REPUBLIC OF KENYA

KALRO
Kenya Agricultural & Livestock Research Organization

NAVCDP
NATIONAL AGRICULTURAL VALUE CHAIN DEVELOPMENT PROJECT

RECORD KEEPING IN BEE KEEPING ENTERPRISE

Record-keeping?

Record-keeping involves the processes of noting down, filing, categorizing, and maintaining information on an enterprise's operations, including finance and production. This can be accomplished through various methods, ranging from a basic manual record-keeping system to a more elaborate computerized one

Importance of record keeping?

Bee farm records assist in tracking activities between production cycles, facilitating informed decisions for:

- Measuring profit and assessing the financial feasibility of the business/operation.
- Providing data for business/operation analysis.
- Preparing for obtaining loans.
- Measuring the profitability of individual operations.
- Analyzing new investments.
- Preparing income tax returns.

Types of Records

The records a bee production entrepreneur needs to keep include:

1. **Apiary records:** Information include:
    - Number of apiaries
    - Location of hives and apiaries
    - Number and type of hives

An apiary (Courtesy of Joseph Kilonzo)

2. Equipment records

Equipment records are comprehensive documentation detailing information about various tools, machinery or assets within a business or organization. They serve purposes like operational planning, compliance, and are maintained by individuals overseeing equipment as assigned by the entrepreneur. These records are updated throughout the equipment's lifespan, maintained manually or in a centralized database accessible to stakeholders. Data is collected through regular documentation, organized using specialized software, covering cost, maintenance, suppliers, and usage history.

3. Hive records

Hives need to be tracked individually. Starting with some way to distinguish one from another, here are some data points to consider:

- **Some form of identifier**
    - Name
    - Number or label can even apply barcodes with some QR readers

- Colour (we do this in our bee yard)
- Queen (because one may move a queen from one hive to another by doing splits or artificial swarms)

- **Bees**

What kind of bees? (to learn about how they behave, produce, handle mites, etc., compared to others)

- **Colony source**
  - Swarm
  - Split
  - Combined

4. Inspection records

Hive inspections (Courtesy of ABIRI Team)

- Date
- Weather:-

  One may want to keep track of general weather conditions over time. If it's been very dry, providing a water source could be crucial.

- Queen status
    - Did you see the queen?
    - Eggs?
    - Larva?
    - Brood pattern
        - ◊ How many frames of brood?
        - ◊ How much drone brood? (may be helpful for mite control)
- Population
    - ◊ Growing or shrinking? (No need to count the bees, just how many full frames of bees.)
- Weight
    - ◊ Weight variations can tell one if the population is growing or if they are adding or consuming stores
- Presence and number of swarm cells or supersedure cells (an indication of the intention to swarm or queen decline).
    - ◊ How many?
    - ◊ Removed?
- Stores
    - ◊ How many frames of capped honey?
    - ◊ Presence of nectar and bee bread?
- Adjustments to the hive
    - ◊ Added/removed honey supers
    - ◊ Added/removed queen excluder
    - ◊ Culled drone brood for mite management?
    - ◊ Added/removed robbing screen
- Feeding
    - ◊ How much was added initially, and how much was consumed
- Chemical treatments (this may be required especially if you sell bee products
    - ◊ Brand/type

- ◊ Manufacturer
- ◊ Expiration date
- ◊ Batch number
- ◊ Results

- Infestations – type and any action taken
  - ◊ Varroa mites
  - ◊ Small hive beetles
  - ◊ Wax moths
  - ◊ American Foul Brood (AFB is a serious bacterial disease that should be reported)
- Actions for the next inspection
  - ◊ Calendar reminders
  - ◊ Note equipment needs

5. Harvest records

Keep records for:

- Honey
- Beeswax
- Pollen
- Propolis
- Queens reared

Sample record sheets

Production record card

Hive No ……..……

Inspection date	Queen sets	Pests and diseases		Mortality No. of bees	Colony strength	Laying patterns	Colony split		Laying patterns	Comments
		Disease	Pests				Date	purpose		

Harvest record sheet

Hive No. ……..…… Date of installation ……

Item	Honey	beewax	Royal jelly	Propolis
Quantity (Kgs)				
Price (per Kg)				
Total sales				

A well capped honey comb ready for honey extraction

(Courtesy of ABIRI Team)

Equipment inventory

Equipment	Date of purchase	Quantity	Cost	Maintenance date	Maintenance cost	Remarks
Hives						
Extractors						
Sieves						
Honey pressors						

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