



## **Title: Quarry Rehabilitation in Ngomongo Village of Mombasa County, Kenya**

**Target Audience:** Farmers, extension agents, learning and research institutions

### **Introduction**

Ngomongo Village in Mombasa is situated in a former coral limestone quarry. The area was degraded through mining of coral rocks used for cement production. The Mombasa municipal council later turned the quarry site into a dump site. The Ngomongo village was started with the aim of rehabilitating the quarry by converting it into hospitable land with an improved ecosystem that could be used by neighbouring community.

### **Objectives**

Objectives of establishing Ngomongo village were mainly to:

- Rehabilitation of the site
- Promote cultural conservation

### **Approach**

In 1991 Dr. Gikandi in collaboration with the surrounding community agreed to rehabilitate the degraded quarry area by planting trees and then establishing cultural villages. Activities such as capacity building through establishment of learning institutions eg Globe Ville college, tree planting to rehabilitate the degraded land and conservation, and establishment of cultural villages were undertaken.

Casuarina was the first species to be introduced in the site. Trees were planted at 1 m spacing and later thinned to 2 m apart. Since casuarina leaves don't decompose easily, millipede population was collected by hand by the neighbourhood community and introduced in large numbers into the

quarry site to help break down the leaves. The proprietor also helped the community around the quarry, to start up a tree nursery.

The quarry houses various rural Kenya villages. Traditional rural home replica are displayed including huts, farms and the crops grown by the various Kenyan tribes and other activities such as fishing and hunting. To make cultural farms productive, the coral was loosened, a 4 inches soil and manure cover added after which each tribe planted their traditional crops which included bananas, sweet potatoes, sisal, cassava, sweet potatoes, cowpeas paw paw and millet.

The tribal villages offer ecotourism activities as a source of income.

## **Impact**

- Rehabilitation of Ngomongo village has led to; soil and water conservation, improved soil fertility, enriched bio-diversity, and improved resilience to climate change.
- Trees have also improved microclimate, aesthetic value and act as windbreak.
- It is also a source of income through ecotourism as a result of the cultural villages that were established.

## **Innovations and Success Factors**

- Rehabilitation of Ngomongo area brought together the communities adjacent the area through tree planting for conservation.
- Establishment of various cultural villages has promoted ecotourism in Ngomongo village.

## **Constraints**

Some of the constraints experienced include:

- The area cannot accommodate villages for all the Kenyan tribes
- Activities are seasonal dependent i.e. the place is busy during tourism high season.

## **Lessons Learnt**

Some lessons learnt include:

- It is important to involve communities in rehabilitation of environment that surround them
- Culture and environment conservation are interlinked
- Degraded areas can be turned to be sources of income

- Environmental conservation can contribute to improvement of social services e.g. subsidized college fee

## **Conclusion**

Rehabilitation of Ngomongo village has been a great source of income through eco-tourism as a result of establishment of a cultural village. Tree planting also led to biodiversity conservation and enhance mitigation and adaptation to climate change.

## **Acknowledgements**

The authors acknowledge Ngomongo village for providing information on rehabilitation and forest conservation which enabled the compilation of this manuscript.