

# Mkingu Nature Reserve

A visitor's guide to the Mkingu Nature Reserve and the South Nguru landscape in Tanzania

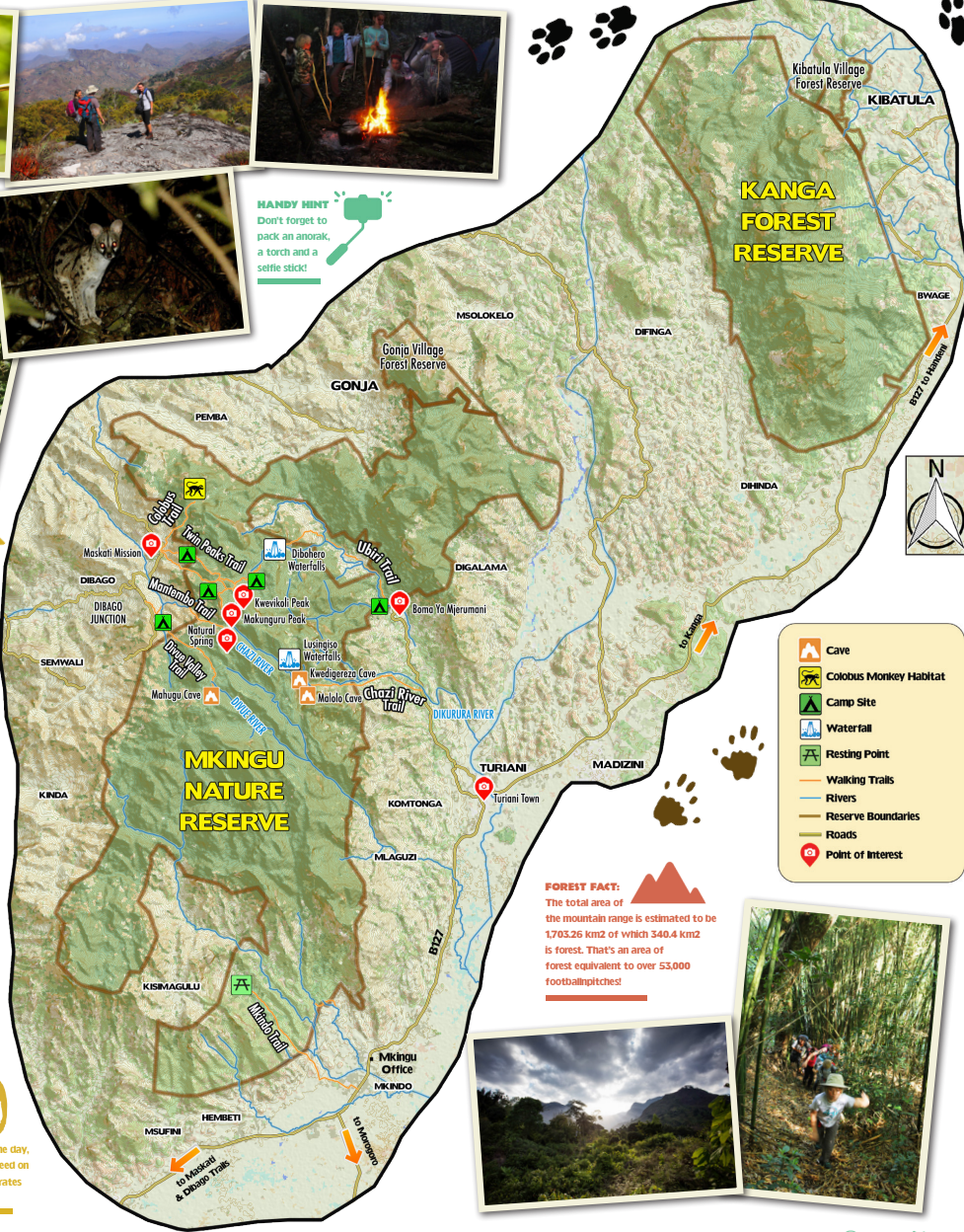
The South Nguru Mountains are a 1.5 hour drive north of the city of Morogoro. Visitors can enjoy the wilderness and biodiversity of Mkingu Nature Reserve, Kanga Forest Reserve and two community-owned forest reserves: Kibatula and Gonja. Stay for two nights or a week and follow nature trails through tropical forests, woodlands and farmland. Look out for the forests' secretive wildlife: pass by caves, pools and waterfalls; and stay at designated forest camp sites.



**FOREST FACT:** The South Nguru Mountains are part of the Eastern Afromontane Biodiversity Hotspot. To qualify as a Biodiversity-Hotspot, an area must have at least 1500 endemic plant species and have 30% or less of its original natural vegetation. The world's 34 biodiversity hotspots cover just 2.3% of the Earth's land surface.



**HANDY HINT**  
Don't forget to pack an anorak, a torch and a settle stick!



- Cave
- Colobus Monkey Habitat
- Camp Site
- Waterfall
- Resting Point
- Walking Trails
- Rivers
- Reserve Boundaries
- Roads
- Point of Interest

**FOREST FACT:** The total area of the mountain range is estimated to be 1,703.26 km<sup>2</sup> of which 340.4 km<sup>2</sup> is forest. That's an area of forest equivalent to over 53,000 football pitches!

## OVERVIEW

The South Nguru Landscape forms part of the Eastern Arc mountain ranges and there really is nowhere quite like it on earth. Known as the Galapagos of Africa, the sheer wilderness of the area, combined with many unique species of plants and animals makes this an unforgettable experience. There are four forests that tourists can visit: Mkingu Nature Reserve, Kanga Forest Reserve, and Gonja and Kibatula Village Forest Reserves. Steep slopes, deep valleys, high summits, rocky cliffs, and a wide range of climatic and soil conditions, which have resulted in a wide range of vegetation types are typical of this area. Tropical forests cover the upper slopes of the mountains with woodland and agriculture in the lowlands. The South Ngurus are particularly important for their amphibian fauna and have more strict endemic species than some entire biodiversity hotspots. BirdLife International recognises the area as an 'Important Bird Area' and Conservation International recognises the Eastern Arc to be part of the 'Eastern Afromontane Biodiversity Hotspot'. The Eastern Arc is also one of the World Wildlife Funds' Global 200 Ecoregions. Within the South Nguru landscape lies the largest forest, the Mkingu Nature Reserve, an area of dense mountain forest with dramatic viewpoints. The forest is home to many plant and animal species including black- and white colobus monkeys. Mountain galagos and black- and rufous elephant shrews. Some of the plants and animals that are found in Mkingu are unique to this forest never having been recorded elsewhere.



**FOREST FACT:** Seven species of amphibian and reptile that live in the South Nguru forests, are found nowhere else on earth.



**FOREST FACT** By visiting responsibly you are supporting conservation efforts, and learning about the fragile eco-system, which can be protected for future generations.



## WHY should I visit?

There are countless hidden gems to be discovered in the Mkingu Nature Reserve, the Kanga Forest Reserve and the Village Forest Reserves. all within the South Nguru Mountain range. Sunbirds, tree frogs, chameleons, colobus monkeys and African violets to name a few. With the help of a local guide, you can trek along nature trails to discover caves, and swim in nearby waterfalls, have picnics at spectacular viewpoints, embark on walking night safaris and camp in remote forests. A stop off at a local village to see how communities make a living, can also be a highlight. A mere five-hour journey north-west from the commercial capital, Dar es Salaam will catapult you into a piece of heaven on earth.

- The Eastern Arc Mountains are an isolated range of massifs stretching from south-eastern Kenya into southern Tanzania.
- They took shape over 100 million years ago.
- Acre for acre, there are more unique plant and animal species in the Arc than anywhere else in Africa.

## WHEN should I visit?

Tropical rain forests are notoriously wet. An ideal time to visit the South Nguru mountains is between June and September. Rainfall peaks in March and April and it can feel hot and sticky. Based on data from weather stations at low and mid-altitude, mean annual temperatures vary between 12°C - 24°C with rainfall records of between 1000 mm - 2100 mm, with considerably more rainfall estimated at higher altitude.

## HOW do I get there?

From Morogoro, the South Nguru Mountains can easily be reached via the B129 Morogoro to Dodoma road. Just before the Magole River, turn right off the B129 through Magole Village and head north-east for 80 km on the B127 in the direction of Handeni. The Nature Reserve Offices are just after Mkingu Village on the right-hand side. This is where entrance permits can be collected. If heading to the Uburi or Chazi River Trails continue along the B127 as far as Turiani, then turn towards Mhonda for the Chazi River Trail or Mafuta for the Uburi Trail. If going to the Maskati or Dibago trails, return approximately 13 km to the junction at Mvomero Here, turn right, and continue along this road for 55 km. Then, take the right turn towards Maskati. After approximately 8 km there is a junction, take the left hand road to Maskati and Dibago, ignoring the road to Serwali. Continue for 13 km. Take the right-hand junction for Dibago or the left-hand turn for Maskati. A 4-wheel drive vehicle is required for the Dibago - Maskati road. Public buses are available to Mvomero and Turiani.

## WHERE can I stay?

Simple guest houses are available in Turiani and Madizini Towns near the Mkingu Nature Reserve. There is also a camp site with basic facilities approximately 800 metres from Mafuta Village centre, on the eastern side of the reserve. Campers must be self-sufficient bringing camping equipment. Food, drinking water and cooking facilities. Basic supplies are available in Madizini Town. The camp site between Mafuta and Uburi villages is in a great location, as it is easily reachable and has some facilities (water, camping area and toilet and one banda (hut)).

**FOREST FACT:** Small groups of Mountain duistables sleep together in nests in tree holes during the day, only emerging at dusk to feed on invertebrates, small vertebrates and tree gum.

## HOW MUCH will it cost? Reserve Fees & Guided Tours

A handful of local tour operators including AfriRoots, Wild Things and Cheers Tours Tanzania can arrange trekking and hiking tours, which take in bird watching, swimming at waterfalls, picnics at viewpoints and cultural tourism. Fees to the reserve help protect and conserve the forests. For Mkingu, fees must be paid at the Mkingu Nature Reserve Office in Mkingo Village before entering the reserve. For Kanga Forest Reserve, fees must be paid to the TFS Office in Mvomero Town. Fees for the village forest reserves can be paid in the villages.

**Entry fees (per person per day) for Kanga and Mkingu:**

- Tanzanian nationals: 3,000 TZS (Children 5 - 18 years: 2,000)
- Residents and Non-residents: 10 USD (Children 5 - 18 years: 5 USD)
- Children under five go free

**Camping fees (per person per night):**

- Tanzanian nationals: 3,000 TZS
- Residents and Non-residents: 15 USD

Local guides cost 10,000 TZS per person/day for nationals; and 20 USD for Residents and Non-residents. The Conservator who is based in Mkingo Village, can provide information about guides. For more information e-mail the Mkingu Conservator at: kindoabeid@yahoo.com or request current contact details from: mpingo@tfs.go.tz or contact a tour operator or look for contact details at: www.easternarc.or.tz/nguru. www.nature-reserves.go.tz

**FOREST FACT:** A chameleon's tongue is roughly twice the length of its body. In humans, that would be a tongue about 3 to 4 meters long!





# MKINGU GUIDED WALKING TRAILS

As tourism is still new, nature trails are under development and a local guide must be hired. Visitors should check with the Conservator for the latest information about camp sites and the safety of the trails.



**RED TRAIL**  
Challenging!



**ORANGE TRAIL**  
Moderate



**GREEN TRAIL**  
Easiest



### Maskati Twin Peaks Trail - 3 or more days

This is a moderately difficult loop trail starting from Maskati village. The main loop is 7.1 km long with three side trails going to the two peaks and to the Tree Fern Valley Camp Site. The northern stretch of the loop is 3.6 km whilst the southern stretch of the loop is 3.5 km. Camp sites are available at the reserve edge and inside the reserve.

From Maskati Mission climb for 1.8 km through farmland towards the edge of the reserve. There is a campsite next to a stream in farmland on the edge of the reserve. From there, the trail climbs into the reserve. After approximately 1 km the trail reaches an open rocky area with good views, ideal for taking a break and enjoying the scenery. The trail then descends gently for approximately 0.6 km towards a small pool unsuitable for swimming. The trail forks here, the south-western branch links up with the return trail. To continue along the main trail, keep heading to the east along the side of a ridge. From the pool, it is approximately 0.8 km until another junction (at -6.069, 37.504) where the path forks again. The southern fork goes to Kwevikoli Peak and the northern fork heads towards Tree Fern Valley.

START: Latitude -6.06 Longitude 37.48 JUNCTION: Latitude -6.07 Longitude 37.50

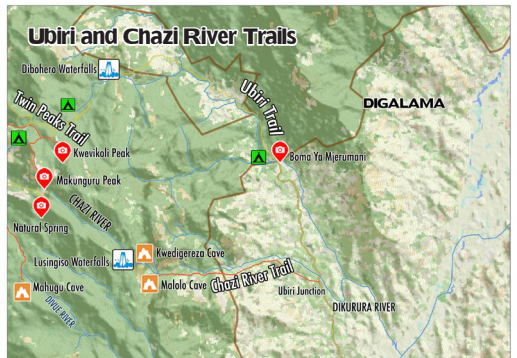
- Distances:
- 3.5 km to the junction Plus 0.6 km to **Kwevikoli Peak**
  - 3.5 km to the junction Plus 1.2 km to **Makunguru Peak**
  - 3.5 km to the junction plus plus 1 km to the campsite and an additional 0.6 km to the **Tree Fern Valley**

**Kwevikoli Peak Side Trail**  
To reach Kwevikoli peak, from the junction at (-6.069, 37.504), the trail climbs to the south. At the next junction at -6.07156, 37.503, head east for 350 m climbing steeply up to the peak (2100 m a.s.l.). This peak is a bare, rocky area with excellent views over the reserve. The plants in this area are particularly sensitive, so tread with care.

**Makunguru Peak Side Trail**  
From the junction at (-6.069, 37.504), head west for 0.3 km, to a second junction, at this junction continue to the south-west climbing up to a ridge (don't take the path to the north-west). Once on the ridge, head south up through the forest towards the Makunguru Peak (2280 m asl). There is an open rocky area at the Peak with good views of the reserve. Return the way you came. This is a challenging climb.

**Tree Fern Valley Camp Site Trail**  
From the junction at -6.069, 37.504, the trail descends to the north, passing through an area frequented by colobus monkeys, and on to the Tree Fern Valley Camp Site (-6.06659, 37.5101). From the camp site there is a 0.6 km path to the north to a picturesque stream, ideal for a relaxing day or so, before returning to Maskati. The stream can be followed for approximately 0.4 km, climbing over boulders and relaxing beside the cool water, before heading back south-west to the campsite.

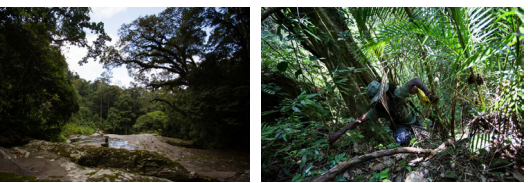
Returning to Maskati village along the southern stretch of the loop:  
From the junction at -6.07156, 37.501 head north west. After 0.5 km you will reach the junction with the path connecting to the northern stretch of the trail (-6.6832, 37.49762), keep to the south-west following the Lugona Stream Valley for 1.5 km to the edge of the reserve. From the reserve boundary head downhill westwards through farmland for 1.4 km to Maskati Mission.



### Ubiri Trail - 2 or more days trails

A moderately difficult trail, starting out at Mafuta village, passing through forest, woodland and farmland up to the Diboho Waterfalls and then returning back on the same path to Mafuta village. A campsite is available within the reserve near to Mafuta Village. The trail starts at the Mkingu Nature Reserve boundary with Mafuta Village, and crosses the Diwale River. After approximately 200m, there is an abandoned German stone house just to the east of the trail, while to the west of the trail, you will find the Mafuta Camp site. The trail continues through thick forest climbing gently. After approximately 1.7 km the trail enters Ubiri Village. Ubiri Village is situated in an enclave within the reserve. For the next 450 m the trail passes through woodland before heading into farmland for approximately 0.8 km before reaching the Ubiri Village Primary School. Continue for 3 km through the village skirting the edge of the forest, crossing the Diwale River again, before reaching the reserve boundary. From there it passes through 0.5 km of woodland up to the base of the Diboho Waterfalls. Return to Mafuta village.

Distance: 6.6 km one way or 13.2 km return  
START: Latitude -6.08 Longitude 37.56  
FINISH: Latitude -6.06 Longitude 37.52



### Chazi River Trail - 1 day trail

This is a challenging trail along the Chazi River Valley passing through cocoa farms, thick forest until reaching the meeting of the Chazi and Mlangali rivers.


From Kwevikoli Village, heading west, follow the Chazi river valley, through farmland and cocoa tree groves for approximately 1.5 km until entering the reserve. The trail then passes through open woodland for 0.5 km before entering the forest where it climbs steeply. Continue for another 1.5 km through thick forest until reaching the Malolo Cave. The cave is said to have 7 chambers and was once inhabited by a reclusive couple. The Chazi and Mlangali rivers join close to the cave and it is a very pleasant place for a picnic and to enjoy the sights and sounds of the forest. There is a very steep path beyond, which leads to the Kweidgereza Cave and the Lusingiso Falls. If continuing to the falls, extreme caution should be taken as the area is hazardously steep. Take the same path back to where you started.


Distance: 3.6 km one way or 7.2 km return  
START: Latitude -6.10 Longitude 37.56  
FINISH: Latitude -6.106 Longitude 37.530





### Other Trails

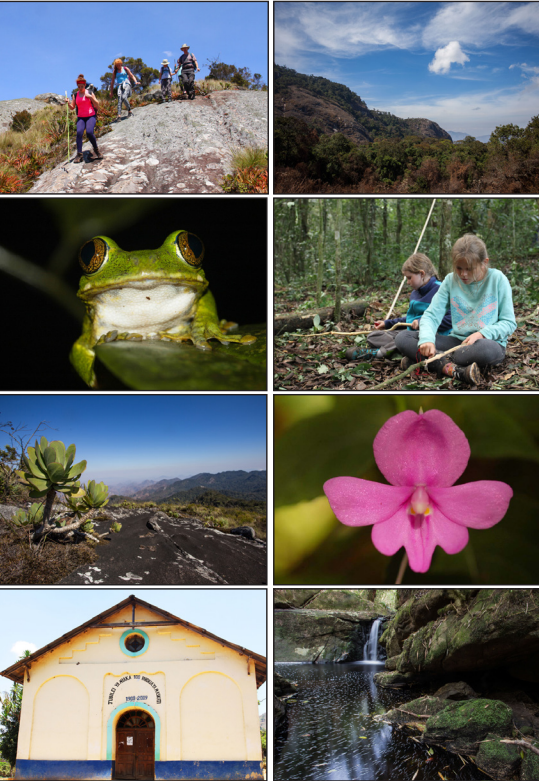
There are plenty of other trails to explore if you have the time and they range from moderate to difficult.

 **Maskati Colobus Trail**, fairly moderate, starting at the Masaki Mission and taking you into the forest in the direction of Ubiri. You can either turn back once you reach the escarpment or head around it to Ubiri. For both trails you will need a guide. (see Twin Peaks map)

 **Dibago - Mantembo Trail** is again moderate with its picturesque spring, it starts at the Dibago - Korogwe Junction, and takes you back to your starting point along the same path. (see Twin Peaks map)

 **The Dibago - Divue Valley Trail** passes through farmland and woodland up to the Divue River and Mahugu Cave. The trail is moderately difficult, returning along the same path. (see Twin Peaks map)

 **The Mkingo Trail** is a moderately difficult trail climbing through woodland, with views eastwards over the South Nguru landscape and takes you back along the same path. (see Mkingo map)

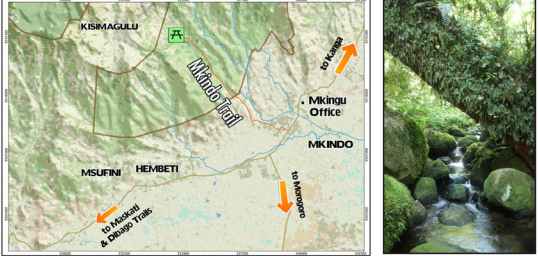


## Kanga Forest Reserve

Kanga is an area of stunning forest on a steep isolated mountain. It is possible to climb up through the forest to a view point close to the peak. To do so, you will need an experienced guide. Contact a tour operator to find out more.



## Mkingo Trail Map



## BIRDS

215 bird species have so far been found in the South Nguru Landscape, of these 116 were found within the Nguru South and Kanga Forest Reserves, and 109 bird species were found within woodland, teak plantations, marsh land and village land. Forests and woodland provide a home for most of the bird species found within the landscape. However, most bird species that live in the forest only live in the forest. This means that it is important to conserve both forests and woodlands. There are three bird species in the South Nguru Landscape that are endemic to the Eastern Arc Mountains, each of these birds can be found in Mkingu Nature Reserve, some can be found in Kanga Forest Reserve: the Banded Green sunbird (Anthreptes rubitorques) the Usambara eagle owl (Bubo vosseleri), Mrs Moreau's warbler (Nectarinia moreau).

## AMPHIBIANS & REPTILES

38 species of amphibian and 43 species of reptile are found here. Of the 38 amphibian species found inside Nguru South and Kanga Forest Reserves, seven are thought to be new species, previously unknown. With many more yet to be discovered! Seven endemic amphibians and one endemic reptile have so far been found in the South Nguru Landscape. It is the unique habitat found within the South Nguru Landscape that allows such incredible diversity of life. 33 different species of plant or animal found within the Landscape face a high risk of becoming extinct in the wild. If they and their forest habitats are not protected adequately, they could be lost to the Landscape forever. The high demand for firewood collection leads to illegal logging activities. This in turn has a detrimental effect on the ability of the forest to lay a critical role in the stability of the local climate.

## LOCAL PLANTS

Modern medicines have their origins in plants from forests, just like those of the South Ngurus. With new medicines being discovered all the time. The South Nguru Landscape has at least nine distinct vegetation types including montane, submontane and lowland moist forest, dry montane forest, heath open woodland, closed woodland and thicket. There are five plant species endemic to the South Nguru Mountains, which means they are found nowhere else on earth. A further fifty species are only found in forests of the Eastern Arc Mountains.

## MAMMALS

29 mammal species have so far been found within the South Nguru Landscape, they include duiker, bush babies, blue monkeys and the giant-pouched rat. The quantity and diversity of mammals found in Nguru South Forest Reserve is much less than in Kanga Forest Reserve. This is probably due to higher levels of hunting occurring in Nguru South Forest Reserve compared to Kanga Forest Reserve. There are three mammal species found in the South Nguru Landscape that are endemic to the Eastern Arc Mountains. The climbing shrew (Sylvorex howelli) the Mountain galago (Galagoides orinus) and the Lowe's servaline genet.



## TAKING CARE OF THE FORESTS

All visitors must respect and care for the forests at all times. Keeping to paths, picking up litter and taking it with you, not picking plants, and protecting the delicate plant communities on the rocky outcrops.

## CULTURAL TOURISM

Nearly 180,000 people live in the South Nguru Landscape, of whom 110,000 live close to the forest. Most people depend on agriculture for their livelihoods. People of the Wangungu and Wabaguru were the earliest settlers in the landscape. They were followed by the Wazigua, Wamaasai, Waluguru, Wachaga, Wapare, Wabana, Wazakuma, Wakahe, Wangoni, and Wanyakyusa ethnic groups who arrived later. The Wangungu tend to dominate upland villages while other ethnic groups dominate different lowland villages. The Wamaasai, a pastoralist ethnic group, only live in the plains where they can find grasses for their herds of cattle and goats. Historically, the Wangungu conserved areas of sacred forest. Such sites were used for worship, rituals and tribal ceremonies. Some groves were also reserved as cemeteries. Most often, these groves were administered by village elders who also punished violators. This traditional way of conserving forests occurs far less frequently than in the past. The relatively rich soils found at the base of the mountains, the establishment of two missions and the presence of Mt. Wabaguru have all encouraged people to immigrate to the area. Most villages within the Landscape were formed during the 1970s. People depend upon the forests for water. Forests also provide stability to the local landscapes by preventing floods, droughts, landslides, excessive wind, water erosion and sedimentation. They serve and protect you and your land! Unsustainable, and often illegal extraction of forest products threatens the forests, the life they hold and the continuation of ecological services that they perform. Apart from illegal timber extraction another major threat to the Nature Reserves are the farming activities taking place inside the forest, which compromise forest land. Clearing the forests and woodlands to create farmland is the main threat to the South Nguru forests, the life they hold and the continuation of ecological services that they perform. Through a Tourism Guiding Network, tourists can visit villages in the reserves, in particular, Gonja and Kibitula as they are easily accessible from Mkingu and Kanga Nature Reserves. Handmade pottery, and sustainably harvested forest products including mats (mleka and wkapu) made from Ukingu, and spices (like iliki) and cocoa can be bought. Listen to riveting stories told from villagers in the Mkingu Nature Reserve about the mountains and find out about mysterious footprints on the rocks found in Mkingo and Semwali villages.

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