

Terms of Reference (ToR)

Performance and Cost-Benefit Analysis of Piloted Sustainable Food and Beverage Packaging Business Models

Project Title:

PlasticSmart Cambodia: Business cases and practices to combat plastic waste and pollution for a greener Cambodia

Context and Background

CARE International is a globally recognized development organization dedicated to alleviating poverty and fostering sustainable development through strategic partnerships and evidence-based interventions. Since 1973, CARE Cambodia has implemented diverse initiatives aimed at empowering marginalized and vulnerable communities, with a particular emphasis on gender equity and environmental sustainability.

Cambodia faces significant environmental challenges related to plastic waste and packaging, particularly in industrial zones where food vendors around garment factories generate substantial amounts of non-sustainable plastic packaging waste. The widespread use of single-use plastics in food packaging contributes to greenhouse gas emissions, environmental pollution, and public health risks.

The PlasticSmart Cambodia project, implemented by CARE Cambodia in partnership with CARE Austria, Youth Council of Cambodia (YCC) and Independent Democracy of Informal Economy Association (IDEA), and funded by the European Union and Austrian Development Agency, aims to reduce pollution and greenhouse gas emissions by promoting sustainable packaging and waste management practices.

Under Output 1 of the project, sustainable food and beverage packaging business models have been developed and piloted with at least 200 food vending Micro, Small and Medium Enterprises (MSMEs) operating around four selected garment factories in Kandal, Kampong Chhnang, and Kampong Cham provinces. These vendors, the majority of whom are women (61%), have been transitioning away from non-sustainable plastic packaging toward environmentally and economically viable alternatives.

This performance and cost-benefit analysis will provide critical evidence on the viability of the piloted business models, inform project fine-tuning, and generate insights for scaling successful approaches under Outputs 3 and 4.

Purpose and Objectives

Primary Objective:

To conduct a comprehensive performance and cost-benefit analysis of sustainable food and beverage packaging business models piloted under Output 1 of the PlasticSmart Cambodia project.

Specific Objectives:

1. Assess financial and non-financial benefits of adopting new sustainable food packaging business models for food vending MSMEs
2. Evaluate customer and stakeholder perceptions of the packaging transition
3. Analyse the accessibility, reliability, and sustainability of the supply chain for alternative packaging materials
4. Identify barriers and enablers for the adoption and expansion of sustainable packaging business models
5. Analyse cost-effectiveness and return on investment for vendors who adopted the new models
6. Document best practices and lessons learned from the piloting phase
7. Provide evidence-based recommendations for business model refinement and scaling
8. Generate evidence for advocacy, resource mobilisation, and green finance positioning
9. Contribute to the development of at least one business case for replication and scaling under Outputs 3 and 4
10. Prepare a compelling impact story documenting the experience of vendors who transitioned to sustainable packaging

Scope of Work

Geographic Focus: Areas around selected garment factories in Kandal, Kampong Chhnang, and Kampong Cham provinces where sustainable food and beverage packaging business models have been piloted.

Target Stakeholders:

- Food vending MSMEs (shopkeepers and street vendors) who adopted the new business model(s)
- Food Vendor Committees in each target area
- Factory workers and management (as customers of the vendors)
- Suppliers of alternative packaging materials
- Local government authorities at commune, district, and provincial level
- Community members in the factory surroundings
- Line Ministries such as Ministry of Environment, Ministry of Labor and Vocational Training, and Ministry of Industry, Science, Technology and Innovation.

Business Models in Scope: All sustainable food and beverage packaging business models developed under A.1.1 and piloted under A.1.3, including the adoption of alternative packaging materials, supply chain linkages with packaging suppliers, operation within eco-friendly market structures, and changes to vendor-customer communication practices.

Key Research Questions

Component 1: Pilot Performance Evaluation

1. What are the financial benefits (revenue trends, cost savings, profitability changes) for vendors who transitioned to sustainable food packaging?
2. What non-financial benefits (efficiency, customer satisfaction, environmental awareness, social standing) have been achieved by adopting vendors?
3. How do customers (factory workers, community members) perceive the transition to sustainable packaging in terms of quality, convenience, safety, and value?
4. How accessible, reliable, and affordable is the supply of alternative packaging materials, and what challenges have emerged in the supply chain?

5. What are the main barriers preventing wider adoption of the new packaging business models among non-participating vendors?
6. What enablers and success factors have supported effective model implementation by early adopters?
7. How cost-effective are the new packaging models compared to previous plastic packaging practices?
8. What specific adjustments or improvements are needed to increase the effectiveness and attractiveness of the business model?
9. Have the new packaging business models reduced gender-based barriers for women vendors in accessing business opportunities, income, and decision-making?

Component 2: Feasibility and Sustainability of Scaling the Refined Business Models

10. Which elements of the piloted packaging business models are most suitable for scaling and indicate sustainability?
11. How could the current food packaging models scale up across additional geographical areas or vendor types?
12. What market opportunities, revenue potential, and financial implications exist for actors across the packaging supply chain?
13. What is the level of willingness to pay for sustainable packaging among factory workers and community customers?
14. How can the refined business models be positioned to attract green finance and private investment, including alignment with international climate finance mechanisms such as EFSD+ and GCF?
15. What policy or regulatory changes would most support scaling of sustainable packaging adoption?

Methodology

The consultant will employ a mixed-methods approach combining quantitative financial and operational analysis with qualitative stakeholder insights through participatory mini-workshops, individual interviews, customer focus groups, and surveys. The methodology shall be gender-responsive and participatory throughout, ensuring that the voices of women vendors are centrally captured.

Data Collection Methods

Participatory Workshops:

- Business performance review workshops - 4 workshops, one per factory target area
- 15–20 participants per workshop (adopters & non-adopters)
- Structured review and discussion of business records: sales volumes, revenues, expenses, and waste generation
- Group analysis of cost-benefit data, packaging material costs, and performance indicators
- Facilitated discussion on supply chain experiences, customer feedback, and implementation challenges

Financial and Operational Data Review:

- Review of business records, sales data, packaging costs, and revenue streams collected during the piloting period
- Comparison of pre- and post-implementation financial indicators
- Cost-benefit calculations covering material costs, investment in new practices, and operational savings
- Return on investment (ROI) analysis for vendors adopting the new models
- Financial projections for model refinement and potential scale-up

- Supply chain analysis including packaging material pricing, availability, and delivery reliability

Stakeholder Interviews:

- Key informant interviews with food vendors (at least 15 vendors, disaggregated by gender)
- In-depth interviews with Food Vendor Committee representatives on collective dynamics and gender dimensions
- Interviews with packaging material suppliers (at least 5) on supply capacity, business relationship quality, and scaling potential
- Discussions with factory management and worker representatives on perception of packaging changes and eco-market functioning
- Interviews with local government officials (line ministries above) on enabling environment and policy perspectives

Customer Satisfaction Assessment:

- Focus group discussions with factory workers and community members on their experience of purchasing food in sustainable packaging
- Survey questionnaire assessing service quality, packaging satisfaction, perceived food safety, and willingness to pay for sustainable packaging
- Documentation of customer suggestions and preferences for future packaging improvements

Analytical Framework

Financial Analysis:

- Revenue trend analysis: assess changes in vendor sales before and after adoption of new packaging
- Cost structure analysis: evaluate changes in packaging material costs, sourcing logistics, and overall operational expenditure
- Profitability and cash flow evaluation: assess net income, liquidity, and financial sustainability of adopting vendors
- Investment payback period and breakeven calculations for initial transition costs
- Cost-effectiveness ratios (cost per unit of sustainable packaging adopted, cost per customer served, etc.)
- Cost and benefit distribution analysis: assess how financial gains and costs are distributed across actors in the packaging supply chain, disaggregated by gender and actor type

Business Model Performance and Operational Evaluation:

- Adoption rates and transition trajectory: number of vendors fully and partially transitioned, speed of adoption
- Supply chain performance: reliability of material supply, number of active supplier relationships, and stability of pricing
- Customer uptake: frequency of purchase, repeat customer rates, and observed behavioural changes
- Eco-market performance: vendor satisfaction with market infrastructure, local government engagement, and market fee sustainability
- Social impact assessment: income improvements, gender dimensions of business decision-making, and working conditions, disaggregated by gender
- Emergence of new business opportunities: new product lines, market linkages, and entrepreneurship opportunities arising from the transition

Barrier and Enabler Analysis:

- Internal factors (vendor capacity, financial literacy, technology use, awareness of environmental benefits)

- External factors (market conditions, customer demand, packaging material availability, regulatory environment)
- Supply chain dynamics (supplier relationships, pricing volatility, material quality consistency)
- Stakeholder relationship dynamics (formal-informal sector integration)
- Gender and social norms affecting vendor participation and decision-making authority
- Scaling potential and replication requirements across different geographic and market contexts

Comparative Analysis:

- Performance comparison across the four target factory areas
- Comparison between vendors with different levels of adoption (early adopters vs. partial adopters vs. non-adopters)
- Before-and-after analysis of key financial and operational performance indicators
- Best practice identification and documentation for scaling purposes

Temporal Scope, Implementation & Timeline

- Three intervention periods over 14 months
 - Preparation for implementation of the models
 - Mid-term monitoring
 - End-term assessment and final report

Implementation stages	Activities	Timeline
Preparation	<ul style="list-style-type: none"> - Literature review, methodology finalization, definition of financial performance data collection tools, training sessions with stakeholders and/or project team on data collection - Inception report 	Month 1-3
Mid-term monitoring	<ul style="list-style-type: none"> - Simplified data collection - Monitoring & Recommendation report 	Month 6-8
End-term assessment	<ul style="list-style-type: none"> - Final measurements, comprehensive data collection and evaluation - Business Performance Analysis Report - Present findings to stakeholders for feedback and validations - Impact story - Case Study 	Month 12-14

Deliverables

1. Inception Report

- Detailed methodology and approach
- Data collection tools (workshop guides, interview protocols, survey questionnaires, self-reporting tools)
- Stakeholder engagement plan, including gender-sensitive engagement strategy
- Work plan and timeline
- Maximum 20 pages without annexes

2. Mid-Term Monitoring & Recommendation Report

- Financial performance analysis with key indicators and comparisons – preliminary results
- Simplified stakeholder perception assessment (vendors and customers)
- Initial supply chain assessment
- Simplified barrier and enabler analysis
- Recommendations for the remaining pilot period and data collection refinements
- Maximum 15 pages without annexes

3. Business Performance Analysis Report

- Executive Summary (max. 2 pages)
- Methodology and approach
- Financial performance analysis with key indicators and pre/post comparisons
- Supply chain performance assessment
- Customer satisfaction and perception analysis
- Barrier and enabler analysis
- Business model effectiveness evaluation, disaggregated by gender where applicable
- Recommendations for model refinement and scaling, including at least one actionable business case
- Lessons learned and best practices documentation
- Maximum 30 pages without annexes

Annexes:

- Workshop proceedings and participant lists
- Financial data summaries and calculations
- Interview transcripts and survey results
- Stakeholder feedback compilation

4. Impact Story

A compelling 2-3 page narrative document highlighting:

- Success stories of vendors who transitioned to sustainable packaging
- Personal testimonials from vendors (women and men), customers, and Food Vendor Committee members
- Visual documentation (photos, infographics) of packaging transitions and eco-market operations
- Quantified impacts and achievements
- Suitable for public dissemination and advocacy purposes

5. Case Study and Investment Pitch

A short 5-7 page case study and a 10 page pitch deck, targeting policy makers and investors synthesizing:

- Project information and context
- Refined sustainable packaging business model/s
- Evidence of results and cost-benefit findings
- Scalability and potential for expansion across vendor types and provinces
- Environmental and socio-economic benefits
- Financing needs and opportunities, with alignment to green finance mechanism

6. Data Package

- Anonymized workshop notes and interview transcripts

- Financial data sets and analysis files
- Survey response data
- Stakeholder contact information and engagement records

Note: All deliverables will be submitted in editable format (English) with Khmer translations of key summary materials for local stakeholder use.

Research Management

Supervision: CARE Cambodia's Project Team in coordination with IDEA and YCC

Stakeholder Coordination: Close collaboration with Food Vendor Committees, packaging material suppliers, and factory management

Ethics: Adherence to business confidentiality agreements and CARE's data protection standards; informed consent from all participants; gender-sensitive research practices

Consultant Requirements

Essential Qualifications:

- Advanced degree in business administration, economics, environmental management, sustainable consumption and production, or a related field
- Minimum 5 years of experience in business model analysis and performance evaluation, ideally with MSMEs
- Proven expertise in cost-benefit analysis and financial performance assessment for small businesses
- Experience with participatory research methods and stakeholder engagement
- Strong facilitation and workshop management skills
- Understanding of gender equality and women's economic empowerment
- Fluency in English (mandatory); proficiency in Khmer (preferred)

Preferred Experience:

- Previous work in Cambodia or comparable Southeast Asian contexts
- Experience with sustainable packaging, circular economy, or sustainable consumption and production initiatives
- Knowledge of food vending, informal markets and MSME development
- Familiarity with social enterprise and sustainable business model evaluation
- Experience working with development projects and donor requirements

Technical Qualifications:

- Proficiency in financial analysis software and statistical tools
- Experience with qualitative data analysis methods
- Strong presentation and communication skills
- Ability to work with diverse stakeholders including informal sector actors and women entrepreneurs

Submission Requirements

Technical Proposal:

- Detailed methodology for business performance analysis, adapted to the food packaging context
- Approach to stakeholder engagement and gender-responsive data collection

- Workshop facilitation strategy
- Data analysis framework
- Team composition with detailed CVs
- Examples of similar MSME business model assessments

Financial Proposal:

- Daily rates for team members
- Workshop, travel and logistic costs
- All-inclusive pricing with detailed breakdown

Evaluation Criteria

- Technical approach and methodology (40%)
- Relevant experience and expertise (30%)
- Cost-effectiveness (20%)
- Team qualifications and capabilities (10%)

Submission Deadline: **10 May 2026**

Email: **KHM.Procurement@care.org** and CC to: **Sokchandaly.Meun@care.org**

Annexes

Annex 1: Project Logical Framework

Annex 2: Ethical Guidelines for Research

Annex 3: CARE Data Protection & Safeguarding Policies

Annexes

Annex 1: Project Logical Framework (in attached file)

Annex 2: Ethical Guidelines for Research

- CARE requires that the datasets that are compiled or used in the process of external evaluation are submitted to CARE when the evaluation is completed.
- Data must be disaggregated by gender, age and other relevant diversity, in line with the project's Theory of Change.
- Datasets must be anonymized with all identifying information removed. Each individual or household should be assigned a unique identifier. Datasets which have been anonymized will be accompanied by a password protected identifier key document to ensure that we are able to return to households or individuals for follow up. Stakeholders with access to this document will be limited and defined in collaboration with CARE during evaluation inception.
- In the case of textual variables, textual datasets or transcripts please ensure that the data is suitable for dissemination with no de-anonymizing information unless these are case studies designed for external communication and suitable permission has been granted from the person who provided the data. In these circumstances, please submit, with the case study, a record of the permission granted, for example a release form.¹
- Where there are multiple datasets (for example both tabular and textual datasets) identifiers must be consistent to ensure that cases can be traced across data lines and forms.
- CARE must be provided with a final template of any surveys, interview guides, or other materials used during data collection. Questions within surveys should be assigned numbers and these should be consistent with variable labelling within final datasets.
- Formats for transcripts (for example: summary; notes and quotes; or full transcript) should be defined in collaboration between CARE and the external evaluator at the evaluation inception
- In the case of tabular datasets variable names and variable labels should be clear and indicative of the data that sits under them. Additionally, the labelling convention must be internally consistent and a full codebook/data dictionary must be provided.
- All temporary or dummy variables created for the purposes of analysis must be removed from the dataset before submission. All output files including calculations, and formulae used in analysis will be provided along with any Syntax developed for the purposes of cleaning.
- We require that datasets are submitted in one of our acceptable format types.
- CARE must be informed of and approve the intended format to be delivered at evaluation inception phase. Should this need to be altered during the project CARE will be notified and approval will be needed for the new format.

Annex 3: CARE Data Protection & Safeguarding Policies (will be shared once selected)