

MOBILE APPLICATIONS

A plethora of mobile applications have been developed catering for the need of line departments of the Government. Functionally these applications have some standard functions, as below

- Geo-fencing, Geo-tagged data capture with photograph
- Spatial data updation / data collection

- Locate nearby features / departmental assets
- Identify jurisdiction boundaries
- Locate the objects along with admin / departmental jurisdiction
- Tracking
- Visualization of various GIS Layers



KGIS BENEFITS

- GIS data availability at all levels to help bringing accountability and responsibility in Governance
- Enabling sound process of monitoring and identify "gaps in development"
- A major support to state, district and locale back/inputs/data as a virtual geographic ingest Governance by embedding GIS in all aspects of Accelerated development of many Enterprise planning and development at state/district/ GIS solutions being undertaken by private panchayat levels
- Citizen Service by giving access to state wide map/image/geospatial information
- To make the state to be in the forefront of this field of technology and applications that are fast growing globally
- Geo-enabling e-governance and public services
- Geo-spatial information support in decision Citizen service by giving access to state wide making and bringing in transparency

Awards and Recognition

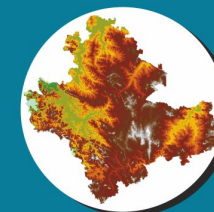
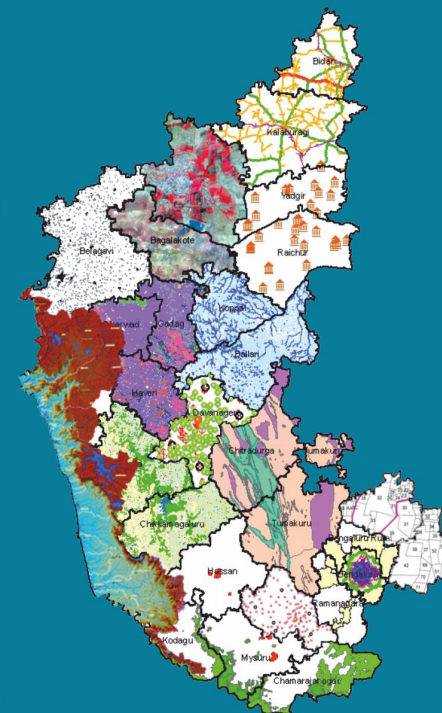
- India Geo-Special award for KGIS 2019
- SKOCH GOLD AWARD for K-GIS implementation - under GOVERNANCE category in 2019
- Award for "Achievement in GIS" for K-GIS at ESRI India User Conference 2018, Hyderabad from ESRI India
- Bengaluru Tech Summit 2017 – Award for Best Exhibitor
- ITE.BIZ 2016 Conference – Award for Best Exhibitor & Conductor of GIS Session



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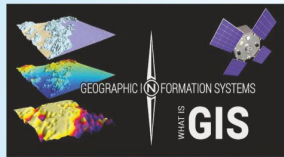
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KARNATAKA GIS



KARNATAKA GEOGRAPHIC INFORMATION SYSTEM

Karnataka GIS (K-GIS), the concept of which was the foresight of the Government of Karnataka and the Karnataka Jnana Aayoga(KJA), is the result of consultation with the line departments of the government on the vision for the entire state. It enables embedding GIS in different aspects of governance namely, planning and implementation at National State / Local levels, decision making, monitoring development, identifying gaps in development, bringing responsibility and accountability in the regime. K-GIS reduces the duplication of GIS efforts in the state, removing redundancy and helps to create an authoritative GIS data to all agencies, enterprises and citizens. K-GIS has layers organized from RS images and survey data/maps. Such data is being integrated/fused with MIS/available data records of various departments of the Government.



KGIS ensures continued availability of GIS ready data assets and applications for decision support easily accessible across the departments, citizens, private enterprises, institutions etc. KGIS is also helping by empowering citizens with GIS data for various information and development needs.

K-GIS is a single gateway integrated platform to access, acquire, process, store, distribute and improve the utilization of seamless geospatial information of the state

through advanced tools for GIS analysis through simpler web and mobile interfaces system with an executive dashboard and other business workflows.

The K-GIS Decision Support System applications, consists of a suite of applications, which are designed and optimized, to provide secure, robust, reliable, responsive and scalable map services. The KGIS-DSS has specific configurations, which is being used to perform geo-spatial data analysis. The DSS is based on a single-window GIS system, providing requested data and relevant applications through closely integrated, closely looped multiple web-based GIS services.

The vision for Karnataka GIS involves realization of a new Information regime supporting good governance, sustainable development and citizen empowerment offering GIS decision support service for governance, private enterprise and citizens and maintaining a state-wide, standardized, seamless and most current GIS asset for the state.

K-GIS Schematic View



K-GIS Contents

Boundaries	Transportation Infrastructure	Land Use Land Cover	Water Bodies	Thematic	Departmental Assets / Facilities
<ul style="list-style-type: none"> Administrative boundaries Municipal Boundaries Departmental Jurisdictional boundaries Constituency boundaries Planning/Development boundaries Land Parcel Boundaries (Rural and Part Urban) 	<ul style="list-style-type: none"> High ways District Roads Other Roads Railways Ports Airports 	<ul style="list-style-type: none"> Settlement Built-up Vegetation Forest 	<ul style="list-style-type: none"> Pond/Tank Stream Canal River Reservoir 	<ul style="list-style-type: none"> Lithology Structure Wasteland Soil Ground water Slope 	<ul style="list-style-type: none"> Departmental Assets Hospital / Schools / Police Station etc Office Locations Related MIS information of all spatial features Departmental MIS database Enterprise database of application (User data / Business workflow etc) Derivative Statistics / Analytics database

KGIS PORTAL

The KGIS portal is a web based Single Gateway-integration platform to access, acquire, process, store distribute and improve the utilisation of geospatial information through:

- Intelligent web services being published by various agencies
- Advance tools for GIS based analysis
- K-GIS viewer for spatial data visualization
- Mata data, web APIs and Map Services
- Downloads of Data, application, Document and Tutorials downloads
- Customised Web and Mobile Apps
- Business Specific Templates
- Executive Dashboards
- Spatial information for further integration with other enterprise application

URL : <https://krsac.karnataka.gov.in/kgis/>

K-GIS Components

- Spatial Framework
- K-GIS Enterprise Database
- Portal and applications
- Infrastructure
- Capacity Building

Uniqueness of K-GIS Solutions

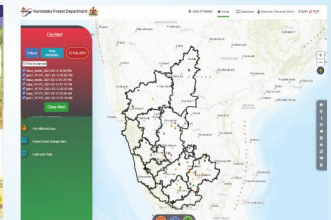
- Unified Framework
- Identified Ownership of data / layers
- Data: State to individual parcel view and ownership information
- Single Gateway - Bilingual
- Configurable Single Sign on – (Dept / Level / Role / Geography)
- Multiple Web / Mobile Apps for GoK departments
- Generic Tools for query / Mapping / Updation
- Continuous Maintenance and upgrade of applications
- Metadata & flexible search facility
- Unified & Managed Web Services
- OGC compliant Map Services
- Modular application : Easy replication - Customisable template with executive dashboard & GIS Viewer
- Horizontal and Vertical Scalability – Component wise (Web/ GIS/ DB etc)
- Integration with other enterprise applications of GoK
- Context based Load balancing
- Technology neutral (COTS and Open Source products – multi database)
- Shared IT infrastructure of State Data Center for hosting
- De- Centralised data / Distributed Storage

Web Applications

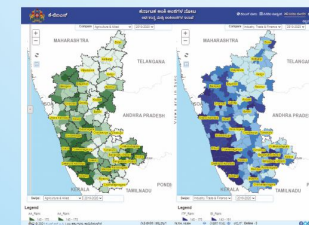
- K-GIS standard viewer and public dashboards
- Health GIS
- Education GIS
- GIS for Home Department
- GIS for Electrical Assets
- GIS for Water supply and Sewerage network
- GIS for Water Resources
- Karnataka @ Glance for Planning Department
- Agriculture DSS
- Industry monitoring and Land Allocation
- GIS based Project Monitoring for KRSRAC
- Aaranyasoochi application for Forest Department
- Property Information System for Urban and RDPR
- GIS for Disaster Management Support
- GIS for COVID-19 Pandemic
- Karnataka Election Information System



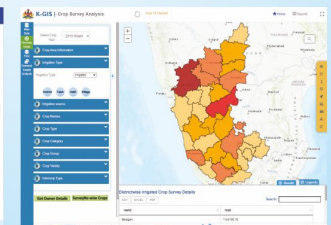
KGIS Portal - Single Gateway for Spatial Data



Karnataka Forest Fire Analysis



Karnataka At A Glance - GIS Portal



Crop Survey Analysis - Web App