“African reference laboratory (with satellite stations) for the management of pollinator bee diseases and pests for food security”

Project Goal:

Contribute to reducing the incidence of bee diseases and pests to improve honey production and pollination services for income generation and harmonise procedures and legislation relating to bee health issues in Africa.

Bee pest: *Varroa mite*  
Foraging bee
Activities

1. Construction of Bee Health Centre and Satellite stations;
2. Evaluation of bee health hazards and control measures: (bee disease surveillance, mapping, chemical/behavioral mechanisms, pesticides hazards detection, plant-based bio-pesticides for prevention and control);
3. Awareness, trade, policy and legislation, sanitary and phyto-sanitary measures;
4. Training and capacity building of NARS and Farmers’ Federations
Bee health staff recruited.

Project Inception Workshop and Inaugural Steering Committee meeting: Sept 2013 - 65 delegates from 15 countries.

Signing of MoUs with relevant Ministries.

Space for marketplaces development allocated in all project countries.

**Activity 1:** Reference laboratory construction and refurbishment of satellite stations ongoing (Expected completion - June/July 2014).

**Activity 2:**
- Surveillance research model designed.
- Standard Operating Procedures (SOPs) developed.
Project Progress

➢ Baseline data for bee disease and pests completed in Kenya.

➢ Development and optimization of pesticide residue analysis using gas chromatography-mass spectrometry initiated.

➢ Data collection on stingless, carpenter and honey bees for sequencing and DNA fingerprinting ongoing.

➢ Development of plant-derived bio-pesticides initiated.

➢ Bioassays of the extracts designed.

➢ Data collection of plant–pollinator interaction in Mwingi and Kakamega.
GIS and Remote Sensing: 150 flowering plants identified and tagged in Mwingi using hyper spectral sensor.

Activity 4:-
- 1st training workshop of 25 ToTs from participating countries trained in bee health in Nov - Dec 2013.
- Continental training scheduled in April & May 2014.

Training manuals for bee pests and diseases being compiled.
Main objective

- To build capacity of officers in the directorate of veterinary services and honey beekeeping stations in AU-Member states for identification and diagnostics of bee diseases, for early detection and timely reporting of bee disease outbreaks as part of the disease reporting assignment of the directorates of veterinary services.

Specific Objectives

The proposed training has three specific objectives:

- Enhance knowledge and create awareness on bee health;
- Strengthen diagnostic capacity for early detection and timely reporting of bee diseases and pests;
- Strengthen capacity for bee diseases prevention and control.
TRAINING COMPONENTS

THEMATIC I: Create awareness and enhance knowledge on bee biology, research methods and certification

THEMATIC II: Surveillance, early detection and timely reporting of honeybee diseases and pests

THEMATIC III: Prevention and control of bee diseases and pests

PRACTICALS - Surveillance, early detection and timely reporting of honeybee diseases and pests
"Queen Breeding can improve African Honey Bee Gene Pool"

THANK YOU