

BACKGROUND:

Government of Punjab has launched a roadmap for the water supply and sanitation sector to meet the Sustainable Development Goals (SDGs), and has shown a clear resolve to provide access to safe drinking water and sanitation to 100% rural and urban population of Punjab. The ADP allocation is a testament to this commitment, as a sizeable amount has been allocated to water supply and sanitation sector. In ADP 2016-17 total amount allocated for water and sanitation sector is amounting to Rs. 57.496 billion (11.5% of the total ADP allocation made by Government of Punjab). All the projects identified / selected in water supply and sanitation sector are implemented through Engineering / Technical Staff of WASAs and PHE Department to ensure quality services by regularly monitoring and water quality testing.

However, despite heavy capital investments and annual subsidies, water services remain in poor shape. There is an intermittent supply of water and limited wastewater treatment in urban areas. Poor drinking water quality leads to major outbreaks of waterborne diseases. In addition, many service providers cannot cover the costs of maintenance due to low tariffs and poor collection efficiency. Water Quality Survey conducted by Punjab Saaf Pani Company in rural areas of Punjab in 2015 indicates prevalence of arsenic contamination in almost 40% water sources. Estimates indicate that each year, more than three million Pakistanis become infected with waterborne diseases. Technical Assessment Report of 21 districts conducted by PCRWR in year 2011 indicates that 89% of water supply schemes provide unfit water.

Bacterial Contamination is the most common type of contamination and can be reduced through chlorination and replacement of outlived pipes. Chemical contamination can be removed by changing the source of water supply scheme or installation of filtration plants.

A comprehensive water quality survey is required to gauge the extent of water contamination at source and dispensation point.

Operation and maintenance is one of the major reason for failure of water supply schemes. TMAs lack sufficient capacity to maintain the schemes and CBOs are unable to maintain the rural water supply schemes due to technical and financial capability issues. It is pertinent to note that outsourcing of O&M of schemes will lead to better service delivery. Vacant technical posts affect service delivery in WASAs and PHED.

It has been experienced that contractors registered with HUD&PHED require a better system of screening / shortlisting/ prequalification to ensure better & timely implementation of projects in these sectors.

It has also been experienced that the pumps and pipes manufacturers registered with HUD&PHE Department require a better system of screening / evaluation to ensure timely implementation of the project and to resolve numerous issues like bursting of pipes, leakage, bad quality works and litigation etc.

OBJECTIVES:

In order to address the above concerns, HUD&PHED intends to engage the services of high quality and well reputed international consultants, possessing sufficient capacity and relevant experience, through International Competitive Bidding Process to provide Consultancy Services for six different studies:

- i) Water quality survey and water quality monitoring of all water supply schemes of WASAs, PHED and TMAs
- ii) Outsourcing of water supply schemes
- iii) Survey for identification of outlived pipelines in 5 WASAs
- iv) Performance evaluation & rationalization of technical staff of HUD&PHED and WASAs
- v) Registration / renewal and prequalification of contractors in HUD&PHED
- vi) Registration / renewal of pumps, pipes, valves and specials manufacturers

The successful Applicants (Consultancy Firms) shall be responsible for providing the best professional engineering consultancy practices & innovative solutions.

1. TORs for Water Quality Survey and Monitoring:

The TOR defines the scope of the agreement to be drawn between the Consultants and "HUD&PHED" hereinafter called "Client". The Terms of Reference of the consultancy firm shall be as under:

- i) Performing a one-time baseline survey of all water supply schemes and filtration plants of WASAs, PHED and TMAs in urban and rural areas of Punjab. Water Schemes and Filtration Plants will be inspected along the following dimensions:

- a) Location: The survey firm will geo-tag each tubewell and water filtration plant to obtain its exact location.
 - b) Staff attendance: The survey firm will record the attendance of the tubewell or water plant operator.
 - c) Functionality: The survey firm will record the functionality of the facility, presence of electricity and supply of water.
 - d) Infrastructure: The survey firm will note down the status of tubewell and filtration plant infrastructure.
 - e) Cleanliness: The survey firm will note down the level of cleanliness of filtration plants.
 - f) Water Quality: The survey firm will note down the level of Total Dissolved Solids (TDS) in the water at every tubewell and filtration plant and collect a sample to be tested at a recognizable water testing lab, according to WHO standards.
- ii) Collect water samples from source (tubewells) and representative samples from households in urban and rural areas, to be tested from a recognizable water testing lab, according to WHO standards.
 - iii) The consultant would be responsible to take one sample from source and 5-15 samples from the households to conduct water quality testing. Frequency of tests would be as under:

Type of Scheme	Household Samples	Source Samples	Total
Small Scale	5	1	6
Medium Scale	10	1	11
Large Scale	15	1	16

- iv) Cost of testing charged from Government will be as per actual tests conducted by the consultant.
- v) Detail of tests to be conducted by consultant is attached. Total 1-20 tests would be conducted by the consultant alongwith heavy metals tests.
- vi) Total samples from household would be about $3500 \times 10 = 35000$, which would vary as per type of scheme either large, small or medium scheme.
- vii) Total samples from sources would be 4200 from urban water supply schemes and about 3500 rural water supply schemes.
- viii) To suggest way forward for sustainable and continued water quality mechanism for water supply schemes.

DELIVERABLES FOR WATER QUALITY SURVEY AND MONITORING OF WATER SUPPLY SCHEMES

Deliverables	
1.	a) Detailed report from android-based survey from urban water schemes and plants. b) Raw data from android-based survey from urban water schemes and plants. c) Water quality reports from urban water schemes and plants. d) GIS Maps of all urban water schemes and plants.
2.	e) Detailed report from android-based survey from rural water schemes and plants. f) Raw data from android-based survey from rural water schemes and plants. g) Water quality reports from rural water schemes and plants. h) GIS Maps of all rural water schemes and plants.
3.	i) Detailed report from android-based survey from representative sample of urban households. j) Raw data from android-based survey from representative sample of urban households. k) Water quality reports from representative sample of urban households. l) GIS Maps of representative sample of urban households.

IMPLEMENTATION PERIOD: 9 MONTHS

MANPOWER FOR WATER QUALITY SURVEY & MONITORING OF WATER SUPPLY SCHEMES

Sr. No.	Consultants	No.	Qualification and Experience	Job Description
1.	Team Leader (International)	1	Environmental / Civil Engineering Works -B.Sc. with 10 years or M.Sc. with 07 Years or PhD with 04 Years	He will be responsible to conduct the overall baseline survey activity in the light of TOR of the Consultancy and also establish the office to accommodate the reports and documents for the project and submit reports as per TORs. He will also be submitting progress reports of the projects whenever requested by the Department. He shall also give presentation to the depth or where depth request and manage all the activities pertaining to the survey.
2.	Assistant Engineer (Civil) (Local) / Water	2	Environmental / Civil Engineering Works - B.Sc. with	There will be one Assistant Engineer for the North Zone and One for South Zone.

	Quality Analyst		08 years or M.Sc. with 05 Years or PhD with 03 Years	They will oversee the collection of the data of existing schemes as per TOR. He will arrange the data and will submit this to TOR. He shall assist Team Leader and provide all the necessary data in report writing and presentation. He will visit the site and vet the data collected by Surveyors.
3.	Assistant Engineer (Electrical) (Civil) (Local)	2	Electrical Engineering- B.Sc. with 08 years or M.Sc. with 05 Years or PhD with 03 Years	There will be one Assistant Engineer for the North Zone and One for South Zone. He oversee the collection of data regarding present status of pumping machinery, all electric installation and present status of WAPDA connection.
4.	GIS Expert (Local)	1	GIS/MIS Expertise/Urban Planner- B.Sc. with 10 years or M.Sc. with 07 Years or PhD with 04 Years	He will be responsible for all GIS mapping related activities in the survey.
5.	Supervisors (Local)	9	Survey or Civil Engineering- B.Sc. Engineer with 10 years of Experience or M.Sc. Engineer with 5 Years of Experience	Supervisors will be present in each division and be responsible for the field activity in their respective division. They will oversee day-to-day survey activities and will do spot checks for surveyors. They will be responsible for training surveyors and resolving issues in the field.
6.	Surveyors (Local)	36	Diploma in Survey-5 years of experience	They will be responsible for going to each facility and household, carrying out the android based survey and collecting a water sample, to be tested at an accredited lab

Note: Total functional schemes are almost 3500 and total samples would be about $3500 \times 10 = 35000$ for each water supply scheme. The samples would vary depending on the size of scheme either small, medium or large water supply scheme (amount would be charged as per actual tests).

2. TORs for Outsourcing of Water Supply Schemes

The TOR defines the scope of the agreement to be drawn between the Consultants and "HUD&PHED" hereinafter called "Client". The Terms of Reference of the consultancy firm shall be as under:

- i) Study the existing system of Operations and maintenance for urban and rural water schemes in Punjab and submit a report
- ii) Propose sustainable O&M mechanism for outsourcing of water supply schemes of PHED and TMAs
- iii) Study of HR capacity for operation and maintenance at TMA and routine and preventive maintenance of TMA assets
- iv) Undertake detailed study and highlight legal, financial and operational requirements of the proposed model
- v) Study the existing complaint redressal systems for water supply and propose a new system based on feedback
- vi) Prepare contract agreement between client Department and private operator to allow outsourcing of O&M of water supply schemes
- vii) Prepare contract agreement for outsourcing of water supply schemes between PHED and TMA/Local Governments
- viii) Provide detailed work plan for outsourcing of schemes and handover to interested parties
- ix) Identify clusters of districts to phase out implementation
- x) Provide support to HUD&PHED in setting-up a monitoring mechanism to ensure outsourcing of the schemes.

Transaction Implementation:

- xi) Prepare an Information Memorandum (IM) that incorporates all necessary details of the project.
- xii) Prepare bid documents, EOI, RFP, evaluation criteria
- xiii) Administration of the tendering process
- xiv) Shortlist interested bidders, and evaluate bids from interested parties
- xv) Conducting Pre-bid meeting with investors in consultation
- xvi) Assist government agency in contract negotiation with bidder.

DELIVERABLES FOR OUTSOURCING OF WATER SUPPLY SCHEMES

Deliverable	
1.	Inception Report
2.	Detailed Report of study of existing system of Operation & Maintenance for Urban Water Supply Schemes in Punjab
3.	Report on proposed sustainable O&M mechanism for outsourcing of Water Supply Schemes of PHED and TMAs, (including detailed study and highlights of legal, financial and operational requirements of the proposed model)
4.	Financial Model including financial analysis of the project
5.	Details of monitoring mechanism to ensure completion of project on time
6.	Technical Analysis of the project plan
7.	Information memorandum for the project
8.	Propose new complaint redressal system
9.	Prepare Contract agreement between PHED and TMAs to allow outsourcing of O&M of water supply schemes
10.	Prepare Contract Agreement for outsourcing of water supply schemes between PHED and private party
11.	Provide detailed work plan for outsourcing of schemes and handover to interested parties and also identify clusters of districts to phase out implementation
12.	List of interested bidders
13.	<p>Complete Tender Documents including EOI, RFP etc .In order to conceive a comprehensive attractive and workable mode, consultant shall also develop Request for Proposal (RFP) and Expression of Interest (EOI) which will include the following:</p> <ul style="list-style-type: none">• Preliminary investment cost and financing plan• Tentative project execution schedule• Financial attractiveness of the project• Economic and other benefits of the project• Proposed cost recovery mechanism• Preliminary risk identification and allocation• Proposed evaluation criteria.• Identify the human, physical and financial resources (if any) which the government may commit for the operation of the project.
14.	Prepare bid documents, short listed interested bidders and evaluate bids from the interested parties

15.	Bid evaluations for selection of successful bidders including Letter of Intent (LOI) and consolidated report (bid evaluations, final agreement, successful bidder)
16.	Sign Contract Agreement with TMAs/Municipal committees
17.	Sign agreements with contractors
18.	Ensure successful handover of water schemes to winning bidders

IMPLEMENTATION PERIOD: 6 MONTHS

MANPOWER FOR OUTSOURCING OF WATER SUPPLY SCHEMES

Sr. No.	Position	No.	Qualification	Man Month
A	Foreign Consultants as Lead Partner			
1.	Water and Sanitation Expert	1	M.Sc. Civil / Environmental Engineering with 10 years experience in Water & Sanitation Sector	3
B	Local Partners			
1.	Water expert	2	M.Sc. Civil / Environmental Engineering with 10 years experience in Water & Sanitation Sector	6
2.	Contract Manager	1	M.Sc. Civil / Construction Management with 10 years experience in Contract Management	3
3.	Legal Experts	1	Law Degree (LLM) with 10 years experience	3
4.	Quantity Surveyor	1	B.S. Civil Technology / Diploma in Civil Engineering with 7 years experience in Quantity Surveying	3

3. TORs for Survey for Identification of Outlived Pipelines of WASAs

The TOR defines the scope of the agreement to be drawn between the Consultants and "HUD&PHED" hereinafter called "Client". The Terms of Reference of the consultancy firm shall be as under:

- i) Review the baseline component report prepared by Urban Unit on condition assessment of pipe network, Create a database of all pipelines with attributes such as length, year of construction, type of material, etc. and review documents such as GIS based maps, Civil, Electrical and Mechanical Drawings, etc prepared by Urban Unit.
- ii) Survey to verify the status of 10% pipelines in five major cities of Punjab preferably by using electronic device such as Ground Penetrating Radar (GPR).
- iii) Evaluate capacity of distribution network as a whole
- iv) Create a master plan for replacement of outlived pipelines including:
 - a) The cost of replacement
 - b) Engineer's Estimate, Specifications, Bill of Quantities along with drawings
 - c) Bid documents, Bid Evaluations till award of contract

DELIVERABLES FOR SURVEY FOR IDENTIFICATION OF OUTLIVED PIPELINES IN 5 WASAS

Deliverable	
1.	Inception Report
2.	Feasibility study
3.	Interim report
4.	Financial Model including financial analysis of the project
5.	Detailed feasibility study
6.	BoQ / Cost estimates
7.	Detailed plan for pipeline replacement
8.	Environment Impact Assessment (EIA) report
10.	Technical analysis of the project plan
11.	Complete Tender Documents including EOI, RFP etc
12.	The key performance indicators for monitoring work of contractor
13.	Contract agreement
14.	Evaluation of bids

IMPLEMENTATION PERIOD: 3 MONTHS

**MANPOWER FOR SURVEY FOR IDENTIFICATION OF OUTLIVED PIPELINES
IN 5 WASAS**

Sr. No.	Designation	Qualification	Total Man Months
1.	Water & Sanitation Specialist / Team Leader	M.Sc. Civil / Environmental Engineering with 10 years experience in Water & Sanitation Sector	1
2.	Water Supply Expert	M.Sc. Civil / Environmental Engineering with 10 years experience in Water Sector	1
1.	Survey Expert / Group Leader	B.Sc. Civil Engineering with 15 years experience in Surveying	2
2.	Survey Engineer (2 Nos.)	B.Sc. Civil Engineering with 10 years experience in Surveying	10
3.	Surveyors Field (10 Nos.)	B.S. Civil Technology / Diploma in Civil Engineering with 10 years experience in Surveying	102
4.	GIS Expert / Group Leader	M.Sc. GIS Mapping with 10 years experience in GIS Sector	3.50
5.	GIS Analyst (1 No.)	M.Sc. GIS Mapping with 07 years experience in GIS Sector	2
6.	Junior Water Supply Engineer (2 Nos.)	M.Sc. Civil / Environmental Engineering with 05 years experience in Water Sector	12
7.	Electrical Specialist/ Group Leader	M.Sc. Electrical Engineering with 10 years experience in Water & Sanitation Sector	2
8.	Mechanical Specialist/ Group Leader	M.Sc. Mechanical Engineering with 10 years experience in Water & Sanitation Sector	2
9.	Senior Civil Engineer	M.Sc. Civil / Environmental Engineering with 10 years experience in Water & Sanitation Sector	2
10.	Sociologist	M.Sc. Sociology with 10 years experience in Water & Sanitation Sector	2
11.	Urban Planner	M.Sc. Urban Planning with 10 years experience in Water & Sanitation Sector	1
12.	Quantity Surveyor (10 Nos.)	B.S. Civil Technology / Diploma in Civil Engineering with 10 years experience in Quantity Surveying	10

13.	Security & Boarding & Lodging (Foreign Staff)	3
14.	Office and Transport	3

4. TORs for Performance Evaluation & Rationalization of Technical Staff of HUD&PHED

The TOR defines the scope of the agreement to be drawn between the Consultants and "HUD&PHED" hereinafter called "Client". The Terms of Reference of the consultancy firm shall be as under:

- i) Timelines: 3 months
- ii) Evaluate the performance of Technical Staff in PHED and WASAs.
- iii) Assess the current organizational structure (Management and Technical Level from BPS 11 to 20) in PHED and WASAs and give recommendations for restructuring them by:
 - a) Estimating a proxy of HR demand per type of service delivery per 10,000 people and using this to determine the ideal number and qualifications of staff in an efficient water utility.
 - b) Determining the existing HR capacity in PHED and WASAs, in terms of numbers and skill sets.
 - c) Calculating the HR shortages and assessing the HR gaps in PHED and WASAs.
 - d) Proposing recommendations for filling the shortages and gaps in HR in PHED and WASAs
- iv) Propose a performance management system to enhance managers' skills and improve monitoring and supervision of staff.
- v) Assess the current job descriptions and recruitment practices of PHED and WASAs and give recommendations for creation of job descriptions adequate to the tasks to be performed and recruitment to be made more transparent and meritocratic.
- vi) Provide recommendations for the way in which training institutions can address the shortages and gaps, and propose necessary trainings to build the capacity of current and newly hired staff to maximize their productivity and recommendations for alternative ways to meet the said shortages and gaps.

DELIVERABLES FOR PERFORMANCE EVALUATION & RATIONALIZATION OF TECHNICAL STAFF OF HUD&PHED AND WASAS

Deliverable	
1.	Inception Report
2.	Technical analysis of human resource
3.	The Key Performance Indicators of staff performance
4.	Report summarizing rationalization of staff, new staff required, human resource gaps and recommendations

IMPLEMENTATION PERIOD: 3 MONTHS

MANPOWER REQUIRED FOR PERFORMANCE EVALUATION & RATIONALIZATION OF TECHNICAL STAFF OF HUD&PHED AND WASAS

Sr. No.	Consultants	No.	Qualifications and Experience	
1.	Team Leader (International)	1	PhD Human Resource Management with 04 years relevant experience including drafting of project proposal, management of water utilities and human resource management.	
2.	Water Supply Expert (Local)	1	Water Supply Engineering. B.Sc. with 10 years or M.Sc. with 07 Years or PhD with 04 Years	
3.	HR Expert	1	Master in HR Development with 10 years experience	
	Consultants		No.	Man Months
1.	Team Leader (Foreign)		1	3
2.	Water Supply Expert (Local)		1	3
3.	HR Expert (Local)		1	3
5.	Security & Boarding & Lodging (Foreign Staff)		3	

5. TORs for Registration / Renewal of Pumps, Pipes, Valves and Specials Manufacturers in HUD&PHED

The TOR defines the scope of the framework agreement to be drawn between the Consultants and "HUD&PHED" hereinafter called "Client". The Terms of Reference of the consultancy firm shall be as under:

- i) Timelines: 4 months
- ii) Develop Evaluation Criteria for Registration/Renewal of Manufacturers considering the following:
 - Financial capacity
 - Income Tax information
 - Managerial, Technical and Non-technical Staff requirements
 - Equipment requirements for the following units of the factory:
 - ✓ Designing
 - ✓ Moulding, fabrication/machining
 - ✓ Assembling
 - ✓ Painting
 - ✓ Testing
 - ✓ Quality Control and Quality Assurance
 - Sale and after sale services
 - Water supply, sanitation and solid waste disposal facilities
 - Environment Impact Assessment, Negative impact and mitigation measures
 - Technical literature / Specifications i.e. material source, material, designing, moulding, fabrication/machining, assembling, painting, testing and performance standards, production capacity
 - Operation and Maintenance facilities etc
 - Field units
 - Experience on general and similar assignments
 - Tendering capacity
 - Performance assessment based on works executed in the last 10 years.
- iii) Prepare a comprehensive document for registration of pumps, pipes, valves and specials manufacturers which should include following information:
 - a) Evaluation Criteria.
 - b) Checklist of information/documents to be submitted by applicants.
 - c) Checklist of information/documents that shall notify the applicant as non-responsive and does not qualify for evaluation of Registration and Renewal process of the Manufacturers.
 - d) Instruction to Applicants for preparation and submission of Registration/Renewal document.

- e) Information regarding declaration that the Manufacturers has not been blacklisted/penalized by the department in the past 10 years on any project.
- f) Conduct visit and evaluate performance of one project of similar size in hand or already executed of the manufacturers applying for registration and renewal of pumps/pipes.
- iv) Registration of manufacturers of pipes, pumps, valves and specials for year 2017-18 & 2018-19.
- v) Review mechanism on the lines of above steps.

DELIVERABLES FOR REGISTRATION / RENEWAL OF PUMPS, PIPES, VALVES AND SPECIALS MANUFACTURERS in HUD&PHED

Deliverable	
1.	Inception Report
2.	Review and revise documents prepared for registration
3.	Checklist of documents to be prepared by applicants
4.	Develop scoring criteria
5.	List of evaluated manufacturers

IMPLEMENTATION PERIOD: 4 MONTHS

MANPOWER FOR REGISTRATION / RENEWAL OF PUMPS, PIPES, VALVES AND SPECIALS MANUFACTURERS IN HUD&PHED

Sr. No.	Staff	Qualification	Man months
1.	Project / Team Leader (International)	M.Sc. Civil Engineering with 7 years experience or B.Sc. Civil Engineering with 10 years experience	4 months
2.	Industrial Engineer	M.Sc. Industrial Engineering with 7 years experience or B.Sc. Industrial Engineering with 10 years experience	4 months
3.	Metallurgical Engineer	M.Sc. Metallurgical Engineering with 7 years experience or B.Sc. Metallurgical Engineering with 10 years experience	4 months
4.	Electrical Engineer	M.Sc. Electrical Engineering with 7 years experience or B.Sc. Electrical Engineering with 10 years experience	4 months
5.	Procurement Specialist (2-Nos.)	M.Sc. Construction Management / Contract Management with 7 years	4 months

		experience	
--	--	------------	--

6. TORs for Registration / Renewal and Prequalification of Contractors in HUD&PHED

The TOR defines the scope of the agreement to be drawn between the Consultants and "HUD&PHED" hereinafter called "Client". The Terms of Reference of the consultancy firm shall be as under:

- i) Timelines: 4 months
- ii) Develop Evaluation Criteria for prequalification considering the following:
 - Financial capacity (Current Situation, Annual Turnover)
 - Permanent Staff
 - Equipment (Owned / Rental) including year of manufacturing and quality of equipment
 - Experience requirement on general and similar assignments.
 - Performance assessment based on works executed.
- iii) Prepare a comprehensive document for registration / enlistment of contractors which should include the following:
 - a). Evaluation criteria.
 - b). Checklist of information / documents to be submitted by applicants.
 - c). Checklist of information / documents that shall notify the applicant as non-responsive and does not qualify for evaluation of Registration / Renewal process of Contractors.
 - d). Sample letter of registration / renewal to be submitted by the applicant.
 - e). Instructions to Applicants for preparation and submission of registration / renewal document.
 - f). Preparation of Forms to be filled in and submitted by the Applicants regarding information highlighted in vi above.
 - g). Sample list of staff and equipment to be available with Contractor for each category / limit notified for Pakistan Engineering Council.
 - h). Information regarding declaration that the Contractor has not been blacklisted / penalized in the past on any project.

- i). Conduct / evaluate one project of similar size in hand or already executed by the Contractor applying for Registration / Renewal in HUD&PHED for category registered with Pakistan Engineering Council.
- iv) Conduct prequalification of contractors for year 2017-18 & 2018-19 (Category wise) based on considerations mentioned above.
- v) Review mechanism on the lines of above steps.

DELIVERABLES FOR REGISTRATION / RENEWAL AND PREQUALIFICATION OF CONTRACTORS IN HUD&PHED

Deliverable	
1.	Inception Report
2.	Detailed Report on the documents submitted by the Contractor in the light of current enlistment / renewal procedure along with visit report of the projects executed by the Firm / Contractor
3.	Review and revise documents prepared for registration
4.	Report with new updated version of the enlistment / renewal / pre-qualification of the Firm / Contractor procedure
5.	Checklist of documents to be prepared by applicants
6.	Develop scoring criteria
7.	Final report with List of prequalified contractors

IMPLEMENTATION PERIOD: 4 MONTHS

MANPOWER FOR REGISTRATION / RENEWAL AND PREQUALIFICATION OF CONTRACTORS IN HUD&PHED

Sr. No.	Staff	Qualification	Man months
1.	Project / Team Leader (International)	M.Sc. Construction Management / Contract Management with 7 years experience or B.Sc. Civil Engineering with 10 years experience	4
2.	Legal Assistant	Law Degree (LLM)	4
3.	Procurement and Contract Management Advisor (3-Nos.)	M.Sc. Contract Management/ Construction Management with 7 years experience in Contracts Management	12

TERMS OF REFERENCE
Individual Consultant (National Consultant)
Utility Institutional Reform Expert

For
“Restructuring of Water and Sanitation Agencies of Punjab”

BACKGROUND

Water & Sanitation Agencies (WASAs) in five large cities of the Province are primarily responsible for planning, designing and service delivery of water supply, sewerage and drainage facilities. The WASAs are working as agencies of Development Authorities, but for all practical purposes rely on Govt. of Punjab for capital investment and operational shortfall each year.

WASAs play a significant role in provision of municipal services, which is essential for vibrant cities and its inhabitant’s quality of life. However, the quality of services in their mandated area is quite deficient primarily due to their institutional design, including issues of autonomy, governance and professional capacity at all levels. This has led to a continuous decline of various service delivery indicators which despite heavy capital investments and annual subsidies have not translated into improved water services. The key service delivery indicators such as ‘own source revenue’, ‘service coverage area of water supply & sewerage’, ‘duration of water supply hours’, ‘high non-revenue water’, ‘low revenue collection’, ‘inadequate response to Monsoon emergencies’ etc. are far below compared to most of the cities in the developing countries

According to World Bank Study in 2013, around 89000 children, under 5, die every year in Pakistan due to water borne diseases. Another indicator, the duration of water supply is less than 8 hours in about 90% areas of WASAs. Furthermore, the non-revenue water in Punjab WASAs ranges from 27% to 51 % as compared to the average of 22% in the other developing countries due to this reason WASAs are not able to cover the operational expenditures from the revenue. This necessitates significant improvement of WASAs, their working and review of their governance system and accountability mechanism to transform into performing utilities.

RATIONALE

The existing Governance system in WASAs is riddled with multiple layers of decision making & control, ranging from the DG of Development Authorities, to HUD & PHED, Finance, P&D, and even Chief Minister’s Secretariat. With this long and ambiguous chain of command, there is no clear cut responsibility for decision making and no single authority can be held accountable.

The Department, as per vision of Chief Minister has been working on a comprehensive plan under guidance of Chairman P&D with technical support of Urban Unit, World Bank and JICA to transform the WASAs into well performing water utilities, at par with other successful models in some of the developing countries.

The key reform is to make WASA an independent professional entity with clearly defined areas of responsibility, coupled with commensurate financial & administrative authority and a single line of objective & performance based accountability.

OBJECTIVE

The Urban Sector Planning and Service Unit (hereinafter called as “Client”) is soliciting proposals for International Consultancy Firms related to the conducting restructuring of Urban Water and Sanitation Utilities (hereinafter called as “Consultant”) to formulate Road Map of Reform/Restructuring Plan and walkthrough Water and Sanitation Utilities of Punjab in Lahore, Faisalabad, Gujranwala, Multan and Rawalpindi to implement the reform/restructure plan of (hereinafter called as “Assignment”). The overall objective of the assignment is to:

- a) Prepare Critical Review and GAP Analysis along with Road Map of Utility Reform/Restructure Plan for Water and Sanitation Agencies of Punjab.
- b) Prepare relevant documents including Operational SOPs, five years Business Plans, Job Descriptions, Capacity Development Plan, etc for the implementation of Reform/Restructure Plan including all areas like Water Supply, Sewerage, Drainage, Human Resource Management, Financial Management and etc.
- c) Implement the approved detailed Reform/Restructure Plan

SCOPE OF WORK

The scope of work of the consultant is described as under:

Task 1: Critical Review and GAP Analysis:

- Critical Review of all the policy, operational functions, procedures and practices of Water and Sanitation Agencies of Punjab including Water Supply, Sewerage, Drainage, Human Resource, Financial & Revenue, MIS & GIS, Planning, Administration and other related matters.
- Perform GAP Analysis obtaining reliable data on service delivery and associated functions to conduct comparison of actual vs potential performance. The Gap Analysis will also elaborate the best use of current resources and introduction on new technologies. The GAP Analysis will cover all areas including Water Supply, Sewerage, Drainage, Human Resource, Financial & Revenue, MIS & GIS, Planning, Administration and Legal matters. It will also include the current Key Performance Indicators (KPIs) of each WASA.
- Submit the draft “Critical Review and GAP Analysis Report” to the client for review at least 10 days before the Stakeholder Workshop.
- Conduct Stakeholder Workshop and make presentations on Draft “Critical Review and GAP Analysis Report” also amend the documents accordingly to the comments in the stakeholder workshop. Submit the amended document to client for approval.

Deliverable: “Critical Review and GAP Analysis Report”

Duration: One (01) Month

Task 2: Road Map for Utility Reform/Restructure Plan:

- Prepare options for Reform/Restructure Plan along with timeline, roles and responsibilities which will tackle all the policy and operational level matters

- based on the approved “Critical Review and GAP Analysis Report”. The consultant will also prepare three (3) years KPIs as a result of proposed Reform/Restructure Plan which will be used as benchmark for performance evaluation and tool for Monitoring & Evaluation during implementation phase.
- Submit the draft “Road Map for Utility Reform/Restructure Plan” to the client for review at least 10 days before the Stakeholder Workshop.
 - Conduct Stakeholder Workshop and make presentations on Draft “Road Map for Utility Reform/Restructure Plan” also amend the documents accordingly to the comments in the stakeholder workshop. Submit the amended document to client for approval.

Deliverable “Road Map for Utility Reform and Restructure Plan”

Duration: One (01) Month

Task 3: Detailed Documents/Manual/SOP for Utility Reform/Restructure

- Based on the approved “Road Map for Utility Reform and Restructure Plan”, the consultant prepare detailed documents with responsibilities and timeline of each responsible official necessary for the implementation of approved documents which will include Standard Operational Procedures (SOP) for Service Delivery, three (3) years Business Plans (one year operational plan with cost), Human Resource Manual, Financial Management Manuals, Revenue Management Manual, three (3) years Capacity Development Plan (including courses design in management and operational areas for middle and top management), Administration Manual, Procurement Manual, Management Information System Manual, Geographical Information System Manual and Public Private Partnership, Detailed Implementation Plan for Utility Reform/Restructure and etc. The documents will be prepared for each Water and Sanitation Agencies of Punjab and submitted to the client for onward distribution to relevant WASA.
- The consultant will hold detailed consultative session with all relevant stakeholders along with five Water and Sanitation Agencies of Punjab in their respective offices to explain all the draft documents and amend them based on the comments in the consultative session accordingly. The amended documents will be submitted to the client for onward distribution to the relevant WASA.
- The consultant will also present the amended documents to the competent authority of each WASA for approval purpose.

Time period: Three (03) Months

Deliverable: Detailed Documents/Manual/SOP for Utility Reforms/Restructure

Task 4: Implementation of Reform/Restructure Plan

- The Consultant along with PMU will facilitate each WASA in the transition phase as per approved implementation plan and provide appropriate support which will include:
 - Recruitment of management team as per HR road map
 - Service Delivery in Water Supply, Sewerage & Drainage which will include issuance of notifications accordingly to the Standard Operational Procedure (SOP), Management Information System, Geographic Information System and etc.
 - Human Resource matters as per approved Human Resource Manual which will include recruitment of management and operational staff, design and delivery of courses in management and operational areas for middle and management (the facilities will be provided by the client), and etc.
 - Financial & Revenue matters as per approved Financial and Revenue Management Manual with tariff revision proposal, one year budget (based on approved one year operational plan), financial statements as per current prevailing laws,
 - Procurement matters as per approved Procurement Management Manual which will include procurement plan etc.
- Prepare and submit monthly progress reports of each WASA along with work performed against planned work with KPIs as per Implementation Plan, indicating bottleneck and options to eliminate the bottlenecks in implementation.
- Present the monthly progress reports to stakeholders of each WASA along with client separately for further for corrective actions.

Time period:One (01) Month

Deliverable: “Monthly Progress Report along with KPIs of Implementation of Reform/Restructure Plan”

TIME PERIOD AND REPORTING

The time period of the assignment is four (06) months from the signing of contract. The Consultant will report to the Client. The consultant will submit and present all deliverable to the client and relevant stakeholders for their review and approval. The comments will be incorporated by the consultant for the final approval of the client.

CONSULTANT EXPERIENCE

16 years education or in engineering, business administration or environmental engineering, environmental science, economics, finance or other fields relevant from a recognized institution.

Over 10 years of experience with at least 05 years specific experience in public utilities or WSS service provision. Preference will be given for specific reforms related experience.

TERMS OF REFERENCE
Individual Consultant (National Consultant)

Legal Expert

For

“Restructuring of Water and Sanitation Agencies of Punjab”

BACKGROUND

Water & Sanitation Agencies (WASAs) in five large cities of the Province are primarily responsible for planning, designing and service delivery of water supply, sewerage and drainage facilities. The WASAs are working as agencies of Development Authorities, but for all practical purposes rely on Govt of Punjab for capital investment and operational shortfall each year.

WASAs play a significant role in provision of municipal services, which is essential for vibrant cities and its inhabitant’s quality of life. However, the quality of services in their mandated area is quite deficient primarily due to their institutional design, including issues of autonomy, governance and professional capacity at all levels. This has led to a continuous decline of various service delivery indicators which despite heavy capital investments and annual subsidies have not translated into improved water services. The key service delivery indicators such as ‘own source revenue’, ‘service coverage area of water supply & sewerage’, ‘duration of water supply hours’, ‘high non-revenue water’, ‘low revenue collection’, ‘inadequate response to Monsoon emergencies’ etc. are far below compared to most of the cities in the developing countries

According to World Bank Study in 2013, around 89000 children, under 5, die every year in Pakistan due to water borne diseases. Another indicator, the duration of water supply is less than 8 hours in about 90% areas of WASAs. Furthermore, the non-revenue water in Punjab WASAs ranges from 27% to 51 % as compared to the average of 22% in the other developing countries due to this reason WASAs are not able to cover the operational expenditures from the revenue. This necessitates significant improvement of WASAs, their working and review of their governance system and accountability mechanism to transform into performing utilities.

RATIONALE

The existing Governance system in WASAs is riddled with multiple layers of decision making & control, ranging from the DG of Development Authorities, to HUD & PHED, Finance, P&D, and even Chief Minister’s Secretariat. With this long and ambiguous chain of command, there is no clear cut responsibility for decision making and no single authority can be held accountable.

The Department, as per vision of Chief Minister has been working on a comprehensive plan under guidance of Chairman P&D with technical support of Urban Unit, World Bank and JICA to transform the WASAs into well performing water utilities, at par with other successful models in some of the developing countries.

The key reform is to make WASA an independent professional entity with clearly defined areas of responsibility, coupled with commensurate financial & administrative authority and a single line of objective & performance based accountability.

OBJECTIVE

The Urban Sector Planning and Service Unit (hereinafter called as “Client”) is soliciting proposals for International Consultancy Firms related to the conducting restructuring of Urban Water and Sanitation Utilities (hereinafter called as “Consultant”) to formulate Road Map of Reform/Restructuring Plan and walkthrough Water and Sanitation Utilities of Punjab in Lahore, Faisalabad, Gujranwala, Multan and Rawalpindi to implement the reform/restructure plan of (hereinafter called as “Assignment”). The overall objective of the assignment is to:

- a) Prepare Detailed Reform/Restructure Plan keeping in view the approved road map for Water and Sanitation Agencies of Punjab.
- b) Prepare relevant documents including Operational SOPs, five years Business Plans, Job Descriptions, Capacity Development Plan, etc for the implementation of Reform/Restructure Plan including all areas like Water Supply, Sewerage, Drainage, Human Resource Management, Financial Management and Legal matters.
- c) Implement the approved detailed Reform/Restructure Plan

SCOPE OF WORK

The scope of work of the consultant is described as under:

Task 1: Critical Review and GAP Analysis:

- Critical Review of all the legal documents including policies, procedures and practices of Water and Sanitation Agencies of Punjab.
- Perform GAP Analysis obtaining reliable data on legal matters to conduct comparison of actual vs potential performance. The Gap Analysis will also elaborate the best use of current resources. The GAP Analysis will cover all areas of legal matters. It will also include the current Key Performance Indicators (KPIs) of each WASA.
- Submit the draft “Critical Review and GAP Analysis Report” to the client for review at least 10 days before the Stakeholder Workshop.
- Conduct Stakeholder Workshop and make presentations on Draft “Critical Review and GAP Analysis Report” also amend the documents accordingly to the comments in the stakeholder workshop. Submit the amended document to client for approval.

Deliverable: “Critical Review and GAP Analysis Report”

Duration: 0.5 Month

Task 2: Road Map for Utility Reform/Restructure Plan:

- Prepare options for Reform/Restructure Plan along with timeline, roles and responsibilities which will tackle all the legal policy and operational level matters based on the approved “Critical Review and GAP Analysis Report”.

The consultant will also prepare three (3) years KPIs related to legal aspect as a result of proposed Reform/Restructure Plan which will be used as benchmark for performance evaluation and tool for Monitoring & Evaluation during implementation phase.

- Submit the draft “Road Map for Utility Reform/Restructure Plan” to the client for review at least 10 days before the Stakeholder Workshop.
- Conduct Stakeholder Workshop and make presentations on Draft “Road Map for Utility Reform/Restructure Plan” related to legal matters and also amend the documents accordingly to the comments in the stakeholder workshop. Submit the amended document to client for approval.

Deliverable “Road Map for Utility Reform and Restructure Plan”

Duration: 0.5 Month

Task 3: Detailed Documents/Manual/SOP for Utility Reform/Restructure

- Based on the approved “Road Map for Utility Reform and Restructure Plan”, the consultant prepare detailed legal documents with responsibilities and timeline of each responsible official necessary for the implementation of approved documents. The documents will be prepared for each Water and Sanitation Agencies of Punjab and submitted to the client for onward distribution to relevant WASA.
- The consultant will hold detailed consultative session with all relevant stake holders along with five Water and Sanitation Agencies of Punjab in their respective offices to explain all the draft documents and amend them based on the comments in the consultative session accordingly. The amended documents will be submitted to the client for onward distribution to the relevant WASA.
- The consultant will also present the amended documents to the competent authority of each WASA for approval purpose.

Time period: Two (02) Months

Deliverable: Detailed Documents/Manual/SOP for Utility Reforms/Restructure

Task 4: Implementation of Reform/Restructure Plan

- The PMU will facilitate each WASA in the transition phase as per approved implementation plan and provide appropriate support which will include:
 - New legal status
 - Establishment of regulator and M&E regime
 - Performance contracts with HUD&PHED
 - Performance contracts within WASA amongst various departments and MD
 - Human Resource matters as per approved Human Resource Manual which will include issuance of relevant notifications and etc.

- Procurement matters as per approved Procurement Management Manual which will include issuance of relevant notifications, etc.
- Legal, administrative and others matters as per approved documents which will include issuance of relevant notifications and etc.
- Prepare and submit monthly progress reports of each WASA along with work performed against planned work with KPIs as per Implementation Plan, indicating bottleneck and options to eliminate the bottlenecks in implementation.
- Present the monthly progress reports to stakeholders of each WASA along with client separately for further for corrective actions.

Time period:One (01) Month

Deliverable: “Monthly Progress Report along with KPIs of Implementation of Reform/Restructure Plan”

TIME PERIOD AND REPORTING

The time period of the assignment is four (04) months from the signing of contract spread over a period of six months. The Consultant will report to the Client. The consultant will submit and present all deliverable to the client and relevant stakeholders for their review and approval. The comments will be incorporated by the consultant for the final approval of the client.

CONSULTANT EXPERIENCE

LLB preferably LLM from recognized institutional with at least 10 years' experience in the law related matters preferably in public utility matters.

