



TERMS OF REFERENCE

For

Hiring of consultancy services for hydrological mapping & engineering designing of hydraulic structures under the integrated water resource management in the indus basin

1 GENERAL

This document contains Terms of Reference (TORs) for the Consultant, to be engaged by WWF-Pakistan (hereinafter called the Employer), for the hydrological mapping, potential sites identification & engineering designing for check dams, groundwater recharge wells/pits, terracing, & rainwater storage tanks, under water replenishment project.

2 PROJECT DESCRIPTION

WWF's global network consists of more than 100 countries and has nearly 50 years of conservation experience. As one of the world's most respected environmental organizations, WWF actively contributes to delivering freshwater projects and programs around the globe and has played a leading role in developing concepts, tools, and approaches for the private sector to address business risk through better stewardship of water resources. WWF has experience grounding corporate water targets in places through its global to local approach and is particularly aware of the importance of aligning water balance targets with locally relevant basin stewardship policies and interventions. WWF freshwater projects and strategies focus on delivering multiple benefits to the environment and local communities while also informing and advancing improvements in regional water policy and landscape approaches.

WWF Pakistan has vast past and current working experience on how integrated water management (IWM) can improve the balance between ecosystem, community, and economic health as well as the needs of the diverse stakeholders on land and water. With the financial support from NIKE, WWF-Pakistan has been working on a project - to pilot integrated water resource management interventions at strategic important landscapes in Indus Basin; 1) Ayubia National Park, Nathiagali, 2) Uchhali Complex, Soon Valley, Khushab and 3) District Muzaffargarh, South Punjab, are (hereafter called the Study Area).

3 OBJECTIVE AND SCOPE OF WORK

The objective of the consultancy is to conduct hydrological modeling and identification & mapping of potential sites for groundwater recharge wells, rainwater storage tanks, check dams, terracing, & climatic data analysis of potential sites in the Study Area. The scope of work includes following key objectives:

- 1) Identification of feasible sites for the harvesting/ conservation and storage of rainwater.
- 2) Hydrological network modeling for all streams in the project area.
- 3) Identification & mapping of potential locations for check dams, terracing etc.
- 4) Identification of potential sites for groundwater recharge, floating treatment wetlands including their detailed engineering designing and related BOQs.
- 5) Climatic trend analysis of seasonal data.

4 DELIVERABLES

Key deliverables of the projects are as follows:



Sr. #	Deliverables	Description
1	Inception Report	<ul style="list-style-type: none">• Detailing Design approach, methodology, resource allocation and project schedule.
2	Interim Report	<ul style="list-style-type: none">• Comprising of hydrological mapping data of the project area, potential site's feasible locations for groundwater recharge well, design of recharge well, climatic data analysis of the study area, potential sites for check dam constructions etc.• Identification of potential sites for the floating wetlands.
3	Final Feasibility Report	<ul style="list-style-type: none">• Final report should include detailed feasibility of all sites including climatic analysis, hydrological analysis, hydraulic structures (recharge wells/ pits, terracing, check dams, retention ponds and rainwater storage tanks etc.) and all the necessary detail engineering drawings of all structures with including BOQs.• Recommendations on potential replenishment & water conservation interventions and practices in the project area, other than prescribed in this RFP.• Any other necessary document related to all.

5 TIME FRAME

From: February 2023

To: May 2023

6 DOCUMENTATION REQUIREMENT FOR PROPOSAL

Interested consultants should submit the following documentation to Muzzammil Ahmed (mahmed@wwf.org.pk) and Maham Zahara (mzahara@wwf.org.pk)

- i. Technical Proposal
 - a. Company's Profile
 - b. Consultant's Relevant Experience
 - c. Understanding of the Assignment
 - d. Approach Methodology
 - e. Tentative Workplan
 - f. Team Composition and Task Assignments
 - g. Curriculum Vitae (CV) for Proposed Professional Staff
 - h. No-Objection Certificate and Letter of Acknowledgement & Warranties (i.e., Firm is not proscribed, banned or restricted by any governmental department to



work in the site areas as mentioned in the TORs)

- i. Letter of Declaration regarding validity and authenticity of information provided in proposal
- ii. Financial Proposal
 - a. Detailed financial proposal which should be inclusive of all applicable taxes and out of pocket expenses in Pakistani Rupees (PKR). The financial proposal should follow a breakdown structure i.e., specifying cost(s) to each head and subhead and remuneration as per man days
 - b. Company's Registration Certificate
 - c. FBR Registration Certificate including NTN detail(s)
 - d. Any legal or technical certification required for the task
 - e. Audited Financial Statements (if available)
 - f. Agreements signed in the similar capacity (if available)
 - g. Any other document which can support your proposal (if available)

7 CRITERIA OF EVALUATION

Applicant's proposal shall be evaluated based on Quality and Cost Based Selection (QCBS) method. Under QCBS both technical and financial proposals shall be evaluated as per following criteria against a maximum score of 100 points.

- Technical Proposal 70%
- Financial Proposal 30%

The following criteria shall be used as a basis for evaluation of technical proposals:

- Qualifications (maximum 30 points)
- Experience relevant to the assignment (maximum 30 points)
- Adequacy of the proposed methodology and work plan (maximum 20 points)
- Skills & Competencies for the assignment (maximum 10 points)
- Prior experience with WWF-Pakistan (maximum 10 points)