



## Terms of Reference

### DEVELOPMENT AND DEMONSTRATION OF COCOA-BASED BIOCHAR FOR MAROU CHOCOLATE JSC IN VIETNAM

Project: Circular Economy Cocoa - From Bean To Bar

#### 1. BACKGROUND

HELVETAS is an independent development organization based in Switzerland with affiliated organizations in Germany and the United States. Helvetas has been active in Vietnam since 1994, working in various areas typically Agriculture, Biodiversity Conservation, Forestry, Eco-Tourism, and Rural Economy.

Under the European Union's SWITCH-Asia programme, HELVETAS is implementing the project "Circular Economy Cocoa: From Bean to Bar," which aims to develop circular economy solutions within the cocoa and agri-food sectors. This project, which began in 2022, is active in 6-7 cocoa-growing provinces across the Central Highlands and Mekong Delta of Vietnam.

In partnership with Marou Chocolate JSC, HELVETAS Vietnam seeks qualified service providers/consultant teams to provide technical assistance in biochar production and its practical application at the farm level.

#### 2. OBJECTIVES

The primary objective of this service package is to promote and scale up biochar production using cacao pod husks and other organic materials among cocoa farming communities in Vietnam. This initiative aims to enhance the efficiency and sustainability of cocoa production and promote circular economy practices within Marou Chocolate's cocoa supply chain.

Specific objectives include:

- Assessing the feasibility of biochar production in 04 cocoa-growing provinces (below mentioned) and recommending optimal biochar technologies.
- Supporting the establishment of 04 (four) biochar demonstration sites and providing coaching and training for local stakeholders (farmers, fermenters, collectors).

#### 3. LOCATIONS

The four demonstration sites will be located in the following provinces:

- Kien Giang (Giong Rieng District)
- Binh Dinh (Hoai Nhon District)
- Ben Tre (Chau Thanh/Cho Lach District)
- Tien Giang (Chau Thanh/Cho Gao/Go Cong Tay District)

#### 4. SCOPE OF WORK

The service package includes, but is not limited to, the following tasks:

#### **4.1. Feasibility Assessment and Technology Selection**

- **Feasibility Assessment:** Evaluate the feasibility of producing biochar from cacao pod husk or other biomass materials in four selected cocoa farms, including an assessment of raw material availability and quality.
- **Technology Selection:** Identify and recommend the most suitable environmentally friendly biochar technology, considering both technical and economic factors.
- **Biochar Pilot Production:** Conduct pilot production in the selected farms using the recommended technology and assess the quality of the biochar against International Biochar Initiative (IBI) standards and Vietnamese regulations.

#### **4.2. Setting Up Demonstration Sites and Training Provision**

- **Demonstration Sites:** Assist Marou Chocolate and selected farms in establishing and operating biochar demonstration sites.
- **Training and Guidance:** Develop training materials and manuals, and provide hands-on training for local farmers, fermenters, and cooperatives on biochar production system operation and maintenance.

### **5. METHODOLOGY**

The Service Provider should propose effective approaches and methodologies for implementing the service package. Collaboration with HELVETAS's Project Manager, Marou Chocolate, and relevant smallholders will be essential throughout the implementation phase.

### **6. REQUIRED QUALIFICATIONS**

The Service Provider could be a consulting firm or a team of individual experts with the following qualifications:

- **Team Leader:**
  - ✓ Minimum Master's degree in environmental/agricultural sciences or a related academic field with at least 10 years of relevant working experience.
  - ✓ Expertise in biochar production technology and knowledge of international IBI Biochar Standards.
  - ✓ Proven experience in setting up biochar production sites, technology transfer and farmer's training.
  - ✓ Knowledge of circular economy, regenerative agriculture, and the cocoa production sector in Vietnam (preferred).
  - ✓ Excellent English language communication and writing skills.
- **Other team members:**
  - ✓ Specialists in environmental and agricultural sciences or related fields.
  - ✓ Experience with biochar production and implementation.
  - ✓ Knowledge of raw materials and agricultural supply chains.
  - ✓ Familiarity with cocoa production techniques (preferred).
  - ✓ Strong communication skills in English and Vietnamese.

## 7. DELIVERABLES

The Service Provider is supposed to deliver the following deliverables on time at professional quality:

- 01 Feasibility & Technology Report detailing the feasibility assessment, testing results, and technology recommendations (in English).
- 04 biochar demonstration sites with 04 training courses for farmers/fermenters/partners on the selected biochar technology (to be delivered in Vietnamese).
- Training materials and technical guidelines for biochar production using cocoa husks and other organic materials (in English and Vietnamese).
- A PowerPoint presentation summarizing the whole project with recommended biochar production methods/processes and implementation results (in English).

## 8. SUGGEST TIMELINE

The timeframe for this consultancy is 02 months, between Mid-September to November 2024. The Service Provider will ensure the completion of the service package and deliver the required deliverables within the committed timeframe.

Tentative timeline:

Activity	Timeframe
Contract Negotiation and Signing	Week 3 of September
Feasibility Assessment, Testing, and Technology Proposal	Weeks 3-4 of September
Establishment of Demonstration Sites and Training	October-November
Final Reporting	Week 3 of November
Contract Liquidation	Week 4 of November

## 9. TECHNICAL & FINANCIAL PROPOSALS

- Technical Proposal: Team composition, historical records, approach and methodology, available technologies, detailed workplan with timeline, quality assurance procedures, and other supporting documents.
- Financial Proposal: Provide a breakdown of costs including the number of working days, consultant rates, budget justification, field travel expenses, and any additional costs. All costs should comply with EU Cost Norms.

## 10. SUBMISSION

Interested candidates should submit their Profiles, Technical and Financial Proposal to Helvetas Vietnam at [tuan.nguyen@helvetas.org](mailto:tuan.nguyen@helvetas.org) and [helvetas.vietnam@helvetas.org](mailto:helvetas.vietnam@helvetas.org) with attention to the EU Circular Economy Project.

**Deadline for submission: 15/09/2024.**