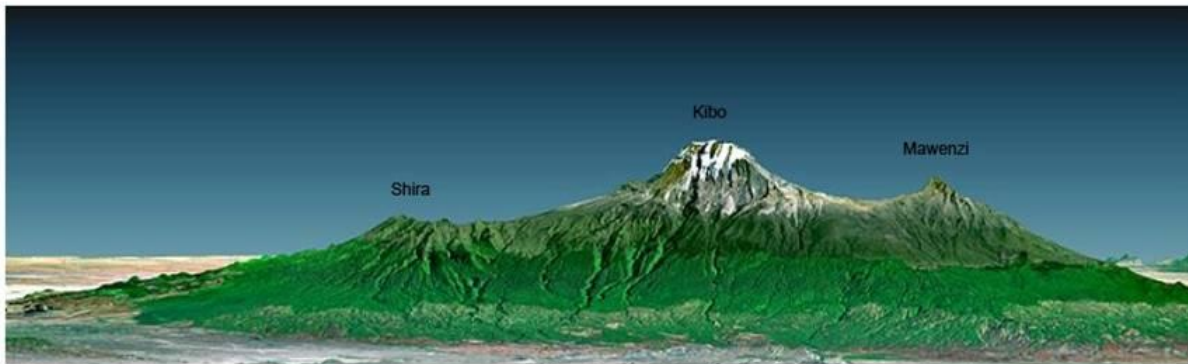


## MOUNT KILIMANJARO

Mount Kilimanjaro was formed about 3 million years ago during the formation of the Great Rift Valley. Many volcanoes busted through in the Kilimanjaro region. Then nearly a million years ago, volcanic activities centered on the three points; Shira, Mawenzi & Kibo. Shira was the first to become extinct, eventually it collapsed and was covered from materials from the other two. Mawenzi and Kibo continued to grow. Later on Mawenzi became dormant but in an enormous explosion the entire eastern rim gave way forming a very spectacular gorge. Lava later on seeped through the cracks, which after much erosion, helped to give Mawenzi its jagged outline.

Kibo continued to grow. About 100,000 years ago, a huge landslide from the summit breached the southwest crater and formed a magnificent precipice. Eventually magma retreated from the central vent of the volcano, but a final puff of smoke deposited a perfect cone of ash around the rim. Kilimanjaro remains a dormant but not Extinct Volcano. Ice as well as fire has helped shape the summit of Kilimanjaro.



Kilimanjaro Seen From The South (NASA)

Mount Kilimanjaro, is nicknamed the roof of Africa and is proud to be the highest mountain in Africa. The mountain was first climbed in 1889 by German geographer Hans Meyer and Austrian mountain climber Ludwig Purtscheller, long before W. H. Tilman and C. Houston made the first ascent from the south of Everest in 1950. Ever since it has been a coveted climb by tourists and professional climbers around the world.

Kilimanjaro, with its three volcanic cones, Kibo, Mawenzi, and Shira, is a dormant volcanic mountain in Kilimanjaro National Park, Kilimanjaro Region, Tanzania. It is the highest mountain in Tanzania, the highest mountain in Africa, and the highest free-standing mountain in the world at 5,895 metres or 19,341 feet above sea level.

Kilimanjaro is composed of three distinct volcanic cones: Kibo 5,895 m (19,341 ft); Mawenzi 5,149 m (16,893 ft); and Shira 3,962 m (13,000 ft). Uhuru Peak is the highest summit on Kibo's crater rim.

Kilimanjaro is a large stratovolcano. Two of its three peaks, Mawenzi and Shira, are extinct, while Kibo, its highest peak, is dormant and could erupt again. The last major eruption has been dated to between 150,000 and 200,000 years ago.



In the late 1880s the summit of Kibo was completely covered by an ice cap with outlet glaciers cascading down the western and southern slopes, and, except for the inner cone, the entire caldera was buried. Glacier ice flowed also through the Western Breach.

An examination of ice cores taken from the North Ice Field Glacier indicates that the "snows of Kilimanjaro" (aka glaciers) have a basal age of 11,700 years. A continuous ice cap covering approximately 400 square kilometers covered the mountain during the period of maximum glaciation, extending across the summits of Kibo and Mawenzi.[34] The glacial ice survived drought conditions during a three century period beginning ~2200 BC.

The period from 1912 to present has witnessed the disappearance of more than 80% of the ice cover on Kilimanjaro. From 1912 to 1953 there was ~1% annual loss, while 1989–2007 saw ~2.5% annual loss. Of the ice cover still present in 2000, 26% had disappeared by 2007. While the current shrinking and thinning of Kilimanjaro's ice fields appears to be unique within its almost twelve millennium history, it is contemporaneous with widespread glacier retreat in mid-to-low latitudes across the globe. At the current rate, Kilimanjaro is expected to become ice-free some time between 2022 and 2033.



OVER 70 per cent of land in Mount Kilimanjaro ecosystem is experiencing serious form of soil erosion of up to 40 tonnes per hectare of soil loss annually, while the land is a direct source of livelihood to a population of over 1.6 million people.

"Mount Kilimanjaro ecosystem is of local, national and international importance," noted a report circulated to participants who attended the launch of 'Sustainable Land Use Management (SLM) Kilimanjaro Project' in Moshi.

The report says land degradation in Mt Kilimanjaro highlands was exacerbated by climate change challenges, hence the need for immediate measures to reverse the trend.

Drivers of land degradation on the slopes of Mt Kilimanjaro include encroachment of forest areas for agricultural activities, poor agricultural practices, poor water management leading to gullies in home gardens and poor grazing land management in the lowlands.

Since 1912 the mountain has lost 82% of its ice cap and since 1962 55% of its remaining glaciers. Kibo still retains permanent ice and snow and Mawenzi also has patches of semi-permanent ice, but the mountain is forecast to lose its ice cap within 15 years. Evidence of past glaciation is present on all three peaks, with morainic debris found as low as 3,600 m. The mountain remains a critical water catchment for both Kenya and the United Republic of Tanzania, but as a result of the receding ice cap and deforestation several rivers have dried up, affecting the forests and farmland below.

#### Management Constraints

As in many other parks and reserves in Africa, resources are stretched, and manpower and equipment are not sufficient for full implementation of the management plan. Within the forest reserve exploitive

activity has continued, although this was curtailed by Presidential Decree in 1984 and the issuing of timber licenses has been stopped. Most difficulties are encountered in the management and protection of the montane forest, with illegal hunting, honey gathering, felling, fuel wood collection, grass burning and incursions by domestic livestock, particularly in the south-west. Both honey gathering and grass burning result in outbreaks of uncontrolled fires every year, particularly during the dry season and in the south-west. It occurs even on the moorland edge and quite extensively within the Erica heathland. As with moorland in many parts of the world, fire is almost certainly one of the factors that has influenced the mountain biota for hundreds of years, and management (or non-management) of fire is likely to continue presenting problems..

There is still a major problem of illegal deforestation especially of camphorwood trees below 2,500 m. This has led to widespread landslides: 88 were recorded by Lamprechts et al.,2002. Problems have also resulted from the increasingly heavy use of the area by tourists. The gradual drying up of mountain rivers is threatening the forest and farmland dependent on them.



On Mt. Kilimanjaro hikers and mountain climbers have caused severe soil erosion because of too much foot traffic.