

African Council of Religious Leaders

Religions for Peace

Terms of Reference (ToR) for Borehole Drilling, and Installation of a Solar-Powered Water Pump and Elevated Water Storage Tank in the Village of Kamita (Kita Region: Sagabari Circle- Mali)

1.0 General Information

Intervention: Enhancing environmental restoration and conflict transformation in Burkina Faso, Mali, and Senegal through the empowerment of religious leaders to advocate for gender equality and women's empowerment in line with the Sustainable Development Goals (SDGs).

Project Title: Women Empowerment and Environment Restoration for Conflict Prevention in the Sahel

Duration: 3 Months

2.0 Background and Context

2.1 About the Task

The African Council of Religious Leaders- *Religions for Peace* (ACRL-RfP) is seeking for a competent company to provide the services of *Borehole Drilling and installation of a solar-powered water pump and an elevated water storage Tank in Village of Kamita (Kita Region: Sagabari Circle- Mali).*

2.2 Introduction

The [African Council of Religious Leaders- Religions for Peace](#) (ACRL-RfP) is the largest and most representative multi-religious platform in Africa. Our mandate is to generate interfaith space and establish platforms and networks for religious leaders and their communities to deliver common action in the promotion of harmony and the sustainable progress for Africa.

ACRL-RfP through the *Women Empowerment and Environmental Restoration for Conflict Prevention in the Sahel* initiative, supported by [Brot für die Welt](#) (BftW), is advancing local environmental restoration initiatives that directly address climate vulnerability and resource-based conflict in the Sahel. One of the project's key interventions is focused on the provision of sustainable water access to enable irrigated agriculture and ecological restoration to improve climate resilience in Burkina Faso, Mali and Senegal.

The initiative recognizes that access to water is central to resilience in the Sahel. By establishing a solar-powered borehole system, ACRL-RfP seeks not only to provide clean water for domestic use but also to enable small-scale irrigation to sustain year-round agricultural production. This approach links environmental restoration with improved livelihoods, promoting food security and social stability, particularly for women and youth. Through collaboration with local congregational leaders, the initiative aims to foster community ownership and ensure that restored ecosystems translate into tangible social and economic benefits.

2.3 Background

Sustainable groundwater supply infrastructure requires prior hydrogeological investigations to confirm groundwater availability, characterize aquifers, and define the technical parameters for borehole drilling and construction. These investigations provide the technical foundation for subsequent drilling, equipping, and commissioning works, in accordance with internationally accepted good practice for groundwater abstraction and water supply interventions.

In compliance with these requirements, the African Council of Religious Leaders- *Religions for Peace* (ACRL-RfP) engaged a qualified firm that conducted a hydrogeological survey in the Village of Kamita, Sagabari Circle, Kita Region, Republic of Mali. The generated hydrogeological survey report recommends two sites, a primary recommended drilling location and an alternative site, with an estimated drilling depth of 120 meters. Additionally, the geological conditions of the area are characterized by stratified sandy clay formations overlying consolidated hard rock. (*Survey report annexed*)

On the basis of this report, ACRL-RfP seeks to procure the services of a qualified and competent contractor to execute the borehole drilling works, install a solar-powered submersible pumping system, construct an elevated water storage facility, and develop associated water point infrastructure, in strict accordance with the hydrogeological survey recommendations, applicable national regulations, and relevant international standards.

This proposed borehole in the village of Kamita, Sagabari Circle, Kita Region, Republic of Mali aims to promote irrigated agriculture, enhance food security, empower women economically, and strengthen community resilience against the impacts of climate change in the Sahel region.

3.0 Objectives of the Service and Scope of Work

3.1 Objectives of the Assignment

ACRL-RfP seeks to engage a qualified company with an overall objective to drill, construct, equip, and commission one fully functional solar-powered borehole water supply system at the site identified and recommended in the hydrogeological survey report, located in Kamita Village, Sagabari Circle, Kita Region, Republic of Mali.

The specific objectives of the assignment are to:

1. Provide a safe, reliable, and sustainable groundwater supply for community use;
2. Ensure that all works are executed in strict compliance with the hydrogeological survey recommendations, applicable national regulations of Mali, and internationally accepted WASH and engineering standards;
3. Deliver a fully operational and commissioned solar-powered borehole, including abstraction, storage, and distribution infrastructure;
4. Ensure technical integrity, durability, and long-term operability of the borehole and associated infrastructure through quality construction, appropriate materials, verified performance testing, and community training on usage and maintenance.

3.2 Scope of Work

The contracted company shall be fully responsible for the mobilization, execution, supervision, completion, testing, and handover of all works and services required to achieve the objectives of this assignment, as described below.

Step 1. Borehole Drilling, Construction, and Development

The contracted company shall carry out all activities required to deliver a completed and developed borehole, including but not limited to:

1. Mobilization and demobilization of all required drilling equipment, tools, materials, and qualified personnel;
2. Drilling of borehole at the location identified in the hydrogeological survey report, to the target depths specified therein, in accordance with the survey's technical recommendations.
3. Borehole construction, including casing, gravel packing, sealing, and sanitary protection, in accordance with recognized drilling standards;
4. Borehole development to ensure optimal water yield and water clarity;
5. Test pumping (step-drawdown and constant discharge tests) to determine sustainable yield, drawdown, and recovery characteristics;
6. Collection of water samples and submission for physico-chemical and bacteriological analysis by an accredited laboratory; ensuring water quality meets WHO standards
7. Supervision of drilling and development works by a qualified and certified hydrogeologist, whose credentials shall be presented to the Client (ACRL-RfP) prior to commencement.

No deviation from the hydrogeological survey recommendations shall be permitted without prior written approval from ACRL-RfP.

Step 2. Borehole Equipping and Water Supply Infrastructure Construction

Upon successful completion and approval of step 1, the Contracted company shall proceed with Phase II, which shall include, but not be limited to, the following:

1. Supply, installation, and testing of a solar-powered submersible water pump compatible with the borehole characteristics and capable of delivering a minimum continuous discharge of 10 cubic meters per hour (10 m³/hr) under operating conditions;
2. Design, supply, and installation of a complete solar pumping system, including solar panels, steel mounting structures, controllers, cabling, and all associated accessories;
3. Construction of a water tower of appropriate height and structural capacity, including foundations, in accordance with approved engineering designs;
4. Supply and installation of a water storage tank of specified capacity (to be defined in the technical specifications), suitable for potable water storage;
5. Construction of at least one water point (tap stand or equivalent), including drainage and erosion protection works;
6. Full system testing, commissioning, and performance verification under operational conditions.

4.0 Technical Specifications and Standards

4.1 General Technical and Quality Requirements

All works shall be implemented in accordance with the approved hydrogeological survey, including the specified drilling depth of approximately 120 metres and the intended purpose of the facility, and shall comply with the applicable laws, regulations, and technical standards of the Republic of Mali, including internationally recognized standards such as the WHO Guidelines for Drinking-water Quality, UNICEF/Sphere WASH Standards, and relevant ISO standards for water supply equipment, civil works, and solar system.

4.2 Borehole Drilling and Construction Specifications and Yield

Drilling shall be undertaken in accordance with the approved hydrogeological survey, using methods and equipment appropriate to the geological conditions.

The borehole shall be drilled to a depth of 120 meters as recommended in the hydrogeological survey report. Any deviation from the approved depth or specifications shall require prior written authorization from the Client.

Permanent casing shall be factory-manufactured uPVC or mild steel, corrosion-resistant and suitable for potable water abstraction. Factory-slotted screens shall be installed only within productive aquifer zones, with clean, well-graded silica gravel used as the filter pack.

The borehole shall achieve a sustainable minimum yield of 10 m³/hour, sufficient to meet domestic, livestock, and irrigation needs. Pumping test results shall be documented and approved by the Client or designated site supervisor prior to system equipping.

4.3 Water Quality Standards

Upon successful borehole development and test pumping, the contracted company shall be responsible to collect water samples and submit to an accredited laboratory for testing and analysis of the following parameters at minimum:

- Physical parameters;
- Chemical parameters;
- Bacteriological parameters (including E. coli).

Water quality shall comply with WHO drinking-water standards. Any non-compliance shall be corrected at the Contractor's cost.

4.4 Solar-Powered Pumping System Specifications

Submersible Pump and installation

The contractor shall equip the borehole with:

- Solar-powered submersible pump that is corrosion-resistant and suitable for achieved borehole depth and dynamic water level
- The pump should have a minimum guaranteed discharge capacity: 10 m³/hr under operating conditions;

The solar-powered submersible water pump should be installed at a depth approved by the supervising hydrogeologist and fitted with non-return valve, safety cable, and dry-run protection.

Solar System

The contractor shall ensure the solar panel system complies to these minimum requirements:

- High-efficiency photovoltaic panels sized to meet pumping demand;
- Panels mounted on secure, corrosion-resistant steel structures;
- Solar controller with surge and lightning protection;
- UV-resistant cabling installed in protective conduits.

4.5 Water Tower and Storage Tank Specifications

Water Tower and storage tank

The contracted company shall construct an elevated steel tower with a minimum height of 6 meters above finished ground level, measured to the base of the tank that is designed and constructed to withstand local wind and load conditions and equipped with an access ladder with safety cage and lockable entry.

The contracted company shall purchase and install an elevated plastic water storage tank suitable for potable water storage with a minimum holding capacity of 10,000 liters.

Thermal Protection

Solar panels shall be installed above the storage tank in a configuration that provides partial shading of the tank to reduce thermal stress and water temperature increase.

Tank fittings shall include inlet, outlet, overflow, washout, and a vent with insect screen.

4.6 Water Points and Distribution

Water points shall be designed for **community, animal, and irrigation use**, with durable taps/valves suitable for high-frequency operation and durability. The established water point shall include:

- Reinforced concrete apron;
- Proper drainage and soak-away system;
- Erosion and stagnation control measures.

5.0 Duration of the Assignment

The total duration of the assignment shall not exceed 90 calendar days from the date of contract signing, unless otherwise approved in writing by the Client.

The duration of the contract shall include:

1. Mobilization and site preparation;
2. Borehole drilling, construction, and development;
3. Test pumping and water quality analysis;
4. Installation of the solar-powered pumping system;
5. Construction of the water tower, storage tank, and a water point;
6. Commissioning, testing, and final handover.

Any request for extension of time shall:

- Be submitted in writing at least **7 calendar days** before the expected delay;
- Clearly justify the cause of delay;
- Be subject to the Client's sole discretion.

6.0 Work Plan and Implementation Schedule

The Contracted company shall submit a detailed work plan and implementation schedule within 7 calendar days of contract signing. The work plan shall Align strictly with the phases and milestones defined in this TOR and be presented in a Gantt chart format clearly identify tasks, timelines, dependencies, and milestones. The work plan shall be subject to review and written approval by the Client prior to commencement of physical works.

The Contracted company shall submit to the client weekly progress reports detailing activities completed, challenges encountered, and planned actions for the following week. The client should be notified in writing of any event likely to cause delays or affect quality.

7.0 Qualifications, Experience, and Skills

7.1 Eligibility Requirements

The Contracted company shall meet the following minimum eligibility requirements:

- a. Be a legally registered company authorized to operate in the Republic of Mali or legally eligible to operate through a registered local partner;
- b. Possess a valid business registration, tax compliance certificate, and any other statutory documentation required by the law in Mali;
- c. Have no record of debarment or suspension by any national authority, UN agency, international NGO, or multilateral donor.

Failure to meet any eligibility requirement shall result in disqualification.

7.2 Organizational Experience

The Contracted company shall demonstrate the following minimum experience:

- a. At least five (5) years of proven experience in borehole drilling and solar-powered water supply systems in rural or semi-rural contexts;
- b. Successful completion of at least three (3) similar assignments, involving:
 - Borehole drilling and development;
 - Installation of solar-powered submersible pumps;
 - Construction of elevated water tanks and water points;
 - Demonstrated experience working with NGOs, INGOs, or donor-funded projects in Africa, preferably in Sahelian or comparable environments.
 - Documentary evidence (completion certificates, contracts, or reference letters) shall be provided.

7.3 Key Technical Personnel

The Contractor shall assign qualified personnel with the following minimum qualifications:

a) Hydrologist (Key Personnel – Mandatory)

- Minimum qualification: Bachelor's degree in Hydrogeology, Geology, or Water Resources Engineering;
- Minimum five (5) years of relevant professional experience in borehole supervision;
- Proven experience supervising borehole drilling and pumping tests;
- Availability on-site during all critical drilling, development, and testing activities.

b) Drilling Supervisor

- Minimum qualification: Diploma or equivalent in drilling technology or related field;
- Minimum five (5) years of field experience in borehole drilling operations;
- Proven ability to manage drilling crews and equipment.

c) Solar Pumping Technician / Engineer

- Minimum qualification: Diploma or degree in electrical, renewable energy, or mechanical engineering;
- Minimum three (3) years of experience in installation of solar pumping systems;
- Demonstrated experience with solar-powered submersible pumps of comparable capacity.

d) Civil Works Supervisor

- Minimum qualification: Diploma or degree in civil engineering or construction management;
- Minimum three (3) years of experience in construction of elevated water tanks and concrete structures.
- Substitution of key personnel shall not be permitted without prior written approval from the Client.

7.4 Equipment and Technical Capacity

The Contractor shall demonstrate ownership of, or guaranteed access to, the equipment and logistical resources necessary to execute the assignment, including:

- Borehole drilling rig(s) suitable for the required drilling depth and geological conditions identified in the hydrogeological survey report;
- Test pumping equipment and water level measurement instruments;
- Equipment for the installation of solar-powered pumping systems and elevated storage tanks;
- Vehicles and logistical capacity sufficient to complete the works within the specified timeframe.

The Contractor shall be responsible for the procurement and supply of water storage tank, solar powered water pump, and solar panels, and the associated costs shall be fully reflected in the financial proposal.

7.5 Skills and Competencies

The Contracted company shall demonstrate:

- Strong technical competence in groundwater development, solar water systems, and civil works;
- Proven ability to deliver assignments within defined timelines and budgets;
- Capacity to comply with Health, Safety, Environmental, and Social (HSES) requirements;
- Effective reporting and documentation skills.

All qualifications and experience claimed shall be subject to verification. The Client reserves the right to: Contact references, verify certificates and licenses, and Reject submissions containing false or misleading information.

8.0 Application and Submission Requirements

Interested and qualified companies are invited to submit **technical and financial proposals** demonstrating their capacity to undertake the assignment in accordance with national standards for water works and borehole construction. Bidders are required to submit proposals and quotations covering both phases as follows: Phase I (Borehole Drilling, Construction, and Development) and Phase II (Borehole Equipping and Water Supply Infrastructure Construction).

A. Administrative Requirements

1. Valid tax compliance certificate from the relevant national authority.
2. Current business license and/or professional registration in the water works or drilling category.
3. Proof of company ownership (Articles of Association or business registration summary).
4. Valid professional indemnity or public liability insurance.

B. Technical Requirements

1. Registration with the relevant national water or drilling authority.
2. Demonstrated experience in at least two similar borehole construction or water supply projects.
3. Curriculum Vitae (CVs) of key technical personnel (Hydrogeologist, Drilling Engineer, and Solar Technician).
4. Detailed technical methodology outlining key phases of work:
 - Phase I: Borehole drilling, casing, test pumping, and water quality analysis*
 - Phase II: Borehole Equipping including installation of solar-powered pumping system and construction of water collection points.*
5. Work schedule and implementation timeline for all phases.
6. Itemized Bill of Quantities (BoQ)- including a firm quotation for Phase I (Drilling and casing works) and a provisional quotation for Phase II (Equipping works).

C. Construction Documentation (as applicable)

To enhance quality assurance, firms are encouraged to include:

1. Simple site layout and designs
2. Brief technical description of each component (drilling, solar installation, and water collection infrastructure).

9.0 Safeguarding and Non-Discrimination

ACRL-R/P is committed to upholding the rights, safety, and dignity of all children and vulnerable adults in our work. This includes adherence to the ACRL-R/P Safeguarding and Protection from Sexual Exploitation, Abuse and Harassment (PSEAH) Policy, the UN Convention on the Rights of the Child, and the Inter-Agency Standing Committee (IASC) Six Core Principles on Sexual Exploitation and Abuse. ACRL-R/P enforces a strict zero-tolerance policy for any misconduct involving beneficiaries, staff, or representatives.

We promote a diverse and inclusive workplace and strongly encourage applications from qualified women and young professionals.

10.0 Submission of Proposals

Proposals must be submitted in English via email: secretariat@acrl-rfp.org with the subject line: **“Borehole Drilling and Installation of a Solar-Powered Water Pump – Kita Region- Mali.”**

The deadline for submission is 20th February 2026

All clarifications must be requested in writing no later than five (5) working days before the submission deadline, through the same email address.

11.0 Evaluation and Award Criteria

Proposals will be evaluated based on the following criteria:

- Administrative compliance (mandatory documents submitted)
- Technical capacity (team qualifications, relevant experience, methodology, equipment, and past performance)
- Financial proposal (cost competitiveness, completeness, and value for money).

Important Notes:

Please note that only shortlisted candidates will be contacted for the further review.

Only shortlisted bidders will be contacted. ACRL-RfP reserves the right to accept or reject any proposal, in whole or in part, without obligation to award the contract or provide reasons for its decision.

Due to the urgency to fill this post, we reserve the right to review the applications on a rolling basis and selected companies/candidates may be interviewed prior to the closing dates listed, therefore early applications are encouraged.

*For any inquiries, please contact Ms. Lydia Ndinda, via- secretariat@acrl-rfp.org/ lnindinda@acrl-rfp.org; WhatsApp- **+254 719476754**.*

We appreciate your interest in this assignment and look forward to reviewing your application!

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