



National Council for Nomadic Education in Kenya

Integrated Mechanisms for Poverty Reduction and Sustainable Education (IMPRESED) Project

Project ID No.: P-KE-IA0-005

ADF Loan No: 2100150043643

Terms of Reference

For the Provision of

Consultancy Firm Services

for

**Consultancy Services for the Design and Supervision of Water Hydrogeology and
WASH Infrastructure in 12 ASAL Counties in Kenya**

AUGUST 2026

A. BACKGROUND

The Government of the Republic of Kenya has received financing from the African Development Fund, through the African Development Bank Group, to implement the Integrated Mechanisms for Poverty Reduction and Sustainable Education (IMPRESSED) Project. The Project is implemented by the Ministry of Education through the National Council for Nomadic Education in Kenya (NACONEK), the Executing Agency.

The Project Development Objective is to increase access to quality and inclusive education for out-of-school children aged 6–17 years and to improve skills development and employment outcomes for out-of-school youth aged 18–35 years in Kenya’s arid and semi-arid lands (ASALs). The Project addresses barriers to enrolment, retention, transition and completion, including inadequate water, sanitation and hygiene facilities, food insecurity, climate vulnerability and weak school-community resilience.

This consultancy will ensure that water hydrogeology and WASH investments are technically sound, legally compliant, climate-resilient, safely constructed and fully functional. It will provide specialist services for water-source identification, borehole development, solarized pumping, storage and distribution, water kiosks, school sanitation, truncated ponds and related school or community water-use systems. The investments are expected to support attendance, school feeding, learner health and dignity, micro-irrigation and sustainable use of water resources.

B. PURPOSE AND OBJECTIVES

The overall objective is to provide independent, multidisciplinary technical services for the design, statutory compliance, procurement support, construction supervision, quality assurance, testing, commissioning, handover and post-handover support of water hydrogeology and WASH infrastructure under the IMPRESSED Project.

The specific objectives are to:

1. Baseline Assessment and Water Source Identification

- Establish reliable baseline information on site conditions, water demand, water-source potential, sanitation needs, land availability and implementation constraints.
- Identify sustainable and potable water sources through hydrogeological, geophysical and water-quality investigations, with particular attention to saline and brackish aquifer risks.

2. Infrastructure Design and Statutory Compliance

- Prepare fit-for-purpose, climate-resilient and inclusive designs, drawings, specifications, bills of quantities, cost estimates and tender-ready technical documents.
- Secure or support the required professional, water abstraction, environmental, construction and county approvals before regulated activities commence.

3. Procurement and Implementation Support

- Provide technical support during procurement without assuming the responsibilities of NACONEK or the appointed evaluation committees.

4. Construction Supervision and Quality Assurance

- Supervise drilling, construction and installation works, and verify quality, quantities, costs, safeguards compliance, contractor performance and implementation progress.

5. Commissioning, Handover and Sustainability

- Test, commission, document and hand over functional systems, including as-built records, operation and maintenance arrangements, user training and post-handover recommendations.

C. SCOPE OF SERVICES

The Consulting Firm shall deploy a multidisciplinary team and undertake the assignment through the following integrated workstreams:

- 1. Inception and document review.** Review the Financing Agreement, Project Appraisal Report, procurement and implementation plans, safeguards instruments, site information and relevant technical standards. Prepare an inception report, detailed methodology, staffing and deployment plan, work programme, reporting schedule, risk register and quality assurance plan.

- 2. Site assessment and verification.** Undertake field reconnaissance and baseline assessments in the target counties. Verify school layouts, water demand, existing sources, sanitation gaps, land and access conditions, community and livestock interfaces, security, climate risks, source protection needs and readiness for implementation.
- 3. Hydrogeological and geophysical investigations.** Carry out desk studies, field surveys, geophysical investigations, borehole siting, aquifer risk analysis and water-quality requirements. Prepare drilling recommendations, source-sustainability advice and, where required, alternative water-source options.
- 4. Engineering design and tender documentation.** Prepare design reports, calculations, drawings, technical specifications, bills of quantities, engineer's estimates and tender-ready documentation for boreholes, test pumping, solarized pumping, storage, distribution networks, water kiosks, school water points, sanitation facilities, livestock watering interfaces, truncated ponds and related integrations with clean-energy or water-generation systems where applicable.
- 5. Statutory compliance and safeguards.** Support applications for water abstraction, environmental, construction, professional and county approvals. Integrate environmental and social safeguards, occupational health and safety, learner and community safety, source protection, gender-responsive sanitation, disability inclusion, menstrual hygiene management and grievance-handling requirements into designs and supervision.
- 6. Procurement technical support.** Provide technical inputs to procurement documents, pre-bid clarifications, site visits and technical evaluation when requested. Procurement decisions, approvals and contract awards shall remain the responsibility of NACONEK and the duly appointed committees.
- 7. Construction and drilling supervision.** Supervise drilling, borehole development, test pumping, civil works, piped networks, sanitation facilities, solar and electro-mechanical installations. Maintain site records, inspect materials and workmanship, review contractor programmes and method statements, verify quantities and payment certificates, advise on variations, monitor defects and report cost, schedule, safety and quality risks.
- 8. Testing, commissioning and handover.** Witness and certify water-quality testing, test pumping, pressure and functionality tests, system commissioning and correction of defects. Prepare handover records, as-built drawings, operation and maintenance manuals, training materials, asset information and sustainability arrangements.
- 9. Post-handover and completion support.** Undertake agreed post-handover checks, confirm system functionality, identify outstanding defects, document lessons and recommend actions for sustainable operation, maintenance and monitoring.

D. EXPECTED DELIVERABLES AND INDICATIVE TIMELINE

All deliverables shall be submitted in editable electronic format and in signed final form, in the number of copies and format specified by NACONEK. Deliverables will be reviewed and accepted against the approved methodology, quality assurance plan, applicable standards and contract requirements.

No.	Deliverable	Minimum Content	Indicative Timeline
1	Inception Report	Methodology, work plan, staffing and deployment plan, stakeholder and reporting arrangements, risk register, quality assurance plan and detailed deliverables schedule.	Within 2 weeks of commencement
2	Site Assessment and Verification Reports	Baseline conditions, site readiness, school and community water demand, sanitation needs, land/access constraints, existing systems, climate and safeguards risks.	By Month 2 and thereafter as sites are confirmed
3	Hydrogeological, Geophysical and Water-Quality Investigation Reports	Survey results, interpretation, borehole siting, aquifer and salinity risk assessment, drilling recommendations, water-quality testing plan and source-sustainability advice.	Before drilling or source development; target by Month 3
4	Design Packages and Tender-Ready Documentation	Approved design reports, calculations, drawings, specifications, BoQs, cost estimates, implementation sequencing and technical procurement inputs.	Before procurement of each works package; target by Month 5
5	Compliance and Procurement-Support Records	Permit and approval tracking, safeguards integration, technical clarifications, site-visit records and evaluation inputs requested by NACONEK.	As required before award and commencement of regulated works

No.	Deliverable	Minimum Content	Indicative Timeline
6	Supervision and Progress Reports	Monthly progress, site instructions, inspections, measurements, contractor performance, quality control, payment verification, safeguards compliance, cost/schedule risks and corrective actions.	Monthly during drilling, construction and installation
7	Testing, Commissioning and Handover Reports	Test-pumping and water-quality results, performance and functionality tests, defects lists, completion certificates, handover notes and user training records.	At completion of each site or works package
8	As-Built Drawings, O&M Manuals and Asset Records	As-built drawings, equipment schedules, warranties, O&M manuals, preventive maintenance plans, spare-parts requirements and asset information.	Before final acceptance of each package
9	Final Completion Report	Consolidated outputs, technical and financial status, compliance, functionality, outstanding issues, lessons learned and post-handover monitoring recommendations.	At the end of Month 18

E. REPORTING AND INSTITUTIONAL ARRANGEMENTS

The Consulting Firm shall report to the IMPRESED Project Coordinator. NACONEK shall retain responsibility for strategic oversight, contract and fiduciary management, procurement decisions and coordination with the Government of Kenya. The Consulting Firm shall not assume the role of Executing Agency, contractor, supplier, regulator or procurement decision-maker.

F. DURATION AND WORK LOCATION

The consultancy shall be implemented over eighteen (18) months from the commencement date. The Firm shall operate from Nairobi and maintain adequate field presence in the target counties during investigations, design verification, drilling, construction, testing, commissioning, handover and agreed post-handover support. The work programme should run activities in parallel where practical while preserving the critical path and allowing reasonable time for Client review and approvals.

G. FACILITATION BY THE CLIENT

NACONEK will provide:

- Available project documents, site information, safeguards instruments and technical records relevant to the assignment.
- Introductory letters and reasonable coordination with national and county institutions, schools, communities and regulators.
- A designated focal person and access to relevant PCU technical, procurement, finance, safeguards and monitoring staff.
- Review of deliverables and processing of accepted invoices in accordance with the contract.

Unless expressly stated in the contract, the Consulting Firm shall provide its own offices, transport, accommodation, equipment, insurance, field logistics, communications and other resources required to complete the assignment.

H. QUALIFICATIONS AND EXPERIENCE OF THE CONSULTING FIRM

The Consulting Firm, or a joint venture led by a clearly identified lead firm, shall demonstrate the following minimum capacity:

- Legal registration and authorization to provide consulting services, together with current tax compliance and ownership information required under the procurement process.
- At least seven (7) years of corporate experience in hydrogeological investigations, groundwater development, water-supply engineering, WASH infrastructure, civil works design or supervision, solarized pumping, rural water systems or comparable assignments.
- Successful completion or substantial completion of at least three (3) similar assignments within the last ten (10) years, supported by contracts, completion certificates or client references.

- Demonstrated technical experience in geophysical interpretation, borehole siting and drilling supervision, test pumping, water-quality analysis, saline or brackish aquifer environments, solar pumping, storage, distribution networks, school sanitation and integrated WASH systems.
- Capacity to meet applicable Kenyan professional, water, environmental, construction, occupational health and safety and county regulatory requirements.
- An operational quality assurance system and access to a multidisciplinary team able to provide design, safeguards, contract administration, commissioning, training and post-handover support.
- Compliance with African Development Bank eligibility, integrity and prohibited-practices requirements, including disclosure of actual, potential or perceived conflicts of interest.

Firms may associate through a joint venture or sub-consultancy arrangement. The proposal shall identify the lead firm, participating entities, roles, responsibilities and level of effort. Any post-shortlisting or post-award change shall require prior written approval in accordance with the procurement and contract requirements.

I. KEY PERSONNEL REQUIREMENTS

The Firm shall propose the following minimum key experts. Qualifications shall be supported by certified academic and professional certificates, detailed signed CVs and evidence of relevant assignments. Equivalent qualifications may be accepted where clearly demonstrated and recognized by the relevant professional body.

No.	Position	Minimum Qualification and Experience	Core Responsibility
1	Lead Geologist / Hydrogeologist (Team Leader)	M.Sc. or B.Sc. in Hydrogeology, Geology or Applied Geophysics; at least 10 years' relevant experience; demonstrated deep-borehole siting, saline-aquifer risk management, groundwater assessment and drilling supervision; registration with GRB and relevant WRA licensing.	Overall coordination; investigations; source selection; design review; drilling and test-pumping supervision; water-quality and licensing compliance.
2	WASH / Civil / Water Infrastructure Engineer	B.Sc. in Civil, Sanitary, Water or Agricultural Engineering; at least 8 years' experience in hydraulic design, school WASH, piped water systems and civil works supervision; registered Professional Engineer with EBK and corporate member of IEK.	Design of storage, networks, water points, kiosks, sanitation and ponds; BoQs/specifications; works supervision; quality and contract management.
3	Electro-Mechanical / Solar Engineer	B.Sc. in Mechanical, Electrical, Energy or related Engineering; at least 5 years' experience in solarized pumping, pump sizing, controls and electro-mechanical installations; registered with EBK and appropriately licensed by EPRA for solar PV work.	Pumping and solar design; integration with storage and distribution; installation supervision; testing, commissioning and O&M advice.
4	Environmental, Social, Health and Safety Specialist	Degree in Environmental Science, Environmental Engineering, Social Development, Occupational Safety or related field; at least 7 years' relevant experience in infrastructure safeguards and community/learner safety; appropriate NEMA or professional registration where required.	Screening and ESMP compliance; OHS, labour, community health, learner protection, inclusion, grievance and safeguards reporting.
5	Quantity Surveyor / Contract Management Specialist	Degree in Quantity Surveying, Construction Economics or related field; at least 7 years' experience in BoQs, cost control, measurement, claims, variations and works contract administration; appropriate BORAQS or professional registration.	Cost estimates and BoQs; payment verification; variations and claims; cost-risk management and value-for-money advice.
6	Assistant Hydrogeologist / Geologist	B.Sc. in Hydrogeology, Geology or Earth Sciences; at least 3 years' field experience in geophysical surveys, drilling logs, water sampling and field data management; graduate or associate professional membership.	Field surveys; data capture; lithological and drilling logs; sampling; test-pumping records and investigation support.
7	Field Inspectors / Technicians	Diploma or degree in Civil, Water, Mechanical, Electrical, Geology or related discipline; at least 5 years' relevant site experience.	Day-to-day inspection, measurements, site diaries, photographs, quality checks, safety observations, defects and handover support.

J. TECHNICAL EVALUATION CRITERIA

Technical proposals shall be evaluated out of 100 marks. A proposal must obtain at least 70 marks to be considered technically responsive and to proceed to financial evaluation in accordance with the Request for Proposals. Documentary evidence is mandatory; unsupported claims shall not be scored.

No.	Criterion	Scoring Basis	Marks
1	Relevant experience of the Firm	General relevant corporate experience (5 mks); Three or more similar assignments supported by contracts, completion certificates or client references (15 mks).	20
2	Understanding, methodology and work plan	Understanding and comments on the ToR (5 mks); Responsiveness and technical methodology (10); Work plan, sequencing, deployment and deliverables schedule (5 mks); quality assurance, risk and safeguards approach (5 mks).	20
3	Qualifications and experience of key experts	Team Leader / Lead Hydrogeologist (12 mks); WASH Engineer (10 mks); Electro-Mechanical/Solar Engineer (7 mks); ESHS Specialist (6 mks); Quantity Surveyor/Contract Specialist (5 mks); Assistant Hydrogeologist (3 mks); Field Inspectors/Technicians (2 mks).	40
4	ASAL, regulatory and stakeholder coordination experience	Demonstrated experience in ASAL or remote settings, saline/brackish aquifers, Kenyan statutory approvals and coordination with public institutions, schools and communities.	10
5	Knowledge transfer, sustainability and local field support	Practical O&M, training, handover, post-handover monitoring and availability of effective local field support.	10
	TOTAL		100

Evaluation Notes

- Similar assignments shall be completed or substantially completed and directly relevant to groundwater, WASH, solar pumping, water distribution or supervision of comparable infrastructure.
- For each key expert, academic qualification, professional registration, overall relevant experience and specific assignment experience shall be assessed. Where the minimum qualification is not met, the expert shall score zero for that position.
- Experience below the stated minimum may be prorated where the qualification is met. A missing or unsigned CV, or a CV not supported by required certificates, shall not be scored.
- The proposed level of effort and deployment shall be consistent with the methodology, work plan and 18-month assignment period.

K. PAYMENT SCHEDULE

The contract shall be lump-sum and milestone-based. Payments will be made only after submission, review and written acceptance of the relevant deliverable by NACONEK and upon receipt of a valid invoice, subject to the contract and applicable taxes.

Milestone	Accepted Deliverable	Payment
1	Accepted Inception Report, work plan, staffing/deployment plan, risk register and quality assurance plan.	15%
2	Accepted site assessment reports and hydrogeological, geophysical and water-quality investigation reports.	20%
3	Accepted design packages, drawings, specifications, BoQs, cost estimates, compliance plan and tender-ready documentation.	25%
4	Accepted supervision, progress, testing, commissioning and handover reports for completed works packages.	25%
5	Accepted as-built documentation, O&M manuals, asset records, training records and Final Completion Report.	15%
	TOTAL	100%

L. CONFIDENTIALITY, OWNERSHIP AND CONFLICT OF INTEREST

All data, drawings, reports, models, specifications and other outputs prepared under the assignment shall become the property of NACONEK upon payment for the relevant deliverable. The Firm shall maintain confidentiality, professional independence, integrity and impartiality and shall not disclose project information without prior written authorization. The Firm shall disclose any actual, potential or perceived conflict of interest and shall not be affiliated with contractors or suppliers competing for or implementing works under the same assignment, except where expressly permitted under the applicable procurement framework.