



MAHARASHTRA INSTITUTE FOR TRANSFORMATION (MITRA) MANPOWER REQUISITION FORM

Requisition No.: _____

Date: _____

Department/Project	MRDP
Division	GIS
Requisition Raised By	MRDP
Designation	Research Officer

Position Details

Position: 1

Vacancies: 1

Employment Type: Contractual

Location: Mumbai

Joining Date: _____

Reason for Hiring

☐ New ☐ Replacement ☒ Project Requirement ☐ Contract Renewal ☐ Additional Manpower ☐ Other

4. Job Description in Brief

Key Roles & Responsibilities:

- Undertake GIS, Remote Sensing, Satellite, and WebGIS-based spatial analysis for MITRA projects and Government of Maharashtra initiatives.
- Provide research and analytical support for Government policy, planning and development program through application of Remote Sensing, GIS, geospatial analytics and quantitative methods.
- Develop and automate GIS workflows using Python, GeoPandas, ArcPy and other geospatial tools for large-scale spatial analysis and decision support.

- Develop GIS-based models, spatial indicators, prioritization frameworks and evidence-based analytical outputs to support Government planning and program implementation.
- Support preparation of technical notes, research papers, working papers, policy briefs, analytical reports, maps, dashboards and presentations.
- Undertake technical review and analysis of reports, datasets and studies submitted by Government Departments, consultants, research institutions and implementing agencies.
- Provide GIS technical support and capacity building/training to government departments and technical personnel.

5. Qualification & Experience

Educational Qualification

Essential:

B.E./B.Tech in Civil Engineering / Water Resources Engineering / Geoinformatics or related discipline, with an M.Tech./M.E. in Remote Sensing & GIS / Geoinformatics / GIS / Geospatial Technology or related field.

Minimum Experience

- Minimum 2 years of relevant professional/research experience in Remote Sensing & GIS, geospatial analytics, Satellite applications, hydrology, water resources, environmental studies, spatial planning, modelling or technical research.
- In addition to the above, the candidate's having experience of working with/for a Multilateral Development Bank (MDB), MDB-funded program or equivalent development-finance institution or graduation/postgraduation from Institutions of Eminence, Institutes of National Importance or equivalent reputed Institutions/organizations; or extraordinary domain ability relevant to the assignment.
- Experience of working on Government projects, Government consultancy assignments, Government-funded program, research institutions or development-sector projects will be preferred.

Essential Skills

- Strong hands-on experience in Remote Sensing & GIS, spatial analysis and modelling, with proficiency in ArcGIS Enterprise, QGIS and Google Earth Engine.
- Digitization and risk modeling, green and grey infrastructure development, capacity building, risk financing, and project management
- Demonstrated experience in climate resilience, integrating flood, drought, and landslide risk management specifically within the focused area.

- Experience in Government projects / consultancy / technical assistance assignments involving GIS, Remote Sensing, hydrology, environmental or disaster-risk applications, with ability to support policy and resilience planning.
- Proficiency in Python-based geospatial analysis/automation and preparation of technical reports, research notes, policy inputs, maps and decision-support outputs.

Preferred Skills

- Experience with government of Maharashtra in GIS projects.
- Experience in watershed prioritization, groundwater analysis, flood/inundation mapping, soil erosion, LULC analysis or environmental assessment.
- Experience in WebGIS, dashboards and GIS-based decision-support applications.
- Experience of coordination with Government Departments, technical agencies, consultants and research institutions.

Scope of Work

The Research Officer shall support research, technical analysis and policy-oriented planning for Government initiatives in the areas of water resources, hydrology, watershed development, environment, natural resource management, infrastructure and regional development.