

## Case 3: B O T S W A N A

### Thota-ya-marula Forest Conservation

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Thotayamarula Forest Conservation is located proximal to Sojwe village and has been in existence since 2006 and has an active Board, which its core business is to manage a forest conservation area. Later on, the Trust opted for a Fruit processing business named Matsheng Wild Fruits Processing Facility, because of abundance of fruit trees that are present in forest reserve. However, the MCDT has been granted 192 ha of forest area in 2007 by the Kweneng Land Board on a 50 year lease under common law. In 2009, the Trust developed a Sustainable Forest Management Plan (SFM), and by the end of the year 2013, the Trust had purchased all the necessary equipment to process the plentiful raw material and produce either jam, balms, oils and snacks of various kinds. The aim of this business was to sustainably derive revenue from the area through processing of wild fruits, utilizing the timber and bee keeping in order to develop the five associated villages.

|                           |   |
|---------------------------|---|
| Implementing Organization | Matsheng Community Development Trust (MCDT)<br>Add : P.O. Box 68, Sojwe, Botswana |
| Funding Source            | Community Conservation Fund, GIZ, Forestry Conservation Botswana (FCB)            |
| Implementing Period       | 04/2016 – 03/2017   |
| Project site              | Botswana, Sojwe, Lephephe, Boatlaname, Shadishadi and Loologane                   |

**Key Words:** Natural Resources Conservation; Wild Fruit Processing; Sustainable Forest Management Plan, Tree Nursery, Beekeeping; Community Based natural Resources Management



Location map of Thotayamarula:

The reserve is fenced and covers an area of



Completed Morula factory:

A factory for process and storage of Morula products

approximately 220 hectares.

completed in 2012.

### Background of the Project

The Matsheng Community Development Trust (MCDT) is a project dealing with the conservation, management and sustainable utilization of natural resources within the Thotayamarula forest conservation area. The area is fenced and covers approximately 220 hectares, it constitutes a diverse array of plant species that produce various edible fruits dominated by morula trees. This Trust comprises of five (5) villages namely, Shadishadi, Sojwe, Lephephe, Loologane and Boatlaname which are all located along the B112 tar road linking two of the urban areas; Molepolole and Serowe. In 2009, the Trust developed a Sustainable Forest Management Plan (SFM), and by the end of the year 2013, the Trust had purchased all the necessary equipment to process the plentiful raw material.

### Overall Goal and Objectives of the Project

**Goal:** Conserve and manage forest resources for the benefit of the local community

**Objective 1:** Maintain the number and species composition of the forest conservation area.

**Objective 2:** Sustain populations of indigenous species and enhance genetic diversity of the forest conservation area.

**Objective 3:** Conserve and increase ecosystem resilience by maintaining diverse ecosystem conditions.

**Objective 4:** Derive economic value from the forest resources

### Major Activities

#### Conservation of Species Diversity

- ✓ To maintain a representation of keystone species of Timber and Non-Timber species, and the overall trees and shrubs-The main activities include, use of Annual allowable cut, Harvesting of Non-Timber species and harvesting of Timber species
- ✓ Species enhancement (silviculture)
  - Establishing nursery
  - Propagation using seeds
  - Wind control
  - Planting in the nursery
  - Planting in the field (Thotayamarula forest)
  - Erosion control
- ✓ Adjustment of species composition (control) and introduction of new species.
  - Bush encroachment control
  - Determine Methodology of cutting
  - Uses of collected wood
  - Plan for controlled harvesting
  - Bush clearing
- ✓ Conservation of Genetic Diversity- Genetic diversity will be conserved by sustaining the population of indigenous species and enhancing genetic diversity of the Forest Reserve.
  - Identification of superior seeds and planting of superior seeds

- ✓ Forest Ecosystem Resilience- Species stability must be maintained within the study area. Anthropogenic activities with a negative impact on the forest must be avoided
  - Restrict workers from planting non-native plants
  - Removing alien plants (Non-native)

Establishment of fire breaks and firefighting teams- The establishment of fire breaks will limit access of uncontrolled fires in to the reserve. Firefighting teams must consist of community

#### **Direct Outputs from the Project**

According to the forest inventory, there are approximately 9000 Morula trees in the conservation area. During the fruiting season 2010/2011 the monitored trees (small, medium and big trees) produced in average 320 kg fresh fruit. That would make more than 1400 tons of raw materials given the fact that Morula is a dioecious species. Assuming that only every third year will be an as good harvest (normal rains) as 2010/2011 and only 50 % of the fruits can be collected in an acceptable state, it is fair to plan with a stable raw material of approximately 240 t per year. Fruit Processing Facility is to create employment opportunities for the community. Biodiversity conservation is enhanced. Education and awareness on natural resources conservation and management is improved.

#### **Indirect Impact of the Project**

The project enhances the spirit of togetherness and corporation amongst the villages for the up-liftment and development of the cluster villages. It has brought about the understanding of planning together as a community and the benefits there off. The natural resources have significant economic potential for the communities of the five villages and community as well as the Trust are both aware of the planning and did contribute to the design and implementation phase of the project. Food security and poverty alleviation.

#### **Intervention of Central/Local Government and other stakeholders**

The Government has put in place appropriate policies and legislation to create conducive environment for communities to effectively manage forest and range resources in their localities. The Department of Forestry and Range Resources offers technical support to communities involved in Thotayamarula forest conservation area to easily achieve their objectives.

#### **Way Forward**

The Government through the Department of Forestry and range Resources will continue to ensure that the project is supported technically, facilitates empowerment of the local communities to ensure that the Thotayamarula forest reserve continue to benefit the five villagers. The process will be catalyzed by establishment of other natural resources products that can allow the reserve to sustain itself and not depend on the donor money after the seed money. The community explicitly expressed the will to start a food processing business in order to make use of the forest reserve. The community has also assured to support the project and to contribute what is in their means, with an established voluntary community watch-dog which is policing and safe guarding any perpetrators to the resources.

Reference Documents/Materials

- ✓ SUSTAINABLE MANAGEMENT PLAN for the THOTAYAMARULA FOREST (Matsheng Community Trust)

Resource Persons

| Name              | Affiliation                                 | email              |
|-------------------|---|--------------------|
| Mr S. W Mokgwathi | Department of Forestry and Range Resources  | swmokgwathi@gov.bw |
| Onalenna Manene   | Department of Forestry and Range Resources  | omanene@gov.bw     |
| Mr. O. Moipolai   | Matsheng Community Development Trust (MCDT) | -                  |



Total Marula Compartment and sub-compartment Map of Thotayamarula Forest Reserve.:  
 The map shows the volume and location of marula trees within the Thotayamarula.