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Bee-Keeping

APICULTURE PROMOTIONAL PROJECT

The aim of the project is to establish a sustainable and financially viable apiculture industry within the various local communities through financial support, training and practical ongoing extension work and in doing so contribute to the local economy and reduce the traditional bee keeping practices which have so many destructive elements.

The pillars of this project are;

1. The conversion from traditional methods of bee keeping to a modern method is an easy step.
2. The socio/economic aspects of the target rural communities are addressed
3. All the environmental aspects are addressed.
4. The empowerment through training is addressed, with a focus of including women.
5. Through good marketing a contribution to the National economy could be achieved.
6. Through guidance and training producers could achieve substantial commercial gains on marketing bee products.

The scope of the project

- Developing the rural based apiculture activity into a sustainable and financially viable industry.
- Prevent the cutting down of large trees to raid wild hives
- Prevent wild fires
- Training and empowering local woman

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Rural apiculture using modern commercial bee hives.

Bee keeping has been a traditional practice for thousands of years. In past years the impact on the environment was low as most rurally produced honey was used at community level. At community level traditional bee keeping had little negative impact on the environment

In recent years with the country opening up its road and rail infrastructures the production of honey and wax as commercial products has risen exponentially. With limited resources to practice, community bee keepers have had to resort to using traditional methods of using bark hives. This coupled with the more recent habit of taking out wild honey by cutting down big trees to raid swarms in hollows, the negative impact on the environment has been huge. Wild honey extraction has the further risk by collectors using fire for the extraction.

The negative environmental impacts are immeasurable



Debarked tree dies



Traditional hive from bark



Mutondo felled by wild honey hunter



Fires started by wild honey hunters



Wild honey extraction hole



Unsustainable and unhygienic traditional honey

THE SOLUTION

The introduction of commercial hives

Based on the success of the Zimbabwean experience of rural bee keeping and on the advice of a master bee keeper in that country, in 2012 WWF along with other non-governmental organizations introduced in to Central Mozambique the Kenyan Top Bar hive, (KTB). This is a cheap & easily produced commercial hive used with considerable success in all Southern, Eastern and Central African countries that have developed into viable and robust rurally based honey and wax industry.

The motivating factors

History has conclusively proven that with a coordinated effort, the community bee keepers are capable of producing substantial volumes of honey. Based on the limited survey areas of Sofala Province the conditions for rural based apiculture are encouraging.

- The mix of natural forest and a wide variety of fruit trees and crops would afford a prolonged and wide source of nectar and pollen.
- The area has an ample supply of water
- The population groups are well spaced along the various major roads, (population groups guarantee water for bees.
- The access roads provide an ideal infrastructure to support training, extension services, buying and transporting products.
- In short from initial observations, an ideal target area.

Recommended course of action

Community consultations and stakeholder participation in these meetings are important factors in any community development initiatives;



Community consultation



Stakeholder participation

Training of producers a critical element for successful production



Theoretical training in the environmental school



Practical training in field using live bees



Cropping of honey in field



Separation of honey from cone.



Filtering of honey from cone



Recovery of wax from cone

The training and capacitating of community promoters



Community promoters; an essential element

The supply of KTB hive to communities.

The delivery of hives is the final step in capacitation of rural farmers in using commercial bee hives. The continuation of the training is conducted by the bee keeping promoters. Their role is to liaise with the farmers to assist in the application of the training received on Catapu by TCT'. The bee promoters are community members who themselves are bee keepers who have had advanced training. Our research has shown women to be substantially better than men at maintaining hives and harvesting of honey.



Delivery to rural communities.



KTB hive mounted in field

THE FINAL PRODUCTS



It is this our belief that the most successful entry point for rural farmers to the honey industry is by using KTB hives. As the service infrastructure advances so will the viability of using the Langstroth hive follow suit.

From our experience, simplicity in the rural areas is essential.



A Kenyan top bar hive in the field



Langstroth hive in field

It is important to keep in mind that it takes a minimum of two years for a swarm to reach maturity and optimal yields of product reached.

THE ECONOMIC REALITY

1. Finance;

Top Bar hives ready to field mount	Bee suits 1 per 20 farmers.	Auxiliary equip. 1 set per 20 farmers	Training, a three day course all inclusive per person	Extension officer costs per 50 farmers; equipped with a bicycle and PPE uniform – per month
Mt3,500	Mt4,000	Mt 1,000	Mt5,370	Mt1,000

2. Training

- a. Selection of trainees, trainees should be volunteers and whenever possible from the traditional keepers. Efforts should be made to include women.
- b. Training, a three day practical course on the use of the Top Bar Hive, (TBH).
- c. Training of technical personal and community promoters, again this is an essential element in achieving sustainable growth of the project.
- d. Post training extension work. Initially this could be done by the initial training staff thereafter the field technician and bee promoters would take over this role.

3. Implementation in the field

- a. Essential that bee keepers are offered extension assistance during the sighting and mounting of the hives.
- b. It is imperative that the technicians and bee promoters are included in this activity.

4. The maintenance of the extension work

- a. An essential element to enhance success and sustainability, this function should be carried out by the technical extension staff and community bee promoters.

It is also recommended that all training and preparation should be concluded and any KTB hives distributed before September, (September being the start of the swarming period).