



Request for Quotations (RFQ)

RFQ No.202602

Issue Date: 6/01/2026

Submission Deadline: 14/01/2026

Issuing Organization: Women Environmental Programme

Project Footprint: 200 m × 200 m site (Forage area: 100 m × 100 m)

LOT 1 - Integrated Solar-Powered Borehole & Mini Pasture Irrigation System

LOT 2 - Integrated Solar-Powered Borehole & Aquaponic Systems

Locations:

1. BENUE STATE (Michille, Katsina Ala LGA)
2. KATSINA STATE (Batagarawa, LGA)

Background

The SPAR Project – Strengthening Peace and Resilience through Climate-smart Agriculture in North-Central and North-West Nigeria responds to persistent farmer–herder conflicts, climate-induced resource scarcity, and women’s exclusion from livelihoods in Benue and Katsina States. Communities in these areas face recurring violence fuelled by competition over land, desertification, and declining agricultural productivity. Women are disadvantaged by restrictive cultural norms, insecure land rights, and limited access to agricultural opportunities, heightening their vulnerability to poverty and violence. Ultimately, SPAR leverages proven WEP pilots to scale inclusive, climate-smart solutions that reduce violence and strengthen resilience in fragile contexts.

The project’s overall goal is to enhance food security, household income, and climate resilience for vulnerable farming and pastoralist communities. Specifically, it will (1) establish and operationalise two aquaponic farms and train farmers, particularly women, in sustainable agriculture; and (2) establish two community-managed climate-smart mini ranches and strengthen pastoralists’ capacity in livestock and rangeland management. The project combines aquaponics with mini ranching as inclusive, resource-efficient, and conflict-sensitive livelihood strategies. Aquaponics offers a home-based, care-compatible, water-efficient agricultural model suitable for men, women and marginalised groups, while mini ranches provide structured alternatives to open grazing, reducing land-based tensions, thereby directly addressing conflict drivers while promoting inclusive economic opportunities.

Expected outcomes include improved food security and nutrition for women, men, and youth; diversified household incomes; reduced competition over scarce natural resources; and enhanced peaceful coexistence between farming and pastoralist groups. The project contributes to SPRiNG’s violence reduction goal by tackling farmer-herder tensions through resource-sensitive livelihood models and embedding conflict resolution skills into training. It supports SPRiNG’s climate resilience goal by introducing innovative, water-efficient, and sustainable agricultural systems that help communities adapt to ecological challenges.

Scope of work

Lot 1: Integrated Solar-Powered Borehole & Mini Pasture Irrigation System

The contractor shall design, supply, install, test, and commission a turnkey system comprising:

- Solar-powered borehole (pump, PV array, controller, protections).
- Elevated steel tower with 10,000 L storage tank and community fetching point.
- Livestock watering trough.
- Pasture irrigation system for 100 m × 100 m forage area, using either:
 - Portable Sprinkler Pods (K-Line style), or
 - Solid-Set Sprinklers/Laterals.

The system must be community-operable, cost-effective, and resilient for dry-season forage production. System must meet performance targets: $\geq 110 \text{ m}^3/\text{day}$ delivery during solar hours; $\text{DU}(\text{Iq}) \geq 0.85$; borehole yield proven by pump test.

Geophysical Survey

- Conduct geophysical survey at three points, interpret results, and submit report for approval before drilling.
- Report must include site plan (borehole, PV, tank, fetching point, trough, forage zones) and irrigation layout with zoning.

Borehole Drilling & Development

- Drill to depth required for specified yield and water quality (minimum 100 m unless otherwise approved).
- Install casing, screen, gravel pack, sanitary seal.
- Perform step-drawdown and constant-rate pumping tests; attach results to completion report.
- Conduct water quality analysis (pH, turbidity, iron, manganese, EC) and submit results
- Disinfect borehole with 50 mg/L chlorine solution.
- Submit borehole completion report with coordinates, lithology, pumping test data, and photos.

Pump & Solar Installation

- Supply and install Grundfos SQFlex submersible pump (centrifugal) sized for $\geq 10\text{--}14 \text{ m}^3/\text{h}$ at confirmed TDH, with integrated inverter, MPPT, and dry-run protection.
- Install 1¼" uPVC riser pipe, gate valves, and water meter.
- Install eight (8) 300 W monocrystalline solar panels on a steel frame (50 mm × 50 mm angle iron) securely fixed to the tower, with spacing for cleaning access.
- Provide anti-theft protection, wiring, and grounding.
- Include donor visibility signage (4 ft × 3 ft metallic sheet on two sides of tower).

Elevated Steel Tower & Tank

- Construct steel tower (6 m height) with:
 - Columns: 150 mm × 75 mm × 6 mm H-channel SHS.
 - Beams: 100 mm × 50 mm × 5 mm H-channel SHS.
 - Gusset plates, bracing, handrails, and chequered plate base.
- Apply anti-rust primer and gloss finish.
- Install 10,000 L plastic storage tank, securely fastened to withstand wind loads.

Community Fetching Point

- Provide ≥4 taps, concrete apron with drainage, and protective bollards.
- Locate outside ranch fence but near overhead tank.

Livestock Trough

- Capacity ≥2,000 L, with float valve, concrete apron, and cleaning provision.

Irrigation System

(Bidders are advised to quote for both option)

Option A: Portable Sprinkler Pods (K-Line)

- ~20–24 pods, spaced 18–20 m, operated in 2–3 moves per event.
- Flow per pod: 0.8–1.2 m³/h at 2.5–3.0 bar.
- Mainline: HDPE PN10 (63–75 mm); submains: 50–63 mm.
- Filtration: disc/screen 80–120 mesh; gauges and flowmeter at headworks.
- DU(lq) ≥0.85.
- Install filtration at pump discharge sized for total zone flow

Option B: Solid-Set Sprinklers

- Spacing: 12 m × 12 m; zone valves for control.
- Laterals: 40–50 mm; risers with impact sprinklers.
- Same filtration and performance requirements as Option A.

Training & Handover

- One-day training for operators on pump, solar, and irrigation system.
- Provide O&M manuals and as-built documentation.
- Engage community for sustainable management.

Quote Specifications

Financial proposals should be in the following format:

S/N	Description of work	Unit	Quantity	Unit cost Naira	Total cost (NGN)
1	Geophysical survey work				
1.1					
	Total for Geophysical survey work				
2	Borehole Drilling & Development				
2.1					
2.2					
2.3 etc					
	Total for Borehole Drilling & Development				
3	Pump & Solar Installation				
3.1					
3.2					
3.3 etc	Total for Pump & Solar Installation				
4	Elevated Steel Tower & Tank				
4.1					
4.2					
4.3 etc					
	Total for Elevated Steel Tower & Tank				
5	Community Fetching Point				
5.1					
5.2 etc	Total for Community Fetching Point				
6	Livestock Trough				
6.1					
	Total for livestock trough				
7A	Option A: Portable Sprinkler Pods (K-Line)				

7A.1					
7A.2					
7A.3 etc					
	Total for Portable Sprinkler Pods (K-Line)				
7B.	Option B: Solid-Set Sprinklers				
7B.1					
7B.2					
7B.3					
	Total for Option B: Solid-Set Sprinklers				
	Summary				
	Geophysical survey work				
	Borehole Drilling & Development				
	Pump & Solar Installation				
	Elevated Steel Tower & Tank				
	Community Fetching Point				
	Livestock Trough				
	Option A: Portable Sprinkler Pods (K-Line)				
	Option B: Solid-Set Sprinklers				
	Grand total with Irrigation Option A				
	Grand total with Irrigation Option B				

LOT 2 - Integrated Solar-Powered Borehole & Aquaponic Systems

The contractor shall design, supply, install, test, and commission a turnkey system comprising:

- Solar-powered borehole (pump, PV array, controller, protections).
- Elevated steel tower with 10,000 L storage tank and community fetching point.
- Design and Instal a Solar-powered Aquaponic System

System must meet performance targets: $\geq 110 \text{ m}^3/\text{day}$ delivery during solar hours; $\text{DU}(\text{Iq}) \geq 0.85$; borehole yield proven by pump test.

Geophysical Survey

- Conduct geophysical survey at three points, interpret results, and submit report for approval before drilling.
- Report must include site plan (borehole, PV, tank)

Borehole Drilling & Development

- Drill to depth required for specified yield and water quality (minimum 100 m unless otherwise approved).
- Install casing, screen, gravel pack, sanitary seal.
- Perform step-drawdown and constant-rate pumping tests; attach results to completion report.
- Conduct water quality analysis (pH, turbidity, iron, manganese, EC) and submit results
- Disinfect borehole with 50 mg/L chlorine solution.
- Submit borehole completion report with coordinates, lithology, pumping test data, and photos.

Pump & Solar Installation

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- Install 1½" uPVC riser pipe, gate valves, and water meter.
- Install eight (8) 300 W monocrystalline solar panels on a steel frame (50 mm × 50 mm angle iron) securely fixed to the tower, with spacing for cleaning access.
- Provide anti-theft protection, wiring, and grounding.
- Include donor visibility signage (4 ft × 3 ft metallic sheet on two sides of tower).

Elevated Steel Tower & Tank

- Construct steel tower (6 m height) with:
 - Columns: 150 mm × 75 mm × 6 mm H-channel SHS.
 - Beams: 100 mm × 50 mm × 5 mm H-channel SHS.
 - Gusset plates, bracing, handrails, and chequered plate base.
- Apply anti-rust primer and gloss finish.
- Install 10,000 L plastic storage tank, securely fastened to withstand wind loads.

Specifications for Aquaponic System

Component	Specification	Description
Fish Tank	10,000 – 20,000 L capacity (Collapsible tank or concrete tank)	Holds fish such as catfish or tilapia
Grow Beds / Grow Area	100–200 m ² (Deep Water Culture , NFT or Media Bed)	Area where vegetables are planted; can support lettuce, hibiscus, greens, tomatoes, etc.
Sump Tank	2,000–5,00L	Collects water returning from grow beds; stabilizes system water levels.
Mechanical Filter (Solids Filter)	Sand filter or radial flow filter	Removes solid waste before nitrification.
Biofilter	200–500 L with bio- media (e.g., bio-balls, K1 media)	Converts ammonia to nitrates through beneficial bacteria.
Water Pump	1.0–1.5 HP (flow rate 15,000–20,000 L/hr)	Circulates water from sump to fish tanks and grow beds.
Aeration System	2–4 air pumps (60–120L/min each) + air stones	Maintains dissolved oxygen levels in fish and plant systems.
Piping and Plumbing	PVC 1–2 inches, valves, connectors	Connects tanks, filters, and grow beds; ensures smooth water flow.
Power Setup	Solar + inverter (2 kW system) or grid power	Provides stable power for pumps and aerators to avoid fish loss.
Grow Media	Clay pebbles/ gravel (2–5 tons depending on system size)	Supports plant roots and provides surface for bacteria.
Water Quality Test Kits	pH meter, ammonia, nitrate, nitrite test kits	Ensures monitoring and safe water conditions.
Plant Species Recommended	Leafy greens, cilantro, okra, tomatoes, hibiscus, vegetables	Fast-growing crops suitable for aquaponic conditions.

Eligibility

All qualified vendors must provide the following documents:

- i. Evidence of a certificate of incorporation
- ii. CAC form 02 and CAC form 07
- iii. Company Profile.
- iv. Tax Identification Number.
- v. Application letter on company letter-headed paper.
- vi. Audited Account for the last three (3) years
- vii. Most recent Tax clearance certificate.
- viii. Evidence of significant presence in Katsina and Benue state
- ix. Vendor should list agencies worked with, work done and contact information (names, telephone numbers, email addresses etc). Include proof of previous experience in the form of Certificates of Completion, Contracts, Purchase Orders etc.

Award & Local Vendor Allocation

WEP intends to make two (2) separate awards under this solicitation to support local implementation capacity:

1. Geographic Allocation

Location 1 (Benue State): Award will be made to a qualified vendor legally registered and operating in Benue State.

Location 2 (Katsina State): Award will be made to a qualified vendor legally registered and operating in Katsina State.

2. **Eligibility & Evidence:** Bidders for each Lot must provide verifiable evidence of local presence (e.g., CAC registration, tax clearance, utility bill or lease agreement for a local office, and at least one project reference delivered within the respective state in the last 5 years).
3. **Independent Evaluation & Contracting:** Each Lot will be evaluated independently against the RFQ's technical, financial, and compliance criteria. WEP may award one Lot per vendor; a single vendor will not be awarded both Lots, unless no eligible competitor is available for the other Lot and WEP determines it is in the project's best interest.
4. **Budget & Scope Separation:** Each award will have its own contract, budget, delivery schedule, and performance milestones, aligned to the state-specific site(s).
5. **Non-Exclusivity & Right to Re-Award:** WEP reserves the right to cancel, retender, or re-award either Lot if the selected vendor fails to mobilize, meet performance requirements, or maintain compliance with contractual obligations.
6. **Coordination & Standards:** Both vendors must coordinate with WEP's field team to ensure uniform technical standards, branding/visibility, and reporting formats across Benue and Katsina implementations.

Method of Submission

All application must be submitted to procurement@wepnigeria.net

- Attach all relevant documents
- Indicate the LOT and LOCATION in the email subject using the format SPAR LOT NO. STATE example SPAR LOT 1 BENUE
- Vendors can either apply for one or both LOTS only within a state