



RFP FOR CONSULTANCY SERVICES WWF-PAKISTAN

Subject:

Hydrogeological Assessment of S.I.T.E Area and Korangi Industrial Area, Karachi

Application Submission:

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

<https://forms.office.com/e/sxNStCNxPM>

RFP – Consultancy Services

CONTENT

| | |
|------------------------------------|---|
| 1) Introduction & Background | 2 |
|------------------------------------|---|

| | |
|--|---|
| 2) General Conditions | 2 |
| 3) Purpose of Consultancy | 2 |
| 4) Deliverables | 4 |
| 5) Requirements | 4 |
| 6) Correspondence and Submission of Proposal | 4 |
| 7) Format of Proposal | 5 |
| 8) Financial Proposal | 5 |
| 9) Evaluation Process | 5 |
| 10) Documentation and Confidentiality | 6 |
| 11) Budget | 6 |

1) INTRODUCTION & BACKGROUND

Contract type: Consultancy and Services
Duration of assignment: 3 Months (September 1, 2025, to November 30, 2025)
Type: Firms

Background of Project & Assignment:

WWF Pakistan, founded in 1970, is the most significant independent nature conservation NGO in Pakistan, with over 20 offices nationwide and an average annual budget of 5.06 million euros, mainly financed by private and public funding. WWF Pakistan has a mission to preserve the country's incredible biodiversity and natural resources through the aforementioned practices. Since its inception, WWF Pakistan has implemented over 200 projects and programmes. WWF Pakistan collaborates closely with local and national partners, the government, private sector partners, researchers, and communities.

Under the Freshwater Programme, WWF-Pakistan, in collaboration with GSK, is implementing a five-year project across strategically important regions of the Indus River Basin, including Karachi, Lahore, Keenjhar Lake, and the Indus Delta. The project aims to protect and restore freshwater ecosystems through nature-positive solutions, aligned with global frameworks such as the Sustainable Development Goals (SDGs), the Global Biodiversity Framework, and the Freshwater Challenge.

2) GENERAL CONDITIONS

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.

- 1) 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.
- 2) 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.

- 3) 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.
- 4) 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.
- 5) The RFP is not a binding agreement between the parties, submission of a proposal or response by a proponent is voluntary.
- 6) 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 OF CONSULTANCY

Objective of the Consultancy:

The purpose of this consultancy is to provide technical expertise for hydrogeological assessment of Korangi Industrial area and S.I.T.E area in Karachi. The consultant will conduct a detailed assessment of hydrogeological dynamics and water use patterns within and around the industrial catchments of GSK's manufacturing sites. The study will be carried out as per the requirement of the Alliance for Water Stewardship (AWS) standard V2.0 implementation for bio-pharma manufacturing industry covering majorly the AWS clauses 1.5.3 (Catchment Water Balance), 1.5.4 (Catchment Water Quality), 1.5.5 (identification of IWRA), 1.5.6 (existing and planned water related infrastructure) & 1.5.7 (adequacy of WASH services in catchment. This assessment will help understand the current water situation including quantity, quality and accessibility & adequacy in the Korangi Industrial Area and S.I.T.E. Area of Karachi. This will include analysis of surface, piped supplied water and groundwater conditions, aquifer characteristics, soil permeability, seasonal fluctuations, and water abstraction. The study will also assess water balances, evaluate water quality, survey existing wells and community usage, and identify WASH-related vulnerabilities. The findings will guide evidence-based water resource planning, risk mitigation, and the identification of locally appropriate recharge interventions, aligned with the AWS Standard V2.0.

Detailed Terms of Conditions of the Assignment:

The consultant(s) is expected to perform the following tasks as per the timeline:

Task: Hydrogeological Assessment of S.I.T.E Area and Korangi Industrial Area

- **Identify Catchment (Surface water and Groundwater):** ○ Identify surface and ground water catchment of GSK manufacturing units in Korangi and SITE areas, following the AWS (Alliance for Water Stewardship) standard guidelines outlined in the special subject section of the standard V2.0 on Catchments.
- **Topography, Drainage, Physiography, Geology and Soil Data:** ○ Conduct an in-depth analysis of the catchments' topography through the available data, utilizing precise maps and elevation data to identify prominent landforms and thoroughly assess slope characteristics.
 - Employ geological maps to delineate rock types, formations, and structures. Conduct a soil survey to identify soil types, permeability and other soil characteristics affecting soil water infiltration and retention
- **Catchment Water Balance:** ○ Carry out hydrological modelling to quantify water inputs and outputs within the aquifers and other sources. Determine and report the catchment water balance for Korangi and SITE areas.
- **Factory's Water Balance and Survey of existing wells:** ○ Perform a comprehensive water balance analysis for both GSK manufacturing sites, quantifying all inflows (groundwater, surface water, piped supply),

internal usage (process, domestic, cooling, etc.), and outflows (wastewater discharge, evaporation, losses) to support effective water resource planning and optimization.

- Undertake a thorough survey of groundwater wells within the factory, evaluating well conditions, extraction rates, usage patterns, and potential impacts on groundwater quality.
- **Onsite water/ wastewater discharge analysis:** ○ Perform site inspections to assess the condition and efficiency of onsite sewage systems and all kind of water discharged from the sites, its wastewater discharge rate and the water balance.
 - Evaluate compliance with regulatory standards, considering potential impacts on groundwater quality and levels.
- **Community/Stakeholder/Private Well Survey:** ○ Conduct a comprehensive survey of community, stakeholder, and private wells, documenting well locations, depths, and water usage patterns to gain a holistic understanding of local water needs.
- **Water Quality of Existing Wells (Primary Data):** ○ Conduct on-site sampling and analysis of water quality from selected existing wells to assess key quality parameters (drinking water). Adopt a comprehensive approach by collecting minimum 8 to 10 samples per site to evaluate both overall water quality and its suitability for drinking purposes.
 - Ensure that sampling locations are selected to representatively cover the entire project area. □
- **Aquifer Properties, Groundwater Levels, Groundwater Flow Direction (Secondary Data):**
 - Collect and analyse available secondary data to discern aquifer properties and evaluate groundwater levels. Determine the direction of groundwater flow within the catchment. Utilize historical data to identify patterns, stresses and potential correlations of ground water usage and levels with influencing factors.
- **Rainfall Data Gathering and its Analysis:** ○ Collect historical rainfall data for the catchments & analyse precipitation patterns, intensity, and temporal distribution.
 - Correlate rainfall trends with groundwater level data to identify periods of seasonal water stress and peak demand, supporting informed planning for recharge and water resource management.
- **Water Sanitation & Hygiene (WASH) issues:** ○ Conduct a thorough assessment of potential threats to drinking water quality within the catchment area, considering all sources including surface water, groundwater, and piped water. Evaluate the impacts on communities, businesses, and ecosystems using both qualitative and quantitative methods to gain a comprehensive understanding of WASH-related challenges.
- **Shared Water Challenges & Opportunities:** ○ Identify shared water challenges and opportunities, fostering a comprehensive understanding of common issues affecting water resources.
- **Risk Assessment & Mitigation Measures:** ○ Conduct a comprehensive risk assessment in consultation with stakeholders and subject matter experts to identify and categorize risks based on their severity, likelihood, and potential impact within and beyond the site.
 - Based on the findings, identify feasible risk mitigation interventions using a structured decisionmaking framework that considers effectiveness, alignment with project goals, and cost-benefit analysis. Ensure that proposed solutions are practical and informed by stakeholder input.
- **Important Water Related Areas (IWRA):** ○ Identify IWRA in the catchment, assess the status (minimum of three such areas), utilizing the guideline mentioned in the AWS Standard V 2.0 guidance document and present summary of all key IWRA in the catchment.
- **Water Stewardship Actions:**
 - Develop recommended water stewardship actions and opportunities for collective action based on assessment findings.

4) Deliverables

A separate report for each site (SITE and Korangi, total 02 reports) covering the following scope of work (but not limited to):

- Detail assessment of available water resources (ground, surface and piped water), quality, quantity and accessibility
- Quantify the catchment water balance, and assess water scarcity, providing insights into annual and seasonal variations.
- Identify and quantify the water quality in the catchment, encompassing physical, chemical, and biological aspects. Address water-related challenges that pose threats to good water quality for both people and the environment, highlighting annual and seasonal variations in high and low statuses.
- Identify and map Important Water-Related Areas, assessing their status, including potential threats to both people and the natural environment. Utilize scientific data and engage stakeholders to comprehensively evaluate the conditions of these areas.
- Quantify annual high and low variances for extreme usage scenarios.
- Water Stewardship opportunities for collective actions.

5) REQUIREMENTS

- Education: The consultants or firm should have a PhD or Master's degree in civil engineering/urban engineering and a Hydrologist/Water Management Specialist. Additional degree in environment is a plus point.
- Experience: At least 03-05 years in conducting hydrological assessment, Hydrogeological assessments, community assessment and catchment studies using distributed hydrologic simulation mode.
- Skills: GIS, data handling, report writing and survey skills
- Software: ArcGIS / QGIS, HEC-HMS, HEC-RAS, Modflow, HydroGeoAnalyst, HYDRUS etc.
- Experience in providing quality technical reports.
- Knowledge of WWF's work globally and regionally is an asset.

6) CORRESPONDENCE & SUBMISSION OF PROPOSAL

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

<https://forms.office.com/e/sxNStCNxPM>

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)

Mehak Sikandar (msikandar@wwf.org.pk)

Syed Ali Larosh Zaidi (salzaidi@wwf.org.pk)

The RFP submission deadline mentioned on WWF-Website.

1. 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.

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.
 - 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.
- 2) **Proposal outlining scope consultancy service-** Description of scope and working process, stages, deliverables, exclusions, conditions;
- 3) **Provide template of already complete similar type of reports-** the WWF-PAKISTAN may request additionally;
- 4) **Service Provision Timeline** – Provide Detailed Work Plan as per Deliverable and TORs.
- 5) **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 Sindh

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 WWFPakistan, 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

The total budget allocated for this consultancy, including direct and indirect taxes, travel, boarding and lodging, and out-of-pocket expenses, is **PKR 2,000,000**.