

**Practical
ACTION**

**CONSULTANCY - BASELINE
SURVEY FOR CIRCULAR
ECONOMY FOR HOUSEHOLD
ORGANIC WASTE (CE4HOW)**



Practical Action

ABOUT US

We are an international development organisation putting ingenious ideas to work so people in poverty can change their world.

We help people find solutions to some of the world's toughest problems. Challenges made worse by catastrophic climate change and persistent gender inequality. We work with communities to develop ingenious, lasting and locally owned solutions for agriculture, water and waste management, climate resilience and clean energy. And we share what works with others, so answers that start small can grow big.

We're a global change-making group. The group consists of a UK registered charity with community projects in Africa, Asia and Latin America, an independent development publishing company and a technical consulting service. We combine these specialisms to multiply our impact and help shape a world that works better for everyone.

OUR AIMS

We help people find solutions to some of the world's toughest problems, made worse by catastrophic climate change and persistent gender inequality. Our aims are to:

- Make agriculture work better for smallholder farmers, many of them women, so they can adapt to climate change and achieve a good standard of living.
- Help more people harness the transformational effects of clean affordable energy and reduce avoidable deaths caused by smoke from indoor stoves and fires.
- Make cities in poorer countries cleaner, healthier places to live and work.
- Build disaster resilience into the lives of people threatened by hazards – reducing the risk of hazards and minimizing their impact on lives and livelihoods.

PRACTICAL ACTION IN KENYA

In Kenya, Practical Action has a long history of addressing systemic barriers that prevent people from accessing energy that transforms their lives, helping communities and government make cities healthier and safer, making agriculture and markets work better for small holder farmers and supporting communities and government to become more resilient.

We use a mix of programming with communities and consultancy services with shapers of policy and practice to achieve our aims.

ABOUT THE ROLE

Background and Purpose of the assignment:

About Regen Organics

Regen Organics is purposed with the mission of building a prosperous, climate-smart agriculture sector through a circular economy approach that helps cities manage their organic waste. The core business of Regen Organics is providing affordable, green inputs for smallholder farmers to transition to regenerative agriculture to build climate resilience. The Material Recovery Facility model positioned by this project in Kakamega is of key strategic interest by potentially providing a low-cost feedstock for our organic fertilizer production.

Project background: Circular Economy for Household Organic Waste (CE4HOW) project

Practical Action is implementing a four- and half-year project in Kakamega County. The Circular Economy for Household Organic Waste (CE4HOW) in Kenya aims to create a commercially viable, circular economy model for household organic waste that reduces greenhouse gas emissions, improves household waste services and transforms the lives of informal waste workers. The CE4HOW is being implemented through a partnership of Practical Action and Regen Organics in Kakamega County.

The social and environmental objectives of the project will be achieved through the development of the business case of the commercial partner, Sanergy Inc., working through it's subsidiary in Kenya, Regen Organics (Regen Organics). Regen Organics has constructed a new waste recycling plant in Kakamega County, to produce organic fertilizer. This location gives it access to a large market of smallholder farmers in Western Kenya, who will benefit from a product that improves soil structure, moisture retention and nutrients and increases yields. The feedstock for the recycling plant will largely come from agricultural waste. However, the business case this project seeks to develop is the inclusion of household organic waste from Kakamega town. The benefits for Regen Organics are the additional social and environmental benefits, which they also aim to monetise through carbon credits.

Regen Organics will add value to a waste stream that currently has no value and is a financial drain on municipal resources. Regen Organics will inject finances into the waste economy by paying Waste Aggregation Centres for supplying household organic waste. Waste collectors in turn will offer household waste collection services at a lower price, provided households separate their waste. We will work with and expand existing informal groups providing this service.

Target beneficiaries

The project target groups and beneficiaries are as follows:

- 1) 210 people (at least 30% women) already working in the informal waste sector, or who get new jobs in the sector through the CE4HOW project. This includes 140 collectors, 30 people at the Aggregation Centres and 40 people at Regen Organics factory. In addition, 500 people will have new jobs or improved incomes through selling Regen Organics products.
- 2) Approximately 15,000 households will receive waste collection services by the end of the project.
- 3) 10,000 smallholder farmers in Kakamega County (at least 40% women).

- 4) The project will also build awareness among Kakamega County policy makers and officials within the government and regulatory agencies.

Objective of assignment

The purpose of the baseline survey is to establish benchmarks for effective planning and implementation of CE4HOW project, as well as to form the basis for progressive monitoring of the achievement of planned outputs and outcomes, through collection of quantitative and qualitative data on a set of indicators. Further, it will provide information on specific issues and needs of stakeholders in the project area.

Practical Action therefore wishes to engage the services of a qualified consultant(s) to assess and report on the status of waste disposal and management through utilizing relevant methodologies and tools, to establish benchmarks to measure the status of all indicators (as contained in the Project logframe). This will enable tracking and measuring of project indicators at output and goal/outcome levels.

Expected Results

The project aims to achieve the following outcomes:

- Outcome 1: Environmental pollution from waste in urban neighbourhoods of Kakamega is reduced.
- Outcome 2: Sustainable green business model established for urban household organic waste collection.
- Outcome 3: Improved livelihood and working conditions for workers in waste collection and aggregation.
- Outcome 4: An enabling policy environment and market system that supports improved management of municipal solid waste.

SCOPE

Assignment Title	Baseline Survey for Circular Economy for Household Organic Waste (CE4HOW)
Location	Kakamega County.
Duration	30 days

The baseline survey seeks to establish a robust account of the current situation on waste and waste management in Kakamega County in relation to the project objectives and performance indicators. The findings of the baseline survey will be used to re-test the project assumptions, refine project implementation priorities and establish baseline measures and final targets to monitor progress throughout the project lifecycle. The survey will focus on the project outcome areas and is aimed to provide information on the status of young men and women in agriculture including their income levels (See Annex 1: Results Framework).

Methodology

The consultants should employ an appropriate mix of qualitative and quantitative methods to gather and analyze data/information, in order to diversify perspective to the mid-term review, and to promote participation of different groups of stakeholders. Final detailed survey methodology will be developed in consultation with Practical Action. This survey encompasses primary data based on the project framework and its indicators. Consultant team must propose a methodology and plan for this survey which will be approved by the Practical Action Impact and Influence team. Data triangulation is required to ensure the credibility and accuracy of data/ information gathered through various tools.

The methods proposed to undertake this survey must be of sound technical quality, rigorous and robust and based on scientific principles, be gender transformative and should resonate well with the survey design as proposed. Practical Action team in consultation with the consultant will agree on the tools and best data collection process. The consultant and Practical Action will harmonize their understanding of the tools and their administration in the inception meeting before administration of the questionnaires by the survey team.

Expected deliverables.

1. Inception report highlighting the following:
 - Approach of the study including framework for activities.
 - Work plan with detailed framework of activities.
 - Methodological Approach
 - Analysis framework
 - Proposed content outline for the report, schedule, and any logistical propositions.
 - Data collection tools
 - Limitation of assessment

2. Draft report responding to the objectives of the survey.
3. Final Baseline Report summarizing the main findings, conclusions, and recommendations.
4. Updated log frame with baseline figures and targets for each Indicator.
5. A power point slide deck summarizing the main findings, conclusions and recommendations from report presented to internal stakeholders at Practical Action and participants of the study.
6. Presentation of finding in a validation workshop
7. Delivery of cleaned dataset in SPSS format as well as raw dataset (Excel), final tools used, list of key informants, qualitative data transcripts.

Administrative and logistical support

1. The Consultants will report to the Project Manager with technical oversight by the Impact and Influence team.
2. The project team will provide day to day support during the assignment to support the actualization of this assignment and within stipulated timelines. Practical Action will also provide all necessary program documents required.
3. The consultants on the other hand will:
 - Recruit and train research assistants (if necessary)
 - Pay research assistants based on reasonable market rates.
 - Facilitate field travel for the research team.

Requirements of the consultant

This baseline should be undertaken by with a range of skills and experience in order to deliver an insightful baseline survey for the project. They should be experienced in gender sensitive data collection techniques and can lead the data collection team. It is expected that the consultant will have the following qualifications and experience:

- Extensive and demonstrated experience in designing, facilitating, and coordinating baselines/evaluations in the development sector by non-governmental and donor (bi-lateral and multilateral agencies)
- Extensive and demonstrated experience in the use of mixed methods approaches (integrating quantitative and qualitative data), statistical analysis and interpretation of results.
- Experience using digital data collection methods, for example, ODK, Kobo Collect, GIS.
- Demonstrated ability to lead and coordinate a multi-disciplinary team in MEL activities.
- Be well-versed and extensive knowledge of the target county geographically, in terms of terrain, local population, and other details of the counties, and has carried some related or similar work in the region.

Education

Team members comprising market systems development practitioners, economists, youth experts, policy and gender experts who possess more than 10+ of experience with Masters' and above level education, lead consultant with PhD level.

Timelines

This consultancy will take place in the months of September and October 2024 within a period of 30 days and final report submitted at the end of October. Final work plan duration shall be agreed with the selected consultant before signing of the agreement.

Terms of Engagement

Payment for the study shall be done in three tranches as indicated below.

- Tranche 1 (50% of the total cost): Upon submission of the inception report
- Tranche 2 (20% of the total cost): submission and acceptance of the of 1st draft of the report
- Tranche 3 (30% of the total cost): submission and acceptance of the final report

Note that the payments will be done subject to the consulting entity meeting quality and timely delivery of stated tasks.

Annex 1: Results Framework

Project title	Circular Economy for Household Organic Waste (CE4HOW) in Kenya
Project objective	The objective is to create a commercially viable circular economy model for household organic waste that reduced GHG emissions, improves household waste services and transforms the lives of informal waste workers.
SDG targets	<p>SDG Targets to be addressed by the project:</p> <ul style="list-style-type: none"> 11.6: By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management. 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse. 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

DGBP Projecte-level indicators	Unit	Baseline	Final target
1.1 Number of vulnerable persons/households who have increased their resilience to climate change as an effect of the partnership projects (total/female/youth)	#	0	10,000 smallholder farmers (at least 40% women)
1.2 Avoided GHG emissions (estimated CO2-equivalents)	CO2-e	Zero	4,000 tonnes/year
1.3 Efficiency gained on the use of water, energy, materials and/or natural resources (percentage efficiency gains)	%	n/a	n/a
1.4 Area under sustainable land management (ha)	Ha	n/a	n/a
1.5 Reductions in the amounts of polluting substances released to soil, water bodies and/or air (percentage reduction)	%	0%	22% of Kakamega's waste recycled
2.1 Number of decent jobs created (total/female/youth) ¹	#	50	410: 30+40+new collectors (est. 90) + 250 distribution agents At least 30% women
2.2 Number of people with opportunities for increased income and/or improved livelihoods (total/female/youth)	#	200 agrovets + 50 collectors (tbc)	300: Number of existing collectors tbc (est. 50) + 250 agrovets At least 30% women 2.1 + 2.2 =710
2.3 Viable business cases developed and sustained at the end of the project period ²	#	0	1
2.4 Percentage of partner companies with responsible business conduct	%	0%	100%
2.5 Amount of private investments mobilised in partnership project	DKK	0	DKK13.980m
Outcome 1	Environmental pollution from waste in urban neighbourhoods of Kakamega reduced		
Outcome indicators	<ol style="list-style-type: none"> 1. Volume of organic waste collected. 2. Volume of inorganic waste collected. 3. Reduction in number of open dumping hotspots. 		

¹ Number of full-time equivalent employees as per local definition working in new or improved jobs under the framework of the project

² This is counted as the number of commercial partners with a viable business case in the developing country at the end of the project.

Baseline	2024	<ol style="list-style-type: none"> 1. Zero. 2. <i>TBC as part of initial baseline study</i> 3. <i>TBC as part of initial baseline study</i>
Outcome 2	Sustainable green business model established for urban HH organic waste collection	
Outcome indicators	<ol style="list-style-type: none"> 1. Production and sale of organic fertilizer from the Kakamega processing plant achieves profitability (in terms of costs and revenues per unit) 2. Carbon credit revenues achieved for 4,000 tCO₂e per year, supporting production viability 3. Amount of private investment by Commercial Partner (Regen Organics) 	
Baseline	2024	<ol style="list-style-type: none"> 1. Zero 2. Zero 3. Zero
Outcome 3	Improved livelihood and working conditions for workers in waste collection and aggregation	
Outcome indicators	<ol style="list-style-type: none"> 1. Number of decent jobs created (total/female/youth) 2. Number of people with opportunities for increased income and/or improved livelihoods (total/female/youth) 	
Baseline	2024	<ol style="list-style-type: none"> 1. <i>TBC as part of initial baseline study</i> 2. <i>TBC as part of initial baseline study</i> <p>Total for indicator 1 & 2 should be derived from waste collection, Aggregation Centres, at Regen Organics Factory (at least 30% women) plus from distribution agents and Master Agrovets and Agrovets. The breakdown between new jobs and existing workers should be determined by an enumeration of existing waste collectors.</p>
Outcome 4	An enabling policy environment and market system that supports improved management of municipal solid waste	
Outcome indicators	<ol style="list-style-type: none"> 1. Increased capacity of Kakamega County in inclusive planning, decision-making and public-private partnerships in SWM 2. Informal waste sector has effective engagement in policy decisions and implementation 3. Learning and examples of best implementation practice (of solid waste management policies and guidelines) shared both locally (Kakamega County) and nationally (other counties) 	
Baseline	2024	<ol style="list-style-type: none"> 1. N/A 2. Zero 3. Zero

Output 1:	Community members aware of the benefits of waste collection	
Output indicator	<ol style="list-style-type: none"> 1. Number of community members sensitized on waste collection. 2. Number of community leaders engaged in BCC campaigns 	
Baseline	2024	<ol style="list-style-type: none"> 1. Zero 2. Zero
Output 2:	Household waste collection in place and transferred to the Aggregation Centres	
Output indicator	<ol style="list-style-type: none"> 1. Number of households signing up for waste collection services 2. Number of people involved in waste collection services (new or existing, at least 30% women) 3. Total volume of waste collected and reaching the Aggregation Centres (tonnes/day) 	
Baseline	2024	<ol style="list-style-type: none"> 1. Est. = 600 (tbc during baseline survey) 2. TBC – can only be determined during baseline survey 3. Zero – Aggregation Centres to be built as part of the project

Output 3:		Aggregation Centres in place and in operation
Output indicator		<ol style="list-style-type: none"> 1. Volume of waste sold by the Aggregation Centres (organic and inorganic) tonnes/day 2. Number of staff employed at the Aggregation Centres (at least 30% women) 3. Establish profitable Aggregation Centres
Baseline	2024	<ol style="list-style-type: none"> 1. 0 2. 0 3. Aggregation Centres not yet operational
Output 4:		Organic waste collected and processed by Regen Organics
Output indicator		<ol style="list-style-type: none"> 1. Total volume of organic waste collected and processed by Regen Organics from both households and other sources (tonnes per day) 2. Volume of organic waste successfully supplied to Regen Organics by Aggregation Centres
Baseline	2024	<ol style="list-style-type: none"> 1. 0 tonnes 2. 0 tonnes
Output 5:		Strengthened capacity of waste collectors and aggregators
Output indicator		<ol style="list-style-type: none"> 1. Number of waste enterprises registered with the County 2. Number of waste enterprises adopting an element of improved business conduct (e.g., health and safety measures, good accounting practices, record keeping, reporting) 3. Percentage increase in incomes for waste collectors
Baseline	2024	<ol style="list-style-type: none"> 1. Est. = 2 (TBC during baseline study) 2. 0 3. 0%
Output 6:		Structures established and operating for inclusive stakeholder engagement in SWM operations
Output indicator		<ol style="list-style-type: none"> 1. Number of grassroots waste collectors' associations established/ strengthened. 2. Number of waste workers actively engaged in county planning and decision-making processes. 3. Number of women with leadership roles in SWM operations 4. Multi-stakeholder platform established and meeting regularly
Baseline	2024	<ol style="list-style-type: none"> 1. Zero 2. Zero 3. <i>Est. = zero (TBC in baseline study)</i> 4. Not established
Output 7:		Smallholder farmers have increased access to regenerative inputs
Output indicator		<ol style="list-style-type: none"> 1. Number of distribution agents, Master Agrovets and Agrovets directly served by Regen Organic's processing plant in Kakamega County 2. Estimated number of smallholder farmers buying Regen Organic's products from the Kakamega processing plant (at least 40% women)
Baseline	2024	<ol style="list-style-type: none"> 1. 0 2. 0
Output 8:		Model documented and learning shared at County, National and Global levels
Output indicator		<ol style="list-style-type: none"> 1. Number of knowledge products produced 2. Number of events at which the project is shared 3. Number of learning sessions or events
Baseline	2024	<ol style="list-style-type: none"> 1. Zero 2. Zero 3. Zero