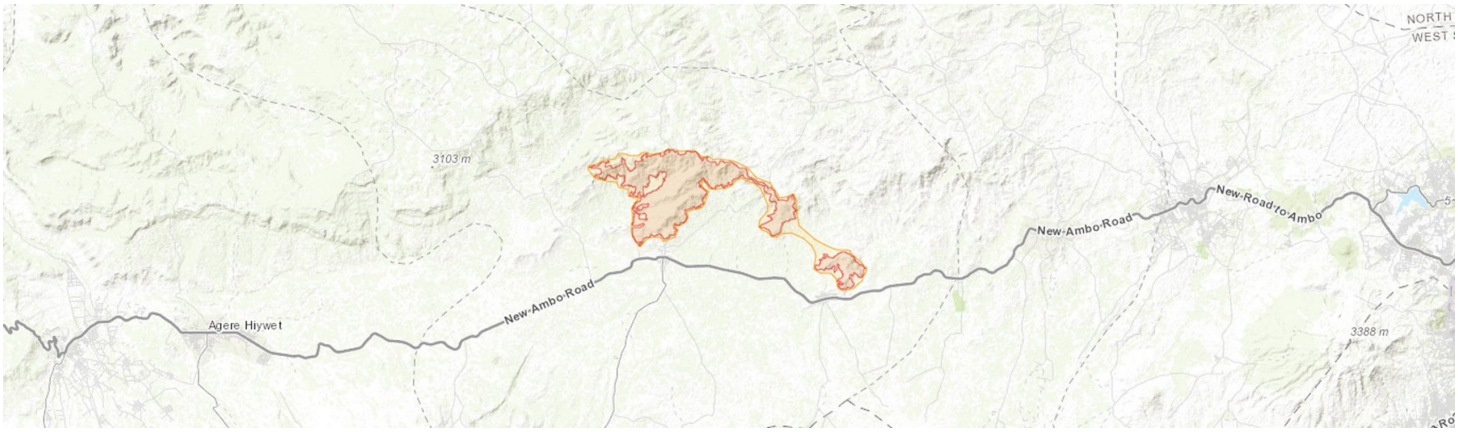
Available from https://tipas.kew.org/site/chilimo-forest/
[Accessed 16 June 2026]

Chilimo Forest

ETHTIPA003



Country: **Ethiopia**
Administrative region: **Oromia (Regional State)**
Central co-ordinates: **9.07442 N, 38.15962 E**
Area: **55.5km²**

Qualifying IPA criteria

A(i), C(iii)

IPA assessment rationale

Chilimo Forest is an important remnant fragment of the nationally threatened Dry Afromontane Forest in Ethiopia and therefore qualifies as an IPA under criterion C(iii). This site also qualifies under criterion A(i) due to the presence of the globally threatened Ethiopian endemic species, Gymnosporia addat (VU) and Hyparrhenia tuberculata (VU).

Also of note is the presence of the widespread but globally threatened timber species Prunus africana (VU), and the economically important timber species, Juniperus procera (LC, decreasing). These do not trigger IPA status but could in the future.

Site description

Chilimo Forest, also referred to as the Chilimo-Gaji Forest, is situated approximately 70 km west of Addis Ababa, within the West Shewa Zone of Oromia Regional State, on the central Ethiopian Plateau. The topology of the IPA is mountainous with numerous river valleys resulting in steep terrain. Chilimo Forest is situated on the southern slope at the western end of a chain of hills and mountainous ridges that stretch 200 km from the north of Addis Ababa to the Ghedeo highlands (Bekele, 1993; Tesfaye et al., 2019). The site is bordered by Ginchi town to the south and route 4, an all-weather main road running between Ambo and Addis Ababa.

The IPA is comprised of a core zone containing natural and plantation forest, and a small buffer zone that includes areas of recent deforestation, arable land, and settlements.

Chilimo Forest is one of the best remaining extensive examples of the nationally threatened Dry Afromontane Forests in central Ethiopia. The forest is said to have been named by the Emperor Menelik II who gave control of the forest to his allies prior to the Italian occupation (1936-1941) (Mohammed & Inoue, 2014; Tesfaye, 2015). Once a large and dense forest, the establishment of several sawmills in the late 1930s led to the depletion of much of Chilimo forest and the surrounding areas; reducing in size from 22,000 ha in 1982 to the current 5550 ha site (Tesfaye et al., 2019).

Chilimo Forest is designated as a National Forest Priority Area (NFPA). It is also recognised as an Important Bird Area (IBA) and Key Biodiversity Area (KBA). Since 1996, the forest has been managed by participatory forest management (PFM).

Botanical significance

Vast areas of Dry Afromontane Forest in Ethiopia have long been converted to agricultural land or depleted due to extraction of timber resources. This has resulted in the once widespread habitat being reduced to remnant 'islands' of forest vegetation. Chilimo Forest is one of best and most extensive examples of Dry Afromontane Forest in the central Ethiopian plateau.

Chilimo Forest is considered to be an important site for the globally threatened Ethiopian endemics Gymnosporia addat Loes. (formerly

Maytenus addat; VU) and Hyparrhenia tuberculata Clayton (VU). Also of note is the globally threatened medicinal timber species, Prunus africana (Hook.f.) Kalkman (VU) which is recorded within the forest; however, this IPA is not thought to be a globally important site for this widespread species. Juniperus procera Hochst. ex Endl. (LC, but decreasing globally), a highly economically important tree species in Ethiopia, and Afrocarpus gracilior (Pilg.) C.N.Page (formerly Podocarpus gracilior; LC, inferred to be declining), a timber species indicative of high quality Dry Afromontane Forest, are the predominant canopy species within the IPA.

Of the 18 Ethiopian endemics reported in Chilimo Forest by Soromessa and Kelbessa (2013), only 9 are still considered endemic according to Plants of the World Online (POWO, 2021): Acanthus sennii Chiov., Crotalaria rosenii (Pax) Milne-Redh. ex Polhill, Impatiens rothii Hook.f., Gymnosporia addat (VU), Mikaniopsis clematoides (Sch.Bip. ex A.Rich.) Milne-Redh., Phragmanthera macrosolen (Steud. ex A.Rich.) M.G.Gilbert, Searsia glutinosa subsp. neoglutinosa (M.G.Gilbert) Moffett, Clinopodium paradoxum (Vatke) Ryding, and Solanecio gigas (Vatke) C.Jeffrey.

Two globally threatened species, Carex monostachya A.Rich. (VU) and Indigofera rothii Baker (EN), were recorded in the Chilimo Forest KBA assessment, however these records appears to be incorrect.

Habitat and geology

Chilimo Forest is characterised by Dry Afromontane Forest (Friis et al., 2010). It is floristically similar to the nearby Menagesha Forest IPA, located ca. 50 km to the east (Bekele, 1993). The topology of the site and surrounding area consists of undulating hills, mountainous terrain, rivers and streams. The site lies within the Awash river catchment, this being one of the longest rivers in Ethiopia (Tesfaye, 2015). The IPA is surrounded by shrubland, arable land, and settlements. An all-weather main road running from Ginchi to Gojo runs through Chilimo Forest.

Within Chilimo Forest, Juniperus procera and Afrocarpus gracilior are the predominant canopy species (Bekele, 1993). Other important species within the IPA include Olea europaea subsp. cuspidata (Wall. & G.Don) Cif., Hagenia abyssinica (Bruce) J.FGmel., Allophylus abyssinicus (Hochst.) Radlk., Prunus africana (Hook.f.) Kalkman, Scolopia theifolia Gilg, Searsia glutinosa (Hochst. ex A.Rich.) Moffett, Olinia rochetiana A.Juss., Gymnosporia gracilipes (Welw. ex Oliv.), Gymnosporia addat Loes., Erica arborea L., Bersama abyssinica Fresen., and Croton macrostachyus Hochst. ex Delile (Kassa et al., 2009; Soromessa & Kelbessa, 2013; Tesfaye, 2015; Mammo et al., 2019). Soromessa and Kelbessa (2013) recorded 213 plant species, in 83 families within Chilimo Forest; of these, 193 species are angiosperms, 16 species are pteridophytes, and four species are gymnosperms (two exotic and two indigenous species). Abdisa (2019) recorded 18 species of vascular epiphytes across seven families. Plantations of Eucalyptus saligna Sm., Eucalyptus camaldulensis Dehnh., Pinus patula Schiede ex Schltdl. & Cham., and Cupressus lusitanica Mill. are found around the edges of the natural forest, acting as a buffer for the natural habitats and providing a source of income to the local community (Tesfaye, 2015).

The geology of Chilimo Forest and surrounding is comprised of volcanic rock. Soils are predominantly leptosols (reddish-brown gravelly soil) with a pH of ca. 6.7 (Jones et al., 2013; Mammo et al., 2019). The higher elevation areas tend to have shallower soil than the lower sites (Bekele, 1993). The surrounding areas are characterised by vertisols (black clay soils) and nitisols (red clay soils) (Bekele, 1993; Jones et al., 2013).

Chilimo Forest has a warm temperate climate (Tesfaye et al., 2019). Rainfall is unimodal with the wet season running from May to September; July is often the wettest month (Bekele, 1993; Soromessa & Kelbessa, 2013). The average annual rainfall is approximately 1,260 mm (Bekele, 1993). Mean annual temperatures range from 15°C to 20°C (Shumi, 2009, in Tesfaye et al., 2019).

Conservation issues

Chilimo Forest is one of the most commercially exploited forests in Ethiopia, with high timber extraction rates since the 1940s. This, combined with overgrazing from livestock, and conversion of natural forest to agricultural land has drastically reduced the forest cover (Tesfaye, 2015). In 1982, forest cover was thought to be 22,000 ha, but by 1991 the cover had declined to 6,000 ha, decreasing again to 4,500 ha in 2016 (Tesfaye et al., 2019; BirdLife, 2021), to the current core site area of 3,849 ha. Bekele (1993) found that Chilimo Forest rarely has individual tree species that attain heights higher than 21 m due to the extensive historical exploitation from logging. Areas that were once forest are now dominated by arable land or shrubland with secondary species such as Myrsine africana L. (BirdLife, 2021).

Historically, Chilimo and Gaji forests formed part of a large closed dense, Juniperus-Afrocarpus (Podocarpus) forest which was controlled by the the allies of Emperor Menelik II until the Italian invasion in 1936 (Soromessa & Kelbessa, 2013; Tesfaye, 2015). Sawmills in and around Chilimo forest were established during the Italian occupation (1936-1941), and a camp was set up within the forest for timber extraction (Tesfaye, 2015). The all-weather road running through the forest and the nearby main road between Ambo and Addis Ababa allowed for easy export of timber to markets. An estimated 300 m3 of timber was exported monthly at the Chilimo sawmill (Bekele, 1993). After the Italian occupation, the sawmills were owned by various foreign investors until 1968 when all sawmills were closed to prevent complete depletion of local forests (Soromessa & Kelbessa, 2013).

In the mid 1970s, the Derg regime took control of the forest. However, from 1991 state control of the forest weakened. This lack of protection led to further exploitation of the forest for logging,

together with encroachment from agriculture and settlements, despite designation of Chilimo as a National Forest Priority Areas (NFPA) since 1982 (Kassa et al., 2009). Bekele (1993) found a high number of logs and stumps (102 and 160 respectively) across 146 (30 x 30 m) plots within Chilimo Forest, demonstrating the continued exploitation.

In 1996, Farm Africa and SOS Sahel Ethiopia implemented participatory forest management (PFM) at this site, which was recognised by the Oromia Regional State in 2000 (Tesfaye, 2015). The PFM scheme aimed to promote local engagement in managing and guarding the forest, involving local communities in decision making, providing economic incentives, and initiating sustainable timber production through plantations (Kassa et al., 2009; Mengist & Alemu, 2019). Farm Africa facilitated the formation of a forest user group (FUG) at Chilimo Forest. FUGs were organised into cooperatives in 2004 to provide legal status over the forest. This came with the responsibility to develop, utilize, and protect the forest (Kassa et al., 2009). In 2005, Farm Africa ended their engagement with the community, and the forest was transferred to the Oromia Wildlife and Forest Enterprise Government Office (Tesfaye, 2015; Kassa et al., 2009). PFM continues through the Chilimo FUG (Mengist & Alemu, 2019), and since the establishment of the FUG there has been a decline in illegal activities such as cutting and pit sawing (Kassa et al., 2009).

The Oromia Forested Landscape Programme (OFLP) is a 10-year project running from 2015 to 2025, aiming to reduce net greenhouse gas emissions from forest cover change and to improve the enabling environment for sustainable forest management and investment in Oromia Regional State (OFLP, 2017). The project has supported the Chilimo FUG, encouraging members to harvest forest resources more sustainably. However, there is a concern that PFM may not be suitable at this site in the future if the surrounding plantations become overutilised and depleted, resulting in the local community switching back to utilising the natural forest (Tesfaye, 2015).

The IPA is encompassed by the Chilimo-Gaji NFPA, which provides nominal protection only. The Chilimo-Gaji Forest is also an Important Bird Area (IBA), and Key Biodiversity Area (KBA). The IBA was designated in 1996 under criterion A3 based on the occurrence of 34 threatened bird species, however 32 of these species are now classed as Least Concern (LC), and two are classed as Near Threatened (NT) under the IUCN Red List (BirdLife, 2021). In 2001, the forest was designated as a KBA, triggered by the presence of Carex monostachya (VU) and Indigofera rothii (VU, now EN) (Key Biodiversity Areas, 2020), however the presence of these species is doubtful and further investigation is needed. Despite these designations, protection remained nominal and conversion of forest to agriculture, settlements, and illegal logging continued until the introduction of PFM (BirdLife, 2021).

Site assessor(s)

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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
Gymnosporia addat Loes.	A(i)	✓	✓	✓	–	–	
Hyparrhenia tuberculata Clayton	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
Dry Afromontane Forest	C(iii)	✓	✓	✓	3435

General site habitats

GENERAL SITE HABITAT	PERCENT COVERAGE	IMPORTANCE
Forest - Subtropical/Tropical Moist Montane Forest	–	Major
Wetlands (inland) - Permanent Rivers, Streams, Creeks [includes waterfalls]	–	Minor
Artificial - Terrestrial - Plantations	–	Major
Artificial - Terrestrial - Arable Land	–	Minor

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
Nature conservation	–	Major
Forestry	–	Major
Tourism / Recreation	–	Minor
Harvesting of wild resources	–	Minor

Threats

THREAT	SEVERITY	TIMING
Agriculture & aquaculture - Annual & perennial non-timber crops - Small-holder farming	High	Ongoing - trend unknown
Agriculture & aquaculture - Wood & pulp plantations - Agro-industry plantations	Medium	Ongoing - trend unknown
Biological resource use - Logging & wood harvesting - Intentional use: large scale (species being assessed is the	High	Past, not likely to return

THREAT	SEVERITY	TIMING
target) [harvest]		
Biological resource use - Logging & wood harvesting - Unintentional effects: subsistence/small scale (species being assessed is not the target) [harvest]	High	Ongoing - trend unknown

Protected areas

PROTECTED AREA NAME	PROTECTED AREA TYPE	RELATIONSHIP WITH IPA	AREAL OVERLAP
Chilimo-Gaji National Forest Priority Area	National Forest Priority Area	protected/conservation area encompasses IPA	–

Conservation designation

DESIGNATION NAME	PROTECTED AREA	RELATIONSHIP WITH IPA	AREAL OVERLAP
Chilimo-Gaji Forest IBA	Important Bird Area	protected/conservation area encompasses IPA	–
Chilimo-Gaji Forest KBA	Key Biodiversity Area	protected/conservation area encompasses IPA	–

Management type

MANAGEMENT TYPE	DESCRIPTION	YEAR STARTED	YEAR FINISHED
Site management plan in place	Participatory Forest Management (PFM) has been running at Chilimo Forest since 1996, initially started by Farm Africa and other NGOs. Farm Africa left the project in 2007 and since then the management of the forest has been run by FUGs created from the PFM. Since 2015, Oromia Forested Landscape Programme (OFLP) has been supporting the FUG at Chilimo Forest. Oromia Forested Landscape Programme (OFLP), one of the national REDD+ pilots in Africa, started its 10-year project in 2015, aiming to reduce net greenhouse gas emissions from forest cover change and to improve the enabling environment for sustainable forest management and investment in Oromia Regional State (OFLP, 2017). This project encompasses all forest within the regional state and sets out to achieve its aims by monitoring forest cover changes using methodologies used at a national level, reforestation, and to promote and finance PFM (OFLP, 2017)	1996	–

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