

## **Title:** Cadastral Mapping Of Neemsara Village, Kota Rajasthan.

### **Intoduction:**

- Cadastral mapping is a fundamental component of land administration and planning. It involves the detailed surveying and mapping of land parcels, including boundaries and land use divisions, which are crucial for ownership, taxation, and resource management. This project focuses on the cadastral mapping of Neemsara Village, located in Kota, Rajasthan. Using geospatial techniques, a detailed map layout of the village was created to visualize and manage its land records effectively.
- The process included georeferencing a base image, digitizing the village boundary, and dividing the area into five distinct zones, each marked with different colors for easy identification. These zones were further subdivided into chunks outlined in green and individual land parcels delineated in red lines. The final cadastral map serves as a comprehensive visual representation of the village's land division, which can support administrative and planning purposes.

### **Objective:**

1. To prepare a detailed cadastral map of Neemsara Village using geospatial techniques.
2. To georeference the provided village image for accurate spatial alignment.

3. To digitize the village boundary and categorize it into multiple zones for land use classification.
4. To create subdivisions within the zones, including chunk and parcel-level divisions.

### **Methodology :**

The project was carried out using GIS software with the following step-by-step methodology:

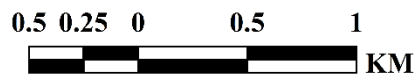
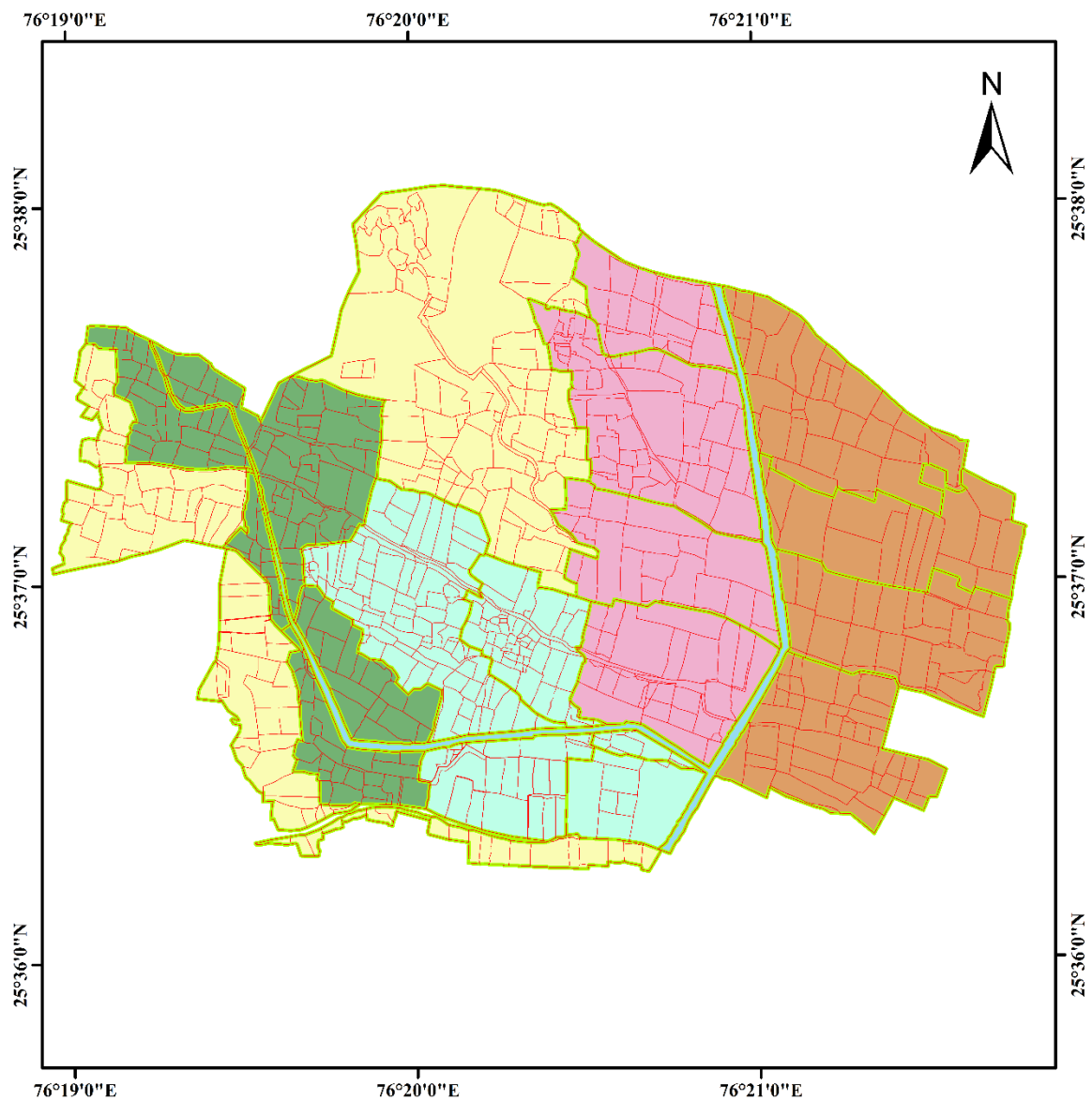
1. Data Collection: A base image of Neemsara Village was obtained for mapping purposes.
2. Georeferencing: The image was georeferenced using control points to align it accurately with real-world coordinates.
3. Digitization:
  - The village boundary was digitized as a polygon layer.
  - The area was divided into five zones, each shown in a unique color for easy interpretation.
  - Each zone was subdivided into chunks, represented using green lines.
  - Further, individual parcels within the chunks were digitized and marked with red lines.
  - Symbology and Layout Design: Different symbologies were applied for clear visual distinction between zones, chunks, and parcels. A map layout was created with essential elements such as legend, scale, north arrow, and title.

## **Results:**

1. The final output is a detailed cadastral map of Neemsara Village, showcasing the following features:
2. Accurately georeferenced map layout that aligns with real-world coordinates.
3. Five distinct land use zones, each color-coded for clarity.
4. Systematic division of zones into green-lined chunks and further into red-lined land parcels.
5. Improved visualization of land distribution that can be used for property management, village planning, and legal documentation.

This project demonstrates how geospatial tools can be effectively utilized for cadastral mapping and rural land management.

# Cadastral Mapping Of Neemsara Village



Legend		
Parcel	Canal	Zone 3
Chuck	Zone 1	Zone 4
Boundary	Zone 2	Zone 5