



TERMS OF REFERENCE

IMPROVED RESILIENCE OF COASTAL COMMUNITIES IN CÔTE D'IVOIRE AND GHANA

Procurement of Contractor for the Supply, Installation, Testing, and Commissioning of Solar-Powered Integrated Sprinkler & Drip Irrigation Systems and Borehole Works

1.0 Project Background

The project financed by the Adaptation Fund is being implemented in 21 coastal communities vulnerable to the impacts of climate change, located in Ghana (11 communities) and Côte d'Ivoire (10 communities). This initiative aims to strengthen the resilience of populations facing increasing climate risks that threaten their livelihoods and security.

Component 2, led by Habitat for Humanity International, with ActionAid being the implementing partner in Ghana, deploys an integrated approach based on three pillars: Early Warning Systems (EWS) to anticipate climate threats, Nature-based Solutions (NbS) to protect coastal ecosystems, and the development of resilient livelihoods to ensure the economic sustainability of communities.

In Ghana, the 11 targeted communities are located in Ada East (Azizanya), Ada West (Wokumagbe, Akplabanya, Goi) and Anloga (Whuti, Agbledomi, Tegbi, Woe, Lashibi/Lagbati, Dzita, Agorkedzi/Atiteti). These localities face coastal erosion, recurrent flooding, land salinisation and degradation of the marine ecosystems on which their economic activities depend.

2.0 Justification

The coastal communities of Tegbi, Lagbati, Woe, Whuti, Agbledome, Dzita, Wokumagbe, Akplabanya, Goi, Azizanya, and Agorkedzi face mounting climate pressures including erratic rainfall, sandy low-fertility soils, salinity intrusion, flooding, and unsustainable reliance on charcoal and firewood for fish smoking and kenkey production.

A rapid community assessment revealed that while farming remains vibrant and diverse, productivity is constrained by:

- Poor soil structure and low organic matter.
- Heavy dependence on inorganic fertilizers.
- Inefficient irrigation and water use practices.
- Recurrent pest and disease outbreaks.
- High post-harvest losses and limited value addition.



ADAPTATION FUND



UN-HABITAT



act:onaid

To address these challenges, the IRCC Project will establish demonstration pilot plots in six (6) communities and a training centre to promote climate-resilient agriculture practices including composting, green manuring, crop rotation, cover cropping, integrated pest management (IPM), and improved soil and water conservation (mulching, infiltration trenches).

3.0 Purpose of the Assignment

The purpose of this assignment is to enhance climate resilience and sustainable livelihoods for coastal farming communities in Tegbi, Lagbati, Woe, Whuti, Agbledome, and Dzita, by providing reliable, solar-powered irrigation infrastructure that enables year-round climate-smart agriculture, reduces production costs, improves food security, and demonstrates replicable water-efficient farming models.

3.1 Objectives

The objectives of the activity are to:

- To drill and construct two (2) reliable boreholes (8–10m depth) per community with adequate yield for irrigating at least a one-acre demonstration farm with the 2 wells connected to one (1) pump
- To supply and install a solar-powered (1 pump powering 2 wells/boreholes) hybrid irrigation system (drip and sprinkler) that ensures water use efficiency, reduces energy costs, and allows farmers to practice climate-resilient cropping.
- To build the capacity of local farmers (especially women and youth) through training in operation, maintenance, and water conservation techniques to ensure long-term sustainability of the system.
- To provide a replicable model of low-cost, renewable-energy-driven irrigation that can be scaled to other coastal communities facing similar climate constraints.

4. Scope of Work

The successful contractor shall be responsible for the complete design, supply, installation, testing, commissioning, and handover of the completed solar-powered hybrid irrigation system capable of irrigating at least, one acre farm.

The specific task forming the scope of work include the following:

- Reconnaissance surveys and hydrogeological investigations
- Drilling and construction of 2No. borehole per community to a depth of between 8m – 10m
- Installation of surface pumps (1pump/2wells) and solar mechanization of the water system per community
- Construct 2No. concrete stands of 5m high and mount 4No. polytanks (5000 liters) for water storage and install distribution lines per community.

- Install hybrid drip and sprinkler distribution lines and accessories
- Provide fencing to project the solar panels and water pumps
- Develop one acre irrigation area and condition the soil with manure for crop production.
- Develop training manuals and deliver training on operation, maintenance and basic repairs.

Note: Refer to the BOQ for the detailed list of activities. Where specific product brands are indicated, equivalent or superior brands may be quoted. Bidders must state the brand offered. All rates shall include supply, delivery, installation, testing, and commissioning.

5.0 Expected Deliverables

The contractor shall provide the following deliverables:

No.	Deliverable	Submission Timeline
1	Inception report with detailed work plan, HSE plan, and quality assurance plan	Within 5 days of contract signing
2	Reconnaissance Survey and Hydrogeological Investigation report and borehole siting confirmation	Week 2
3	Borehole completion report (including pumping test results and water quality analysis)	Week 6
4	Solar irrigation system as-built drawings and specifications	Week 10
5	Operation & Maintenance manuals (English and local language simplified version)	Week 12
6	Training completion report (including participant list and pre/post-test results)	Week 14
7	Final handover certificate signed by the project team and community representatives	Week 16

6.0 Qualifications and Eligibility of the Contractor

This assignment is open to Ghanaian-registered contractors, suppliers, or consulting firms meeting the following criteria:

Mandatory Compliance Documents (to be submitted with bid)

- Business Certificate of Registration (Registrar General's Department)
- Valid Tax Clearance Certificate (GRA)
- Valid VAT Registration Certificate (if applicable)



- Bid Security (2% of total bid value) – Bank Guarantee or Insurance Bond
- Signed Declaration of Non-Canvassing & Conflict of Interest
- Valid Labour Certificate (SSNIT clearance)

Technical Requirements

- Minimum 5 years' experience in borehole drilling, solar pumping, and drip/sprinkler irrigation installation – experience in the project district will be a asset.
- At least 2 completed similar contracts (provide reference letters and completion certificates)
- Multidisciplinary team including: Hydrologist, Solar Engineer, Irrigation Technician, Community Trainer
- Strong logistical capacity to deliver within the timeframe
- Knowledge of Ghana Water Resources Commission, EPA, and District Assembly regulations and by-laws

7.0 Submission Process

Interested bidders must submit the following in one sealed envelope or single PDF email attachment:

- a) Cover Letter – Expressing interest and confirming eligibility.
- b) Mandatory Compliance Documents (as listed in Section 6).
- c) Technical Proposal (max 5 pages) – Methodology, work plan, quality assurance, HSE plan, training approach.
- d) Financial Proposal – Detailed cost breakdown using the BOQ format (Appendix B), including professional fees, equipment, installation, and training.
- e) Equipment Schedule – List of all materials with brands, specifications, quantities, and unit prices.
- f) Company & Team Profile – Organizational capacity, CVs of key personnel.
- g) References – At least two past similar contracts with contact details.
- h) Delivery Timeline – Gantt chart with clear milestones.

Deadline for submission: Friday, July 03, 2026, at 11:59 GMT