Karnataka State Remote Sensing Applications Centre

DPAR (e-Governance), Government of Karnataka
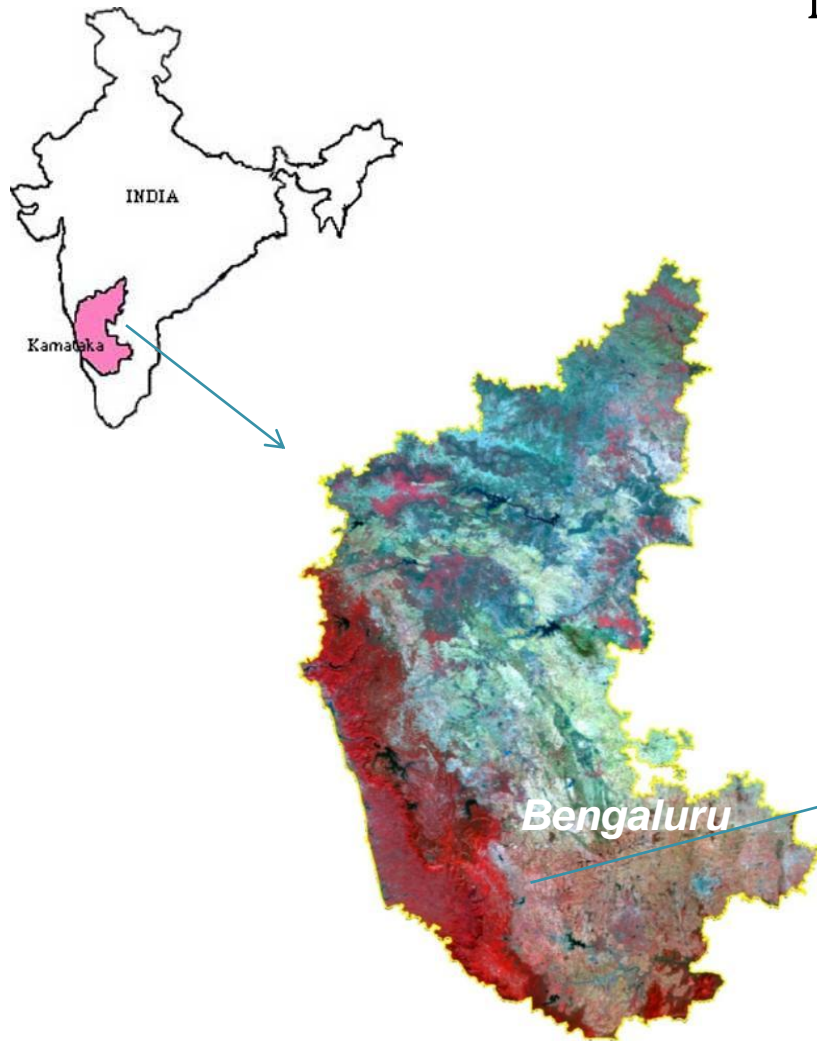
Karnataka GIS

27th National Conference on e-Governance

3 - 4 September, 2024

KSRSAC

Nodal Agency to plan and implement geospatial activities in the state

INDIA

Karnataka

Bengaluru

Established in 1986

❖ Repository of Information/ Data/ Maps
❖ Building Capacity in RS & GIS

200+ Data Scientists/Software Developers/Information Managers/Administrators

Mandate

➢ To **co-ordinate the requirements of the state departments** for any remotely sensed data and applications

➢ To act as **repository (data bank) of remote sensing images and derived geospatial datasets** of the state with relevant attributes.

➢ To **develop GIS applications** for GoK departments

➢ To **assist user departments / orgnisations / academia** in the implementation, monitoring and evaluation of RS & GIS applications

➢ To **build capacity in RS & GIS** in the line departments

➢ To **Promote Research and Education** in the field of Geomatics : **MTech Geoinformatics**

Components of K-GIS

- **K-GIS Asset -** a seamless, state-wide GIS-Ready data layers that are standardised and updated and configured to meet the GIS data and application needs of government, citizens and enterprises.

- **K-GIS Portal -** a single gateway access to K-GIS data & K-GIS DSS applications with specialised metadata service, GIS applications service, data ingest service, data sharing service, publishing services etc.

- **K-GIS DSS Applications -** For decision and work-processes of different departments.

- **K-GIS Infrastructure**
  - o Development and Staging at KSRSAC
  - o Hosting and Servicing through KSDC

- **K-GIS Capacity Building -** Training and orientation for users/officers of GoK departments.

- **Seamless data on standardized spatial framework**

  ◦ Ground Control Points (GCPs)

  ◦ DEM – Digital Elevation Model layer

  ◦ Seamless satellite image - Ortho rectified Cartosat-1 image covering the state

  ◦ 0.5 m ortho corrected satellite image mosaic for the state arranged in the form of tiles.

  ◦ Various Thematic Maps (>600 layers)

  ◦ Govt. Assets (>20 lakh)

  ◦ Integrated departmental data – State view to individual land parcel view

- **Unified Platform- Single Gateway**

  ◦ For spatial data visualization & Dashboard with Statistics

  ◦ GIS Applications (Web / Mobile) – Data Collect / Geotag / Update/Analysis

  ◦ Map / Web services for external application use

- **A flagship Program of GoK, to Institutionalize the use of Geospatial Technology in the Governance**

  https://kgis.ksrsac.in/kgis
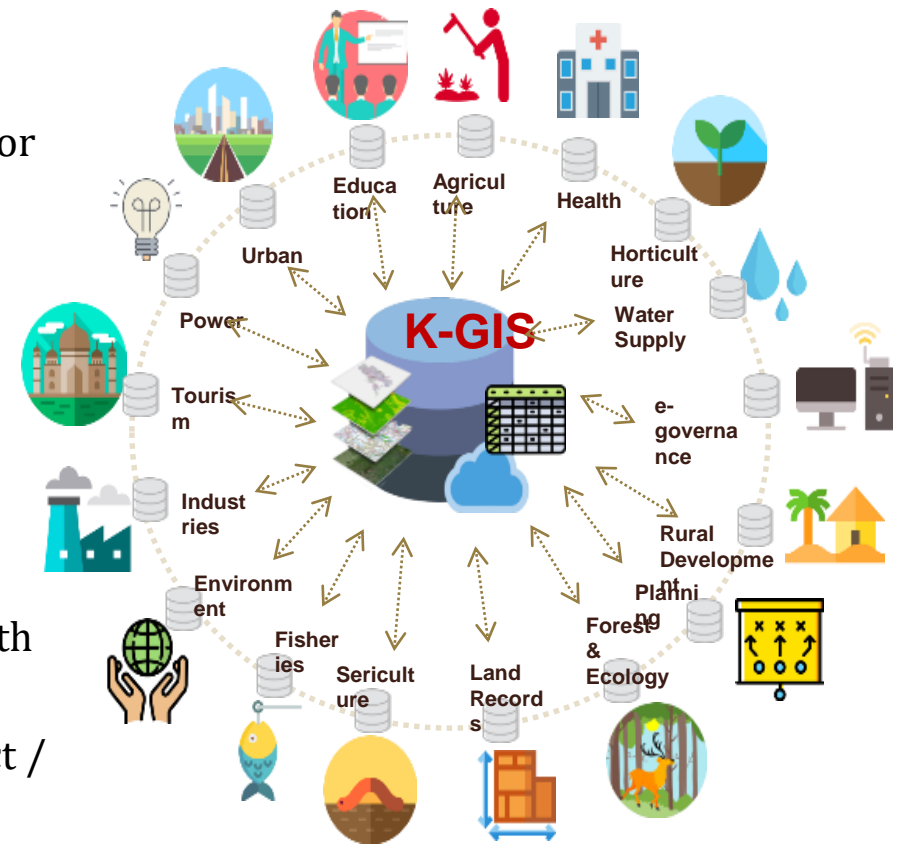
Major K-GIS Applications

Citizen Centric Mobile Application
(Dishaank / Maulya / Chunavana / Nearby Assets,Facilities / Know your Jurisdiction)

Forest Fire Alert & Management System
Geo-portal for Forest cover, Forest boundary demarcation

Industrial Information System – KIADB

Works Monitoring System (NGSK) - RDPR

Property Information System for RDPR, SSLR

Karnataka @ Glance - Planning

Soil Health Information System

Geospatial Portal for Covid Management

Election Information System

Crop Survey Analytics

Tree Census

Geo portal for various themes / sectors
(Health, Education, Forest, Social Welfare, Industry, Agriculture / Water Resources, Home etc)

Mobile apps and its Web dashboard
Geotagging of assets / Project Location / events, Progress Monitoring, Data Approvals etc

K-GIS Portal for Integrated Spatial visualisation and analysis
Boundaries, assets, Land Parcel information, Terrain, Thematic map, Weather & Utilities

- **Geotagging of Trees**

  ◦ Mobile application for geotagging of all trees within BBMP limits along with datails viz., tree name, species, height, girth, canopy type, health, location, etc.

  ◦ Web application for monitoring the status, validation & analysis of information collected, updation & user management.

Mobile Application

- To capture the geotagged photograph of the status/stages of works within the geo-fenced boundary.

Web Application

- To create & monitor the works / projects (road/segments, bridges, buildings, check dams, tanks, etc.) based on the geography / jurisdictional area, time & stages of project activities.

Users

- Karnataka Rural Road Development Agency,

- Panchayati Raj Eng Dept,

- Dept of Rural Drinking Water Supply & Sanitation

- Taluk Panchayat
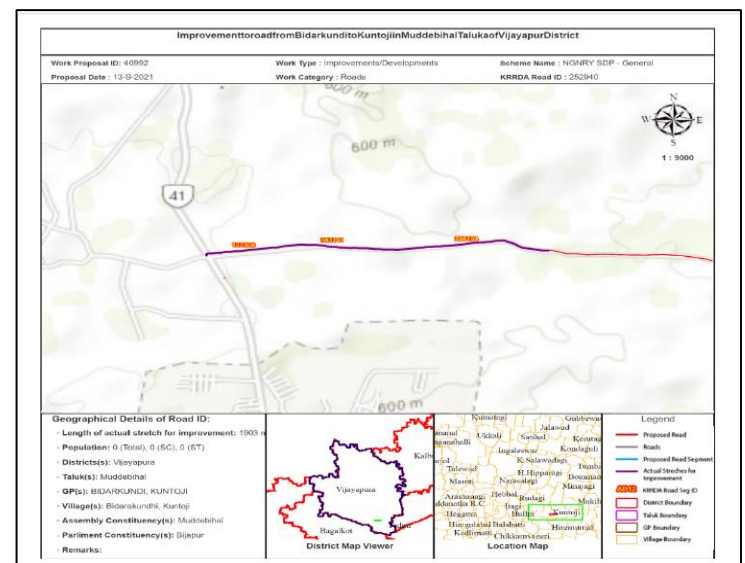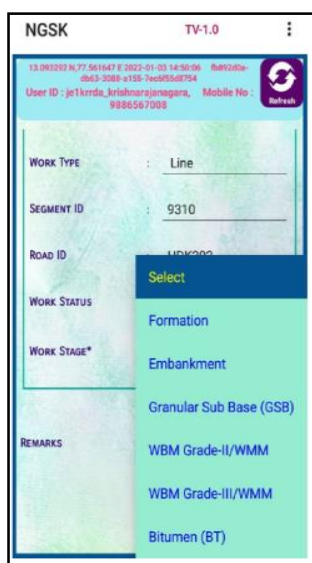
Chunavana – Mobile & Web App

- **Karnataka Election Information System**

  - On entering the user UHN ID the app provides the complete personal details, polling station place, name and it's location,

  - Facilities for citizens - wheel chair booking, pickup drop, parking information, que information & nearby emergency facilities

  - The apps also lists all candidates for your consistency/ voter details / officers details and voting percentage & results information

  - The app Chunavana was extensively used by the citizens of Karnataka as well as election officials during 2023 State assembly elections

Dishaank Mobile Application
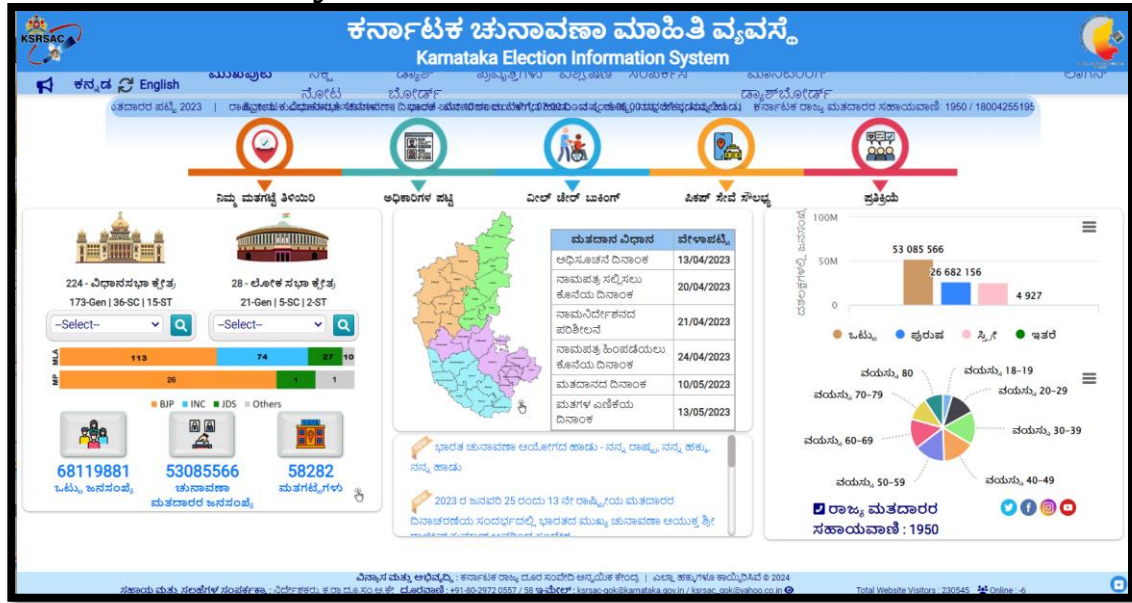
- It enables users to identify the administrative boundaries and the survey number of the land as available in the village based on their current location.
- The app provides the information includes
  - the name of the owner
  - extent of property
  - ownership type
  - land type, restriction / litigations any on the land
  - category of the land and
  - any other active transactions being done on the land are displayed on a single click
- An option to download the village maps & the RTC information available for such land / owner

Mobile & Web Application : Soil Fertility Analysis
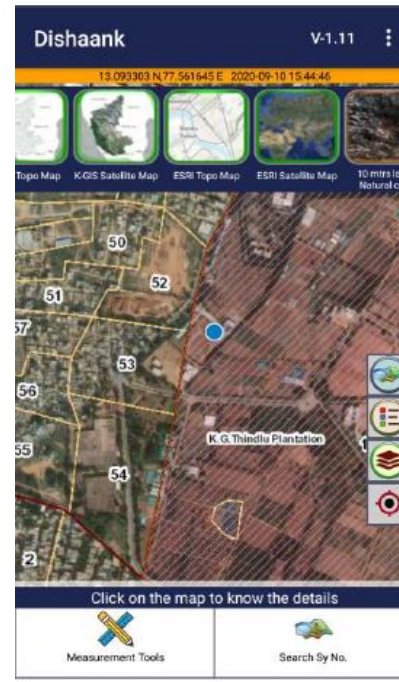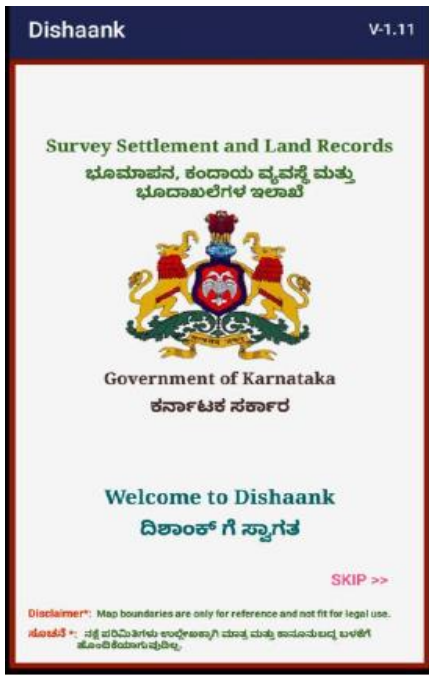
- Mobile App and Web Portal to support soil sample collection and lab results entry

- The lab results along with geo coordinates are sent to NIC through the FRUITS application for issue of soil health card

- The lab analysis data are received by KSRSAC for the generation of soil fertility maps
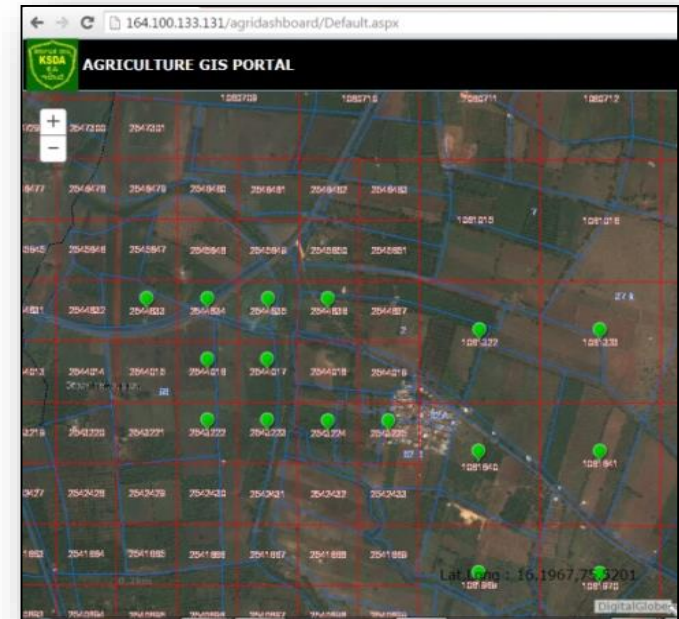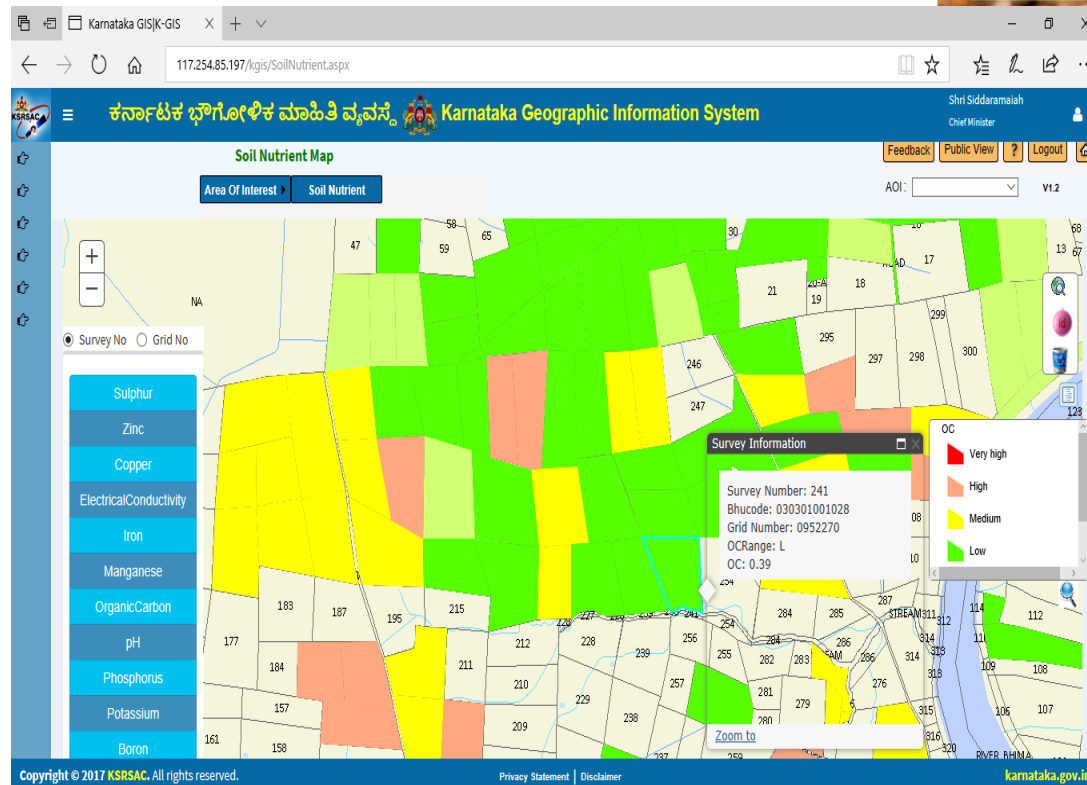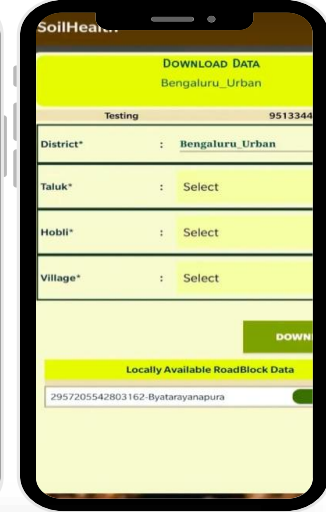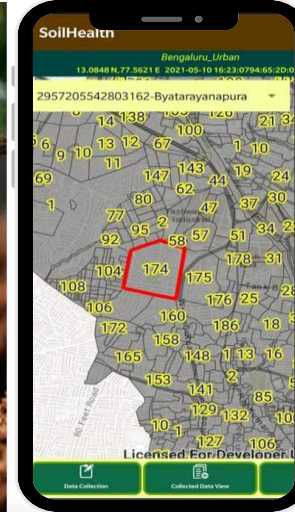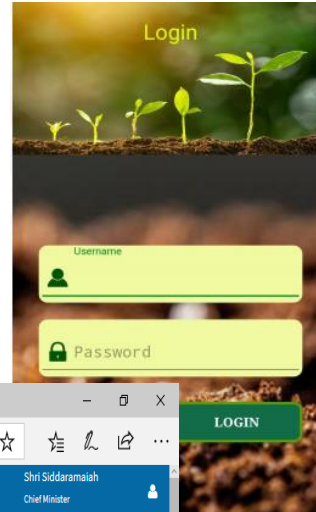
Karnataka Forest Fire Alert Monitoring System

Fire alerts with value added information (SMS/Email through web and mobile application)

Karnataka at A Glance (KAG)

- Karnataka at a glance (KAG) contains various departmental statistical information under 20 titles collected from 31 districts.

- KAG MIS to GIS, this information is available for preparing decentralized plans by planners, policymakers, researchers and public.

- The KAG application was revamped during 2022-23, with a new interface and additional parameters like NITI Aayog indicators for aspirational districts was included.

Thank You

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