



Consultancy Ref No: 122/ILES/CENTRAL/23-24

RFP FOR CONSULTANCY SERVICES WWF-PAKISTAN

SUBJECT:
**GROUNDWATER QUALITY ASSESSMENT
AND INDEXING**

Application Submission:

Interested consultants should submit the Proposal on **Application Form Available Online** or can access through following Link:

<https://forms.gle/qazomXoWh7FSWcl29>

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1) INTRODUCTION & BACKGROUND

Contract type:	Consultancy and Services
Duration of assignment:	<u>06 Months</u>
Type:	<u>Individual</u>

Background of Project & Assignment:

The groundwater is second major source after canal supplies. The canal supplies are decreasing day by day, that put more pressure on groundwater, resulting in over extraction. There are wide spatial and temporal variations in groundwater quality in the Indus basin, which is due to the pattern of groundwater movement in the aquifer. The belt of fresh groundwater is generally available near the main rivers and canal on account of high recharge of fresh seepage water. But, then, the quality of groundwater changes to unfit as laterally away from the rivers. The continuous and intensive use of groundwater for irrigation is adding plenty of salts causing secondary salinization because groundwater generally has more salts than canal water.

It is reported that at some places groundwater having total dissolved solids (TDS) of 1000mgL⁻¹ up to a soil depth 370mm changed the top 300mm depth of non-saline into a saline soil that reduced crop productivity. In many agricultural areas of Pakistan, the usage of poor-quality tube well water for irrigation is considered as one of the major causes of salinity and, consequently, lower food productivity.

According to an estimate in Pakistan, the secondary salinization degraded the crop land which reduced the production potential of major crops by 25%. Low quality water and soil salinity can affect plant growth and soil structure in several ways, directly and indirectly. Thus, the assessment of groundwater quality is important to ensure the safe use of these resources on a sustainable basis. Groundwater models are most widely used tools for efficient management of precious groundwater resources and to predict different future scenarios.

The water quality indices are used to categorize the water in different classes, good to bad. The water quality index and mapping are helpful for the farmers to know the water quality of their areas and potential impacts of using bad quality water for irrigation in term of soil damage and crop yield reduction. Furthermore, according to The Punjab Water Act-2019, 43 2b the farmers have to get license to extract water for agriculture purposes.

Keeping in view above situation there is dire need for groundwater quality assessment, mapping and indexing, so that judicious groundwater pumping can be made possible according to groundwater quality and groundwater potential in different location of the Punjab.

There are large number of water quality indices, two water quality including WQI (Water Quality Index) and CWQI (Canadian Water Quality Index) are used for water quality assessment. Using CWQI we can find that the water quality of the area ranked in good to bad category with its quality concerns.

2) GENERAL CONDITIONS

- 1) The WWF-PAKISTAN reserves the right to reject or accept any proposal. The WWF-PAKISTAN reserves the right to proceed with the implementation of any Service, in whole or in part, as described in the Proposal.
- 2) The WWF-PAKISTAN reserves the right to engage in discussions with any BIDDER to clarify responses or discuss certain issues with regards to the proposal or services requested. The WWF-PAKISTAN has no obligation to notify the other BIDDERS of the discussions, clarifications, or other information provided by a BIDDER. Any additional information required for preparation of the BID shall be distributed to all participants at the same time.
- 3) The WWF-PAKISTAN reserves the right to award the proposal based on experience, qualification, completion date, service cost and other criteria, and not necessarily the lowest cost.
- 4) Based on the RFP BID the WWF-PAKISTAN is entitled to change/replace or omit any clause/part of the preliminary defined scope of services of the proposal. The WWF-PAKISTAN shall conduct negotiations with WWF to achieve the full compliance to the requirements.

5) The WWF-PAKISTAN reserves the right in the event the successful CONSULTANT fails to comply with the terms and conditions as listed, to cancel this contract and award it to another CONSULTANT without penalty or action against the WWF-PAKISTAN. The RFP does not constitute an agreement or order.

6) The RFP is not a binding agreement between the parties, submission of a proposal or response by a proponent is voluntary.

7) By submitting a bid, the BIDDER is deemed to have acknowledged all of the undertakings, specifications, terms and conditions, **WWF Fraud and Corruption Prevention and Investigation Policy and WWF's Environment Social & Safeguard for consultant agreement** and to be bound by them if the BID is accepted. All expenses incurred by the Bidder in connection with the preparation of its proposal are to be borne by the RFP participant, and the WWF-PAKISTAN shall not incur any obligation whatsoever toward the Bidder regardless of whether such bid is accepted or rejected.

3) PURPOSE

a. **Objective of the Consultancy:**

The objective of the consultancy is to conduct hydrogeological assessment with respect to groundwater quality in irrigated areas the Punjab.

b. **Specific Tasks:**

1. To determine the groundwater potential assessment in selected canal command areas
2. To determine groundwater table and quality assessment and mapping.
3. To prepare the spatial and temporal groundwater quality maps
4. To prepare the groundwater quality Index map of the Punjab.

4) Deliverables

1. Inception Report (Including Technical methodology)
2. Mid Term Report (Must include the mapping of groundwater aquifer water table)
3. Final Report (Must Include the all kind of investigation, Analysis, assessment)

5) REQUIREMENTS

1. The consultant should have a one MSc/MS/M.phil in environmental sciences/hydrology/ hydrogeology/ water resource management or relevant engineering, having professional experience of 10-15 years working with industries and/or water department.
2. The consultant should have a minimum of 05 years, in designing, feasibility studies developing policies, plans, engineering estimates related to water management, groundwater research and regulations.
3. The consultant having water related experience mainly in Punjab province would be preferred.

6) CORRESPONDENCE & SUBMISSION OF PROPOSAL

1. **Application Submission:**

Interested consultants should submit the Proposal on **Application Form Available Online** or can access through following Link:

<https://forms.gle/qazomXoWh7FSWcL29>

2. If Any **Queries** may send through Email by attention to the Following:

To: Faiza khan (fakhan@wwf.org.pk)

Cc: Muzzammil Ahmed (mahmed@wwf.org.pk)

The RFP submission deadline mentioned on WWF-Website.

3. Any information and responses to enquiries will be made in writing and distributed by email to all proponents. Enquiries after the foregoing deadline will not receive a response.

7) FORMAT OF THE PROPOSAL

The BID submitted by the participant must be structured as per the below provided instructions:

- 1) **Application Form available at WWF-Website** - General information about the Bidder, covering qualification and experience, CV and all related Information.
- 2) **Experience:**
 - a) **Description of the complete projects:** the list and general information about the complete projects, description of the role in the project, other accomplishments of the Consultant.
- 3) **Proposal outlining scope consultancy service-** Description of scope and working process, stages, deliverables, exclusions, conditions;
- 4) **Provide template of already complete similar type of reports-** the WWF-PAKISTAN may request additionally;
- 5) **Service Provision Timeline** – Provide Detailed Work Plan as per Deliverable and TORs.
- 6) **Financial Proposal-** the prices shall be provided in Pak Rs, the total price shall include all costs related to service provision including applicable taxes.

Note:

Templates of all Information is provided on Application form available at WWF-Website. Any Additional Information related to the RFP can be attached along with application Form.

8) FINANCIAL PROPOSAL

The proposed prices shall be provided in PKR, the total price shall include all costs related to service provision including all Direct and Indirect taxes, Travel, Boarding & Lodging shall be based on actual receipt up to max Ceiling (If Any).

The consultant will submit the cost of the assignment in a lump sum, including all applicable taxes according to the Government of Pakistan and the Government of KP

The Payment Term: shall be defined by the contract to be concluded between WWF -Pakistan and the consultant.

9) EVALUATION PROCESS

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.

- A) Technical Proposal (70%)
 - Detailed workplan
 - Expression of interest (EOI)
 - Company's Profile
 - Detailed methodology
- B) Financial Proposal (30%)
 - Detailed financial proposal which should be inclusive of all applicable taxes and out of pocket expenses. The financial proposal should follow a breakdown structure i.e., specifying cost(s) to each head and subhead
 - Company's registration certificate

- NTN detail(s)
- Any legal or technical certification required for the task
- Audited Accounts Report (if available) of last FY

Note: Late/ incomplete submissions will not be accepted. Only three (03) top-ranked firms will be included in the comparative process

10) DOCUMENTATION AND CONFIDENTIALITY

All documents completed based on requirements of the present RFP shall be the property of the WWF-Pakistan, and shall not without the consent of the WWF-Pakistan be used, reproduced or made available to third parties beyond what is necessary in respect of the fulfilment of the Project. All documents issued and information given to the BIDDER shall be treated as confidential.

11) BUDGET

Total Budget for this activity inclusive of all taxes and Out of Pocket expenses are **0.5 million PKR/-**