

Call for Expression of Interest – Consultancy to Conduct a Life-Cycle Costing and Cost-Benefit Analysis of Riser Pipe Options for Rural Handpumps in Zambia

Zambia NGO WASH Forum | Consultancy | Lusaka, Zambia

Reference: EOINGOWASH/STR2026/01 | Initiative: The Stop the Rot Campaign

Assignment Duration: 25 working days over 6 weeks

Invitation

The Zambia Non-Governmental Organisations, Water, Sanitation and Hygiene Forum (NGO WASH Forum) invites Expressions of Interest (EOI) from suitably qualified individual consultants or consulting firms to undertake a consultancy to develop a transparent, user-friendly Life-Cycle Costing (LCC) model and Cost-Benefit Analysis (CBA) comparing galvanised iron, stainless steel and uPVC riser pipe options for rural handpumps in Zambia, and to convert the results into advocacy materials for government, cooperating partners and sector stakeholders. The full Terms of Reference (TOR) accompany this call.

Background

Across rural Zambia, groundwater is the main source of drinking water, and most community water points use India Mark II handpumps. When these handpumps are fitted with galvanised iron riser pipes in acidic groundwater, electrochemical corrosion causes premature failure, producing red, bitter water and frequent borehole abandonment. Approximately 88% of Zambia's landmass, mostly within Agro-Ecological Zones (AEZ) Region II and Region III, is characterised by naturally aggressive, low-pH groundwater, which can cause galvanised iron riser pipes to fail within 1 to 2 years instead of their 10-to-15-year design life.

Field studies in Zambia have shown that replacing corroded galvanised iron riser pipes with unplasticized polyvinyl chloride (uPVC) or stainless steel restores water quality and community acceptance. The Stop the Rot Campaign, hosted by the NGO WASH Forum, seeks to demonstrate that corrosion-resistant riser pipe options reduce whole-life costs and social burdens despite higher initial purchase prices.

Scope Summary and Key Deliverables

The technical scope, tasks, deliverables, schedule and payment milestones are set out in full in the attached Terms of Reference and must be followed without modification. Key outputs include:

- An unlocked Microsoft Excel LCC and CBA model for 15- and 20-year horizons.

- Draft and Final Technical Reports with underlying costing model and documentation.
- Stakeholder validation session(s) and summary note.
- An executive advocacy package: a 4-page policy brief, infographic(s), a 10-12 slide presentation, and a one-page donor summary.

Eligibility and Required Qualifications

- **Education:** Advanced university degree (master's or higher) in Water/Civil Engineering, Hydrogeology, Environmental Economics, Financial Modelling, or WASH Infrastructure Management.
- **Professional Experience:** Minimum 7 years of demonstrable experience in groundwater engineering, borehole construction, or rural water supply economics in Sub-Saharan Africa (direct experience in Zambia strongly preferred).
- **Technical Expertise:** Deep understanding of rural handpump mechanics (India Mark II, Afridev, Ghana-Modified), downhole metallurgy (GI, SS 304, SS 316), engineering polymers (uPVC), and electrochemical corrosion dynamics.
- **Financial Modelling:** Proven track record developing transparent, robust Life Cycle Costing (LCC) models applying the WASH Cost/LCCA framework.
- **Advocacy & Communication:** Demonstrated ability to distil technical engineering and economic metrics into concise, visually compelling policy briefs and advocacy presentations for political and donor leadership.
- **Language:** Fluency in written and spoken English with strong editorial and presentation capabilities.

Mandatory administrative requirements: for Zambian national individual consultants, copies of a Tax Registration certificate and the most recent tax clearance certificate; for firms, business registration, tax registration, current tax clearance certificate, and VAT registration where applicable (full details in the TOR).

Application Requirements

Applicants must submit the following as a single PDF (except where editable files are requested):

- Cover letter (max 1 page) expressing interest and confirming availability for the assignment period.
- Technical Proposal (max 4 pages) describing approach, methodology, and work plan aligned with the TOR.

- Curriculum Vitae of the lead consultant and key team members (maximum 4 pages per CV).
- Examples of relevant work (maximum 3 items) including LCC/CBA models, policy briefs or advocacy materials.
- Financial Proposal (separate file) with a lump-sum fee and a brief budget breakdown linked to TOR deliverables and milestones.
- Mandatory administrative documents as specified in the TOR (tax certificates, registration documents, etc.).
- Two professional references with contact details.

Submissions that do not include the mandatory administrative documents will be considered incomplete.

Submission Instructions and Deadline

Submission email: admin@ngowash.co.zm, CC: bubalamumba@ngowash.co.zm.

Subject line: "EOI - Life-Cycle Costing and Cost-Benefit Analysis of Riser Pipe Options - Reference EOINGOWASH/STR2026/01". Deadline: 16 September 2026 at 23:59 Zambia time. Late submissions will not be considered.

Evaluation and Next Steps

EOIs will be evaluated against the criteria set out in the TOR, including technical expertise, financial modelling experience, methodological approach and advocacy translation capability. Shortlisted applicants will be invited to submit a full technical and financial proposal and may be asked to participate in an interview or presentation.

Contact and Annex

Technical inquiries regarding the TOR and this EOI should be addressed to admin@ngowash.co.zm, CC bubalamumba@ngowash.co.zm. The full Terms of Reference document accompanies this EOI and is available at: [TOR - Call for Expression of Interest \(SharePoint link\)](#). Applicants must read the TOR carefully and ensure proposals fully align with its content.