

## **TERMS OF REFERENCE (TOR)**

### **DESIGN, SUPPLY, INSTALLATION AND TESTING OF SOLAR WATER HEATING SYSTEM**

#### **A. BACKGROUND**

ChildFund International is a non-sectarian and non-profit development organization working in more than 30 countries worldwide to improve the well-being of about 15.2 million children and families, regardless of race, creed, religion and gender. ChildFund Kenya's core intent is to help deprived, excluded and vulnerable children have the capacity to improve their lives and the opportunity to become young adults, parents and leaders who bring lasting and positive change in their communities; and societies whose individuals and institutions participate in valuing, protecting and promoting the worth and rights of children.

The MFAT funded Agriculture, Dairy and Economic Development Project (ADED) will deliver improved agriculture, diversified livelihoods and reliable and beneficial market pathways for 1,250 farming households, who are included within the 2,875 direct beneficiaries (5,750 indirect). By the end of the project, food security and incomes in Emali farming communities will be improved and Maasai and Kamba households will be more resilient to climatic and economic shocks.

ChildFund Kenya intends to set up 5 milk collection centres within its area of operation to improve milk value chain and marketing of milk under Samuli Dairy cooperative. Due to frequent power outages experienced in the area, a back-up power system was envisaged to minimize losses associated with the milk spoilage. It due to this that ChildFund Kenya intends to procure and install standby generators in the milk collection centres.

#### **B. OBJECTIVE**

To design, Supply install, and commission solar water heating systems at Sultan Hamud and Masimba to ensure adequate supply of hot water for cleaning milk handling equipment.

#### **C. TECHNICAL SPECIFICATIONS**

##### **1. GENERAL REQUIREMENTS**

###### **1.1 Environmental and climatic conditions**

All equipment shall be fully operational in the following conditions:

- Relative humidity up to 75%
- Ambient temperature from 19°C to 35°C
- Rural environment with high presence of dust, insects, etc.
- UV Index: 3

The ability of the equipment of the same basic design and size to operate correctly in the indicated environmental and climatic conditions shall be proven by appropriate documentation on successful operation of at least 5 years.

All equipment shall be selected, from the operational and maintenance point of view, taking into account that in the primary source of water is borehole

###### **1.2 Desired Water Parameters**

The following summarizes the parameters of water at inlet and outlet of the solar heater:

- Flowrate of 1500 liters/hour closed system
- Inlet temperature is assumed to be 40<sup>0</sup>C from heat recovery system (economizer)
- Desired outlet temperature shall be 80<sup>0</sup>C

#### **D. ELIGIBLE TENDERERS**

- This Invitation for Tenders is open to all firms. Successful tenderers shall complete the supply, install and commissioning of the equipment by the intended completion date specified in the tender documents.
- Tenderer must have completed at least two similar works in the last within the last 3 years
- Must be tax Compliant
- The procuring entity's employees, committee members, board members and their relative (spouse and children) are not eligible to participate in the tender.
- Tenderers involved in corrupt or fraudulent practices or debarred from participating in public procurement shall not be eligible.

#### **E. TENDER SUBMISSION FORMAT**

##### **Tender Submission Format**

This order and arrangement shall be considered as the Tender Submission Format. Tenderers shall tick against each item indicating that they have provided it.

No.	Item	Tick Where Provided
1	Company or Contractor or Firm's Registration/Incorporation Certificate. Certificate of Confirmation of Directors and Shareholding for registered companies and if not a registered company a business name for those trading as a sole proprietor or a partnership registered under the Kenyan law or equivalent certification for foreign tenderers.	
2	Local Authority trading License	
3	PIN Certificate or its equivalent for foreign companies	
4	Valid Tax Compliance Certificate or its equivalent for foreign companies	
7	Price Schedule(s)	
8	List of previous clients of the Contractor for similar works indicating physical addresses and contact information.	
9	Reference letters from previous clients of the Contractor for similar works.  Three (3) Names with full contact as well as physical addresses of previous clients of similar works together with a letter from each of them confirming completion of the contracts on schedule.	
10	List of Three (3) previous clients of the Sub-Contractor for similar works indicating physical addresses.	
11	Quotation	

No.	Item	Tick Where Provided
12	<p>Audited Financial Statements. The audited financial statements Required must be those that are reported within eighteen (18) Calendar months of the date of the tender document. For companies or firms that are registered or incorporated within the last one calendar year of the Date of the Tender Document, they should submit certified copies of bank statements covering a period of at least six months prior to</p> <p>The date of the tender document. <b><i>The copies should be Certified by the Bank issuing the statements.</i></b> The Certification should be original.</p>	
13	Access to a credit facility	
14	Any other document or item required by the Tender Document. (The Tenderer shall specify such other documents or items it has submitted)	
15	CVs of Personnel who will carry out the TVs	