
Debre Genet Medihane Alem

Located right at the edge of Mekele Town this urban site was long ago denuded of all large trees. The vegetation consists in large expanses of open and closed scrubland. The species composition is highly variable including much exotic cacti but the area is species rich. Even areas of open low scrub have many species of woody plants.



Name: **Debre Genet Medihane Alem**

Status: church

Site Code: TU06

Floristic Region: TU

Region: 1 (eastern Tigray)

Altitude: 2130 m

Latitude: 13° 29' N

Longitude: 39° 29' E

Woodland/forest:

Status: ancient secondary

Size: ca 2 ha

Dominant species:

canopy: *Acacia abyssinica*, *Acacia*

etbaica, *Euphorbia abyssinica*

shrub/ground: *Echinops longisteus*,

Otostegia integrifolia, *Pavonia urens*

No of woody species: 54

No of species with less than 5 individuals: 7

Threats: graves, drought

Photograph: Debre Genet Medihane Alem is situated at the edge of Mekele Town. Apart from some small patches of woodland the site consist in areas of open or closed scrub.

Situated right at the outskirts of Mekele, Debre Genet Medihane Alem occupies much of a small valley heading up the escarpment to the East of town. The aspect and the severity of the slopes vary on either side of the deep river channel. A stone wall delimits the outskirts of the church-controlled land.

Little of the vegetation can be described as woodland and essentially it is open or closed scrub. Some areas are quite impenetrable because of the density and spinness of the vegetation, including large clumps of exotic cacti. Other areas have more or less no woody vegetation with much bare ground and scattered grasses. The area is species rich and the botanical diversity is somewhat different on the two sides of the valley. The church is essentially surrounded by exotic species.

To the West of the churchyard the landscape is urban with scattered vegetation whereas on the escarpment little of the original tree cover remains. Instead there is mainly open secondary vegetation and trees when present are chiefly eucalypts.

History

The establishment of the church is probably moderately ancient. It has clearly suffered from near complete deforestation at some point in the past. Probably reflecting human pressure due to the fact that this church is adjacent to an urban centre, the whole church area is surrounded by a poorly maintained stone wall.



Both sides of the valley have markedly different types of secondary vegetation which are surprisingly species rich. In the foreground *Euphorbia abyssinica*, *Opuntia ficus-indica* and *Acacia* spp.

Threats

Burial practices appear to be changing probably in line with people's increasing wealth. Close to the church an area is rapidly becoming a monoculture of stone and mortar (see photo).

Grazing is intense and prevents most, if not all, natural tree regeneration on the town side of the valley. Uphill, *Opuntia ficus-indica* dominates part of the vegetation and these monotypic clumps are expanding. There is a danger that much of the hillside could become dominated by these cacti.

Conservation status

Although this site is essentially urban and has a limited woody plant cover, it has a high number of species. Because of the size of the ground it has much potential for the conservation of the local biodiversity in a rapidly expanding urban environment.



Uphill from the church a large building site was observed in early 2002. A large network of graves was been built resulting in an area made of concrete slabs devoid of vegetation.

Management

Mending the stone wall in conjunction with the removal of grazers should allow natural regeneration to take place in some areas at least. Planting of trees on traditional graves, still the dominant burial practice, should allow the establishment of native trees and enhance biodiversity in some open areas, provided the right species are available for planting. Modern burial practices as seen nearby the church, especially if this habit becomes more prevalent, will over the medium-term become detrimental to the conservation value of the site. This issue should be addressed.