

Decades ago the lowland forests of Kimboza and Ruvu were linked by continuous tree cover along the River Ruvu Gorge but then the area was largely deforested for agriculture. In recent years the land has been so degraded that most of it is now abandoned. However,

much of the vegetation is regularly burnt as fires spread from farmed areas. Our objective is to recreate the wooded corridor linking the two forests. We also aim at carrying out activities that preserve and enhance the unique biodiversity of Kimboza and Ruvu forests.

## Kimboza and Ruvu forests and their surroundings

Kimboza is a forest island of 4 km<sup>2</sup> mostly surrounded by wooded farmland and bisected by the large Ruvu River. It

has a few permanent water sources and rivulets. The larger Ruvu Forest is a few km downstream.



View of part of Kimboza Forest from Kibungo Hill. Note the sharp transition from forest to wooded farmland.



Kimboza Forest straddles the Ruvu River which supplies Dar es Salaam with its water.



Although widespread logging of large trees occurred until the 1980s, some tall emergent trees still occur.

## Kimboza Forest types

Forest types in Kimboza are very variable ranging from swampy forest to scrub on rock outcrops.



*Pandanus rabaiensis* stand in swampy areas, the habitat for the endemic gecko.



Many species are restricted to large rock outcrops such as *Euphorbia* spp.



*Cedrela odorata* dominated stand several years after the latest fire.



# Kimboza-Ruvu Gorge Conservation Area News

## Forest Corridor - Aims

Aims of proposed corridor:

- Restoration of severely degraded forest and abandoned agricultural land to link Kimboza and Ruvu forest reserves along the Ruvu River Gorge.
- Preservation and re-establishment of endemic species.
- Promote the area for education, teaching and research.
- Promote ecotourism.



Left: In areas less desirable for agriculture, and on very steep grounds in particular, some mature trees remain.

Above: Kimboza forest with its sharp boundaries is to the left. Ruvu Forest to the right is more diffuse and affected by deforestation. The area demarcated by a yellow line is the proposed nature corridor. The plot inside the red oval is in the process of being purchased to carry out forest restoration.

## Nature Corridor – land acquisition



The hill (centre left) is adjacent to Kimboza Forest Reserve and is being acquired. Our aim is to restore the forest cover over the whole hill. In the background the South Uluguru Mountains with the Lukangwule plateau.

The acquisition of a plot is a convoluted business. After the owner has agreed to sell, his family and local village officials have to certify the seller is the owner of the land and that there are no conflicts. Relatives have to agree to the sale. As plots are variously demarcated by trees, paths and/or physical features all surrounding landowners must be convened to the site in order for them to agree to the boundaries. Eventually a lawyer gets involved.

Right: Plot demarcation involves a field visit by all surrounding landowners so that everyone agrees to where exactly the boundaries are.





**Kimboza conservation work**

Over the past two decades Kimboza has suffered from recurrent fires and the invasion by the neotropical tree *Cedrela odorata*. As fires have destroyed large areas of forest and also increased the rate of spread of *Cedrela* the

first conservation priority is to control fires. Fires spread from the adjacent farmland as it is used to clear dead vegetation prior to planting crops.



Aftermath of a fire in late 2016 at the SW edge of the forest. Most of the trees including *Pandanus rabaiensis*, the key habitat of the endemic gecko, have died.



Patch of forest with recurrent fires. Here all small individuals are *Cedrela odorata* many of which have survived the latest fire in late 2016.



To the northern end of the forest large areas are now grassland or wooded grassland as a result of recurrent fires.

Since early 2017 The Rufford Foundation has funded the clearing of the forest boundary in order to assist the forestry department in its management tasks. Clearing has been regularly carried out over about a third of the forest

perimeter. This involves removing leaf litter and shrubby vegetation on a 4 m wide strip at the forest's edge. Only one minor fire has affected the forest since we initiated this scheme.



Forest boundary demarcated by planted teak. All ground vegetation has been cut and the litter removed.



The boundary clearing team consisted of a number of local farmers employed to clear key parts of the forest boundary. All gear and tools were purchased thanks to a Rufford Foundation grant.



## Kimboza-Ruvu Region Research News

### Kimboza discoveries

During a survey of the invasive *Cedrela odorata* a photographic record of interesting plants encountered was

undertaken. We made the first ever observations of the fruits of two endemic *Cola* species.



First ever record of a fruit of *Cola kimbozensis*. In early 2019 we located a small population at one site inside Kimboza Forest.



First ever record of a *Cola quentinii* fruit. Four trees ever recorded.



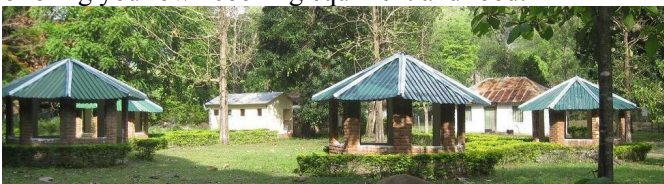
In 2018 a local farmer, Bilal Omar, made the first record of *Barringtonia racemosa* in the Kimboza-Ruvu area.

### Background information - Kimboza-Ruvu Region

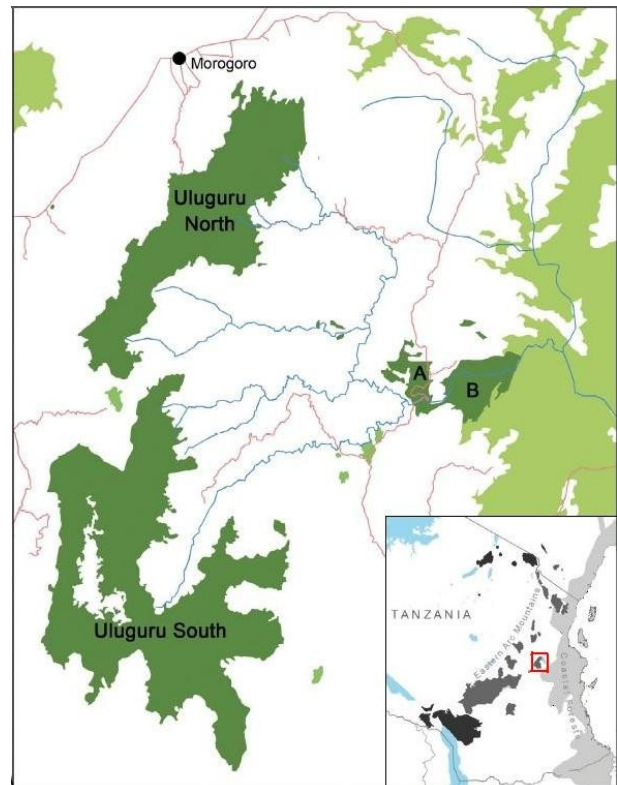
The Kimboza-Ruvu region lies at the base of the Uluguru Mountains that are part of the Eastern Arc Mountains in Eastern Tanzania. It lies 60 km from Morogoro on the main road to the Selous Game Reserve. The area is inhabited by the Luguru people.

The Kimboza and Ruvu Forest Reserves are managed by the Tanzania Forest Service Agency (TFS) based in Morogoro.

In 2004 the Morogoro Office of TFS produced a management plan for Kimboza Forest. They have a campsite at the edge of the forest with shower and toilets. Food can be obtained at the local Mission 'café' or bring your own cooking equipment and food.



The Kimboza-Ruvu Gorge project is managed by Dr C. Kilawe from Sokoine University of Agriculture in collaboration with local communities and TSF. This initiative is at an early stage as it was started in early 2019. e-mail: [ckilawe@sua.ac.tz](mailto:ckilawe@sua.ac.tz) website: [https://www.rufford.org/projects/charles\\_kilawe](https://www.rufford.org/projects/charles_kilawe)



Location of the forests reserves in the Morogoro Region with A. Kimboza, B. Ruvu