

## **Ifaty Garden Project Report**

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The original purpose of establishing a garden in the white sandy soils of the IHSM property in Ifaty was to **A)** see if it was possible to germinate and grow food plants as an alternative means of harvesting food, **B)** grow medicinally valuable and other plants used by local people and **C)** in general act as an example that it is in fact possible to grow food and useful plants that can be valuable to people with limited opportunities. Eventually local endemics can be replanted back to the highly impacted sections in the Ifaty-Mangily forests acting as a forest restoration project.

**What we did-** With the help of our local gardener Jonny, a fenced area approximately 5x6m was constructed as a nursery area on the IHSM property near the existing well. Soils were enriched with compost from a local horse ranch in Mangily. Raised beds were established in the fenced area and shades were constructed over the beds to reduce the amount of directed sunlight on seedlings and to retain soil moisture.

As the physical set up of the nursery was under construction, vegetable seeds were started in seed boxes and native seeds from the forest behind Ifaty were collected for future germination. Vegetable seeds germinated readily but only lived for about one month as the salinity of the well water was too great creating an osmotic effect resulting in unsuitable growing conditions for cucumbers and tomatoes. Furthermore a small gardening/composting project was initiated in Tsivonoy (the village directly to the east, across the Route National from Ifaty) where fresh water is more readily available and plants were tended by local people grew successfully.

On New Year's Eve 2007, a planting party sowed the entire garden space at Ifaty with basil, carrots, cucumber, tomatoes, lettuce, corn, mustard seed, squash, melon, and multiple species of native endemic plants found in the local forest including Euphorbiaceae (*Euphorbia*, *Jatropha*), Didieriaceae, *Baobabs*, *Aloe*, *Moringa* and fabaceous species *Delonix* and *Thephrosia*. A tropical storm hit the region the next day and lasted four days giving the garden ample amounts of fresh water. Amazingly the result was tremendous germination success of all food and native plants.

A 12 meter long gutter was added to the western side of the IHSM building to act as a water catchment system and a 250 liter barrel was used to store water. Several weeks later another 250 liter barrel was purchased to store water for the garden. We found this amount of water to be completely inadequate because the garden required around 150 liters of water for each watering. However, thousands of liters of water can easily be gathered from one storm if a proper storage unit (such as from Makiplast) was purchased. The alternative, (which was given the go-ahead by Rod) is to dig a new well on the property which is greatly needed as a local source of suitable fresh drinking water for Reef Doctor staff and could be used to maintain a fruitful food and tree nursery.

**Further Recommendations-** Since the limiting factor for growing plants in the area is water with low salinity, digging a well is essential for maintaining a garden. Composting must regularly be added to the soils to maintain fertility but otherwise gardening is very possible and could easily supplement the diet of local people and Reef Doctors staff. In addition the nursery can act as a base for a small reforestation initiative (which could be a source of funding), medicinal plant nursery and botanical garden.