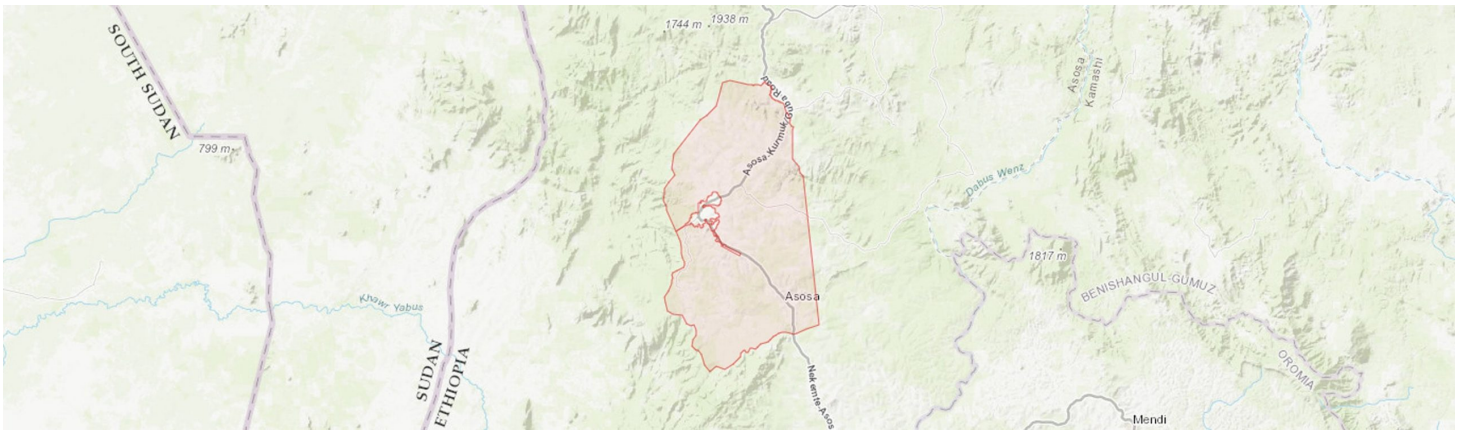
Available from https://tipas.kew.org/site/asosa/
[Accessed 16 June 2026]

Asosa

ETHTIPA001



Country: **Ethiopia**
Administrative region: **Benishangul Gumuz (Regional State)**
Central co-ordinates: **10.06404 N, 34.56761 E**
Area: **629km²**

Qualifying IPA criteria

A(i)

IPA assessment rationale

Asosa qualifies as an IPA under criterion A. This IPA is believed to contain more than 1% of the global population of seven globally threatened species, A(i): Aloe benishangulana (CR), Chlorophytum herrmannii (CR), Chlorophytum pseudocaule (CR), Disa facula (EN), Zygotritonia benishangulana (EN), Pancratium centrale (VU) and Scleria pseudohispidior (VU). Several of these threatened species are endemic to the site. Local populations within the site are threatened by habitat conversion to agriculture.

Further threatened species are thought to exist or be endemic to the area, however further exploration of the area is needed to determine their abundance and range.

Site description

The Asosa IPA is located in the south-west of Benishangul Gumuz Regional State within the Wellega and Gojam floristic regions. It lies south of the Abbay (Blue Nile) river, and is close to the border with Sudan to the west. Located in the Western Escarpment of the Ethiopian highlands, the topography is characterised by undulating slopes and mountainous ridges. Vegetation is typical of the Western escarpment, dominated by Combretum-Terminalia broad-leaved deciduous woodland, grassland, Oxytenanthera thickets, and wetlands, with a high orchid diversity (Herrmann et al., 2007). This region is one of the least botanically explored in Ethiopia; the boundary of this IPA has not been precisely defined due to limited exploration beyond the main road network.

Located within this proposed IPA [but excluded from the IPA boundary] is Asosa town, the capital of Benishangul Gumuz Regional State. Asosa has seen a migration of people into the area since the 1984 Government resettlement initiative (Kenaw, 2020). Land use is dominated by agriculture; shifting cultivation and permanent farming are the two main types of systems used. The main threats are urbanization, clearance of land for agriculture, and the associated increased burning, and draining of wetlands.

Botanical significance

Seasonally wet natural meadows support a rich herbaceous flora with a high number of geophytes, including a high orchid diversity and a number of local endemic species; over 50 orchid species have been found within the vicinity of Asosa (Herrmann et al., 2007). In addition, rocky outcrops that support Combretum-Terminalia woodland and Oxytenanthera abyssinica Munro thickets, also support a small number of endemic species. This area is particularly noted as a local centre of endemism for the genus Chlorophytum (Awas & Nordal, 2007).

Five globally threatened plant species are considered to have their entire known ranges within this IPA based on current knowledge: Aloe benishangulana Sebsebe & Tesfaye (CR), Chlorophytum herrmannii Nordal & Sebsebe (CR), Chlorophytum pseudocaule Tesfaye & Nordal (CR), Disa facula (EN), and Scleria pseudohispidior Bauters (VU) (Awas & Nordal, 2007; Bauters et al., 2019). These species are largely known from only a few botanical collections, in particular those from Christoff Herrmann and colleagues in 1999-2001; further exploration is needed to confirm their full range

and abundance.

Other scarce species recorded from this site include the geophytes Zygotritonia benishangulana Goldblatt & Sebsebe (EN), known only from Benishangul Gumuz State; Pancratium centrale (VU), a scarce but scattered species in central northern Africa; and Crinum bambusetum Nordal & Sebsebe, which is otherwise known only from a few localities in Sudan and South Sudan and has not yet been assessed on the IUCN Red List but is likely to be threatened. Other Ethiopian endemics are known to be found in the areas surrounding the site, including Vernonia gilbertii Mesfin, and could occur within the IPA (Mesfin, 1997).

Habitat and geology

Asosa lies on a suture zone in the Southern Arabian-Nubian Shield, comprised of metamorphic Proterozoic and Palaeozoic rocks. Superficial cover is characterised by Makonnen basalts and Precambrian granitoid intrusions (Fernandez et al., 2007; Bullock and Morgan, 2018). These rocks hold rich mineral deposits including copper, lead, zinc and high levels of gold, which have been mined since the early twentieth century within Benishangul Gumuz Regional State (Bullock and Morgan, 2018). Soil is characteristically a deep reddish-brown clay-rich soil (nitisol) that is slightly acidic (Hunde, 2019).

The topology of the site and surrounding areas consists of flatlands, valleys, and rugged terrain (Bullock and Morgan, 2018). The vegetation comprises Combretum-Terminalia broad-leaved deciduous woodland (White's [1983] n. 29b undifferentiated woodlands Ethiopia type; Friis et al., 2010), extensive Oxytenanthera abyssinica (lowland bamboo) thickets, seasonally wet meadows/grasslands with scattered trees and/or bushes, rocky outcrops, and wetlands comprised of small creeks and rivers forming an extensive permanent water network (Herrmann et al., 2007).

The site is dominated by woodland; the most common tree species within the site are Combretum spp., Terminalia laxiflora Engl., Terminalia macroptera Guill. & Perr., Balanites aegyptiaca (L.) Delile., Lannea welwitschii (Hiern) Engl., and Stereospermum kunthianum Cham. (Awas & Nordal, 2007; Yilma et al., 2016; Abera & Yasin, 2018). During the wet season the ground cover is dominated by geophytes including Chlorophytum, Costus, Dorstenia, Drimiopsis, and Hypoxis spp.. At the end of the wet season grasses, such as Andropogon and Cymbopogon spp., become the dominant ground cover vegetation (Awas & Nordal, 2007). Vegetation is thought to be well adapted to annual fires, occurring in December/January (Sebsebe et al., 2005). Most of the current knowledge of the local vegetation was gathered during fieldwork in 1999-2001. A large proportion of the vegetation within this IPA and the surrounding area has been converted to farmland.

Wetland areas within and surrounding Asosa have a high orchid diversity, including locally abundant populations of Habenaria bracteosa A.Rich., Habenaria peristyloides A.Rich., Habenaria zambesina Rchb.f., Eulophia livingstoniana (Rchb.f.) Summerh., Eulophia kyimbilae Schltr., and Satyrium sacculatum (Rendle) Rolfe (Herrmann et al., 2007).

Climate is characterised by unimodal rainfall with the wet season running from April to November; the annual precipitation is on average 1275 mm (Herrmann et al., 2007). Daily maximum temperatures reach 20-25°C in the wet season, and 35-40°C in the dry season.

Conservation issues

Currently, no site protection or biodiversity management is in place within the Asosa IPA. It does not fall within an Important Bird Area (IBA) or Key Biodiversity Area (KBA). The Ethiopian Biodiversity Institute recognises a forest gene bank for in-situ conservation within this IPA, located 0.5 km outside Asosa town. However, Abera & Yasin (2018) note that the gene bank site is not well known within the local area and is therefore at threat from human interference and lack of site protection.

The main threats to the Asosa IPA are increasing human and livestock populations, settlements and urbanisation, and expansion of agriculture. During the last three decades, threats to the vegetation around Asosa have increased drastically as the human population has continued to expand, partly from government led resettlements since 1984 from the northern parts of Ethiopia, and Sudanese refugee settlements. The growing human population has led to urban sprawl and put a strain on natural resources leading to encroachment and conversion of land for agriculture (Yilma et al., 2016; Kenaw, 2020). Satellite imagery suggests that a large proportion of the land around Asosa is now intensely cultivated. More than half of household income in Asosa comes from crop production (Mekonnen et al., 2014). The majority of agricultural land is for arable farming, including sesame, ground nut, soybean, sorghum, and maize, while a minority is for livestock. This increased conversion of land for agriculture has also led to an increased frequency of burning (to clear habitat for farmland, and to encourage new re-growth of grasses for livestock grazing), and draining of wetlands. Recent reports show a planned development of two new agro-processing sites within Asosa (Tegegne, 2019). Additionally, the current local civil unrest is not only a challenge to the community but can also have consequences for the local biodiversity.

In addition to the threats outlined above, Aloe benishangulana is threatened by habitat disturbance from rock extraction. This species grows in rock crevices which provides protection from deliberately set fires, but recently rocks have been removed from the area for use as building material, putting Aloe benishangulana at risk.

The Benishangul Gumuz Regional State, within which Asosa resides, has been recognised by the Ethiopian government as suitable for

development and land investment. Large scale trans-national farmland acquisition is known to occur in the Asosa area but the full extent is uncertain (Moreda, 2013; Teklemariam et al., 2016).

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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
Aloe benishangulana Sebsebe & Tesfaye	A(i)	✓	✓	✓	✓	–	
Chlorophytum herrmannii Nordal & Sebsebe	A(i)	✓	✓	✓	✓	–	
Chlorophytum pseudocaule Tesfaye & Nordal	A(i)	✓	✓	✓	✓	–	
Zygotritonia benishangulana Goldblatt & Sebsebe	A(i)	✓	✓	✓	–	–	
Scleria pseudohispidior Bauters	A(i)	✓	✓	✓	✓	–	
Disa facula P.J.Cribb, C.Herrm. & Sebsebe	A(i)	✓	✓	✓	✓	–	
Pancratium centrale (A.Chev.) Traub	A(i)	✓	✓	✓	–	–	

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

General site habitats

GENERAL SITE HABITAT	PERCENT COVERAGE	IMPORTANCE
Shrubland - Subtropical/Tropical Moist Shrubland	–	Major
Artificial - Terrestrial - Arable Land	–	Major
Wetlands (inland) - Permanent Rivers, Streams, Creeks [includes waterfalls]	–	Major
Rocky Areas	–	Major
Savanna - Moist Savanna	–	Major

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
Agriculture (arable)	–	Major
Agriculture (pastoral)	–	Minor
Residential / urban development	–	Minor

Threats

THREAT	SEVERITY	TIMING
Residential & commercial development - Housing & urban areas	Medium	Ongoing - increasing
Agriculture & aquaculture - Annual & perennial non-timber crops	High	Ongoing - increasing
Agriculture & aquaculture - Livestock farming & ranching	Low	Ongoing - increasing
Natural system modifications - Fire & fire suppression - Increase in fire frequency/intensity	High	Ongoing - increasing
Human intrusions & disturbance - Work & other activities	Medium	Ongoing - trend unknown

Management type

MANAGEMENT TYPE	DESCRIPTION	YEAR STARTED	YEAR FINISHED
No management plan in place		–	–

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