



GOVERNMENT OF SINDH
PLANNING & DEVELOPMENT DEPARTMENT
PROJECT COORDINATION & MONITORING UNIT (PCMU)
Sindh Water and Agriculture Transformation (SWAT) Project
EXPRESSION OF INTEREST (EOI)

Individual Consultant

Development of GIS-Based Project Mapping System

Introduction

The Project Coordination & Monitoring Unit (PCMU), Sindh Water and Agriculture Transformation (SWAT) Project, Planning & Development Department, Government of Sindh, invites Expressions of Interest (EOI) from qualified individual consultants for the assignment titled “Development of GIS-Based Project Mapping System.”

The assignment will be financed under the SWAT Project funded by the Government of Sindh.

Scope of Services

The individual consultant will develop a GIS-based project mapping system to visualize project locations, progress, and related data for improved monitoring and decision-making.

The consultant will design and implement a user-friendly GIS platform using open-source tools such as QGIS and web-based mapping solutions, enabling spatial representation of projects across Sindh, including data visualization and reporting features.

The assignment is expected to be completed within three (03) weeks.

Eligibility Criteria

Interested individual consultants should demonstrate:

- Master’s degree in GIS, Geomatics, Geography, Computer Science, Information Technology, or a related field from an HEC-recognized university.
- At least 3 similar assignments involving GIS systems, mapping platforms, or spatial data visualization
- Relevant qualifications in GIS, Geomatics, IT, Computer Science, or related field
- Proven experience in GIS software (QGIS, ArcGIS, Leaflet, GeoServer, etc.)
- Experience with public sector projects (preferred)



- Valid CNIC
- Strong portfolio of completed GIS-related work
- Affidavit/undertaking confirming that the consultant has not been blacklisted

Estimated Cost

PKR 2,000,000 (Lump Sum)

Selection Method

Selection will follow the Individual consultant method under SPPRA Rules 2010 (Amended):

1. Individual consultants will be ranked based on qualifications and relevant experience
2. The top-ranked consultant will be invited to submit a combined technical and financial proposal
3. Negotiations will be held with the highest-ranked candidate

Submission of EOI

Interested individuals may submit:

- CV
- Expression of Interest
- Portfolio of relevant assignments

within 15 days of publication of this notice through **e-Pak Acquisition and Disposal System**.

Only shortlisted candidates will be contacted.

Project Coordinator

Project Coordination & Monitoring Unit (PCMU), SWAT Project
Directorate Sindh Water Sector & Barrages Improvement
2nd Floor, Sindh Bureau of Statistics Building
13, Block 8, Chaudhry Khaliqzaman Road, Clifton, Karachi
Phone: 021-99205862-3
Email: info@pcmu.gos.pk | procurement@pcmu.gos.pk



TERMS OF REFERENCE (TORs)

Individual Consultant – GIS-Based Project Mapping System

1. Background

The Government of Sindh is implementing the SWAT Project to improve planning and monitoring of development initiatives. PCMU intends to develop a GIS-Based Project Mapping System to enhance spatial analysis and decision-making.

2. Objective of the Assignment

To design and develop a GIS-based mapping system using open-source tools to:

- Visualize project locations across Sindh
- Integrate project data with spatial layers
- Improve monitoring and reporting
- Provide a user-friendly interface

3. Scope of Services

3.1 System Design & Planning

- Review available project data
- Define GIS database structure
- Identify appropriate open-source tools (QGIS, Leaflet, GeoServer)
- Prepare system design and workflow

3.2 Data Collection & Preparation

- Clean and organize datasets
- Geocode project locations
- Develop base maps
- Ensure data standardization

3.3 GIS Development



- Create GIS layers for:
 - Project locations
 - Project sectors/types
 - Implementation status
- Develop web-based GIS interface
- Enable filtering, search, and visualization

3.4 Dashboard Development

- Create dashboards showing:
 - Geographic distribution
 - Project status indicators
- Ensure simplicity and usability

3.5 Testing & Validation

- Test system functionality
- Validate data with PCMU
- Incorporate feedback

3.6 Training

- Conduct at least one training session
- Provide user guidance
- Submit manuals

3.7 Deployment

- Deploy system (local/cloud)
- Ensure accessibility

4. Deliverables



Sr. No.	Deliverable	Timeline
1	Inception Report	End of Week 1
2	GIS Data Structure & Base Maps	Week 1
3	Digitized Project Maps	Week 2
4	Interactive GIS System (Draft)	Week 2
5	Dashboard	Week 3
6	Final GIS System	Week 3
7	User Manual & Documentation	Week 3
8	Training Completion Report	Week 3

5. Duration

03 weeks (21 days) from contract signing

6. Reporting Requirements

- Report to Project Coordinator, PCMU
- Weekly progress updates
- Submission of deliverables in soft and hard formats

7. Client Responsibilities

PCMU will:

- Provide available data
- Facilitate coordination
- Provide timely feedback
- Arrange training logistics

8. Payment Schedule (Lump Sum)



Milestone	Payment
Inception Report Approval	20%
Draft GIS System	40%
Final System + Training	40%

9. Qualification

- Master's degree in GIS, Geomatics, Geography, Computer Science, Information Technology, or a related field from an HEC-recognized university.
- At least 3 similar assignments involving GIS systems, mapping platforms, or spatial data visualization
- Relevant qualifications in GIS, Geomatics, IT, Computer Science, or related field
- Proven experience in GIS software (QGIS, ArcGIS, Leaflet, GeoServer, etc.)
- Experience with public sector projects (preferred)
- Valid CNIC
- Strong portfolio of completed GIS-related work
- Affidavit/undertaking confirming that the consultant has not been blacklisted

10. Procurement Method

Selection of Individual Consultant (SPPRA Rules 2010 Amended)

11. Confidentiality

All outputs remain property of PCMU. No disclosure without approval.

12. Ownership of Data

- Full ownership of system, database, and source files rests with PCMU
- Consultant must hand over all credentials and materials