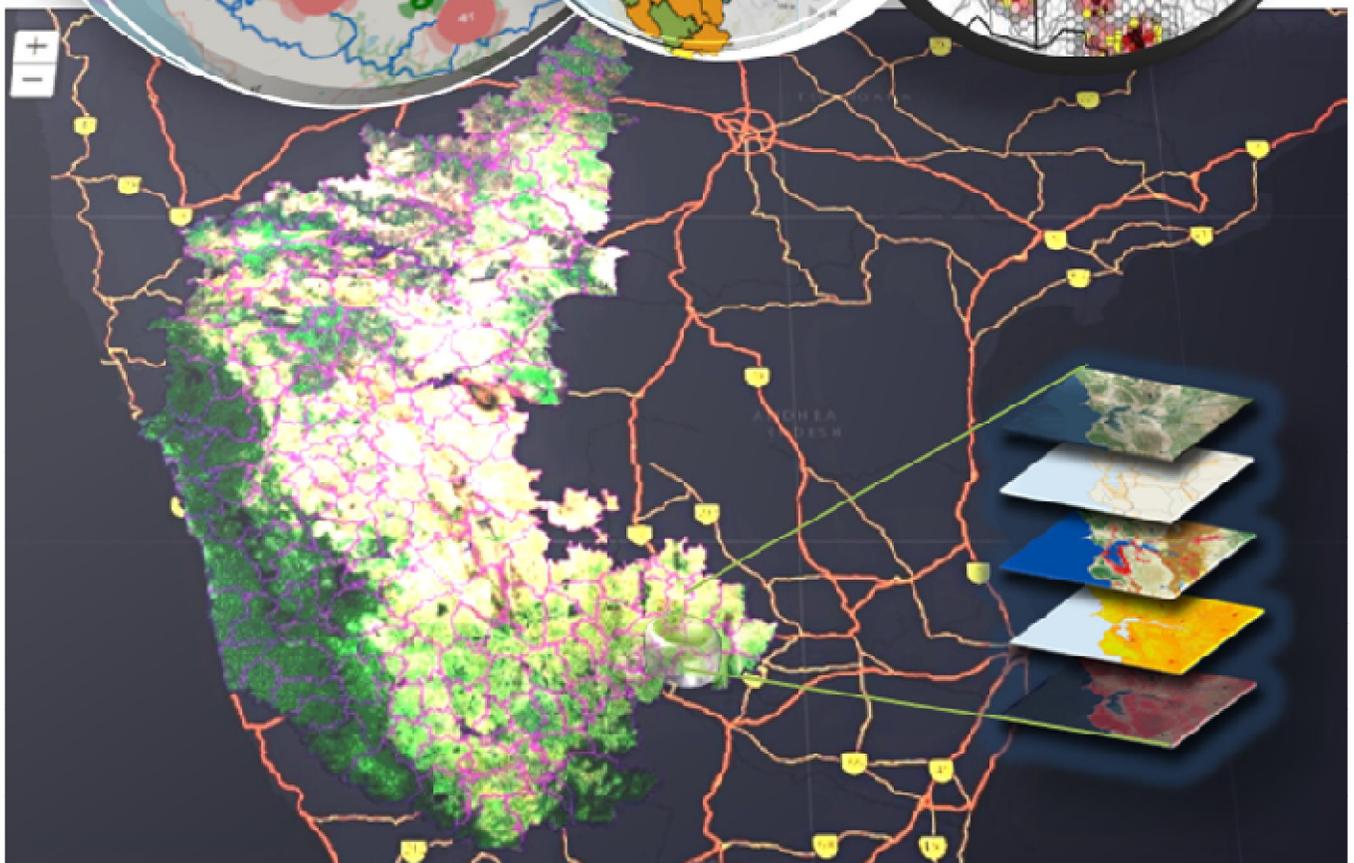
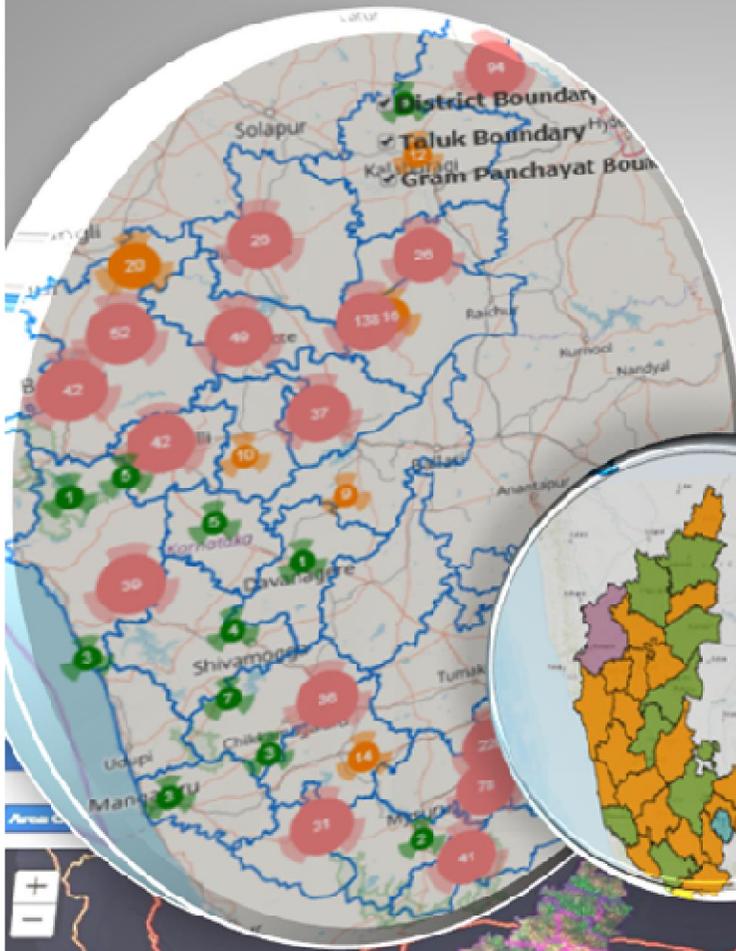
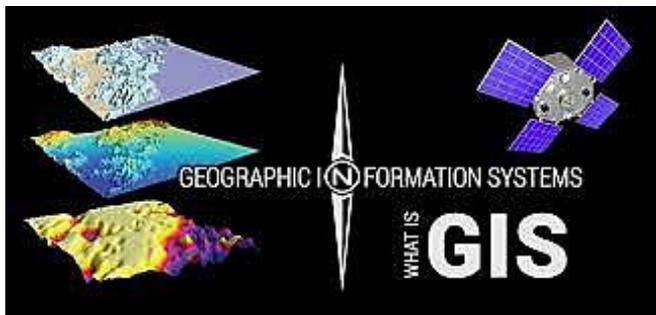


# Karnataka GIS



# Karnataka Geographic Information System

Karnataka ó GIS (K-GIS), the concept of which was the foresight of the Government of Karnataka and the Karnataka JnanaAayoga (KJA), is the result of the process of consultation with the line departments of the government on the vision for the entire state. It encompasses developing a broad consultation process which has enabled 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 is helping in reducing the duplication of GIS efforts in the state, removing redundancy and helping to create an authoritative GIS data to all agencies, enterprises and citizens. K-GIS has layers that has been 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.



Towards achieving the prime objective, there is a need to establish the state needs for robust information and GIS based decision support systems and also focus to ensure

## KGIS Portal

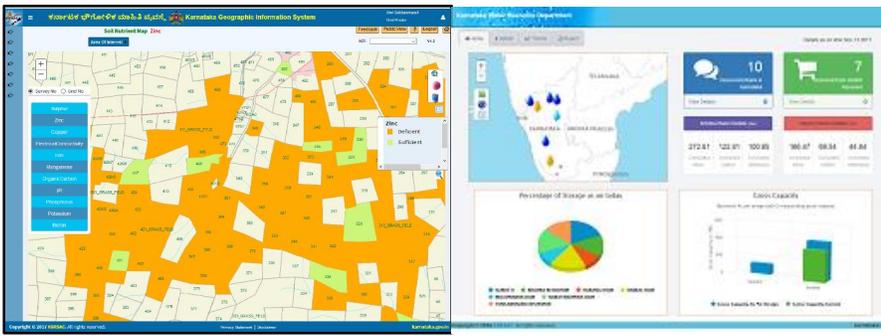
The KGIS portal is a web based single gateway ó integrated platform to access, acquire, process, store distribute and improve the utilisation of geospatial information through:

1. Intelligent web services being published by various agencies
2. Advance tools for GIS based analysis
3. Web and Mobile Apps
4. Business Specific Templates
5. Executive Dashboards and
6. Spatial information for further integration with other enterprise application

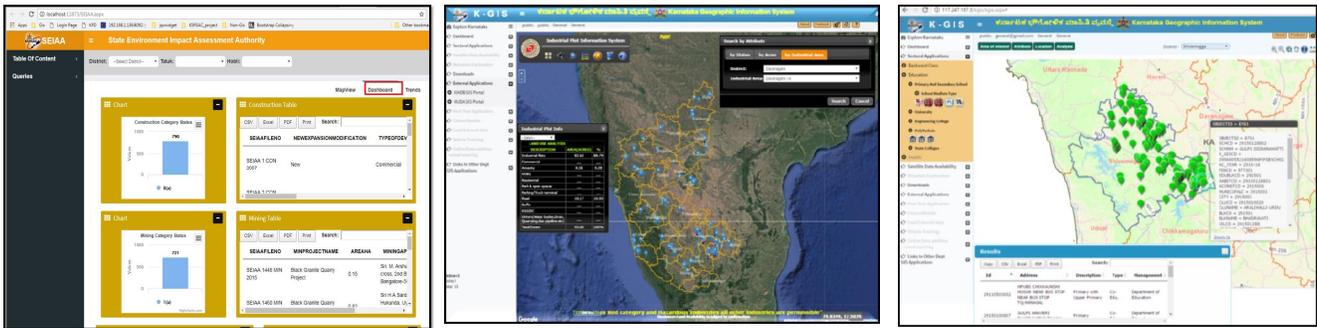
continued availability of GIS ready data assets and applications for decision support. This is being made easily accessible across the departments, citizens, private enterprises, institutions etc. The integrated GIS based Decision Support System (DSS) with the information available across the departments, citizens, private enterprises, institutions etc is enabling the policy makers to make effective decisions for planning and implementation of various developmental activities. KGIS is also helping by empowering citizens with GIS data for various information and development needs.

K-GIS is acting as 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.



### Base Layers

Administrative Boundaries	Transportation Infrastructure	Land Use Land Cover	Water Bodies	Thematic	Municipal
1. State	8. Highways	1. Settlement	1. Canal	1. Structure	1. ULBs
2. District	9. District Roads	2. Built Up	2. Pond/Tank	2. Lithology	2. Wards
3. Taluk	10. Other Roads	3. Vegetation	3. Stream	3. Wasteland	3. Blocks
4. Hobli	11. Railways	4. Forest			4. Property polygon
5. Village	12. Ports				
6. Parliament	13. Airports				
7. Assembly					

### Web Functionalities

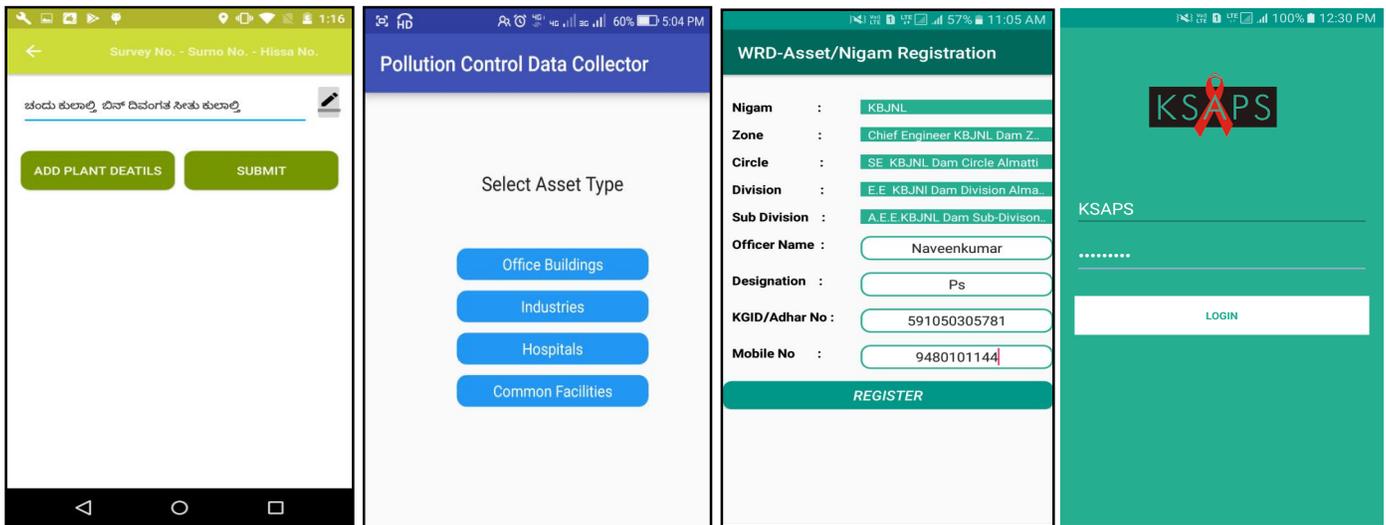
1. Pre-defined queries	6. Data Visualisation through Heat maps, Charts, Graphs and Reports	11. Customised dashboard for user departments
2. User defined analysis		12. Search and download of satellite availability data by government departments
3. Queries on single layer	7. Time series analysis	
4. Queries on multiple layer	8. Crowd sourcing of data	
5. Integration with departmental	9. Citizens feedback	13. Integration with other

- 14. Integration with various existing Government/ MIS applications
- 15. Geo-tagging of departmental asset data
- 16. Predictive analysis and back end user analysis
- 17. Query based Decision Support mechanism
- 18. Trend and pattern analysis

### Mobile Applications

A plethora of mobile applications have been developed catering for the need of line departments of the Government. Functionally these applications can broadly be classified as:

- 1. Mobile Application for Geo tagged Data Capture
- 2. Mobile Application for GIS Data Updating
- 3. Mobile Application for other uses (Nearby services, Citizen application)



## **KGIS Benefits**

1. GIS data availability at all levels to help bringing accountability and responsibility in Governance
2. A major support to state, district and locale Governance by embedding GIS in all aspects of planning and development at state/district/panchayat levels
3. Citizen service by giving access to state wide map/image/geospatial information
4. Geo-enabling e-governance and public services
5. Enabling a "crowd-sourced" interactive process of citizen involvement in providing feed-back/inputs/data as a virtual geographic ingest
6. Brining transparency and geo-spatial information support in decision-making
7. Enabling sound process of monitoring and identifying "gaps in development"
8. Accelerated development of many Enterprise-GIS solutions being undertaken by private enterprises and help align these to state development
9. To make the state to be in the forefront of this field of technology and applications that are fast growing globally