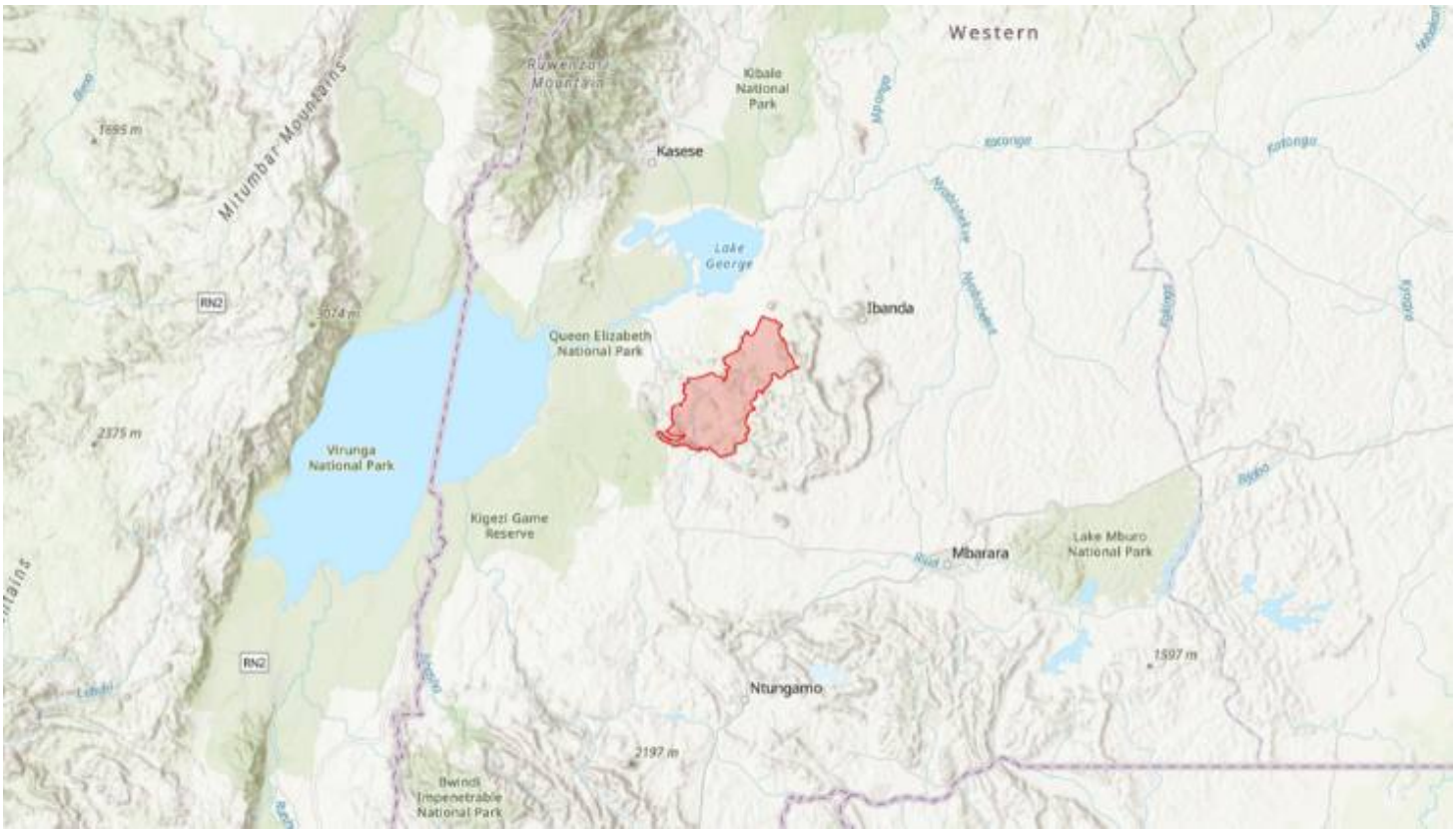
Kasyoha-Kitomi

UGATIPA7



Country: **Uganda**
Administrative region: **Western (Region)**
Central co-ordinates: **-0.27544 N, 30.23853 E**
Area: **384km²**

Qualifying IPA criteria

A(i), B(ii), B(iii), C(iii)

IPA assessment rationale

Kasyoha-Kitomi is recognised as an IPA under sub-criterion A(i). One Critically Endangered, five Endangered and six Vulnerable species are known from this site. Urgent research is needed to establish if four of these species are still extant at this site, particularly Diospyros katendei, which is only known from this site globally. Meeting the threshold of taxa on national list of endemic and range-restricted species, and 16% of the national list of useful plant species encompassed within this IPA, Kasyoha-Kitomi meets both sub-criterion B(ii) and B(iii). Finally, sub-criterion C(iii) is triggered by the presence of medium altitude evergreen forest (VU). Kashoya-Kitomi encompasses 16.6% of the national resource of this habitat and is one of the five best sites nationally.

Site description

Kasyoha-Kitomi Central Forest Reserve (CFR) covers 394.6 km2 and lies within the administrative districts of Bushenyi, Ibanda, Rubirizi and Kamwenge of Uganda's Western Region. Located within the Albertine Rift Area, this IPA is around 25 km east of Lake Edward and 10 km south of Lake George. The Kyambura River runs through this site, meeting the Kazinga Channel downstream between these two lakes. The site was surveyed in 2023 as part of fieldwork for the Uganda TIPAs project.

Botanical significance

Kasyoha-Kitomi is an important site for national and Albertine Rift endemics, many of which are threatened. Of great importance is Diospyros katendei, a Critically Endangered tree that is endemic to Kasyoha-Kitomi and is only known from a single individual. Searches have been undertaken to locate this species in recent years, but there have been no further individuals found and, as a Diospyros species, it is highly likely to have been targeted for its high-quality timber (IUCN SSC East African Plants Red List Authority 2013). Another threatened tree species, Ficus katendei (EN), similarly named after the Ugandan botanist Anthony Katende, may have also been extirpated from this site. While this species is found at one

other site, Bwindi-Impenetrable National Park, the only known individual at Kasyoha-Kitomi was felled to build a bridge (Gereau et al. In prep.). However, there are large areas of Kasyoha-Kitomi that have yet to be searched for either of these species and, therefore, they may still be extant at this site. Further research is urgently needed, particularly given the threats to this site, to understand whether there is an opportunity to conserve D. katendei and F. katendei here, particularly for the former of the two, which may be saved from extinction through conservation at Kasyoha-Kitomi.
This IPA is also of great conservation importance for several other threatened species. Kasyoha-Kitomi is, for instance, the only site nationally from which Aframomum spiroligulatum is known and one of only two protected areas globally in which this species occurs. In addition, another Endangered species Uvariodendron magnificum, was described as a “dominant understorey tree” when collected in 1969 (Synott #540) and has been collected here more recently in 2017. This species is endemic to Uganda and Kasyoha-Kitomi likely represents the most important site for U. magnificum nationally.
This IPA is also an important site for Brachystephanus roseus, an Albertine Rift endemic known from only two other protected areas in Uganda.
Six Vulnerable species are known from this IPA. One of these species, Musanga leo-errarae, was collected during 2023 fieldwork by the Uganda TIPAs team at this site. This tree is an Albertine Rift endemic and occurs occasionally in recently opened gaps in the canopy at Kasyoha-Kitomi. Another Vulnerable species recorded on fieldwork is Rinorea tshingandaensis, this species was uncommon at this site and globally only known from Uganda and eastern D.R. Congo (Kalema & Beentje, 2012). Two other Vulnerable species, Crotalaria adenocarpoides and Vernonia parapetersii, were collected in 1970 on Lubare Ridge in rocky grassland habitats (Lye #5473, 5480). In recent decades, large areas of this grassland have been replaced by forest plantation and some small-scale agriculture (Google Earth 2023). Some small areas of Lubare Ridge continue to support grassland, and so it is strongly recommended that further surveys are undertaken to ascertain whether these grassland species persist within this IPA.
Kasyoha-Kitomi contains 170 useful plant species (16% of the national checklist), triggering criteria B(iii), and is the fifth most species-rich site for useful plants in the IPA network. This IPA holds a significant proportion of the national total species with social (13 spp., 26%), fuel (83 spp., 44%), materials (98 spp., 32%) and medicinal (129 spp., 17%) uses.
The Vulnerable timber tree Mimusops bagshawei was likely observed during fieldwork in 2023 for the Uganda TIPAs project, although it was not possible to collect material to confirm this determination. This fieldwork did, however, find a new record of Massularia acuminata and Rytigynia bagshawei var. lebrunii for both Uganda and the Flora of Tropical East Africa region. There are likely several more plant species that are of botanical significance at this site. Further research is needed, particularly in harder to access sections, to fully categorise its biodiversity importance.
In addition to species of conservation importance, Kasyoha-Kitomi is also a key site for the conservation of nationally threatened medium altitude evergreen moist forest. Kasyoha-Kitomi CFR has the second largest area of this forest nationally, representing 16.6% of the national resource. Most of the threatened species at this site are associated with this habitat, so protection of medium altitude evergreen moist forest will concurrently support conservation outcomes for these species.

Habitat and geology

Kasyoha-Kitomi occupies a hilly landscape, reaching a maximum altitude of 2108 m in the northeast, and is geologically complex, including quartzites, schists, gneisses, shales and phyllites in the underlying rocks (Howard 1991). The site is dominated by moist forest. Langdale-Brown et al. (1964) classified this forest as a mixture of Parinari Forest and Albiza-Markhamia Forest. Our surveys of this site were largely limited to the westerly edges of the reserve within moist, well-developed, secondary forest where species such as Shirakiopsis and Strombosia were common.

Conservation issues

Kasyoha-Kitomi CFR was established in 1932. With neighbouring protected areas Queen Elizabeth National Park, Kyambura Wildlife Reserve, Kalinzu and Kakasi Central Forest Reserves, Kasyoha-Kitomi forms part of a conservation corridor from Fort Portal to the Democratic Republic of Congo border south of Lake Edward (UNEP-WCMC and IUCN 2022).

The site has previously experienced high levels of disturbance through pitsawing, covering well over half of the reserve area, however, the steep topology has prevented mechanised tree felling (Howard 1991). The site continues to be threatened by gold mining at the Kitaka deposit in the north-east, with a prospecting license covering 40 km2 granted to Simba mining group. The mining and associated access roads have led to deforestation at this site (Google Earth 2023; Global Forest Watch 2023). The chairman of Simba group was reported to have claimed that, for every tree cut at the site, 40 more would be planted (Daily Monitor 2013). There are no further details of such a commitment, and as such it is unlikely to be binding.

Tea plantations cover large areas of land to the south of the site; landowners and tea estates have previously bought out small-scale farmers leaving them with little land to cultivate (Raben et al. 2007). In turn, a shortage of land, combined with high population densities in the area, puts pressure on the habitats of Kasyoha-Kitomi and has led to agricultural encroachment and illegal harvesting of timber and charcoal production (Bitariho and Babaasa 2016).

Collaborative Forest Management (CFM) at the site was established by Nature Uganda within the Participatory Environmental Management project between 2007-2011, to curb these threats. Several CFM groups continue to work with site managers. Forest plantations within the site were established outside existing natural forests (BirdLife International 2008). Much of this forestry appears

to be on Lubare Ridge, however, satellite imagery shows this area lacking forest cover in previous decades (Google Earth 2023). In addition, the hilly grasslands of the south of the reserve have been given over to small-scale tea plantations, while cattle are grazed in rocky, infertile areas (Raben et al. 2007). This loss of habitat has conservation implications for Vulnerable grassland species Crotalaria adenocarpoides and Vernonia parapetersii (see “Botanical Significance”).

Site assessor(s)

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Date of first assessment:
1st Nov 2024

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IPA criterion A species

SPECIES	QUALIFYING SUB-CRITERION	≥ 1% OF GLOBAL POPULATION	≥ 5% OF NATIONAL POPULATION	1 OF 5 BEST SITES NATIONALLY	ENTIRE GLOBAL POPULATION	SOCIO-ECONOMICALLY IMPORTANT	ABUNDANCE AT SITE
Brachystephanus roseus Champl.	A(i)	✓	✓	✓	–	–	Unknown
Dasylepis eggelingii J.B.Gillett	A(i)	✓	–	–	–	–	Occasional
Vernonia parapetersii C.Jeffrey	A(i)	✓	✓	✓	–	–	Unknown
Diospyros katendei Verdc.	A(i)	✓	✓	✓	✓	–	Scarce
Ficus katendei Verdc.	A(i)	✓	✓	✓	–	–	Scarce
Polystachya hastata Summerh.	A(i)	–	✓	✓	–	–	Unknown
Balsamocitrus dawei Stapf	A(i)	✓	✓	✓	–	✓	Scarce
Musanga leo-errerae Hauman & J.Léonard	A(i)	–	✓	✓	–	–	Occasional
Aframomum spiroligulatum Lock & A.D.Poulsen	A(i)	✓	✓	✓	–	–	Unknown
Crotalaria adenocarpoides Taub.	A(i)	✓	–	–	–	–	Unknown
Rinorea tshingandaensis Taton	A(i)	✓	–	✓	–	–	Occasional

IPA criterion C qualifying habitats

HABITAT	QUALIFYING SUB-CRITERION	≥ 5% OF NATIONAL RESOURCE	≥ 10% OF NATIONAL RESOURCE	1 OF 5 BEST SITES NATIONALLY	AREAL COVERAGE AT SITE
Medium Altitude Evergreen Forest (VU)	C(iii)	✓	✓	✓	268.3
Medium Altitude Semi-Deciduous Forest (EN)	C(iii)	–	–	–	64

General site habitats

GENERAL SITE HABITAT	PERCENT COVERAGE	IMPORTANCE
Forest - Subtropical/Tropical Moist Lowland Forest	—	Major
Forest - Subtropical/Tropical Moist Montane Forest	—	Major
Grassland - Subtropical/Tropical High Altitude Grassland	—	Minor
Artificial - Terrestrial - Plantations	—	Minor
Artificial - Terrestrial - Arable Land	—	Minor

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
Nature conservation	—	Major
Agriculture (arable)	—	Minor
Forestry	—	Minor

Threats

THREAT	SEVERITY	TIMING
Agriculture & aquaculture - Annual & perennial non-timber crops - Small-holder farming	Medium	Ongoing - trend unknown
Agriculture & aquaculture - Wood & pulp plantations - Small-holder plantations	Medium	Ongoing - trend unknown
Energy production & mining - Mining & quarrying	High	Ongoing - increasing
Biological resource use - Logging & wood harvesting - Intentional use: subsistence/small scale (species being assessed is the target) [harvest]	Medium	Ongoing - trend unknown

Protected areas

PROTECTED AREA NAME	PROTECTED AREA TYPE	RELATIONSHIP WITH IPA	AREAL OVERLAP
Kasyoha-Kitomi Central Forest Reserve	Forest Reserve (conservation)	protected/conservation area matches IPA	384

Conservation designation

DESIGNATION NAME	PROTECTED AREA	RELATIONSHIP WITH IPA	AREAL OVERLAP
Kasyoha-Kitomi Forest Reserve	Important Bird Area	protected/conservation area matches IPA	384
Kasyoha-Kitomi Forest Reserve	Key Biodiversity Area	protected/conservation area matches IPA	384

Management type

MANAGEMENT TYPE	DESCRIPTION	YEAR STARTED	YEAR FINISHED
Protected Area management plan in place		–	–

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