



Terms of Reference

Consultant for Documentation of Biochar Case Study

Project: CIRCULAR ECONOMY COCOA: "FROM BEAN TO BAR"

Budget line: 6.3.1.3 | Date: 04/02/2026

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 1995, 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," (EU-Cocoa Project) 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.

Since 2024, the project has demonstrated biochar production from agricultural waste using pyrolysis and gasification technologies in Dak Lak, Gia Lai, Lam Dong, Khanh Hoa, Vinh Long, Kien Giang and Ho Chi Minh City. These solutions enhance economic value and farmer income, improve livelihoods and community capacity, strengthen soil health, reduce waste and pollution, and protect ecosystems.

To capture and share these lessons, HELVETAS is seeking a qualified consultant to document a specialized case study focusing on biochar model, with the aim of promoting replication and scaling of these innovations across other agri-food sub-sectors, thereby contributing to Vietnam's national targets on carbon emission reduction.

2. OBJECTIVES

The overall objective of this assignment is to systematically document and analyze circular economy solutions developed under the EU-Cocoa Project, with a specific focus on the production and application of biochar from agricultural by-products. The case study aims to capture practical experience and early evidence to support learning, replication, and informed decision-making.

Specifically, the assignment will document and systematize the technical solutions applied in Central Highland and Mekong Delta, including the different pyrolysis and gasification kiln models and the soil improvement formulas used in practice. It will also assess the initial economic, social, and environmental benefits of these solutions through qualitative and semi-quantitative analysis.

In addition, the case study will gather practical feedback from end users - such as farmers, cooperatives, and enterprises - to better understand their needs, operational challenges, and maintenance requirements. Based on these findings, the assignment will propose practical recommendations, including key conditions for sustainable operation and potential scenarios for scaling up the model.

Note: This case study is intended as a formative, evidence-based documentation to inform decision-making on model improvement, scaling potential, and future policy dialogue, rather than a full-scale impact evaluation.

3. SCOPE OF WORK

The consultant will be responsible for carrying out, but not limited to the following tasks:

- **Documentation of technical solutions:** Document and systematize the biochar-related technical solutions, including pyrolysis (03 versions, demonstrated across up to 19 sites), gasification kiln models (02 versions, demonstrated in Dong Nai - HCMC and Ea Kar - Dak Lak), and soil improvement formulas applied in practice (demonstrated in Vinh Long).
- **Field data collection and stakeholder consultation:** Conduct field visits (up to two trips to Dak Lak, Vinh Long+Ho Chi Minh City, lasting 2–3 days per trip) and interviews (online and/or on-site) with key stakeholders (farmers, cooperatives, enterprises, and project partners) to gather practical insights on implementation, operational challenges, maintenance, and user needs.
- **Analysis of results:** Conduct cost & benefit analysis (focusing on indicative investment costs, operational costs, benefits, and payback periods), evaluate the preliminary economic, social, and

environmental impacts of the biochar solutions using qualitative and semi-quantitative methods, highlighting strengths, limitations, and enabling factors.

- **Case study drafting and recommendations:** Prepare a concise, evidence-based case study documenting lessons learned and proposing practical recommendations for sustainable operation, replication, and scaling of the model.

4. DELIVERABLES

The consultant shall deliver the following outputs in English:

- One (01) Final Report, including an executive summary, applied methodology, workplan, data analysis, key findings, limitations, and practical recommendations. Annexes shall include all tools and complete sets of collected data (e.g. interview guides, consent forms, datasets, images/videos, where applicable).
- One (01) Communication-oriented Case Study Brochure (2–3 pages), publication-ready, with concise content, visual illustrations, key results, cost–benefit highlights, and messages on sustainability and scalability for communication and outreach purposes.

5. DURATION AND TIMELINE

The consultancy should be done from March 2026 within maximum total 15 working days.

Tasks	Tentative timeline
Contract signing	Late February, 2026
Desk research	W1 of March, 2026
Field visits and data collection	W2-3 of March, 2026
Reporting	W4 of March, 2026

6. REQUIRED QUALIFICATIONS

The consultant should meet the following criteria:

- Advanced degree in agriculture, environmental sciences, development studies, or related fields.
- Proven expertise in circular economy, sustainable agriculture, or agri-food value chains.
- Strong experience in research, documentation, and case study writing; experience in documenting case studies for scaling is an advantage.
- Excellent communication and analytical skills.
- Fluency in English.

Note: The consultant will report to the Project Manager of EU-Cocoa Project, HELVETAS Vietnam and work closely with project staff and partners for coordination and fieldwork support.

7. APPLICATION AND DEADLINE

Interested candidates are invited to submit the following documents in English:

- A CV/profile, including links or samples of similar case studies or analytical writing products;
- A brief technical proposal outlining the proposed approach, methodology, and workplan;
- A financial proposal with a detailed cost breakdown including number of working days, consultant rates, budget justification, field travel expenses, and any additional costs. The EU Cost Norms (2022) are suggested to be applied.

Applications should be submitted at diep.dinh@helvetas.org and helvetas.vietnam@helvetas.org no later than **24 February 2026**, with the subject line: "Proposal – Biochar Case Study".