



## **Ethiopian Horticulture Producer Exporters Association (EHPEA)**

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### **Terms of Reference**

#### **For Service Provision on Vertical Farming in Urban Areas**

##### **1. Introduction**

Ethiopian Horticulture Producer Exporters Association (EHPEA), is a non-profit, nongovernmental organization, established in 2002, whose members are legally registered and operating in the horticulture production and export business. The mission of EHPEA is to promote the competitive position of the Ethiopian horticulture sector in the global market.

Currently EHPEA, in partnership with Mastercard Foundation and Digital Opportunity Trust has entered the implementation phase of an innovative Urban Vertical Farming project aimed at promoting efficient, climate-smart, and space-optimized Horticulture production systems in Addis Ababa and surrounding urban centers. This initiative is designed to address job creation or employment, urban food security challenges, enhance household income opportunities, and introduce modern horticulture technologies suitable for limited urban spaces.

##### **2. Objective of the Training**

The main objective of this program is to:

- Train and equip participants be qualified both in practical and theoretical aspect of Vertical farming
- Build a pool of professionals capable of facilitating and cascading programs focusing on urban agriculture programs and projects
- Strengthen institutional and organizational compliance of EHPEA and other partner organizations.

##### **3. Scope of the services**

###### **A. Training of Trainers (TOT) for EHPEA Experts and Partners**

We require a structured TOT program that equips EHPEA's trainers with both theoretical knowledge and hands-on practical skills in urban vertical farming. The TOT should cover:

- Principles and models of vertical farming

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- Hydroponics, aquaponics, and soil-less cultivation
- Growing system design and operation
- Crop selection, nutrient management, pest & disease control
- Monitoring, automation, and efficient resource utilization
- Safety, maintenance, and troubleshooting

This capacity-building will enable EHPEA to cascade high-quality training to at least 600 beneficiaries at community and institutional levels.

### **B. Training Curriculum and Material Development**

We need expertise in developing a standardized and user-friendly curriculum, including:

- Training modules (beginner, intermediate, advanced levels)
- Trainer and trainee manuals
- Practical demonstration guides
- Visual and digital learning materials
- Assessment tools and certification guideline

These materials will ensure consistent knowledge transfer across all project sites and will serve as a reference for long-term sustainability.

### **C. Identification/recommendation of Suitable Vertical Farming technologies**

To ensure technological adoption and project effectiveness, we seek guidance in identifying or supplying appropriate vertical farming technologies, such as:

- Modular vertical growing systems
- Hydroponic towers, NFT channels, or stacked systems
- Low-cost starter kits for households and youth groups
- Energy-efficient LED growing lights
- Automated irrigation and nutrient management systems
- Monitoring devices and sensors

These technologies must be economically feasible, scalable, and environmentally sustainable, fitting the urban context of Ethiopia.

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#### **4. Qualifications and Experience of Trainer(s)**

- At least 10 years of practical experience in providing capacity building on Vertical farming and Urban agriculture development programs.
- Master's or PhD, in Agriculture, Crop science, Horticulture, Agricultural engineering, Urban agriculture
- Proven experience in delivering TOT training, curriculum development and designing and establish vertical farming facilities in the urban context.
- Strong facilitation and communication skills.
- Knowledge of local regulatory and compliance requirements.
- Preferably if firms have access to appropriate training facilities or demonstration sites

#### **5. Deliverables**

- Training material.
- Training delivery (theory and practice).
- Training curriculum
- Certification of successful participants.
- Final training report with recommendations.
- Project Monitoring and Evaluation tools

#### **6. Timeline**

- **Preparation phase:** 2–3 weeks prior to training.
- **Training delivery:** five days (two days theory and three days practical)
- **Certification and reporting:** Within 2 weeks after training completion.
- **Training Curriculum two weeks after training delivery**

#### **7. Approval and Agreement**

These Terms of Reference (TOR) are subject to approval by the contracting organization. Upon acceptance, the selected trainer(s) will sign a formal agreement covering the scope, deliverables, and conditions of the assignment.