



# THE COCONUT WASTE PROJECT

### TERMS OF REFERENCE

REQUEST FOR THE SUPPLY OR FABRICATION OF MACHINERY FOR THE MANUFACTURING OF COCONUT WASTE VALUE-ADDED PRODUCTS (COCOPEAT, COIR FIBER & COCO SHELL)

## CERATH Development Organization 24<sup>th</sup> October 2022







#### <u>Introduction</u>

CERATH Development Organization (CDO) is a non-profit entity focused on catalyzing development within rural and urban communities of Africa. Its mission is to catalyze development through five intervention areas; Water, Sanitation and Hygiene (WASH), Agriculture, Fisheries, Inclusive Finance and Renewable Energy. CDO is implementing the Coconut Waste Project (COWAP) funded by the European Union (EU) under the *Promoting a Circular Economy and Local Development programme*. The project is being implemented together with the La Nkwantanang-Madina Municipal Assembly (LaNMMA), and the Tree Crops Center (TCC). The project seeks to achieve a green-circular economy and create livelihood opportunities through value addition to coconut husks in the La Nkwantanang-Madina Municipality.

#### **About the project**

A common solid waste in the La Nkwantanang-Madina Municipality is the coconut husk. This is due to the high consumption of coconuts spurred by the presence of numerous vendors within the municipality. Unfortunately, this waste is indiscriminately disposed and not well managed (CDO Scoping Report, 2019). Although coconut waste can be recycled into an array of value-added products, these opportunities have not yet been tapped and this represents lost economic opportunities for the municipality and Ghana as a whole. The project's goal is to achieve a green-circular economy and create livelihood opportunities through value addition to coconut husks in the La Nkwantanang-Madina Municipality.

The specific objectives of the project are to:

- Establish a coconut waste aggregation system in the target municipality.
- Institute a processing centre to convert coconut waste into selected useable products including cocopeat, paper, and charcoal.
- Create linkages with market actors to procure coconut waste value-added products.
- > Implement a monitoring and evaluation system for waste management, learning, and scaling of the project.

#### The Assignment

One of the project's objectives is to establish a processing centre to convert coconut husk waste into various coconut waste value-added products notably cocopeat, coir fiber, and coco shells. In line with this, CDO is seeking to engage suppliers and engineers to offer service to the development of the requested machinery in the table below. Interested suppliers and engineers are encouraged to submit their bids as per the specifications indicated below:

No.	Item	Description	Quantity
I	Big Defibering Machine	Weight: 2 - 3tons Bearings: SKF Net size: 10mm - 12mm Suitable Materials: Biomass (Wood, coconut) Shift design: Single Capacity: 5 - 20 tons per day (8 hours) Voltage: 220 - 250v Dimension: 4ft*6ft Blade: Steel Blade pieces: 36 Belt: Type B Power: Electricity Electronic motor: 40 - 50Hp Pulley: 4 - 6 holes	
2	Small Defibering Machine	Weight: I - 2tons Bearing: SKF Net size: 6mm-10mm Suitable Materials: Biomass (Wood, coconut) Shift design: Single Capacity: 5 - 10 tons per day (8 hours) Voltage: 220 - 250v Dimension: 4ft*4ft Blade: Steel Blade pieces: 24 Belt: Type B Electronic motor: 20 - 30Hp Pulley: 3 - 4 holes	
3	Rotary Sieving Machine	Weight: 200 - 300kg Bearing: SKF Net size: 6mm-10mm Suitable Materials: Biomass (Wood, coconut) Shift design: Single Capacity: 5 tons per day (8 hours) Voltage: 220 - 250v Sieving Length: 1.5M Diameter: 0.6M Belt: Chain Electronic motor: 5HP Gear Motor Hopper Sprochet	
4	Cocopeat Block- Making Machine	Motor: 25Hp Block weight: 5kg Output 170-180 blocks per hour	I
5	De-shelling Machine	Capacity: 300 - 400 coconut per hour Machine weight: I 78kg Motor: Electronic motor	I

#### **Application Process and Deadline**

Requirements include:

- I. Valid Business Registration Certificate
- 2. Valid Tax Clearance Certificate
- 3. Article of Incorporation
- 4. Evidence of past performance including names of contact numbers of at least five clients
- 5. Vendor's profile

Bidders may bid to supply any or all the items with their required quantities. Furthermore, the offered price should be quoted in Ghana Cedis only. Failure to attach copies of the listed documents and late submission will lead to the tender not be considered. All bids should be sent to <a href="mailto:procurement@cerathdev.org">procurement@cerathdev.org</a> The subject line of the email should read "Submission of Tender- The Coconut Waste Project- Name of item". Example "Submission of Tender- The Coconut Project- Sieving Machine"

The deadline for submission of bids is 7th November 2022 at 17:00 GMT. Kindly note that only successful bidders will be contacted.