

SCHEME OF SERVICE

Organisation: Land Drainage Authority

Post: Geographic Information System Officer/Senior Geographic Information System Officer

Salary: **Rs 28,225 x 825 – 35,650 x 900 – 37,450 x 950 – 42,200 x 1,300 – 46,100 x 1,575 – 49,250 x 1,650 – 54,200 x 1,700 – 64,400 x 1,800- 69,800 (LDA 8A1)**

Qualifications:

- A A degree in Geographic Information System or Geomatics from a recognized institution or an equivalent qualification acceptable to the Board of the Land Drainage Authority.
- B. Candidates should:
 - (i) be conversant with Computer Programming and Structured Query (SQL) Languages for relational database management systems and use of ArcGIS, QGIS or other relevant tools and their applications;
 - (ii) have a sound knowledge on the conduct of inventory and hazard mapping in relation to flooding;
 - (iii) have the ability to work in a team;
 - (iv) possess good interpersonal and communication skills;
 - (v) be able to operate workstations; and
 - (vi) be computer literate.

Candidates should produce written evidence of knowledge claimed.

Duties:

- 1. To be responsible to the Director or any other officer designated by him for the performance of the following duties-
- (a) To prepare:
 - (i) graphic representations of data in the form of shape files, maps, graphs or tables, using GIS hardware or software applications; and
 - (ii) flood hazard maps and flooding events;
- (b) To carry out:
 - (i) drone surveys in relation to flood management; and
 - (ii) 2D/3D simulations of flood events.

(c) To use: -

- (i) a range of GPS tools to capture the location of assets including bridges, streetlights, road barriers and flood defenses, drainage networks and culverts;
- (ii) various methods for analysis and data manipulation; and
- (iii) tools to join different types of GIS data and datasets and create new information in order to investigate patterns and estimate the number of people potentially affected by flooding, using population growth figures and planning information;

(d) to maintain and update existing databases on GIS;

(e) to undertake desk-based data capture (digitizing) to convert paper maps to GIS datasets to record the location of drainage infrastructures or water pipelines from original maps;

(f) to manipulate, analyze and present geographical information by creating programs to convert GIS information from one format to another;

(g) to assess applications for Morcellement projects and other clearances related to land development;

(h) to effect site visits for characterization of drainage infrastructures and ground-truthing exercises;

(i) to evaluate the various Geographic Information and other Information Systems in the watershed management and flood mitigation projects;

(j) to analyze graphic representations of data and submit reports on a regular basis.

(k) to coordinate Geographic Information System data and datasets with relevant stakeholders;

(l) to ensure that databases on Geographic Information System are properly maintained and updated regularly to ensure compliance with all quality procedures and standards; and

(m) to derive water catchment zones based on Digital Elevation Model.

2. To use ICT in the performance of his duties.

3. To perform such other duties directly related to the main duties listed above or related to the delivery of the output and results expected from the

Geographic Information System Officer/ Senior Geographic Information System Officer in the roles ascribed to him.

Note:

The Geographic Information System Officer/Senior Geographic Information System Officer may be required to work outside normal working hours, including Saturdays, Sundays and Public Holidays during flooding events and heavy rainfall/torrential rain warnings.

CERTIFIED CORRECT

Officer-in- Charge