## Training Approach

- ✓ Hands-on field demonstrations in nurseries and apiaries
- ✓ Practical sessions on briquette making, hive handling, and honey processing
- ✓ Interactive classroom lessons
- ✓ Group activities and case studies

  Participants leave with **practical skills** to start agroforestry and beekeeping enterprises.

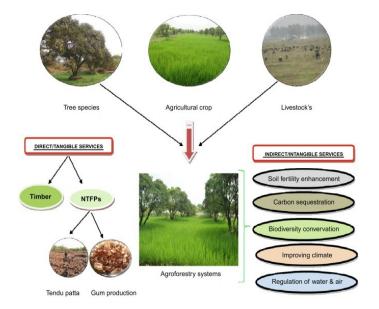
### **Why Choose This Course?**

- Highly practical and field-oriented
- Delivered by experienced agroforestry and beekeeping instructors
- Certificate of Completion awarded
- Suitable for both beginners and practising farmers
- Promotes environmentally friendly incomegenerating skills

### **Accommodation & Meals**

Training participants are provided with **comfortable accommodation and nutritious meals** under the **CICE** facility.

This ensures a safe, supportive, and enjoyable learning environment.



Contact details and location:

For further details, contact the Principal through the following:

Zambia College of Agriculture-Monze P.O.Box 660053 Monze

Call/whatsapp: +260 974 105 394

+260 972 023 825

+260 966 162 357

Email: principal@zcamonze.edu.zm www zcamonze.edu.zm

Location:
Southern Province
Monze District
East of Monze town
5 Km along the Monze-Chivuna road.

# ZAMBIA COLLEGE OF AGRICULTURE MONZE



Sustainable Agriculture: Agroforestry & Beekeeping (Duration: 2 Weeks)

"Building Climate-Smart Skills Through Trees, Bees, and Sustainable Land Use"



- Training for sustainable development -

### **Course Overview**

This two-week practical training program equips participants with hands-on skills in **agroforestry nursery establishment** and **modern beekeeping practices**.

The course promotes sustainable farming systems that enhance soil fertility, biodiversity, pollination, income generation, and climate change resilience.

Ideal for farmers, youth agripreneurs, cooperatives, extension officers, environmental groups, and community-based organizations.

### **Modules Covered**

A. Agroforestry Nursery Establishment (1 Week)

• "Greening Farms for Future Sustainability"

### 1. Benefits of Agroforestry

Participants learn the economic and environmental advantages of integrating trees with crops and livestock, including soil conservation, microclimate improvement, and diversified income.

### 2. Seed Collection and Preparation

Techniques for selecting quality seed sources, seed extraction, treatment, and storage to improve germination and seedling vigor.

### 3. Site Selection

Factors considered when selecting a suitable nursery site—water access, drainage, shade, soil texture, and security.

### 4. Nursery Bed Preparation and Sowing

Practical training in soil preparation, nursery bed layout, potting, sowing methods, and spacing for different tree species.

### **5. Nursery Management**

Covers watering schedules, shading, pest and disease control, weed management, hardening-off, and seedling transplanting.

# 6. Forest Tree Conservation Techniques (Biochar Briquette)

Participants learn sustainable charcoal alternatives and how to produce **biochar briquettes** to reduce deforestation and improve soil health.



### B. Beekeeping (1 Week)

**\Pi** "Empowering Farmers Through Honey, Pollination, and Environmental Protection"

## 1. Apiary Establishment

Site selection, placement of hives, and environmental requirements for successful apiary establishment.

### 2. Beekeeping Equipment

Overview of essential beekeeping tools including smokers, protective clothing, hive tools, and honey extractors.

#### 3. The Hives

Covers types of hives—Top-Bar, Langstroth, and Traditional hives—and their suitability for different environments.

#### 4. Hive Stands

How to construct durable and predator-proof stands to support hives safely.

### 5. Baiting Techniques

Teaches how to attract bee colonies using wax, pheromones, and natural attractants.

# 6. Supplementary Feeding & Water (Bee Forage)

Participants learn the importance of forage, planting of bee-friendly trees, and sugar-syrup feeding during shortages.

### 7. Control of Pests and Diseases

Covers common pests (ants, wax moths, beetles) and diseases affecting colonies, plus preventive and control strategies.

### 8. Honey Harvesting and Processing

Includes safe harvesting techniques, honey extraction, filtering, storage, packaging, and meeting quality standards.