

Terms of Reference

Black Soldier Fly Pilot Facility

4 November 2024

ICLEI Africa invites applications to participate in a project titled,
“The Campus: A One Hectare Circular Farm & Learning Hub”

Bids due: 12h00 on 19 November 2024

All bids should be valid for 30 days.

Implementation is expected to start January 2024

Bids and technical queries can be sent to amy.murgatroyd@iclei.org,

cc paul.currie@iclei.org)

*ICLEI Africa reserves the right not to appoint a service provider in relation to this
Terms of Reference (ToR).*

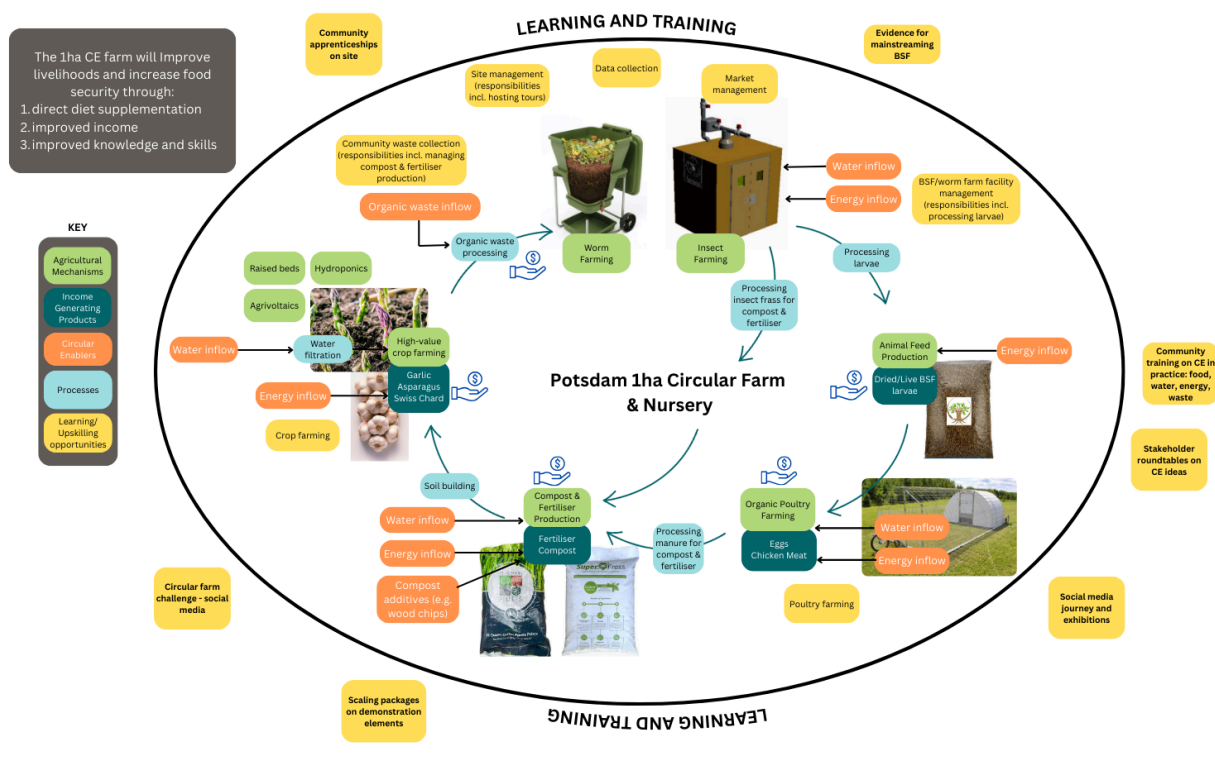
Introduction

The Potsdam Sustainability Campus is an innovative project driven by the City of Cape Town and ICLEI Africa. This experimental project aims to encourage broad participation in testing and showcasing various agricultural practices at a local site, located along Potsdam Road in Cape Town, South Africa. The project aims to demonstrate potential solutions that can improve livelihoods and promote environmental sustainability, benefiting the local community as well as encouraging broader adoption across the City.

The initial focus of this project is on establishing a 1-hectare Circular Economy demonstration farm. The design challenge guiding our approach is to identify whether we can implement this model within a limited capital budget. The site will serve as a training campus for future farmers and provide extensive visibility for service providers through numerous tours and activations planned for the site. A key output of the project is to package a catalogue of agricultural activities for circular farming, which can be taken up by the National Department of Agriculture, Land Reform and Rural Development and independent farmers across South Africa.

To achieve this, we are seeking a service provider to build and equip a Black Soldier Fly (BSF) facility and provide the necessary training and support to get the facility up and running effectively. The BSF larvae will be used as live feed for on-site chickens, while the BSF frass will be used as an in-house soil-building supplement. More details are provided in the diagram below.

Figure 1: 1ha Circular Economy Farming Model



BSF Facility Specifications

- The facility should have the capacity for up to 1500 kg of waste per cycle. The proposal should include details of the waste processing capacity of the facility.
- The aim is to feed up to 450 chickens, with the live BSF larvae making up 20-50% of their diet.
- The feedstock will be predominantly household organic waste, with the option to add additional farm-generated organic waste, poultry manure, and other necessary ingredients.
- The facility should be able to be operated by one individual, with no prior experience (apart from the training given by the service provider).
- We will not be breeding or growing the BSF larvae, but rather intend to purchase 5 day old larvae seedlings.
- We will not be drying the larvae or selling to external buyers.
- The facility should ideally include a storage area.
- The proposal must include a line item cost for a solar panel system and a battery that will sufficiently power the facility.
- The proposal must highlight the energy (kWh) and water (litres) required to operate and maintain the facility.

Scope of work

Each of the below items must be cost separately in the proposed budget. Preference will be given to the service provider who can provide all of the below services.

- Design, build and equip a modular BSF facility to accommodate the above specifications.
- Fit the facility with a solar panel and battery so that it is off the grid.
- Facilitate an in-person training programme with the individual employed to operate the facility.
- Assist with diet formulation of the feedstock for the BSF.
- Assist with diet formulation for the chicken feed.
- Advise on the process of converting BSF frass into a soil-building supplement.
- Oversee the operation of the facility for the first 3 months.

Budget

- Bidders are required to submit a detailed proposed budget, making efficient use of resources while ensuring quality delivery.
- The contractual partnership will be limited to the proposed budget, and in accordance with the time/duration of the contract period.

Application Requirements

Applicants are required to submit a proposal to amy.murgatroyd@iclei.org with paul.currie@iclei.org in cc by no later than **19 November 2024, 12h00**.



Proposals must include the following elements:

- A detailed budget listing each item separately.
- Company bio/description.
- A short proposal describing:
 - Your interest in the project and the alignment between the project objectives and your company goals
 - A methodology for effective implementation, training of operators, and handover
 - Clear work plan with timelines
- B-BBEE certificate or rating

Selection Criteria

- Budget Value
- In-kind contributions will be favourably considered
- Clear and realistic methodology
- Demonstrated understanding of the ToR and work required to deliver the assignment
- Alignment with Potsdam Campus project objectives
- B-BBEE Rating

Timeline

Submission deadline: 19 November 2024, 12h00

Bids evaluated: 4 December 2024

Bidders informed: 5 December 2024

Contracts finalised: 13 December 2024

Work commences: 1 February 2025

ICLEI Africa is committed to the pursuit of excellence, diversity and in achieving its gender, equity and development aspirations.

ICLEI Africa RESERVES THE RIGHT NOT TO APPOINT A SERVICE PROVIDER IN RELATION TO THIS TERMS OF REFERENCE.

Please be aware if you do not hear any feedback, either ICLEI Africa has decided not to appoint a service provider for this piece of work, or you have been unsuccessful in your application.

