

NGO Forum for Public Health

Terms of Reference (TOR) for Consultancy Services of Teknaf Repurpose Water Project

Organizational Profile: NGO Forum for Public Health is a national networking and service delivery organization engaged in different development arena ranging from healthcare, WASH, nutrition to relief, rehabilitation and humanitarian responses related activities keeping governance as core approach.

NGO Forum for Public Health is implementing a project “Maintaining Access to Humanitarian and Inclusion Services for the Rohingyas in Bangladesh” in Cox’s Bazar supported by UNHCR. Under this project the following activities to improve the water supply situation in Teknaf will be implemented.

Background & Rationale: There are 978,003 refugees identified in Cox’s Bazar district camps according to the RRRC-UNHCR Registration exercise in March 2024. While the groundwater is abundant in Ukhia, Teknaf upazilla has a long-term and established problem with drinking water resources. Ground water is generally unavailable in the immediate area and surface water being difficult to manage, with limited appropriate areas for reservoirs. Over 90% of its very high annual rainfall (up to 4000 mm per year) totals falls in a four-month period between June and September. Each year at the end of the dry season in April / May, the Teknaf peninsula faces a period of water stress for approximately 6 to 8 weeks leading to serious public health risk, affecting the most vulnerable population groups and conducive to generate tensions between water users. During this period water trucking interventions are required to address the water shortage.

To address the increased demand in the Nayapara area since the current influx, NGOF with support from UNHCR has constructed several temporary earth dams and reservoirs.

Several treatment plants have been established at Nayapara RC, Camp 26 and 27 to treat surface water and distributed through water network. Currently, 41,470 individuals at Camp 26, 17758 at camp 27 and 24,748 at Nayapara RC rely on this water supply. Currently, approximately 550 m³ of water is supplied to Nayapara RC daily, including institutional demand, based on an allocation of 20 liters per person per day. However, during the dry season from March to May, water supply decreases to about 325 m³ per day due to reservoir scarcity, which is insufficient to meet the demand. Similarly, Camp 26 requires approximately 850 m³ of water daily, based on the same per capita allocation and current treatment plant does not include filtration system. To enhance the water supply system, several tasks have been identified, including replacing transmission pipelines, upgrading treatment plants, and installing additional tanks.

Purpose of the Work: The purpose of this consultancy is to assess the feasibility, design, and Supervision of improvements to the water treatment and distribution systems in the refugee camps in Teknaf. The consultant will provide a comprehensive feasibility study, design the necessary infrastructure, prepare Bill of Quantities (BOQ), and supervise the implementation of the project.

Scope of Work: The consultancy work involves multiple activities aimed at improving water infrastructure across various camps in Teknaf. The scope includes

1. Water Distribution Network Improvements:

- Feasibility study for upgrading and installing new water distribution transmission pipelines.
- Design and BOQ preparation for the replacement of old damaged pipe networks with HDPE pipes.

2. Water Treatment Plant Upgrades:

- Feasibility study, design, and BOQ preparation for the construction and improvement of water treatment plants.
- Upgrading the capacity of water treatment plants including sedimentation capacity increment, fencing, and pump house repair.

3. Construction and Repair Works:

- Feasibility study, design, and BOQ preparation for the construction of RCC tanks, pump houses, boundary walls, and temporary earthen dams.
- Repairing existing water tanks and improving their capacity.

Activity details:

Network improvement work: Nayapara RC

Activities	Unit	Preparatory work	Remarks
Upgradation and installation of water distribution transmission pipeline (NRC)- Replacing the old, damaged pipe network with HDPE pipes and fittings	7635 M	Feasibility study Prepare BoQ	
Improve the capacity and upgradation of water treatment plant (NRC)- construction of 02 RCC tank,	02 nos	Feasibility study Drawing & design Prepare BoQ	
Boundary wall Construction	271.34 M	Feasibility study Drawing & design Prepare BoQ	
Existing water tank repairing	03 plant	Feasibility study Drawing & design Prepare BoQ	
Pump house Construction	02 nos	Feasibility study Drawing & design Prepare BoQ	

Increasing water tank capacity: Camp-26

Activities	Unit	Preparatory work	Remarks
Improvement the capacity and upgradation of water treatment plant (Shalbagan)- Construction of 11 ferrocement tank and internal connection	11 nos	Feasibility study Drawing & design Prepare BoQ	
Retaining wall Construction for site protection and water treatment plant upgradation work	102 M	Feasibility study Drawing & design Prepare BoQ	

Pipe Network and Plant upgradation: Camp-27

Activities	Unit	Preparatory work	Remarks
Upgradation and installation of water distribution transmission pipeline (Camp 27)- Replacing the old damaged pipe network with HDPE pipes and fittings (4550 meter water network)	4550 M	Feasibility study Prepare BoQ	
Improvement the capacity and upgradation of water treatment plant (Camp 27)- treatment plant upgradation with sedimentation capacity increment, fencing, pump and pump house repair	2 Nos plant	Feasibility study Drawing & design Prepare BoQ	

Pipe network (Domdomia to Leda)

Activities	Unit	Preparatory work	Remarks
Connecting all the current water treatment plants through a transmission pipeline for seamless integration (Camp 26, NRC, 24 IOM)- Leda to Domdomia) 9000-meter 90mm dia pipe network	9000 M	Feasibility study Prepare BoQ	

Upgradation Pipe network and Plant: Camp-24 & 25

Activities	Unit	Preparatory work	Remarks
Upgradation of water distribution pipe network & treatment plants in IOM managed camps (IOM-Camp 24, 25) - 4880-meter pipe network,	4,880 M	Feasibility study Prepare BoQ	
RCC tank Construction Pump houses construction, repair maintenance work of various unit of treatment plants.	7 Nos	Feasibility study Drawing & design Prepare BoQ	
Pump houses construction,	06 nos	Feasibility study Drawing & design Prepare BoQ	
Construction of 13 temporary earthen dams in camp 24 & camp 25 to store the spring water (IOM Managed camps)	13 nos	Feasibility study Drawing & design Prepare BoQ	

Deliverables:

1. Feasibility Study Report:

- Detailed feasibility reports for all proposed improvements, including technical, financial, and environmental assessments.

2. Designs:

- Comprehensive design documents for water distribution networks, treatment plants, storage tanks, pump houses, boundary walls, and solarization systems.

3. Bill of Quantities (BOQ):

- Detailed BOQ for all construction and repair activities, including materials, labor, and other necessary resources.

4. Supervision:

- On-site supervision reports ensuring the adherence to designs and standards during the implementation phase.

- Regular progress reports and a final completion report including hardcopy and softcopy (dwg/doc/pdf) of the project.

Consultant Qualifications

- Proven experience in water resource management, particularly in humanitarian and refugee settings.
- Strong background in civil and environmental engineering with expertise in designing and implementing water infrastructure projects.
- Ability to conduct comprehensive feasibility studies and prepare detailed BOQs.
- Excellent project management skills and experience in supervising large-scale infrastructure projects.
- Familiarity with local conditions and challenges in Teknaf or similar regions is preferred.

Duration of the Assignment:

The consultancy is expected to be completed within 3 months from the date of commencement, including all feasibility studies, design work and BOQ preparation.

- The initial draft drawing & design should be submitted within 30 days.
- The supervision of implementation will be continued till the implementation period.

Selection Criteria:

The selection of the consultant will be based on the following weighted criteria:

1. Relevant Experience (20%):

- Demonstrated experience in similar infrastructure projects, preferably humanitarian contexts (10%).

- Experience in the Teknaf region or similar challenging environments (10%).

2. Technical Proposal (40%):
 - Quality and feasibility of the proposed methodology (20%).
 - Clarity and completeness of the project plan, including timeline and deliverables (20%).
3. Team Qualifications (10%):
 - Expertise and experience of key team members in relevant fields (10%).
4. Financial Proposal (30%):
 - Cost-effectiveness and clarity of the budget (30%).

Submission of Proposals:

Interested consultants should submit their proposals including:

- A brief methodology (Maximum 3 page)
- Timeline
- Budget
- CVs of key team members

Proposals should be submitted by August 7, 2024

Payment Instructions:

Upon signing the contract	30%
Upon Submission of Final Report	40%
After Completion of Project	30%

Contact Information:

For further information or clarifications, please contact:

Md. Abu Rafat Siddique
Deputy Project Coordinator
Cell: +8891744333552
email: ngofcox.technical@gmail.com

Approval and Commencement:

This TOR is approved by and is effective from The consultant is expected to commence work immediately upon signing the contract.

Note: This TOR outlines the comprehensive requirements and expectations for the consultancy services aimed at improving the water infrastructure in Teknaf. We look forward to receiving proposals from qualified and experienced consultants who are committed to making a significant impact in the lives of the refugees and host communities.