



Ministry of Agriculture and Livestock Development  
State Department for Crop Development  
P.O. Box 30028, Nairobi



Emergency Locust Response Program  
P.O. Box 30028,  
Nairobi



Kenya Agricultural & Livestock Research Organisation  
P.O. Box 57811-00200,  
Nairobi



The World Bank  
P.O. Box 30577-00100  
Nairobi

## **Sustainable Agricultural Livelihood Restoration, Rehabilitation and Resilience in Kenya Training Manual**

---

### **3.1.1 SUB-MODULE 1: APIARY SITING AND ESTABLISHMENT**

#### **Introduction**

An apiary is a bee yard where honeybees are kept for their products and pollination services. It's a bee boma where numerous honeybee colonies are reared for their economic benefits. The number of colonies to be kept in the apiary depends on the availability of bee forage and the presence or absence of other colonies in the vicinity

#### **Factors to consider in apiary siting**

- Availability of bee plants (forage)
- Availability of bee colonies
- Source of water
- Shelter
- Proper drainage
- Accessibility of the site
- Proximity to public amenities, minimum 200-300 metres
- Low incidences of pests, predators and diseases
- Minimum exposure to pesticides
- Distance to the next apiary(ies) radius of 2-3 km.

#### ***Apiary establishment***

There are various steps to be followed when establishing an apiary:

- Site preparation which involves clearing the site of any excess vegetative growth, removal of unwanted materials such as big stones, logs and tree stumps
- Site fencing. Surrounding the apiary with a barbed wire fence excludes livestock, predators and human beings from accessing the apiary
- Establishment of a live hedge fence that makes the bees fly high when leaving and returning to the apiary thus reducing the risk of them becoming a nuisance in the neighbourhood. Fast - growing bee plants e.g., Kei apple and *Lantana camara* are recommended as a live hedge fence
- The hive hanging posts should be well treated to prevent termite attacks and not rot easily. They should be sunk about two feet below the ground surface and about two metres apart for suspending KTBH.

#### ***Hive placing and hanging***

Hives can be placed on a bench/platform at least 1m above the ground. This is gender friendly, unlike the traditional beekeeping where hives were hang high on trees hence a preserve for men.

## **Sustainable Agricultural Livelihood Restoration, Rehabilitation and Resilience in Kenya Training Manual**

---



Langstroth hives placed on a bench



Langstroth hives hanging

## Sustainable Agricultural Livelihood Restoration, Rehabilitation and Resilience in Kenya Training Manual

### *Langstroth hives placement*

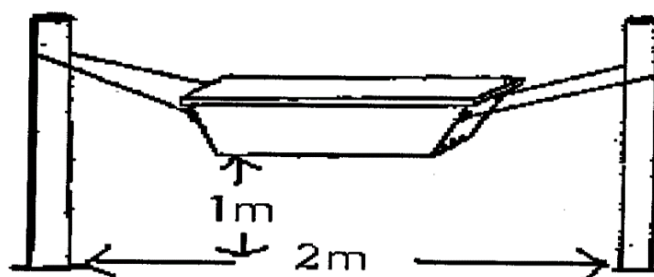
Hives are hung so as to offer a convenient working height and also to prevent pests and predator attacks. This working height is preferably 1m above the ground. There are several hanging patterns including-Single patterns, line patterns, T-patterns, cross patterns, zig zag patterns, goal posts and suspension.



Line pattern



Cross pattern



**KENYA TOP BAR HIVE HANGING**

### *Routine management of the apiary*

For successful beekeeping, it is very important for a beekeeper to devote some time to managing his/her apiary. The following managerial practices are recommended:

- The Apiary is well - fenced with barbed wire or a live hedge to keep off animals and people. The hedge should be more than 2 m high so that bees can fly high when leaving or returning to the apiary. This height reduces exposure and risk of being stung
- The apiary should be kept clean by cutting overgrown and undesirable vegetation around the hives so as to prevent pests from accessing the hives



Ministry of Agriculture and Livestock Development  
State Department for Crop Development  
P.O. Box 30028, Nairobi



Emergency Locust Response Program  
P.O. Box 30028,  
Nairobi



Kenya Agricultural & Livestock Research Organisation  
P.O. Box 57811-00200,  
Nairobi



The World Bank  
P.O. Box 30577-00100  
Nairobi

## **Sustainable Agricultural Livelihood Restoration, Rehabilitation and Resilience in Kenya Training Manual**

---

- Hives should be properly hung and hanging wires must be greased frequently to keep off crawling pests
- Plant more bee plants in and around the apiary to ensure that the bees are provided with enough forage
- The dilapidated posts should be repaired or replaced
- The provision of a Bee house to; enhances the security of the hives, provides shade especially in hot areas and controls pests and predators.

The Beehouse can be constructed by use of locally available materials such as: Grass thatching for roofing. Rafters and mud for walls. Any available timber for hive stands. Holes are drilled on the wall. Hives are placed on stands with their entrances corresponding with holes (about 1m from ground level) on the walls. Pipes of about 2 inches wide and 6 inches long connect the hive to the outside through the wall and works as bee entrances.