

***NATURAL RESOURCES DATA
MANAGEMENT SYSTEM
(NRDMS)***

***MONTHLY ACTIVITY REPORT
August – November 2025***

***Submitted by
District NRDMS Centre
Zilla Panchayat, Raichur***



***Karnataka State Council of
Science and Technology
(KSCST)***

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Bengaluru - 560012

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1. NRDMS Centre Activities (August 2025 - November 2025)

1. Water Quality Contamination & LPCD (August 2025)

• Objectives

- To identify contaminated drinking water as per the data provided.

• Assessment of water quality risks and LPCD adequacy

• To map high-risk and low-service areas

• Data Collection

- Rural Water Supply & Sanitation Department (RWSSD)

• Public Health Engineering Department (PHED)

• Analysis

- Calculation of per capita water availability (LPCD) for each village/ward.

- Identification of water-deficit habitations and areas with adequate supply.

2. Rurban Project (September 2025)

• Objectives

- Assessment of land use patterns in Rurban clusters

- Support for integrated rural–urban planning

- Identification of development-suitable land

• Data Collection

- Soil maps

- Watershed and drainage maps

- Village and habitation boundaries, Taluka & District etc

• Analysis

- Assessment of constraints including water bodies, flood-prone areas, forest land, and protected zones.

- Identification of areas requiring conservation or land restoration.

Analysis of spatial distribution and dominance of different land-use classes.

3. BCM Hostel Locations (October 2025)

• Objectives

- Spatial distribution of BCM hostel facilities

- Assessment of accessibility and coverage

- Identification of gaps for new hostels

• Data Collection

- GPS coordinates of hostel locations

- Village, ward, taluk, and district boundaries

- Name and type of hostel (BC / Minority / Combined)

4. Stone Crusher Locations (October 2025)

• Objectives

- Spatial distribution of stone crusher units

- Environmental and regulatory assessment

- Support for sustainable industrial planning

• Data Collection

- Department of Mines & Geology.
- GPS coordinates of stone crusher units
- Integration into GIS platform for analysis and monitoring
- **Analysis**
- Prioritization of inspections and regulatory action.
- Inputs for policy decisions on licensing and siting.
- GIS-based monitoring framework for ongoing compliance.

5. City Municipal Corporation (November 2025)

- **Objectives**
- Ward-wise population distribution analysis
- Identification of high-density wards
- Population-based planning and resource allocation
- **Data Collection**
- Ward-wise total population data.
- Male, Female & Age-group distribution
- Population growth trends projected.
- **Analysis**
- Identification of high-density and low-density zones.
- Analysis of ward-wise total population & spatial distribution across ULB.

2. Training Programmes Attended

1. **Training Programme (One day Workshop)**
2. Topic – Yuktdadhara Portal Training
3. Venue – Zilla Panchayat, Vijayanagara.
4. Organized by – RDPR
5. Date - 20-09-2025

3. Trainings Imparted to Line Departments

1. NRDMS Presentation to CEO and all ZP staff etc.

4. Science Outreach Activities

-NO-

5. Conclusion

- **Summary of Activities and Key Findings**
- **Data Collection & Database Management**
Updated spatial and non-spatial datasets from line departments
- **GIS & Thematic Mapping**
Updated administrative boundaries at GP, Ward, and Village levels
Literacy mapping, water resources, health facility access, and infrastructure distribution
- **Capacity Building / Training**
- NRDMS Presentation to CEO and all ZP staff etc.

Conducted GIS related Yuktadhara portal training to Talukawise PDO's, EO's @ Zilla Panchayat, Meeting Hall, Raichur.

- **Departmental Support & Decision Making**

Provided GIS inputs and prepared draft plan, Jal Jeevan Mission maps, and Aspirational District monitoring. Supported line all departments

- **Commitment to Improve NRDMS Activities**

- The NRDMS Centre will focus on enhancing data quality, GIS applications, capacity building, and research innovation to support evidence-based planning and sustainable development.
- Regular updating of spatial and non-spatial datasets from line departments, field surveys, and satellite imagery.
- Ensuring accurate data for all sectors, including water resources, agriculture, health, education, and infrastructure.
- Providing actionable GIS inputs for GPDP, Aspirational District Programme
- Conducting training programs and workshops for district officials, GP staff, and field personnel.
- Promoting awareness of NRDMS activities to ensure effective utilization in decision-making.

- **Areas for Improvement**

- Strengthen collaboration with line departments for data sharing & planning etc.
- Enhance hardware, software for high resolution mapping.
- Monitoring & Evaluation.
- GIS outputs to involve local communities in planning and development initiatives.

6. Annexures

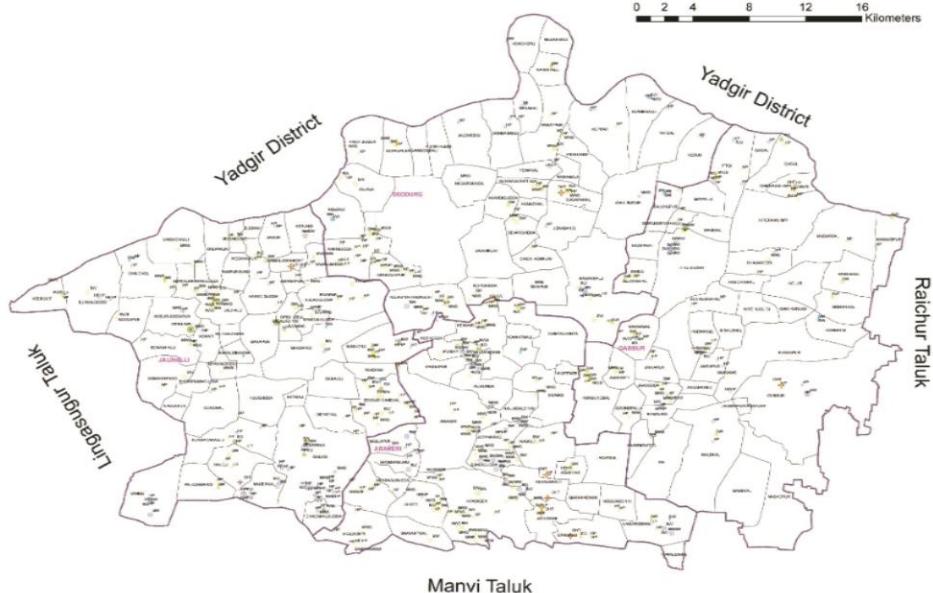
1. Department – Rural Water Supply (RWS)

- **Title – Water Quality Contamination & LPCD Maps**

- **Map Purpose:**

- Identification of contaminated rural drinking water sources
- Assessment of water quality risks in rural areas
- Spatial analysis of rural water quality contamination

Map Showing The Devdurga Taluk Water Quality Contamination of Sources Fluoride & Nitrate



Legend

- Hobli Boundary
- Village Boundary

Nitrate Contamination

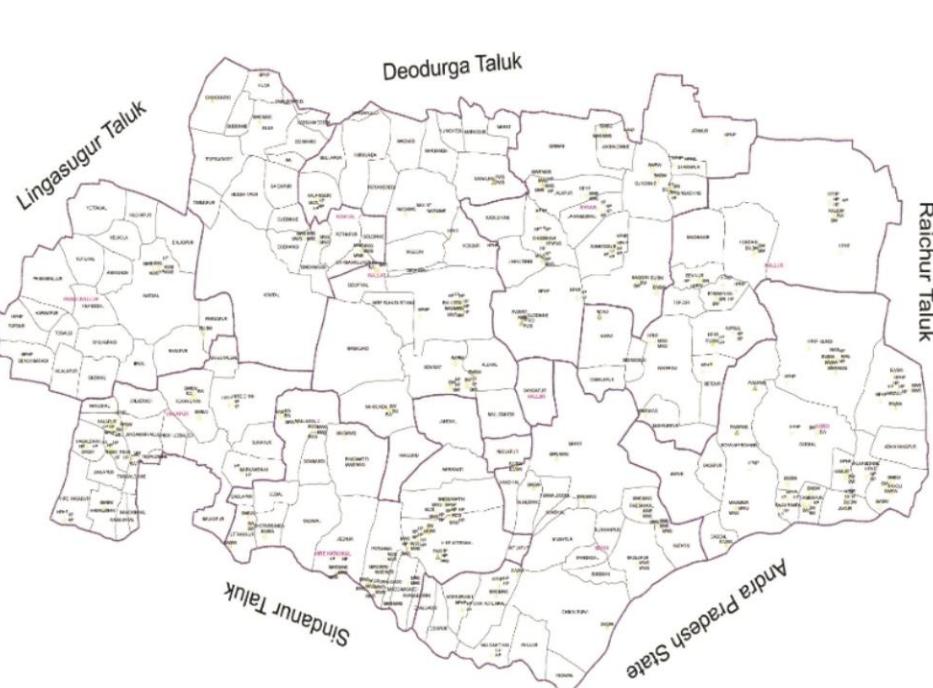
- Borewell (BW)
- Mini Water Supply (BW/MWS)
- Hand Pump (HP)
- Mini Water Supply (MWS)
- Over Headed Tank (OHT)
- Surface Water (SW)

Fluoride Contamination

- Borewell (BW)
- Borewell Tap (BW/HP)
- BW Mini Water Supply (BW/MWS)
- Hand Pump (HP)
- Mini Water Supply (MWS)
- Over Headed Tank (OHT)
- OPEN WELL
- Public Water Supply (PWS)
- Reverse Osmosis (RO)
- Surface Water (SW)

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Map Showing The Manvi Taluk Water Quality Contamination of Sources Fluoride & Nitrate



Legend

- Hobli Boundary
- Village Boundary

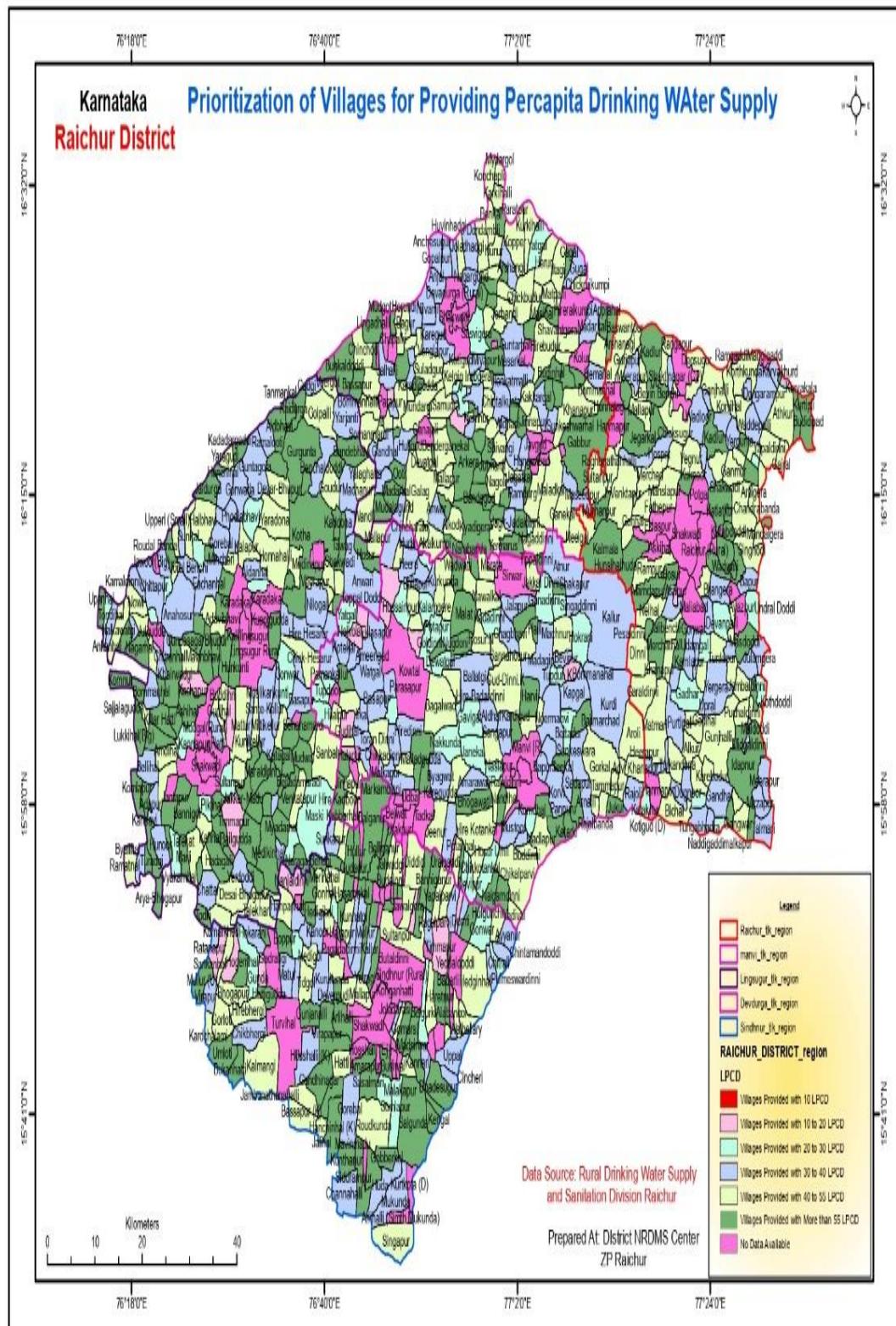
Fluoride Contamination

- Borewell (BW)
- Hand Pump (HP)
- Mini Water Supply (MWS)
- Public Water Supply (PWS)
- Reverse Osmosis (RO)
- Surface Water (SW)

Nitrate Contamination

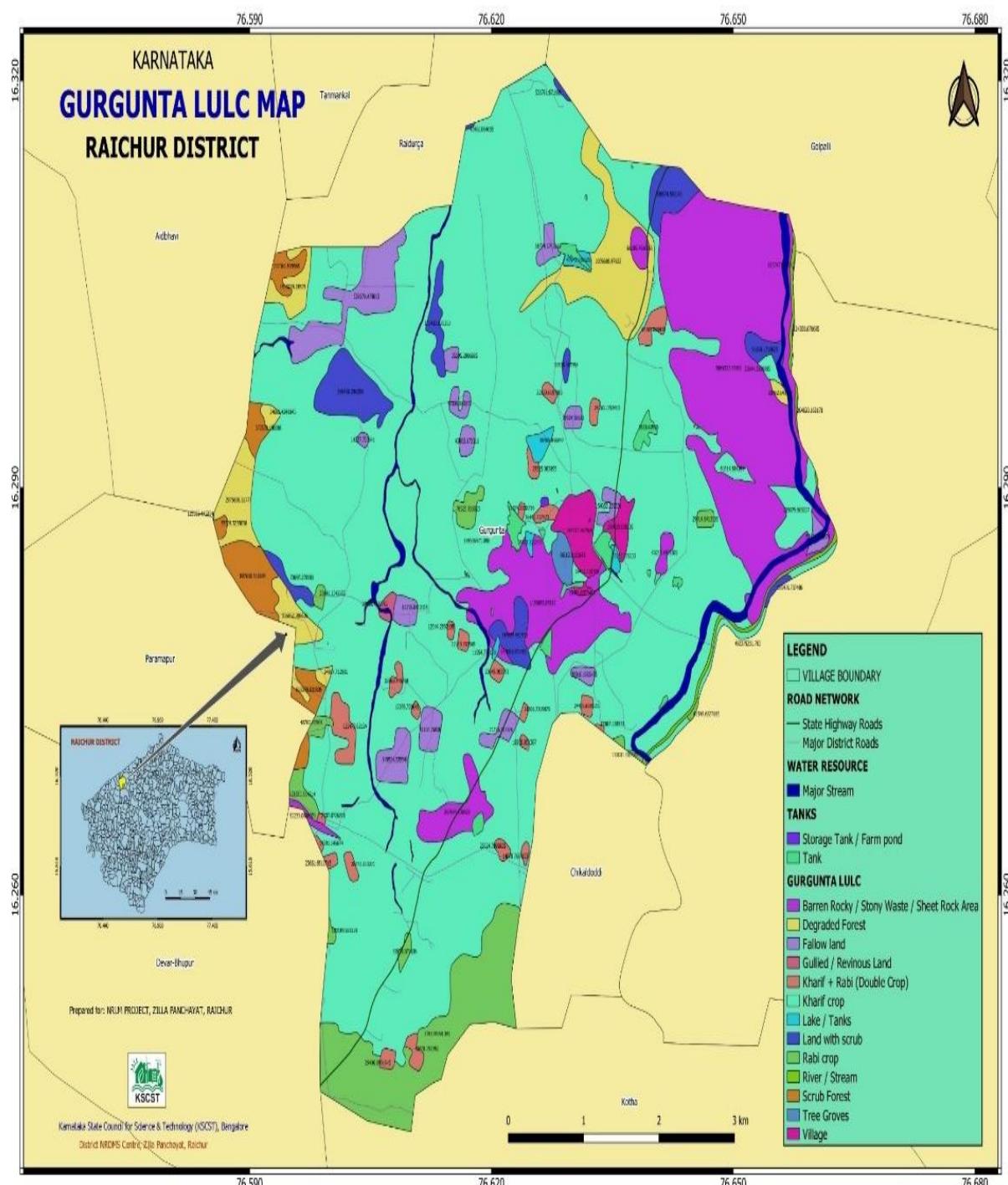
- Borewell (BW)
- Hand Pump (HP)
- Mini Water Supply (MWS)
- Public Water Supply (PWS)
- Reverse Osmosis (RO)
- Surface Water (SW)

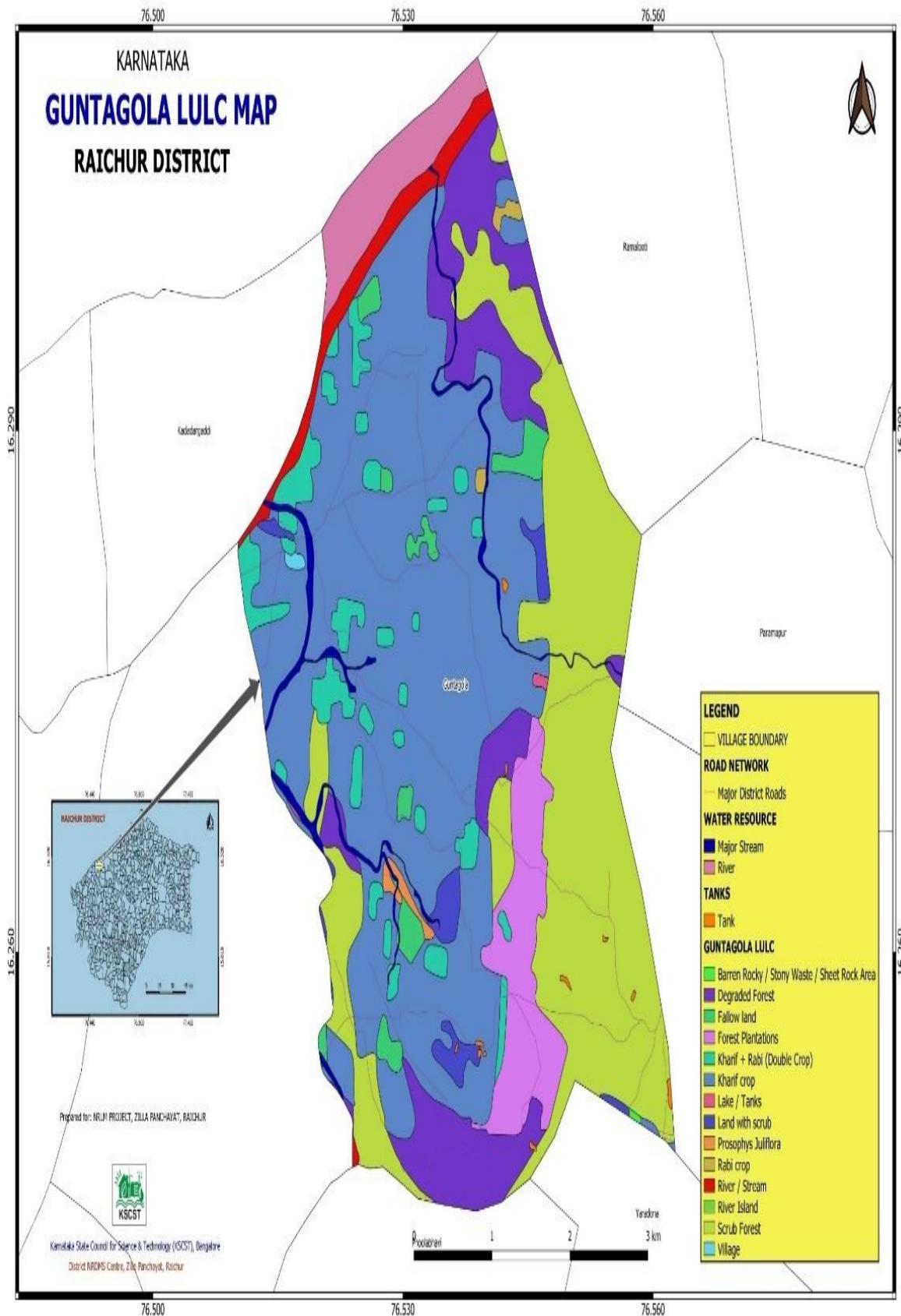
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2. Department – NREGA Section, ZP

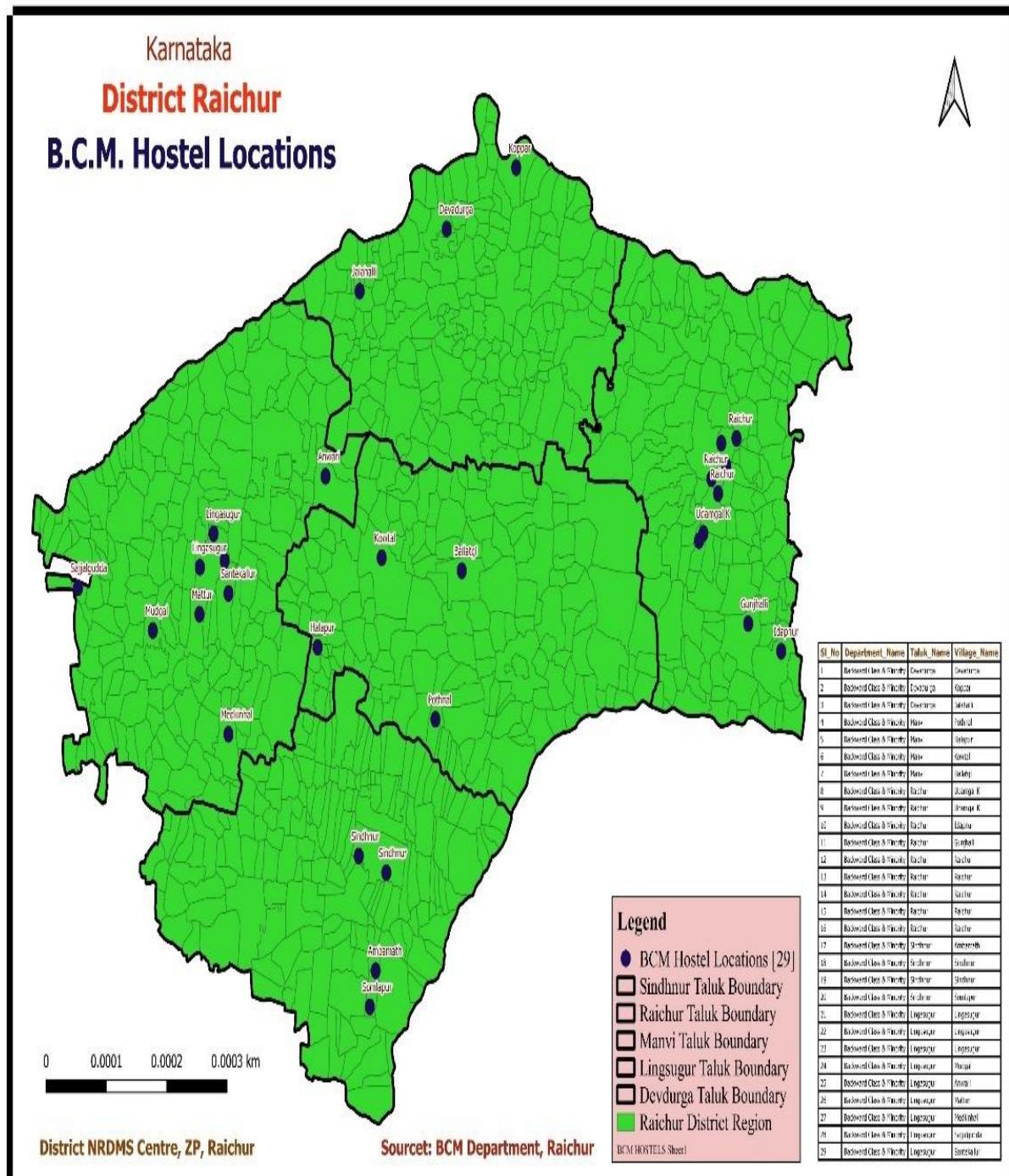
- **Title – Rurban Project**
- **Map Purpose:**
 - Assessment of land use and land cover patterns
 - Spatial distribution of LULC categories
 - Land resource analysis for planning





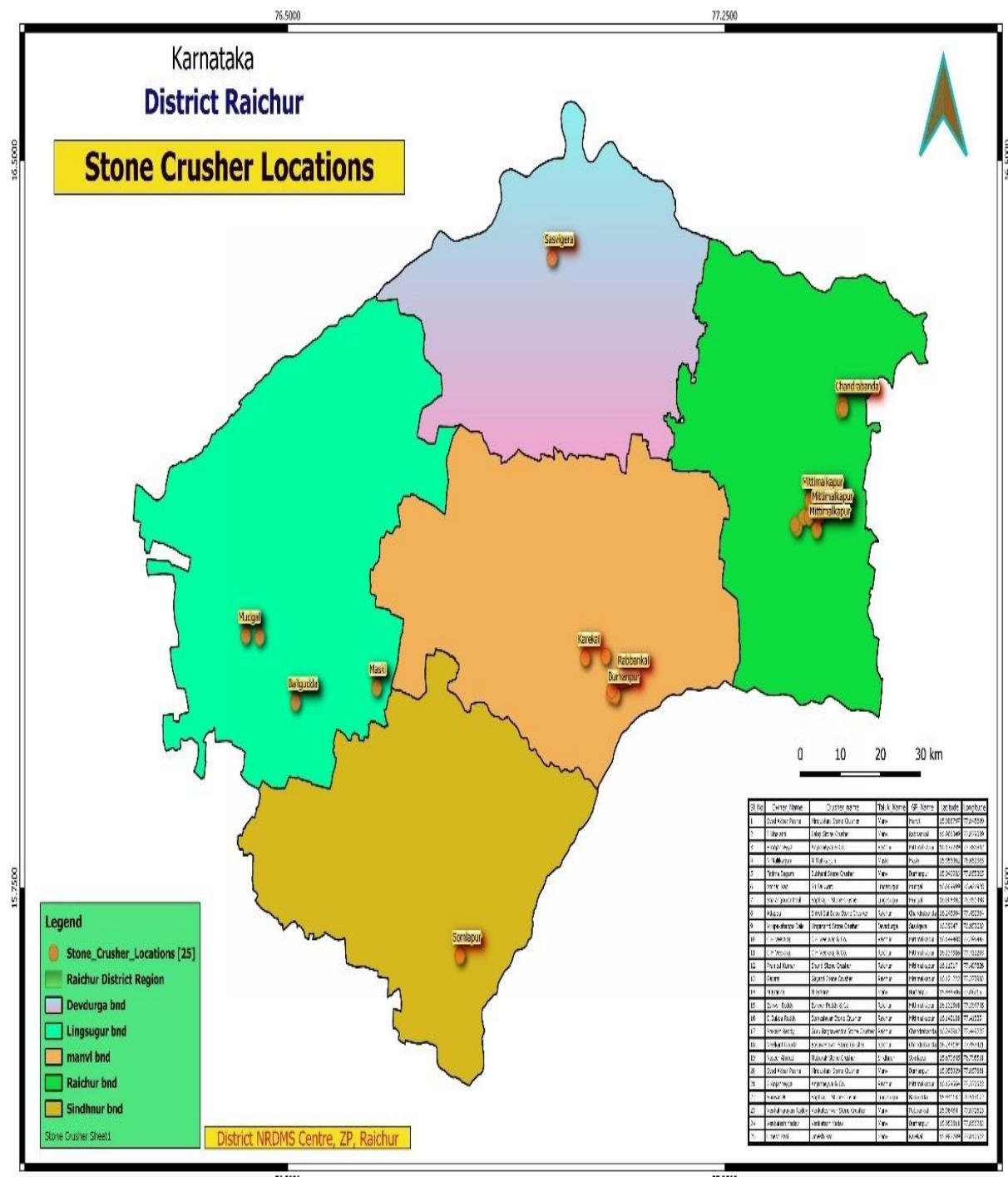
3. Department – BCM

- **Title – BCM Hostel Location Map**
- **Map Purpose:**
 - Spatial distribution of BCM hostel facilities
 - Assessment of hostel accessibility and coverage
 - Identification of gaps in BCM hostel infrastructure



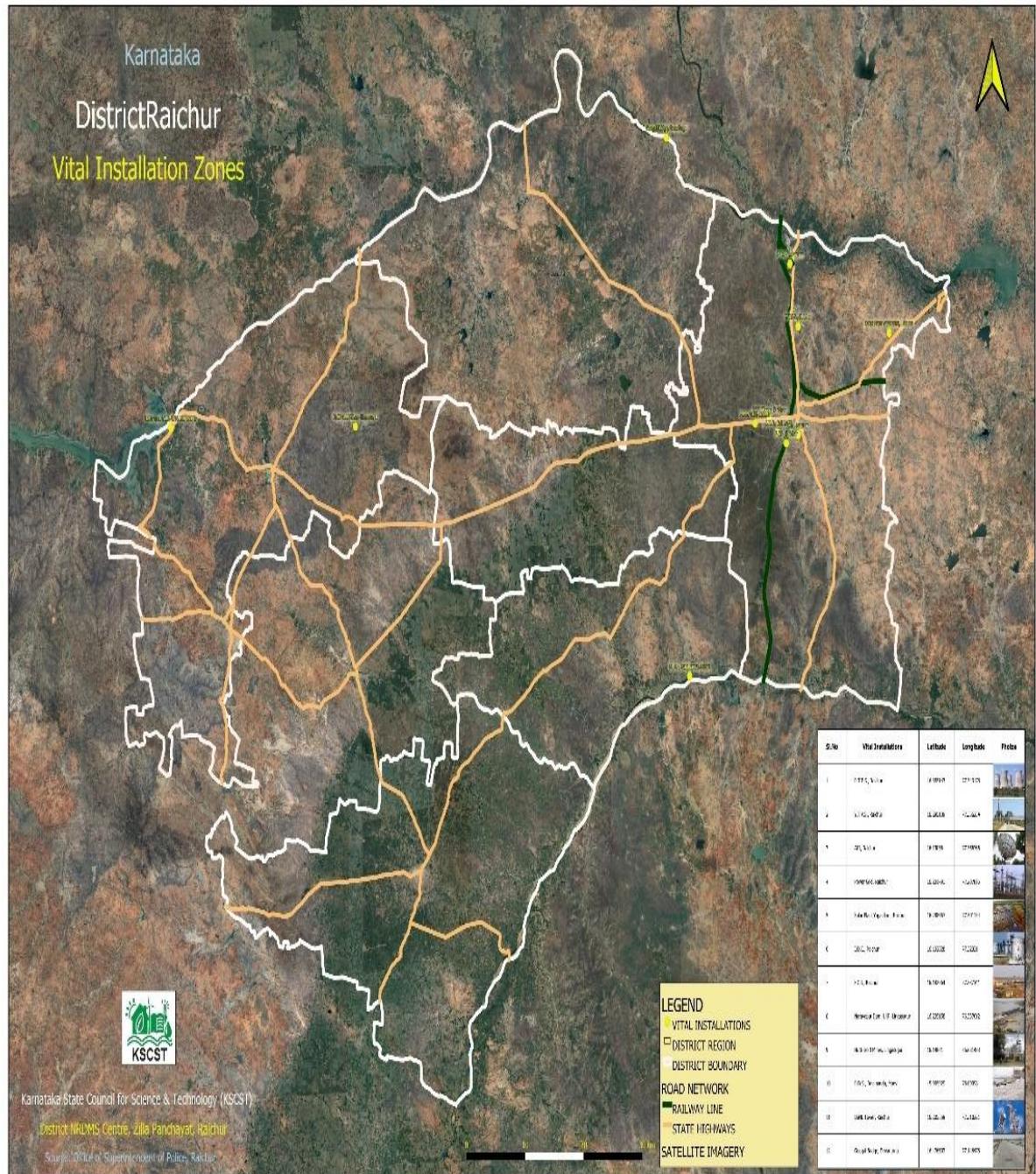
4. Department – Mines & Geology

- Title – Stone Crusher locations
- Map Purpose:
- Spatial distribution of stone crusher units
- Regulatory and environmental assessment of crusher locations
- Identification of high-risk crusher zones



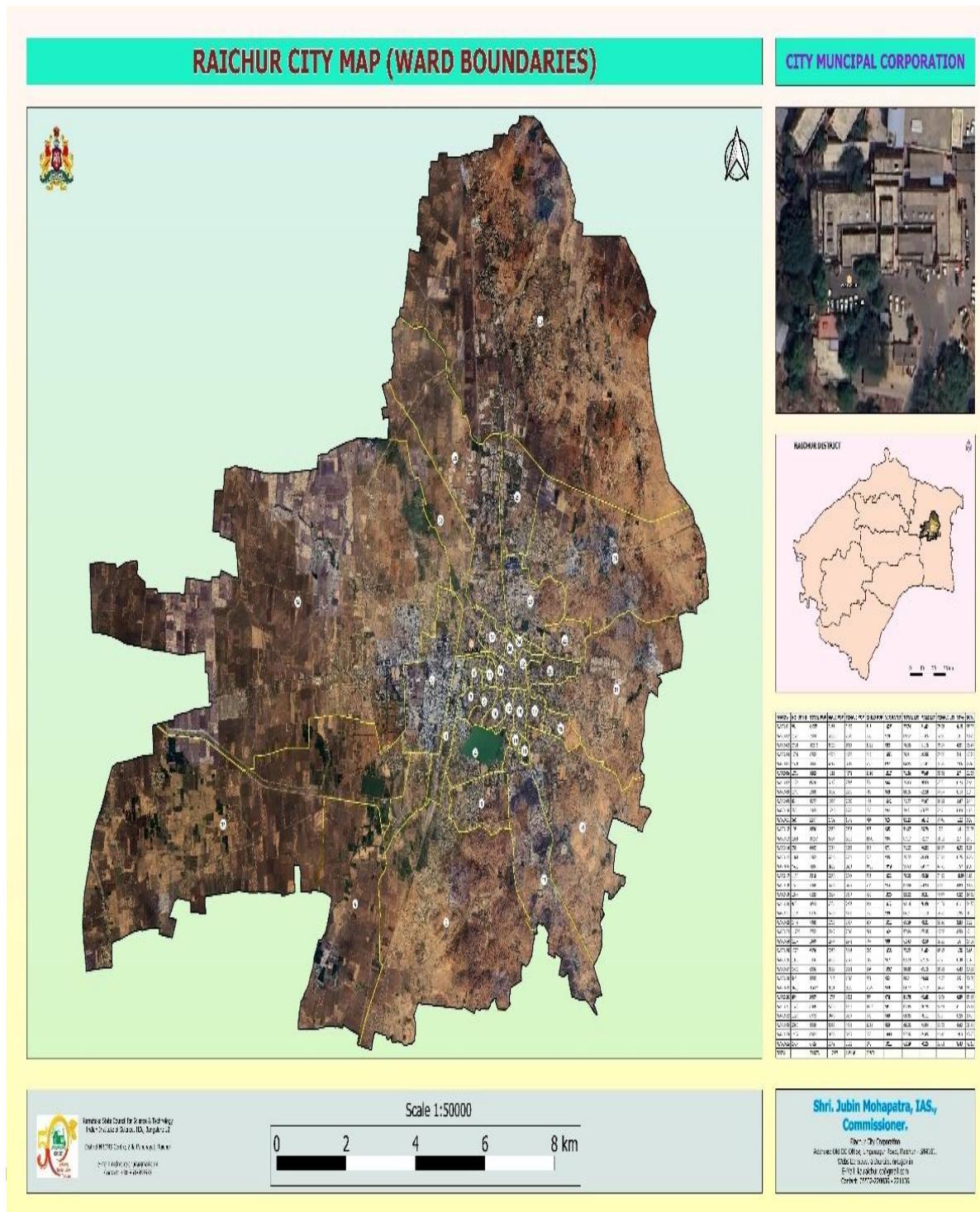
5. Department – SP Office

- **Title – Sensitive Installation location**
- **Map Purpose:**
- Security & Surveillance
- Disaster & Emergency Management
- Risk & Vulnerability Assessment
- Infrastructure Protection



6. Department – CMC

- **Title – Ward wise Population Analysis**
- **Map Purpose:**
- Ward-wise population distribution and density analysis
- Identification of high and low population wards
- Population-based planning and resource allocation
- Electoral & Administrative Planning



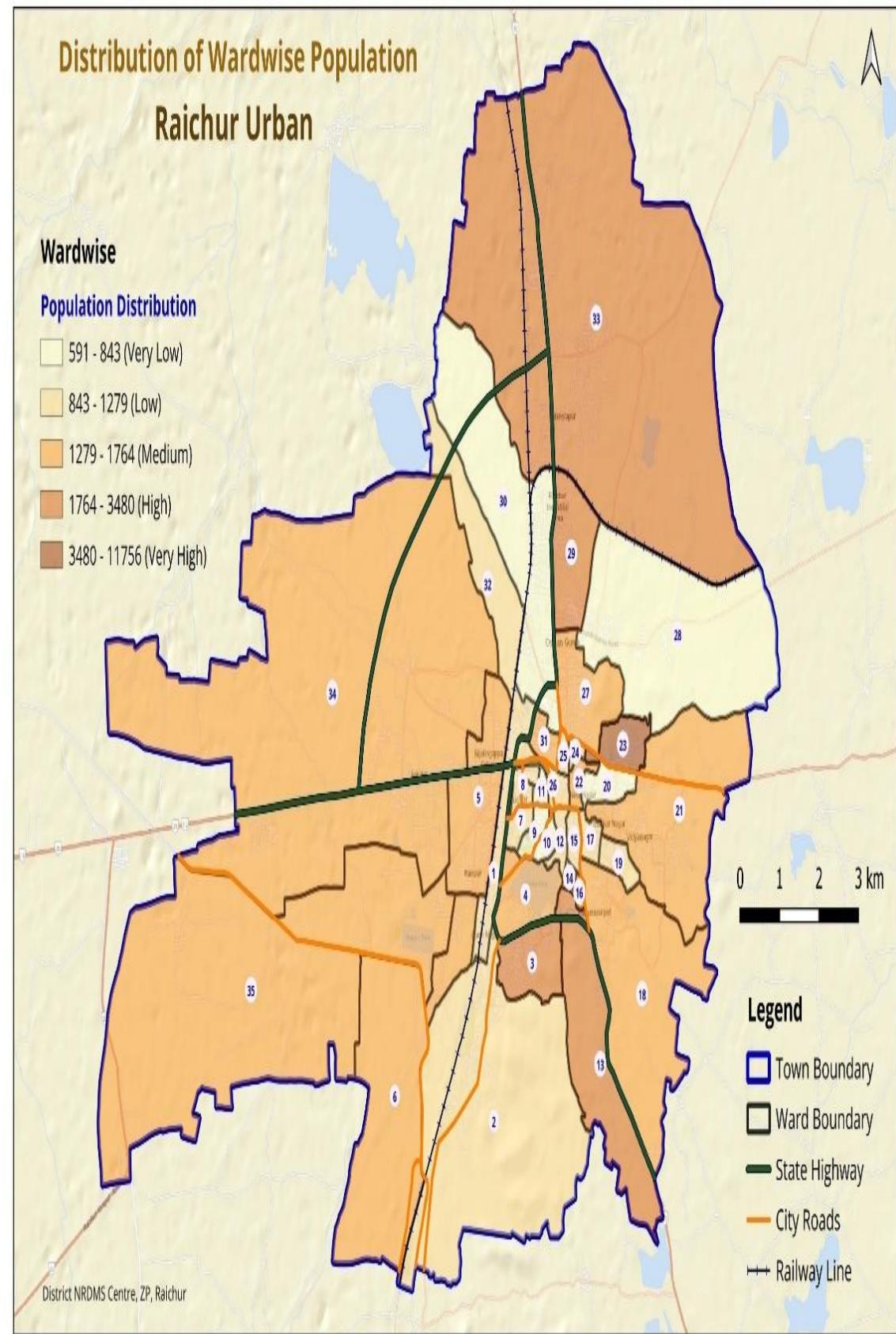
Distribution of Wardwise Population

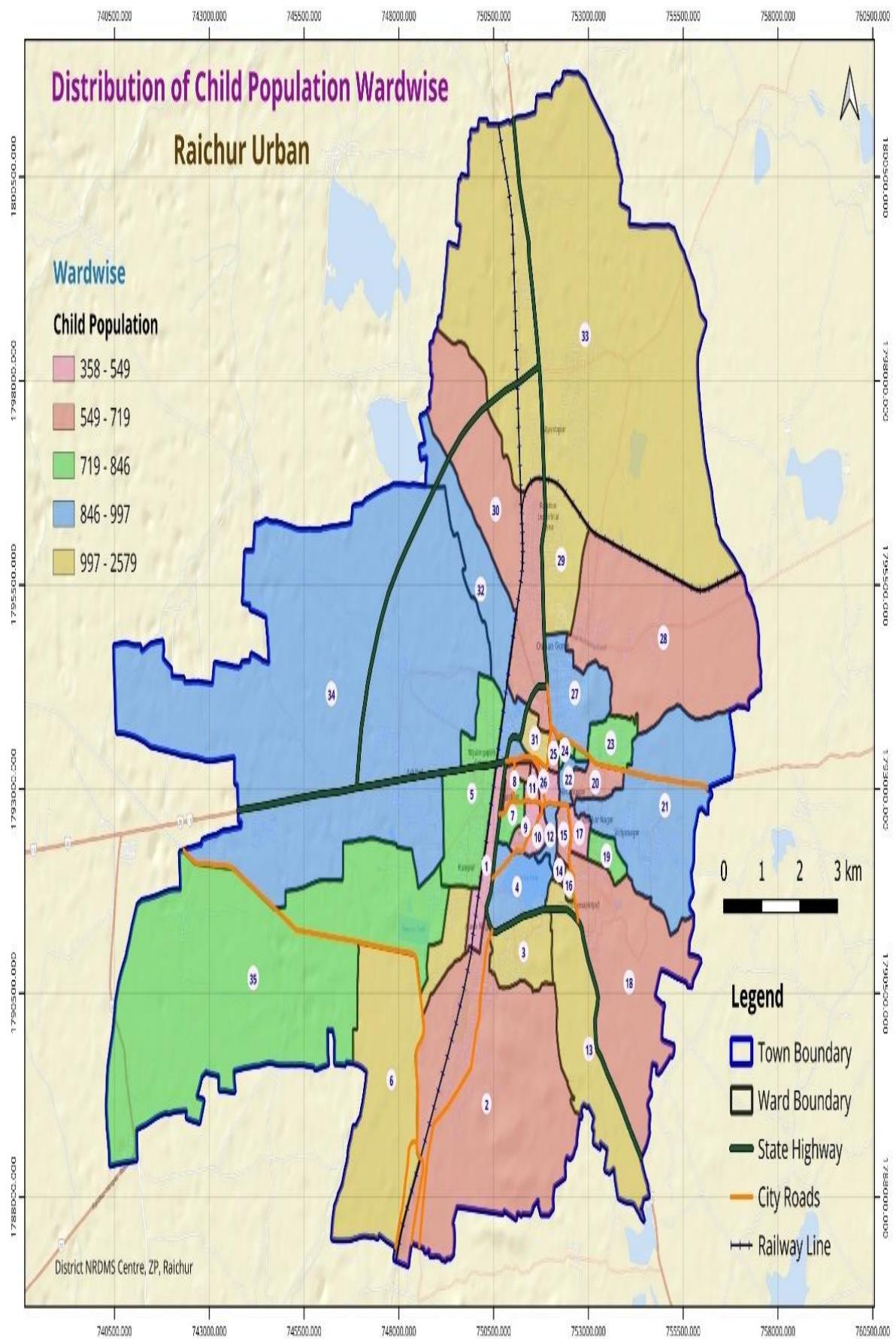
Raichur Urban

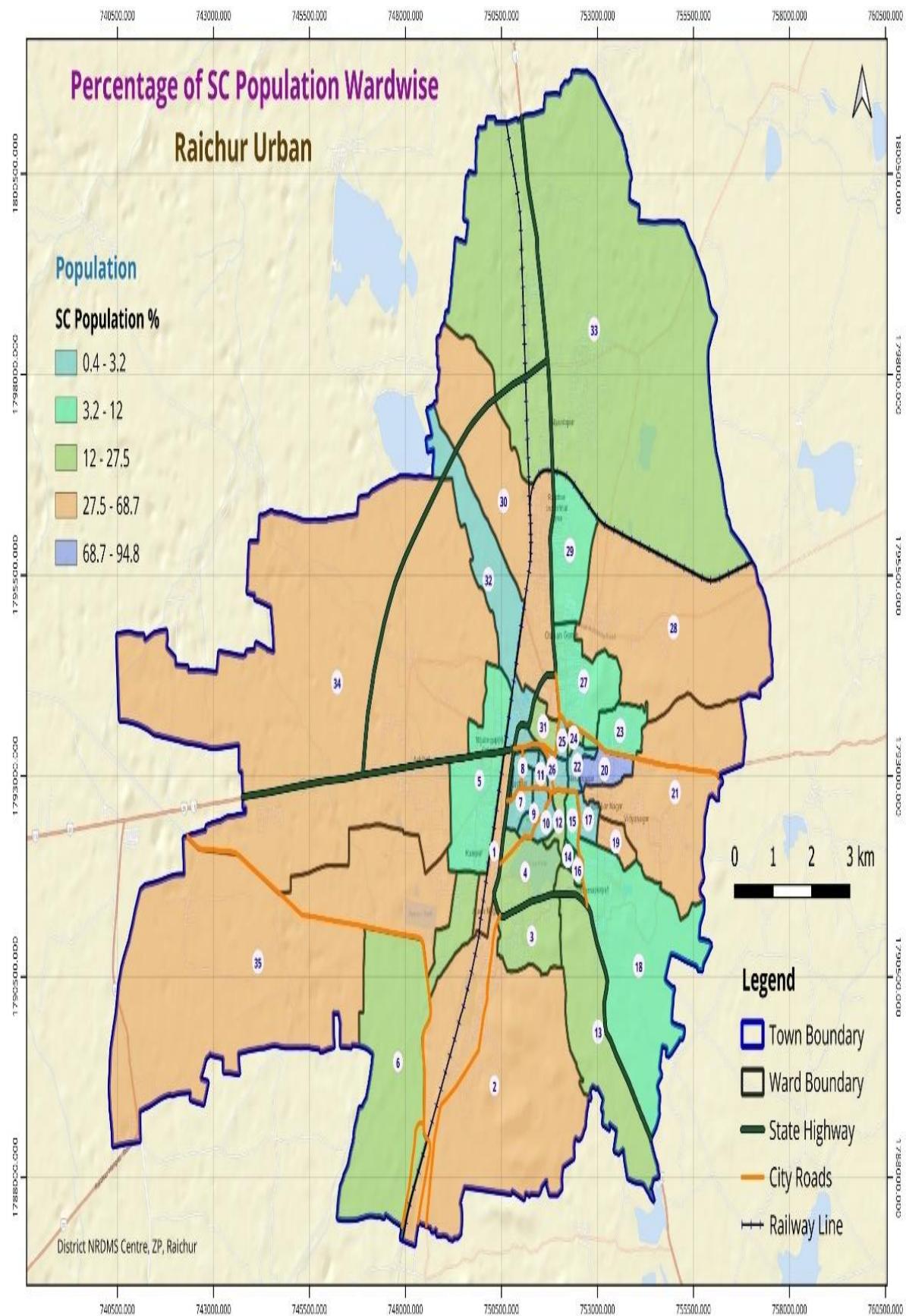
Wardwise

Population Distribution

- 591 - 843 (Very Low)
- 843 - 1279 (Low)
- 1279 - 1764 (Medium)
- 1764 - 3480 (High)
- 3480 - 11756 (Very High)







7. Department – Deputy Commissioner Office

- **Title – Newly Proposed Hobli**
- **Map Purpose:**
 - To facilitate revenue and administrative services by creating a new hobli.
 - Accessibility & Service Delivery
 - Population & Area Management
 - Infrastructure & Resource Planning

