity of Nyiragongo is of world importance as a witness to volcanism of a lava lake: the bottom of its crater is in fact filled by a lake of quasi permanent lava that empties periodically with catastrophic consequences for the local communities (World Heritage Committee, 2012).
- ▶ **Exceptionally high biodiversity resulting from a unique combination of uninterrupted gradient of habitat types from 680m to 5,109m and geographic location within three bio-geographic regions.** Criterion:(x)

High diversity of habitats and species results from uniquely wide altitudinal range covered by the park (680 - 5,109m), which includes dense humid rainforest, afro-montane forest, afro-alpine forest and meadows, dry forests, savannas, lakes, rivers, swamps, thermal sources. The park straddles three bio-

geographic regions: Guinea-Congolian, afro-montane, and Central African lakes. It is also located within Africa's two largest river basins: the Congo basin and the Nile basin. Species diversity: 2,077 higher plant species, 218 mammal species (including 22 primates), and 706 bird species. In an area representing 0.3% of the surface area of DRC, the park contains over half of the country's mammal species and two thirds of its bird species (Languy & De Merode, 2006; UNESCO World Heritage Centre, 2010.). This park contains the highest vertebrate diversity of any park on the African continent (Languy & De Merode, 2006; World Heritage Committee, 2012).

► **Presence of several endangered and emblematic mammal species** **Criterion:(x)**

Mountain gorilla (*Gorilla beringei beringei*), Grauer's gorilla (*Gorilla beringei graueri*), eastern chimpanzee (*Pan troglodytes schweinfurthii*), okapi (*Okapi johnstoni*), elephant (*Loxodonta africana*) (World Heritage Committee, 2012). 13 species of mammal, 11 birds, 10 amphibians, and 6 plants are considered to be threatened. A 2010 census of the Virunga population of mountain gorillas estimated 480 individuals, of which one third usually reside in Virunga National Park (Gray et al. 2013).

► **Endemic species** **Criterion:(x)**

Albertine endemics: 230 plants, 21 mammals (including 4 primates), 27 birds, 11 reptiles, 21 amphibians (Languy & De Merode, 2006; World Heritage Committee, 2012).

► **Rwenzori Mountains, uplifted from the floor of the Albertine Rift as a result of recent (<3m years) movement of tectonic plates** **Criterion:(viii)**

The northern sector of the park includes about 20% of the massif of Monts Rwenzori – the largest glacial region of Africa and the only true alpine mountain chain of the continent. It borders the Rwenzori Mountains National Park of Uganda, also inscribed as World Heritage, with which it shares the 'Pic Marguerite', third highest summit of Africa (5,109 m).

Other important biodiversity values

► **Important wetland areas for overwintering Palearctic bird species, and fishing for local communities.**

Lake Edward, and the rivers flowing into and out of it, are important wetland habitats for migrating bird species.

Lake Edward has a high potential for fish production (estimated at 15,000 – 16,000 tons/year in 1989 (Vakily, 1989)) and is a vital resource for local populations. Fishing rights for local communities, regulated by a cooperative (COOPEVI), were preserved when the park was created (but COOPEVI is no longer functioning) (Draft Plan d'Aménagement et de Gestion du Parc National des Virunga, 2011-2015).

Assessment information

Threats

Current Threats

Very High Threat

Decades of poor governance culminating in two civil wars and the ongoing civil unrest are the factors that have created the current threats: encroachment for agriculture and fishing, commercial hunting, and deforestation for charcoal. The cumulative effect of these threats is resulting in intense pressures on many of the park's World Heritage attributes: Diversity and ecological connectivity of terrestrial habitats (particularly Sclerophyllous forests, woodlands, wooded savannah and humid rainforest); Endangered and/or threatened species (2 subspecies of gorilla, chimpanzees, l'Hoest's monkey, okapi, Rwenzori duiker, elephant); Large mammal assemblages of the central plains; Wetland habitats for Palearctic migrants. Overfishing on Lake Edward also threatens the biological diversity of the aquatic ecosystem and threatens food security of local populations. Although there have in recent times (2014–2017) been some

improvements (3 years consistent progress in the reclamation of some of the park, end of M23 rebel group threat, construction of hydro power stations (which potentially reduces the need for charcoal, and provide financial sustainability for park protection), greater collaboration between the DRC military and park rangers contributing to the removal of armed groups from the centre of the park), change in mandate of MONUSCO to take on armed groups in the east of the country and increases in numbers of some of the large charismatic mammals, plus the creation of Virunga Alliance and good financial stability) to some of these threats mentioned, they all still exist and any gains made can very quickly be reversed because of the overall poor governance of the country.

► **Fishing / Harvesting Aquatic Resources**

Very High Threat

(Overfishing)

Inside site, throughout(>50%)

Overfishing is causing impoverishment of fish stocks. Fish are of vital importance for the food security of many of the 5 million people living around the park. Lake Edward used to be one of the most productive lakes in Africa for fish (in part due to the large hippopotamus population that feeds the fish through their dung). Illegal fishing increased during the wars and continued to increase under the control of FARDC. There is now clear evidence of overfishing as catches (volumes and fish sizes) have declined dramatically (IUCN NL study reported in State Party of the DRC, 2017). Agriculture and hunting are associated with the illegal fishing villages and cause habitat impoverishment, and loss of wildlife, including threatened species. Illegal settlements along the west coast of the lake also currently interrupt the terrestrial ecological connectivity of the uniquely wide range of habitat types within the park. Wetland habitats for migrating Palaearctic bird species are also threatened by illegal fishing settlements in the park.

► **Logging/ Wood Harvesting**

High Threat

(Deforestation for charcoal making)

Inside site, widespread(15-50%)

Outside site

The biologically unique Sclerophyllous forests (forêts sclérophylles) on and around the two active volcanoes, Nyamulagira and Nyragongo, are under intense pressure from commercial charcoal making operations to supply the burgeoning population of the provincial capital of Goma where over 90% of the residents have traditionally cooked with charcoal (WWF-PEVi, 2012). In 2019, illegal encroachment for agriculture and charcoal covered 18.5% of the property (19.4% in 2018), and 912 bags of charcoal were seized and 254 kilns destroyed (State Party of the DRC, 2020). FDLR militias control much of the operation. Congolese military are also involved. Rwandan interests (where charcoal making is forbidden) also fuel the trade. Chimpanzee populations are directly threatened, as well as the habitat for the endemic l'Hoest's monkey. As these unique forests are slow growing forests, the long term impact of charcoal making is severe. The involvement of FDLR militia groups and certain elements of the Congolese army, in the charcoal commerce make this a particularly difficult challenge for park management.

There has recently been an attempt to stem this destruction with the construction of hydro-electric structures outside of the park: Matebe power station (13.2MW) in 2015, Mutwanga II (1.4MW) in 2019, and Luviro (15MW) in 2020. In 2019, electric power was supplied to the city of Goma with a population of two million people (State Party of the DRC, 2020). These activities are carried out under the Virunga Alliance program and are intended to greatly strengthen park management and its positive role in society. Other developments in sustainable energy, including large scale community tree planting and the adoption of fuel efficient stoves have reduced the people's consumption of the park's forests for charcoal.

► **Crops**

High Threat

(Habitat loss from agricultural activities associated with illegal encroachment)

Inside site, scattered(5-15%)

Outside site

Subsistence agriculture around illegal occupations inside the park is a high threat to the park's values. 67% of the park boundary is under moderate or high pressure. In October 2010 an estimated 37,182 ha of the park were illegally occupied (State Party of the DRC, 2016). The park is long and narrow (300km long, average width 25km with minimum of 2.5km, 1150km of boundary) so encroachment threatens

the connectivity between the uniquely diverse range of habitat types within the park. The integrity of the park is thus directly threatened. Deforestation and hunting are also associated with illegal encroachment. Deforestation in the southern and northern sectors also threatens the survival of certain endangered or endemic forest species (e.g. chimpanzee, l'Hoest's monkey, and okapi). Hunting associated with illegal settlements has greatly reduced the exceptional mammal biomass of the Rwindi plains. The main areas affected by illegal occupations are: Southern Sector: Kiroliirwe, Mugunga, and Nzulo. 12,500 ha of mid-altitude natural forest have been lost in Kiroliirwe. Central Sector: Ndwali, west shore of Lake Edward, and along eastern border at Nyamilima. Encroachment along west shore interrupts the ecological connectivity of terrestrial habitats between the south and the north of the park. Northern Sector: Lubilya, Djuma, Nyaleke. Deforestation in the Djuma sector threatens the dense humid rainforests of the Semiliki valley where chimpanzees and okapi are found. Encroachment around Tshiaberimu mountain threatens the small population of Grauer's gorillas, currently numbering only five individuals (Sikubabwo, 2015). From 2003 - 2015 ICCN recovered 25,788 ha. In 2016, 280 FARDC soldiers under the command of ICCN patrolled parts of Virunga NP especially along Route 2 that crosses the park in the Central Sector and the Northern Sector to protect civilian travellers from attack by armed groups. These were referred to as Sekolo I & II operations and are ongoing (State Party of the DRC, 2017). They have achieved some success in diminishing armed group activities in the park. In 2019, approximately one fifth of Virunga NP (i.e. an estimated 18.5% of the Park's surface area (ca 1,000 km²)) remains under illegal occupation, corresponding to areas of cultivation and charcoal production. This shows a significant improvement since 2010, and a slight improvement compared to recent levels of 21% in 2017 and 19.4% in 2018. A consultation strategy with local communities is being implemented, where the Park is working through its Virunga Alliance development programmes based on tourism, hydropower & business support, agriculture & fishing, and the construction of electric fences (State Party of the DRC, 2020).

► **War, Civil Unrest/ Military Exercises**

(Presence of armed militia (war/civil unrest))

High Threat

Inside site, widespread(15-50%)
Outside site

The park is used as a cover by at least three groups of militia (FDLR, Mai Mai, and ADF-NALU). The rebel groups are involved in illegal exploitation of resources wherever they are present (e.g. charcoal exploitation, elephant and hippo poaching, agriculture). In April 2012 fierce fighting broke out in and around the park with dissident elements of the Congolese army. These rebels (called M23) occupied the gorilla sector of the park. Their presence was a cause of great insecurity for local populations living near the park and for people travelling across the park on the main road. This rebel group M23 was defeated in November 2013 by MONUSCO and FARDC although there is a threat of this group re-establishing (State Party of the DRC, 2017). This was only possible because of a change in the mandate of MONUSCO, namely that it has been given a mandate of neutralising armed groups in the east of the country (UNESCO, IUCN and Ramsar, 2014). In 2019, the number of armed elements within the property and its vicinity was reduced from around 2,500 people during the first months of 2019 to an estimated 1,000-1,200 in December 2019 (State Party of the DRC, 2020).

Park guards risk their lives daily, and many have been killed while on duty. This is still ongoing today with over 180 killed since the beginning of the civil war in 1996 (Virunga website, July 2020). This greatly erodes the morale of park staff and the insecurity that this creates undermines the management effectiveness of the park. No-go areas are created and morale is sapped by the frequent attacks on guards. There was an assassination attempt on the park director in April 2014 (UNESCO, IUCN and Ramsar, 2014). It is not known who carried out this attack but, added to the continuous attacks on park guards, this makes effective management of the park very difficult. On 12 May 2018, 7 park rangers and a Virunga Foundation staff member were killed in the Central Sector of the park and on 24 April 2020, 12 park rangers, a Virunga Foundation staff member and 4 civilians were killed at Rumangabo by FDLR militias (Virunga National Park, 2020). However the paramilitary capacities of the park guards are continually strengthened by the park's training programs. Since the establishment of the CorPPN (corps responsible for the security of national parks) command in April 2018, efforts from 2019 onwards will focus on launching the process of transforming anti-poaching units into CorPPN detachments in six priority sites in the DRC, including Virunga (PNKB, PNG, PNS, PNVi, PNL and RFO), training senior officers and maintaining logistics in the six sites (State Party of the DRC, 2020). This could greatly help secure

Virunga NP and allow ICCN eco-guards to operate across the whole of the NP which they are unable to do at the moment, since the northern end remains under the control of the ADF and the Masisi area in the south (State Party of the DRC, 2020).

► **Volcanic activity**

Low Threat

(Volcanic eruptions)

Inside site, extent of threat not known

Relatively extensive areas of Sclerophyllous forests (forêts sclérophylles) are lost each time there is a lava flow. Since so much of these forests has already been degraded by illegal charcoal exploitation the loss of even a small area of intact forest is a major concern with respect to the integrity of the park and the loss of chimpanzee and l'Hoest's monkey habitat. The volcanic activity also threatens communities living in the vicinity. Much of Goma town was destroyed by a lava flow in 2002. As this is a geological event it is impossible to influence its occurrence or impact. However it should be noted that eruptions can be an important source of tourism revenue. Areas of varying size of intact forests (tens to hundreds of hectares depending on the direction of the lava flow) are lost each time there is a lava flow. Since so much of the natural forests have already been degraded by illegal charcoal exploitation the loss of even a small area of intact forest is a major concern with respect to the integrity of the park and the loss of chimpanzee and l'Hoest's monkey habitat. The volcanic activity also threatens communities living in the vicinity.

► **Hunting and trapping**

Very High Threat

(Commercial hunting of large mammals)

Inside site, scattered(5-15%)

Elephant, hippopotamus, buffalo and other plains ungulates are seriously threatened by commercial poaching in the plains to supply bushmeat markets in neighbouring cities and towns. While none of these species individually are unique to the park, it is the overall biomass and tourism potential of the mammal assemblage in the Rwindi plains which is the unique attributes affected by commercial hunting. Elephants are poached for ivory and meat, and are down to fewer than 100 individuals, with many regularly moving into Queen Elizabeth National Park in Uganda. The hippopotamus population has been reduced by 95% since the beginning of the 1990s and 50% of the 2000 that remain occur in the Ishasha river on the border with Uganda. Commercial poaching of forest species elsewhere in the park threatens the survival of endangered and/or endemic species (e.g. chimpanzee, l'Hoest's monkey, okapi, and Rwenzori duiker). Chimpanzees may already have disappeared from the Ishasha forest (Etat des Forêts, 2008). The two subspecies of gorilla (mountain and Grauer's gorillas) in the park are highly vulnerable to even low levels of hunting because their numbers are so small. Poaching of mountain gorillas in the Southern Sector is an ever present threat although there have been no new cases of direct killing of mountain gorillas since the killing of 10 individuals in 2007. In June 2013, a young mountain gorilla was discovered alone in a field outside of the park, suspected to have been held captive by poachers as he had injuries on his back, possibly due to a rope restraint. Further, in April 2016, survey teams came across a young mountain gorilla found dead in a snare in the Mikeno Sector of the park, highlighting that the snares used to target other species such as duiker, also pose a direct threat to mountain gorillas. These endemic species generate sustainable revenue for the park and local communities through tourism. With the ongoing instability in the country, the growing human population and many thousands of people unable to feed themselves, this threat is unlikely to diminish or go away soon.

► **Habitat Shifting/ Alteration**

High Threat

(Melting glaciers due to climate change)

Outside site

Recent studies indicate that the glaciers of the Rwenzori Mountains, which constitute part of the aesthetically spectacular alpine landscape have been receding (600ha in 1906 to 200 ha in 2005) (Languy & De Merode, 2006) and that these have almost completely disappeared (Bosson et al., 2019). Climate change therefore is a high threat to these glaciers.

Potential Threats

Very High Threat

Possible future oil exploitation is the greatest threat to the site as it would require degazettement of parts of the park where oil exploitation would take place. In a country racked by conflict and corruption, oil

exploitation in the park is likely to fuel conflict and intensify pressure on the site's unique attributes, and is considered by the World Heritage Committee to be incompatible with World Heritage status. Although the DRC government in 2019 states that extractives are not currently a threat to the site since this is not on the government agenda, it has not announced any long term intentions regarding drilling for oil in Virunga NP or other World Heritage sites, so there is a significant potential threat for this to become active again in future. The potential threat from Uganda relating to the Ngaji block, which borders Virunga NP on the Ugandan side of Lake Edward also remains a concern.

► **Oil/ Gas exploration/development**
(Oil exploration)

Very High Threat
Inside site, localised(<5%)
Outside site

In 2007, 85 percent of Virunga National Park was allocated as oil concessions by the DRC government. Acceptance of oil exploitation in the park will create a very dangerous precedent which will require degazettement of part, or all, of the park since mining and oil exploitation in national parks are specifically proscribed by law. It will also strengthen the hand of a minority of powerful local politicians who are lobbying for degazettement of the park for purely political and economic reasons. Oil spills in the closed aquatic ecosystem of the park could have catastrophic consequences for aquatic resources in the lake on which at least 3 million local people depend. Most of Virunga National Park is covered by 3 oil prospection blocks (Blocks III, IV, and V). Bloc III had been assigned to French oil company TOTAL S.A which committed not to enter current boundaries of the park in May 2013, nevertheless TOTAL pursued activities in close proximity of the park (north part of Block III) in the watershed of the Semiliki river; periphery activity could impact the park itself, before withdrawing from Block III since 2018. In 2010, Block V was attributed to SOCO International/ Dominion Oil / Cohydro for exploration. After a public outcry and pressure from international agencies, the exploration permit was suspended pending a Strategic Environmental Assessment supported by the EU. In June 2014, under intense pressure from UNESCO and many conservation organisations, SOCO announced it was stopping all activities in Virunga National Park unless the DRC government and UNESCO agreed that these activities can be compatible with World Heritage status. It should be noted that SOCO had completed its seismic activities by this time. According to the SOCO annual report 2015 "Following the end of our contractual obligations to the Government of the DRC, SOCO did not seek to renew the Block V licence. In 2015, SOCO finalised its relinquishment of the licence. This is in accordance with its public commitments made in 2014. The closure of the SOCO office in Kinshasa was completed by the end of the year. SOCO holds no licence interests in the DRC." (SOCO 2015). There has been no confirmation from the DRC government on whether they have cancelled oil exploration licenses for Virunga NP (SOC, 2017).

The World Heritage Committee has repeatedly expressed its concern regarding the existence of oil concessions in Virunga National Park and requested the DRC government to not issue any more exploration permits for Virunga NP (UNESCO, 2017; 2018; 2019). In 2020, the government reported that, for the time being, petroleum exploration does not represent a threat to the Outstanding Universal Value of Virunga (and Salonga) National Park since there is no exploration and exploitation activity, and such activities are no longer on the agenda (State Party of the DRC, 2020).

Potential threats from oil exploration remain, including in neighbouring Uganda where in May 2019, the minister of Energy and Mineral Development announced a second licensing open bidding of five oil blocks to further Uganda's commercial interests in oil production, including the Ngaji block located in Queen Elizabeth NP which borders the DRC along Virunga NP and covers Lake Edward which is jointly split between DRC and Uganda (Save Virunga, 2020). This potential threat remains, with the agreement in April 2016 to construct an oil pipeline from Uganda to the coast of Tanzania. Over 60 DRC, Ugandan and International NGOs, along with UNESCO, signed a joint declaration to the Ugandan and DRC governments to prevent any exploration, extraction or related activities in the wider Virunga area.

Overall assessment of threats

Very High Threat

Decades of poor governance culminating in two civil wars and the ongoing civil unrest are the factors that have created the current threats: encroachment for agriculture and fishing, commercial hunting,

and deforestation for charcoal. The cumulative effect of these threats is resulting in intense pressures on many of the park's World Heritage attributes including: Diversity and ecological connectivity of terrestrial habitats (particularly Sclerophyllous forests, woodlands, wooded savannah and humid rainforest); Endangered and/or threatened species (2 subspecies of gorilla, chimpanzees, l'Hoest's monkey, okapi, Ruwenzori duiker, forest elephant); Large mammal assemblages of the central plains, Wetland habitats for Palaearctic migrants. Overfishing on Lake Edward also threatens the biological diversity of the aquatic ecosystem and threatens food security of local populations. Possible future oil exploitation is the greatest threat to the site as it would involve degazettement of parts of the park where oil exploitation would take place. In a country racked by conflict and corruption, oil exploitation in the park is likely to fuel further conflict and greatly intensify pressure on the site's unique attributes, and would be incompatible with World Heritage status.

Protection and management

Assessing Protection and Management

► Management system

Some Concern

In early 2020, a 2020-2021 management plan has been drafted, submitted to ICCN headquarters and is awaiting official approval (IUCN Consultation, 2020). In the meantime most of the elements of the plan are being implemented (Draft Plan d'Aménagement et de Gestion, 2020-2021).

► Effectiveness of management system

Some Concern

In 2019, The Particip GmbH Consortium was contracted by the European Union to train park staff in the use the Integrated Management Effectiveness Tool (IMET) developed by BIOPAMA (Biodiversity and Protected Areas Management). The training also involved carrying out an evaluation of the park's management effectiveness using the IMET. The results of the PNVi management evaluation were largely positive for all elements of the management cycle. The evaluation recommended that Virunga National Park consider the need for an internal self-assessment for a more careful interpretation of the parameters related to threats, intervention context and effects/impacts.

► Boundaries

Some Concern

The park has over 1,150 km of boundary (including 154 km of international boundary) established over 70 years ago. Over this time many factors have led to a situation where the actual position of the real boundaries has become unclear (official and unofficial modifications, encroachment, displacement or loss of old boundary markers, etc.) A process of participatory boundary marking has been under way since 2002. About a third of the distance had been marked according to the draft management plan, 2011-2015 (State Party of the DRC, 2016). Progress continues, with the construction of electric fences continued to protect the southern area of the Ishasha ecological corridor linking Virunga and the Queen Elizabeth Conservation Area (10 km long built in 2018 and 16 km in 2019). A total of 70 km of electric fencing is planned to be constructed along the Virunga Ecological Corridor and the Queen Elizabeth Conservation Area. The construction of the electric fences will allow the recovery of 60 km² within the Property, access to which is controlled by armed groups, and the reduction of human-wildlife conflicts, especially in densely populated areas (including crop plowing) (State Party of the DRC, 2020). Concerns over a potential modification of boundaries to allow extractives is covered under "Threats".

► Integration into regional and national planning systems

Some Concern

Wherever possible the park's strategy for support for community development takes into consideration the local development plans drawn up by the 11 "Collectivités" around the park. Development initiatives must be compatible with the conservation objectives of the park. Decades of poor governance of the country culminating in two civil wars and the ongoing civil unrest are factors that have exacerbated the current threats: encroachment for agriculture and fishing, commercial poaching, and deforestation for charcoal. There is cross-border agreement between conservation NGOs to protect the mountain gorillas

that exist in DRC, Uganda and Rwanda, which is supported and facilitated by the International Gorilla Conservation Programme. Further, in October 2015, the Treaty on the Greater Virunga Transboundary Collaboration on Wildlife Conservation and Tourism Development was signed between the governments of DRC, Uganda and Rwanda for eight transboundary Protected Areas in the Greater Virunga Landscape, inclusive of Virunga National Park. The Treaty outlines the purpose and six organs of collaboration, inclusive of a Secretariat which is currently based in Kigali, Rwanda (Virunga website, accessed 5 October 2017). Conservation partners such as IGCP, Fauna and Flora and WWF offices (DRC and Uganda) have made important contributions regarding the inclusion of Virunga National Park in the larger Greater Virunga Landscape (GVL), including the creation of a coalition to focus on completing technical work in the field (IUCN Consultation, 2020).

► **Relationships with local people**

Serious Concern

Relationships with local people are strained in areas where illegal activities, particularly encroachment and illegal fishing, are actively encouraged by local politicians. However, the park makes a concerted effort to maintain a constructive dialogue with local customary chiefs and supports, within the limits of its resources, community development activities which will help reduce pressures on the park (water sources, micro hydroelectric installations, alternatives for charcoal, energy efficient stoves, tree planting, etc.), or promote goodwill and better understanding of the park's values (schools, human-elephant conflict strategies) (State Party of the DRC, 2016).

With the completion of the Matebe power station (13.2MW) in 2015, Mutwanga II (1.4MW) in 2019, and Luviro (15MW) in 2020, efforts have been made to build relationships with the local populations including employment in tourism (UNESCO, 2017) and local enterprise (about 12,000 jobs are estimated to have been created (VF 2019)). Of particular significance is the central role that national park staff played as a member of the Ebola and COVID-19 response committee, providing drinking water to 1.3 million people in the city of Goma by powering the city's pumping stations free of charge during the crisis, and by managing Ebola points of control along the main roads passing through the park to prevent the spread of the Ebola epidemic into the larger cities and across borders into East Africa (IUCN Consultation, 2020).

In 2016, there was an expulsion of 7,000 cattle and 500 households from Karuruma-Kasaka-Bwino area of the park (State Party of the DRC, 2017), which caused tensions with local people. With the very high population density around the park (average 300 inhabitants/km² - maximum 600), it is inevitable that many stakeholders have little or no direct contact with park management and not all stakeholder needs are addressed. In 2016, a strategy to address some of these concerns was developed. A communication strategy for the dissemination of information on Virunga NP to local and international media has been established. In July 2016, there was a stakeholder meeting held in Beni with public officials, civil society and local development organisations on the illegal occupation of the park and peaceful ways of restoring its integrity (State Party of the DRC, 2017).

Relations with local people in the gorilla sector are generally good because gorilla tourism brings direct benefits (revenue sharing, employment, improved security). Revenue sharing mechanisms are reported to be in place and to fund community development initiatives, however it is unclear whether communities are effectively engaged in these processes (IUCN Consultation, 2020).

► **Legal framework**

Serious Concern

ICCN has subcontracted a 25 year partnership to co-manage Virunga with the Virunga Foundation until 2040. The legal framework of the park is clear and adequate. However enforcement is extremely challenging in view of the current situation of political turmoil, civil unrest, and the presence of armed groups in the park. There has been an escalation of violence since the beginning of 2011, which has caused casualties among park guards every year since. The continued existence of three oil blocks remains a threat to the status and future of the park. The ongoing oil code reform could allow exploitation of protected areas for "reasons of national interest" (article 24), putting at risk the network of protected areas in DRC and its five World Heritage Sites.

► **Law enforcement**

Serious Concern

Law enforcement is now being supported by the Congolese army. Some areas of the park have been freed from illegal encroachment. In 2016, 120 new guards were recruited which will greatly improve enforcement capacity. However, there are still fatal attacks on park guards (UNESCO, 2017) and this is very demoralising for all the staff, local management included. On 15 June 2015, the DRC published a decree (n° 15/012) on the establishment of a Corps in charge of securing national parks and nature reserves (Corps en charge de la sécurisation des Parcs Nationaux, or CorPPN) (UNESCO, 2015).

► **Implementation of Committee decisions and recommendations**

Some Concern

Implementation of Committee decisions and recommendations is variable. Generally there has been inadequate implementation of recommendations which require decisions at the government level (e.g. political support for peaceful evacuation of illegal occupants, cancellation of oil exploration permits in the park) or at the level of the high command of the armed forces (closure of the Nyaleke army training camp, evacuation of armed militias). The Congolese army were able to successfully defeat the rebel group M23 who were operating within and around the park. Implementations of decisions requiring action by the park's authorities have been more successful (strengthened surveillance, revenue sharing mechanisms, public awareness, promotion of alternative energy sources) (IUCN-UNESCO Mission Report, 2010).

► **Sustainable use**

Some Concern

The fishing cooperative of Virunga, COPEVI (Coopérative des pêcheries des Virunga), is meant to regulate fishing on Lake Edward, but is dysfunctional. As a result, overfishing and the installation of illegal fishing villages threaten several attributes. A 2017 study by IUCN-NL confirmed that there is overfishing of Lake Edward and this needs to be addressed (State Party of the DRC, 2017). An assessment of fish stocks and sustainable take has not yet been conducted, but was planned under the previous management plan (State Party of the DRC, 2016). The park devotes considerable effort to curbing illegal fishing (patrols, confiscation of illegal nets and boats, etc.), but the problem remains serious. In 2019, the presence of eco-guardians in the legal fishing enclaves and on the exit routes resulted in the seizure of nearly 43,000 illegally caught fry, 114 nets, 710 hooks, and 63 illegal boats (State Party of the DRC, 2020).

In 2019, ICCN signed a 30 year agreement with the fishing cooperative. In 2020, park management intends to work with stakeholders to coordinate the formulation of an improved regulatory framework for fisheries management on Lake Edward. This includes cooperation with Uganda in the development of a regional roadmap under the auspices of the Greater Virunga Transboundary Collaboration (IUCN Consultation, 2020).

► **Sustainable finance**

Some Concern

In 2020, the park had an annual operating budget of USD 12 million, and an investment budget of USD 22 million. This is a significant increase compared with the previous two decades. Funding comes from about 10 public and private sources and are of varying time frames. The website also generates funds to support development projects, a fund for families of guards, and anti-poaching. Significant funding is mobilized by ICCN's partners, in particular the European Union for activities in the buffer zone of the park focused on energy and agriculture.

Tourism in 2019 generated almost USD 3 million, the most that has ever been raised in this sector in DRC. 20% of the tourism revenue returns to the park (the rest being split between local communities and ICCN head office). Tourism came to a standstill in early 2012 and remained so throughout 2013 because of insecurity, but high-end tourists are now staying at Mikeno Lodge, which opened in 2011. Since then, tourism has had to be suspended several times because of civil war, heightened insecurity and health emergencies (Ebola and COVID-19). While the funding situation is the best it has been for over 20 years, it undoubtedly falls short of full requirements but the park is expected to be financially self sufficient in 2022 thanks to tourism revenue and electricity sales, which currently cover 40% of

operating costs (IUCN Consultation, 2020).

► **Staff capacity, training, and development**

Mostly Effective

In recent years, the park has invested in restructuring the personnel (pensioning off retirement-age staff, divesting the personnel of illegally employed staff, recruiting and training new staff) (Draft Plan d'Aménagement et de Gestion, 2011 - 2015; State Party of the DRC, 2016). This is an ongoing process as staff numbers and capacities are not yet at optimal levels. By 2019, 748 guards had been trained (with 16% of guard time that year spent on training activities) and the number of civilian personnel working in the implementation of development programmes continues to increase (State Party of the DRC, 2020).

► **Education and interpretation programs**

Some Concern

Awareness programs concerning the park's most emblematic animal, the mountain gorilla, are highly effective and raise awareness around the world. The park's social media activities have a very positive awareness building impact nationally and internationally. It is also an effective fund raising tool. A documentary film raised global awareness about the threat from drilling for oil in Africa's oldest NP and an incredibly important area for biodiversity. This documentary has been shown around the world (Virunga - Conservation is War, 2014).

Eleven schools near the park have been built or rehabilitated by the park, using funds from public and private donors and from tourism revenues, and contribute significantly to awareness building. However, education and interpretation by the park authorities is constantly undermined by an active minority of corrupt local politicians who orchestrate a campaign of disinformation about the park, encourage illegal occupations, and lobby strenuously for degazettement of the park. The overriding daily urgency of dealing with illegal activities and attacks from armed militias means that park management probably has less time than it would like to devote to education and interpretation activities.

Quarterly meetings are held with main actors from civil society, the private sector and local government to address the park's problems and for consultations on its development strategies.

► **Tourism and visitation management**

Mostly Effective

Tourism currently focuses mainly on gorilla viewing, chimp viewing and treks to the active volcanoes. Given the current circumstances of civil unrest the park management authorities are achieving a remarkable level of success with these activities. More than 5,000 tourists visited the park in 2019, generating nearly USD 3 million of revenue (IUCN Consultation, 2020). Following a collapse since 2011, the recent resurgence of tourism to the park has contributed significantly to improving staff morale. The potential future yearly value of tourism linked to Virunga's extraordinary landscapes and rare wildlife is estimated at US\$235 million. Further, the tourism industry could be the source of over 7,000 jobs in park management and other necessary services (WWF, 2013).

► **Monitoring**

Mostly Effective

Daily monitoring of the habituated groups of mountain gorillas in Mikeno Sector is conducted when security and human resources allows. There are several known poaching incidents. In June 2013, an infant gorilla now known as Matabishi was found alone in a cornfield outside of Virunga National Park. He was confirmed to be a mountain gorilla and was suspected to have been a victim of gorilla trafficking and had been held captive for several weeks (Virunga website, 2020b). In April 2016, during the field work for the latest census of mountain gorillas, teams discovered a mountain gorilla dead in a poacher's snare likely set to capture duiker. Poacher's snares remain a persistent threat to the mountain gorillas in the Mikeno Sector and transboundary Virunga Massif. Within the entire Virunga massif which encompasses Volcanoes National Park, Mgahinga Gorilla National Park, and the Mikeno Sector of Virunga National Park, the results of the 2016 census indicate that the transboundary mountain gorilla population likely increased from an estimated 458 in 2010 to an estimated 604 in 2016 (Hickey et al., 2019). The population of mountain gorillas within Virunga National Park was estimated to be 286 individuals (113 habituated, 173 unhabituated) (State Party of the DRC, 2019). While comparison of abundances should be done cautiously because the search effort in the 2016 survey for the entire

Virunga massif was nearly double that of the 2010 survey, the growth rate of continuously monitored gorillas can accurately be calculated for the entire Virunga massif at 3% (Granjon et al., 2020). These results are an impressive conservation achievement given every other species of great ape has recently experienced declines (Plumptre et al., 2016). Although the species is still under threat, the Mountain gorilla's threat status on the IUCN Red List of Threatened Species was downgraded from Critically Endangered to Endangered due to the success of intensive conservation actions (Hickey et al., 2018). Aerial monitoring of the plains sector is done as and when possible. Hippopotamus counts were done most years between 2003 and 2015 with the population changing from 1,309 in 2003 to 2,406 individuals in 2015. Aerial counts of plains ungulates and elephants were conducted in 2003, 2006, 2010 (References in State Party of the DRC, 2016). In 2016, 15 elephants were collared and monitored which highlighted movement between DRC and Uganda. In 2016, it was confirmed that there are forest elephants and 3 groups of savannah elephants. Two communities of chimpanzees are monitored and habituated for tourism, Tongo (25 individuals) and Rumangabo (14 individuals). Illegal occupations, charcoal making, agriculture and fishing are regularly monitored (on an ad hoc basis) by aircraft, foot patrols and boat patrols. SMART patrolling is established and operational throughout the park, but practical support for park management is considered inadequate (State Party of the DRC, 2019).

► **Research**

Some Concern

The previous management plan lays out a series of priorities for applied research (energy alternatives, evaluation of fish potential of lake, diseases transmission in apes, human-animal conflict, control of introduced exotic species, feasibility studies for controlled resource use, bush fires). However given the current security situation park management is rightly focusing on law enforcement, although research on energy alternatives and disease transmission in apes is ongoing (State Party of the DRC, 2016).

Overall assessment of protection and management

Some Concern

In a context of continuing civil strife, insecurity and political instability the park faces enormous management challenges. The issues of mass encroachments, presence of armed militia, commercial charcoal making, illegal fishing and oil exploration require clear and strong political leadership in support of park management structures but regrettably the necessary level of leadership is not forthcoming from the higher levels of the DRC government. Park management therefore often finds itself in an isolated position as it tries to re-establish the rule of law in the park. However, park leadership is currently strong, and remarkable efforts (and sacrifices) are being made to save the park's World Heritage attributes despite the enormous challenges. A significant increase in financial and technical support to the park from public and private partners in recent years has been of critical importance in preserving these attributes.

► **Assessment of the effectiveness of protection and management in addressing threats outside the site**

Some Concern

There has been an increase in effort to address outside threats to Virunga NP.

► **Best practice examples**

In a serious situation of ongoing conflict, the Park enables the conservation of the World Heritage values of Virunga through the implementation of activities relating to a green economy (e.g. hydropower at Matebe) with the aim of contributing to peace and ensure the development in the buffer area and the financial resources for the Park by an adaptive, innovative and proactive management. The fact that mountain gorilla tourism has continued to generate significant revenue for the Park despite the ongoing conflict demonstrates the remarkable level of success park management authorities are achieving with these activities.

State and trend of values

Assessing the current state and trend of values

World Heritage values

► **Aesthetically spectacular afro-montane and alpine landscape of Rwenzori Mountains**

Low Concern
Trend:Data Deficient

Overall, the aesthetic quality is intact. Although the glaciers have been receding (600ha in 1906 to 200 ha in 2005) (Languy & De Merode, 2006) and almost completely disappeared (Bosson et al., 2019) the aesthetically spectacular landscape remains (IUCN Consultation, 2020).

► **Spectacular Virunga volcanoes with frequent volcanic activity**

Low Concern
Trend:Data Deficient

Aesthetic quality intact, although threatened by degradation of the natural forests on and around them as a result of illegal charcoal making (UNESCO and IUCN, 2010).

► **Aesthetically spectacular concentrations of large mammal fauna in the savannah plains**

Critical
Trend:Data Deficient

A massive decline in the large mammal biomass has occurred since the site's inscription. Since 1959 elephant, buffalo, hippo and certain species of antelope have declined by between 82% and 92% (UNESCO and IUCN, 2010). However, re-population can occur from the contiguous Queen Elizabeth II National Park in Uganda. It has been proven that elephants cross between the two countries (State Party of the DRC, 2017) so there is no reason to believe this cannot happen to all threatened savannah species. Oil exploration on either side could potentially hamper this. There is a real threat of local extinctions.

► **Active and extinct volcanoes as a result of ongoing tectonic movements along the Albertine Rift**

Good
Trend:Data Deficient

Intact (UNESCO and IUCN, 2010)

► **Exceptionally high biodiversity resulting from a unique combination of uninterrupted gradient of habitat types from 680m to 5,109m and geographic location within three bio-geographic regions.**

High Concern
Trend:Data Deficient

The uninterrupted gradient of habitats from 680m to 5,115m is threatened in places by encroachment and habitat destruction. The long and narrow shape of the park (300km long, average width 25km with a minimum of 2.5km), over 1150km of boundary (Languy & De Merode, 2006) makes it particularly vulnerable to pressures, especially as it is located in an area with one of Africa's densest human populations. With the exception of emblematic large mammal species such as gorillas, elephants, okapi, hippo, savannah ungulates, up to date data on the distribution and abundance of most of the plant and animal species is lacking for the entire park. There are no known cases of species extinction in the park.

► **Presence of several endangered and emblematic mammal species**

High Concern
Trend:Data Deficient

The mountain gorilla population may be increasing over the last several decades and the results of the 2015/2016 indicated a population of 286 individuals within Virunga National Park (113 habituated, 173 nonhabituated) (State Party of the DRC, 2019). For Grauer's gorillas their population is thought to have decreased quite significantly, from an estimated 20 individuals in 2009 to six individuals in 2015 on Mount Tshiaberimu. The small chimpanzee population at Tongo (chimpanzee viewing site, approx. 25 individuals) is well protected but elsewhere in the park they are threatened by poaching and habitat degradation. They seem to have already disappeared from the Ishasha forest (Etat des Forêts, 2008). They are known to exist in the following sectors; Nyamulagira, Ishasha, Kasali, Watalinga, Ruwenzori,

Kinyonzo, Sarambwe, Busendo, Mwaro and Kibati (UNESCO, IUCN and Ramsar, 2014; ICCN 2017).

Elephants are severely threatened by poaching (less than 350 remain in the plains sector from an estimated figure of 3425 in 1959 (UNESCO, IUCN and Ramsar, 2014)) but replenishment from Uganda's contiguous Queen Elizabeth II NP is possible (UNESCO and IUCN, 2010). It has since been confirmed that savannah elephants do cross between Uganda and DRC when 15 elephants were collared and recorded moving between the two countries, spending most of their time in Uganda. 16 elephants were poached in 2016 as opposed to 13 in 2015 (State Party of the DRC, 2017). There is also known to be a forest elephant population in Mikeno sector (State Party of the DRC, 2017). No known elephant poaching incidences have been recorded between 2017 and 2020, and the population numbers in the central sector are estimated to have increased from under 100 to about 400 in 2020 (State Party of the DRC, 2020). This is mainly caused by migration from Queen Elizabeth National Park in Uganda, coupled with a significant reduction in poaching. Okapi numbers in the north of the park are probably very low and are threatened by human activities (Bashonga & Languy, 2008).

► **Endemic species**

Critical
Trend:Data Deficient

The mountain gorilla population may be increasing over the last several decades and the results of the 2015/2016 indicated a population of 286 individuals within Virunga National Park (113 habituated, 173 nonhabituated) (State Party of the DRC, 2019), with at least 11 new babies born between January and September 2020 (IUCN Consultation, 2020). For Grauer's gorillas their population is thought to have decreased quite significantly, from an estimated 20 individuals in 2009 to six individuals in 2015 on Mount Tshiaberimu.

Exact data is lacking for most other endemic species. Hunting and habitat degradation is likely to be a concern for l'Hoest's monkey and okapi. Okapi were only reconfirmed in the Park in 2009 when ZSL and ICCN caught them on camera trap. This was the first confirmation that they still existed inside Virunga NP since 1959.

Hunting may be a concern for the Ruwenzori duiker. Threats to smaller endemic vertebrate species are probably low, but this could change if habitat loss/degradation accelerates (UNESCO and IUCN, 2010).

► **Rwenzori Mountains, uplifted from the floor of the Albertine Rift as a result of recent (<3m years) movement of tectonic plates**

Good
Trend:Stable

Intact (UNESCO and IUCN, 2010).

Summary of the Values

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

High Concern
Trend: Data Deficient

The status of landscape attributes relating to criteria (vii) (superlative natural phenomena) and (viii) (outstanding examples representing major stages of earth's history) are good and are likely to remain so. However the biological attributes relating to criterion (vii) (exceptional large mammal biomass) are severely degraded, although the situation can recover if sustained protection is applied. In recent times there has been slight progress in this area with increasing numbers of some of the charismatic large mammals. The status of attributes relating to criterion (x) (significant natural habitats for in-situ conservation of biological diversity), is a concern because of encroachment and habitat degradation. The trend is reversible if strong political leadership is given to support park management's law enforcement and conservation actions.

► **Assessment of the current state and trend of other important biodiversity values**

High Concern
Trend: Data Deficient

Illegal fishing settlements are encroaching on wetland overwintering sites for Palearctic migrants. Extensive overfishing is depleting fish stocks and threatening food security for local populations. The perspectives for inverting the trend are not encouraging as the necessary strong political leadership is currently lacking. However recovery of the fish stocks will be feasible if proper protection measures can be implemented and maintained.

Additional information

Benefits

Understanding Benefits

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

The mountainous region covered with natural vegetation ensures steady supplies of clean water outside the park for households and agriculture, and for the whole White Nile, and contributes to mitigating the frequency of landslides and erosion. The potential for energy generation from micro-hydroelectric installations is very high (Languy & De Merode, 2006).

Factors negatively affecting provision of this benefit :

- Habitat change : Impact level - High, Trend - Increasing

Forests being changed illegally to agricultural land could lead to landslides and erosion affecting water quality.

► **Outdoor recreation and tourism**

High-end tourism generates significant benefits for the park and local communities (through revenue sharing and employment). The spectacular landscapes (Rift Valley, volcanoes, snow-capped Ruwenzori Mountains, savannas, lakes) are also of very high tourist value along with many of the charismatic large mammals in the savannah (Languy & De Merode, 2006).

► **Fishing areas and conservation of fish stocks**

The fish resources of Lake Edward are of very high value both economically and in terms of food security for the 3 million people living around the park (Languy & De Merode, 2006).

Factors negatively affecting provision of this benefit :

- Overexploitation : Impact level - High, Trend - Increasing

There is evidence of over fishing in Lake Edward and depletion of fish stocks

Summary of benefits

The park contains many endemic species (e.g. Okapi), two sub-species of gorilla, many other charismatic species and spectacular landscapes. It is a primary source for both the Nile and Congo rivers and clean water for millions of people.

The national and global benefits in terms of nature conservation (biodiversity), recreation (tourism), water supplies and food (fish) are incontestable and of very high importance.

However, given the extraordinarily difficult context of eastern Congo (continuing war, absence of rule of law, extreme poverty, looting of natural resources) the benefits for communities outside the park are probably not appreciated at their real value. At the national level it is also a matter of very serious concern that the national and global benefits of the park appear to be undervalued (as evidenced by the possibility

of degazettement as a result of oil exploitation, and the unwillingness/inability to confront the problem of illegal encroachments and the presence of armed militia).

Projects

Compilation of active conservation projects

Nº	Organization	Project duration	Brief description of Active Projects
1	European Union		Support to improve general management of Virunga National Park
2	European Union		Micro-hydroelectric installation for Mutwanga
3	RAPAC		Tourism and training
4	Frankfurt Zoological Society (GEF funds)		Support to improve general management of Virunga National Park
5	UNESCO		Emergency support to central sector
6	Belgian Cooperation		Ranger training
7	WWF		Projet Ecomakala alternative for charcoal production and also generating revenue to people living in the vicinity of the Park.
8	GVTC/Community		Water supply Rumangabo
9	UNHCR		Protection des femmes retournées et déplacées
10	Suez Electrabel Foundation		Suez Electrabel Foundation
11	PACEBCo		Ranger Training and anti-poaching
12	Virunga Alliance		Sustainable energy, sustainable fisheries, agro-industry, tourism
13	Water4Virungas		Support to water supply and reduction of human-wildlife conflict. Dutch-funded project, in collaboration with the Greater Virunga Transboundary Collaboration (GVTC), implemented by MDF Global, Wageningen University & Research, Witteveen + Bos and the International Gorilla Conservation Programme.
14	WWF (Sweden International Development Agency via WWF Sweden)		Leading the change (supporting Civil Society organisation and community based organisation interacting with policy makers and decision makers for having good governance on natural resources)
15	WWF (DGD, Belgium Government)		Protection of communities, indigenous people and their forest in DRC/North Kivu
16	WWF		Implementing agroforestry field to improve the environmental resilience of farmers in North Kivu
17	IGCP (Sweden International Development Agency via WWF Sweden)		Leading the change (Supporting Civil Society organization and community-based organization interacting with policy makers and decision makers to ensure good governance on natural resources). For both DRC, Rwanda and Uganda communities protecting gorillas.
18	IGCP (WWF-UK)		Support SMART implementation and Transboundary gorilla movement monitoring in ViNP

Nº	Organization	Project duration	Brief description of Active Projects
19	IGCP (WWF-Norway via WWF-Sweden)		Support patrols/Cleaning in ViNP
20	IGCP (Arcus foundation)		Improved tourism practices to contribute to risks reduction to gorillas
21	IGCP (The Netherland Kingdom - W4V project)		Support to Integrated Water resources management, conflict reduction and safe water provision around Mikeno sector

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