



Karnataka GIS



Karnataka State Remote Sensing Applications Centre
(Established in 1986, Nodal Agency for RS and GIS since 2002)

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ಅನುವಯೋಕ ಕೇಂದ್ರ

Karnataka State Remote Sensing Applications Center

Dept. of IT, BT and S. & T. CoK



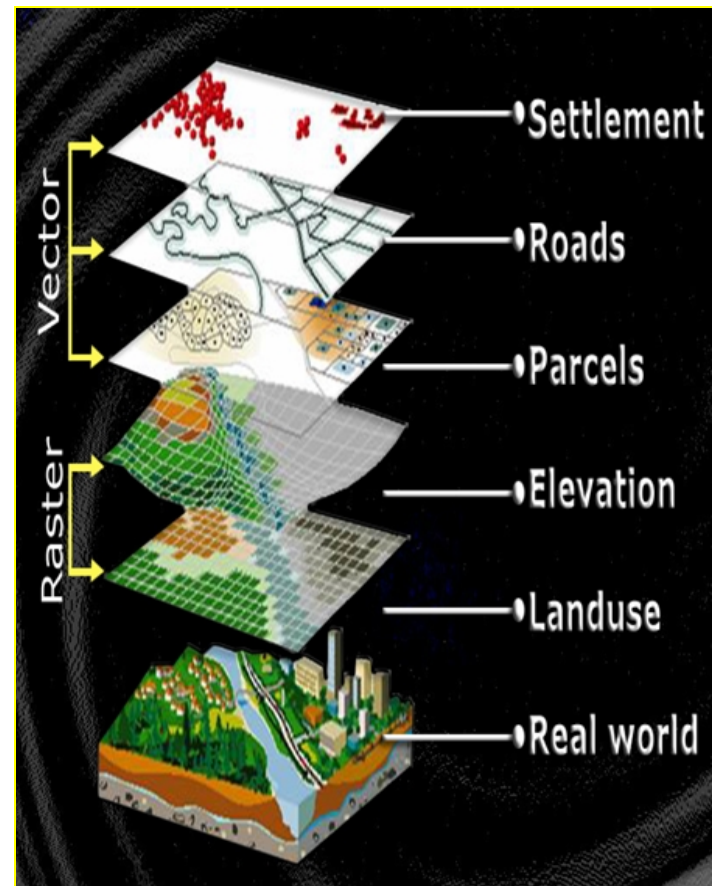


Mandated Activities

- ❖ Generate Geospatial database using RS & GIS
- ❖ Develop applications for line departments
- ❖ Repository of Information/ Data/ Maps
- ❖ Build Capacity in RS & GIS

Key Assets for Entire State

- ❖ 60+ Natural Resource & other State GIS Layers
- ❖ 500+ Layers of area specific database including Urban GIS layers
- ❖ Geo-Referenced Digital Cadastral database of 30662 villages
- ❖ Digital Satellite Images of multiple dates & resolutions (56/23.5/5.8/2.5/0.5m)
- ❖ Trained/Qualified Multi Disciplinary Scientists/Engineers





Current Projects

No	Project	Sponsor
1	Space-based Information Support for De-centralized Planning (SIS-DP)	NRSC, DoS, GoI
2	Slum Free City Mapping for 10 Cities of Karnataka	DMA, GoK
3	Organizing and Maintaining a MUDA-GIS DSS and Supporting GIS requirements for Master Planning and Administration and	MUDA, Mysore
4	Support for Improved Program Integration in Rainfed Areas for the Karnataka Watershed Development Project-II (Sujala-III)	WDD, GoK
5	Updation of Network Assets of ESCOMS under RAPDRP and Updation of Base map of Bangalore division of BESCO	ESCOMS
6	Delineation of Notified Forest Area in village maps as per forest working plan	KFD
7	Forecasting Agricultural output using Space, Agro meteorological and Land-based observations (FASAL)	MNCFC, GoI & SAC, ISRO, GoI
8	Integrated Coastal Zone Management	SAC, GoI
9	Generation of Pre-Level surface plan and estimation of volume of extracted material for "C" category mines	DMG, GoK





Current Projects

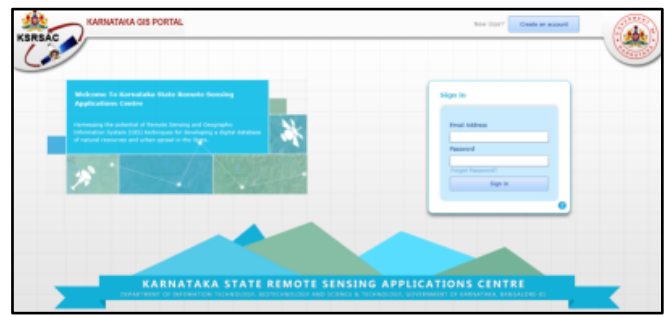
No	Project	Sponsor
10	GIS Database Creation and Boundary delineation for NMPT	NMPT
11	Mapping Temporal Changes of Quarrying in Uttara Kannada District Using RS and GIS Technique	KFD, GoK
12	Land use change analysis for Tippagondanahalli Reservoir catchment area	EMPRI
13	GIS-Based Web Application for Mine Information System	DMG, GoK
14	Industrial Plot Information System Portal for Karnataka Industrial Area Development Board	KIADB, GoK
15	GIS Based Crime Analysis and Reporting Engine (G-CARE)	SCRB, GoK
16	Mapping of Bangalore Milk Union Limited (BAMUL) Milk Supply Route and Distribution Outlets	BAMUL, KMF, GoK
17	Development of GIS Portal for GoK Departments (G2G)	GoK
18	Establishment of Karnataka GIS	GoK



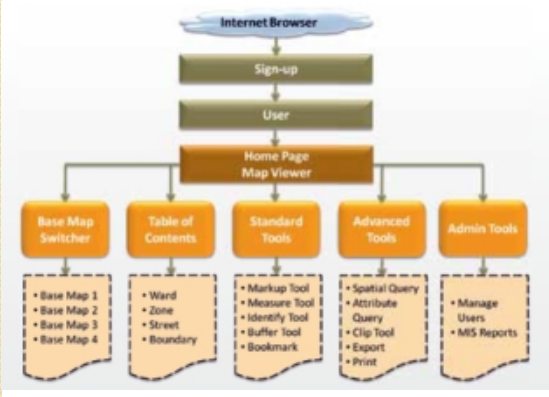
G2G-GIS Portal



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Administrative Layers		Thematic Layers	
<ul style="list-style-type: none"> State Boundary District Boundary Taluk Boundary Hobli Boundary Village Boundary City Boundary Cadastral Maps with Survey Numbers Parliamentary Boundary Assembly Boundary Ward Boundary Forest <ul style="list-style-type: none"> Circle Division Range 	<ul style="list-style-type: none"> Watershed <ul style="list-style-type: none"> Region Basin Catchment Subcatchment Watershed Subwatershed Miniwatershed Microwatershed 	<ul style="list-style-type: none"> Land Use <ul style="list-style-type: none"> 2001-2002 2005-2006 Lithology Geomorphology <ul style="list-style-type: none"> 2001, 2005 Structure Ground Water Prospects Minerals Forest Status Forest Type Forest Density Soil Land Capability 	<ul style="list-style-type: none"> Hydro-soil (Run-off potential) Soil Irrigability Slope Wastelands <ul style="list-style-type: none"> 2003 2005-2006 2008-2009 Land degradation Oil Palm Suitability Tanks
Waterbody Layers	Base Layers	Transport Layers	Mobile Application Layers
<ul style="list-style-type: none"> Waterbodies (Reservoir River, Tank...) Drainage Canal Network 	<ul style="list-style-type: none"> Wells (Observation Wells) Settlement Location Settlement Type 	<ul style="list-style-type: none"> Road Type Road Status Railway 	<ul style="list-style-type: none"> Asset Point Asset Line Asset Polygon





G2G-GIS Portal -Web based Tools



Imagery View



Base Map



Identify Tool



Attribute Query



Spatial Query



Buffer Tool



Clip Tool

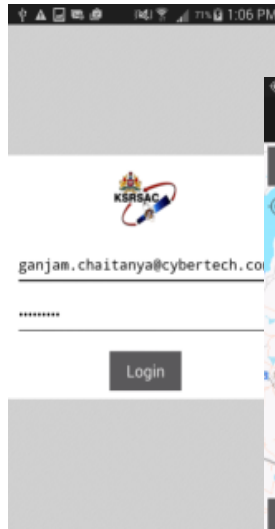


Print Tool

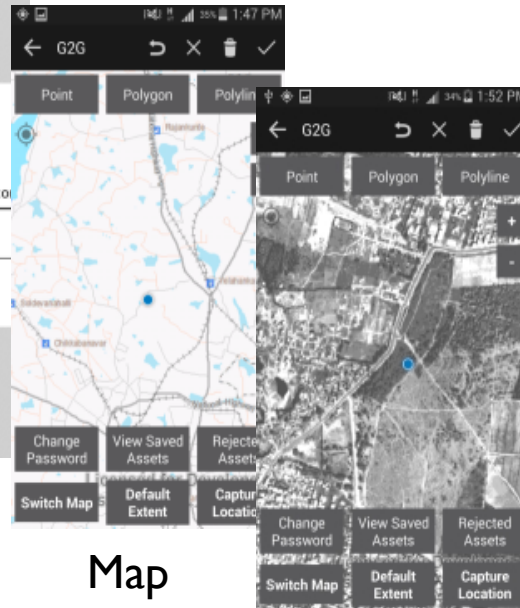
Mobile Application on G2G GIS Portal



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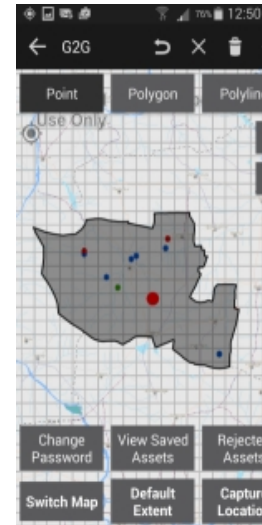
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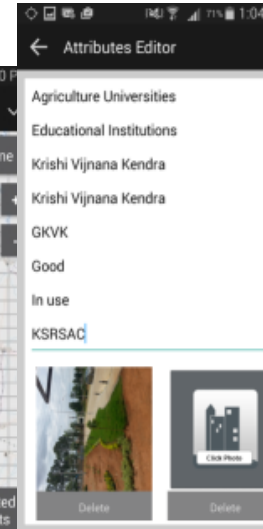
Map



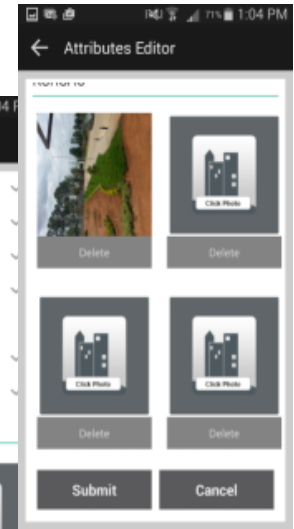
Image



Add Asset
Point/Line/Polygon



Attribute



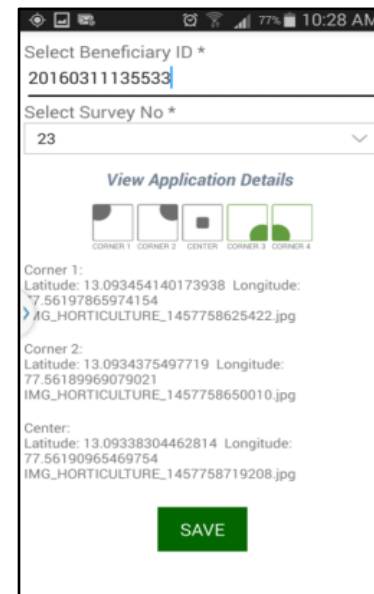
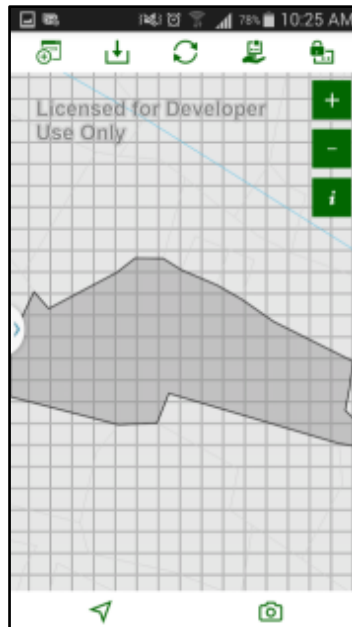
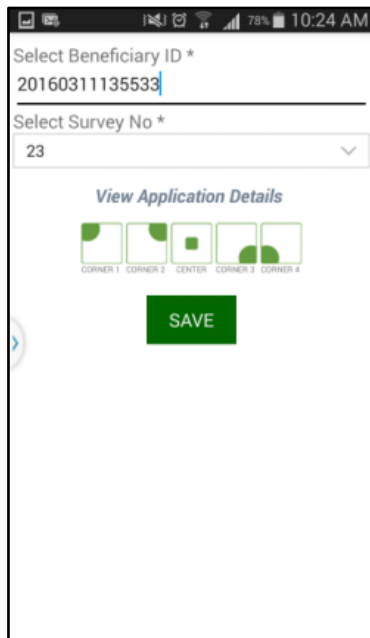
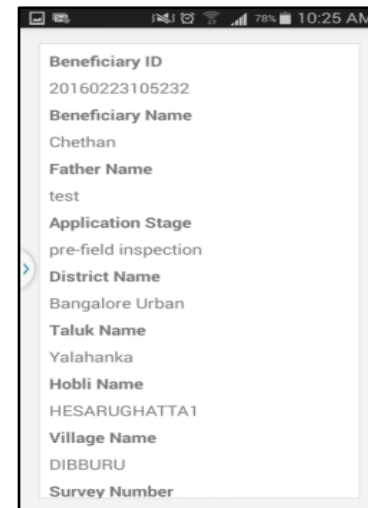
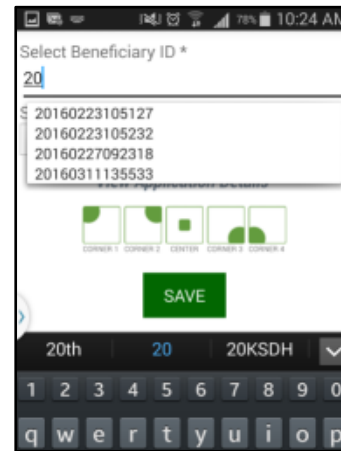
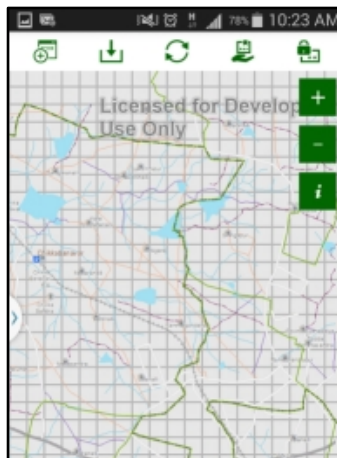
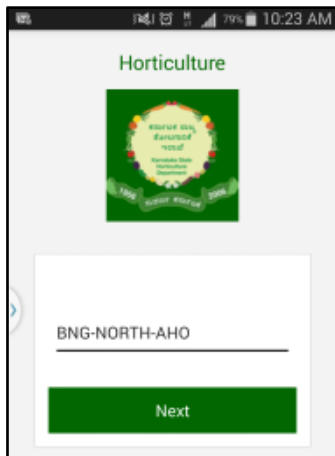
Upload

- Asset Data Capture
 - Point
 - Line
 - Polygon
- Geotagged Photographs
- 51 departments



Mobile Application for Beneficiary Survey Number Tracking Horticulture & Sericulture Depts.

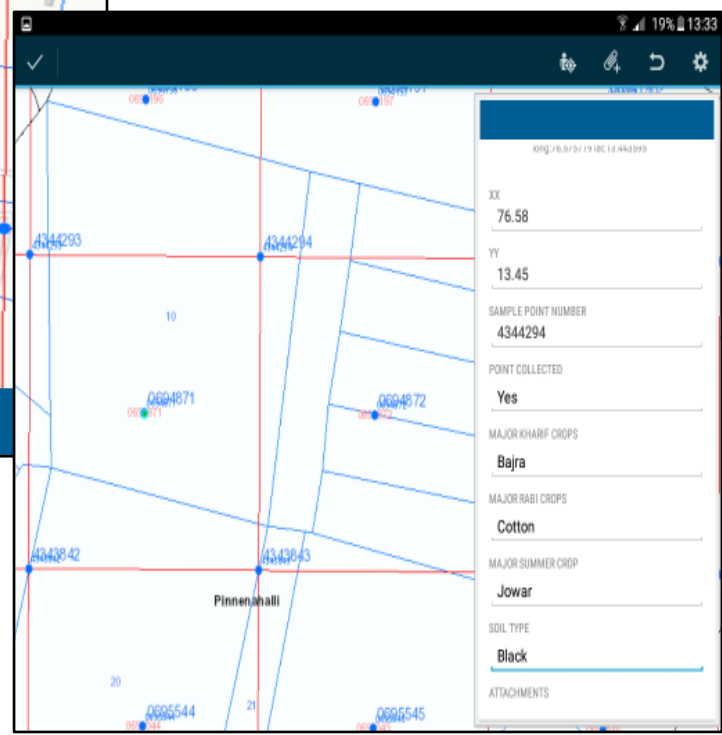
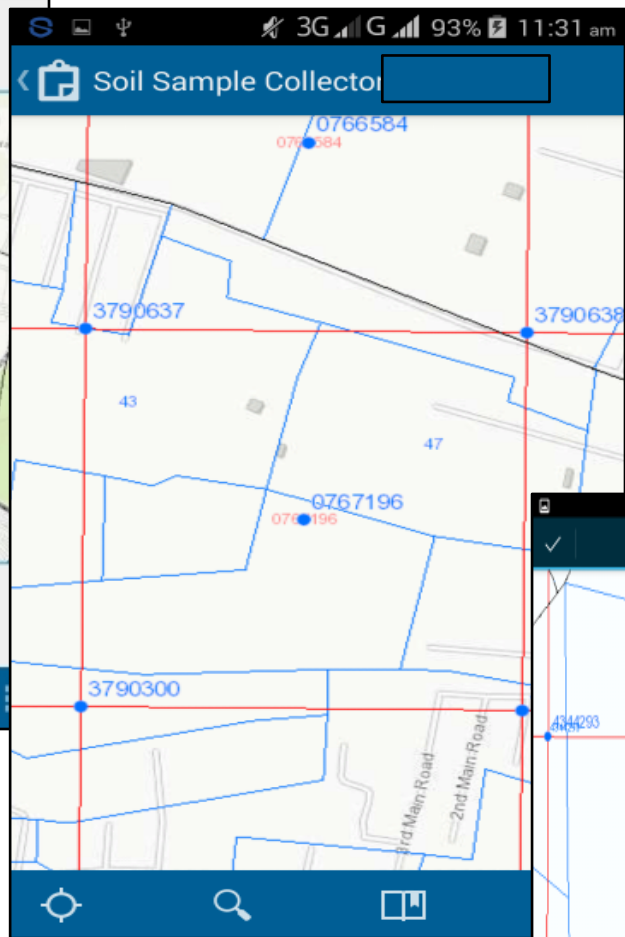
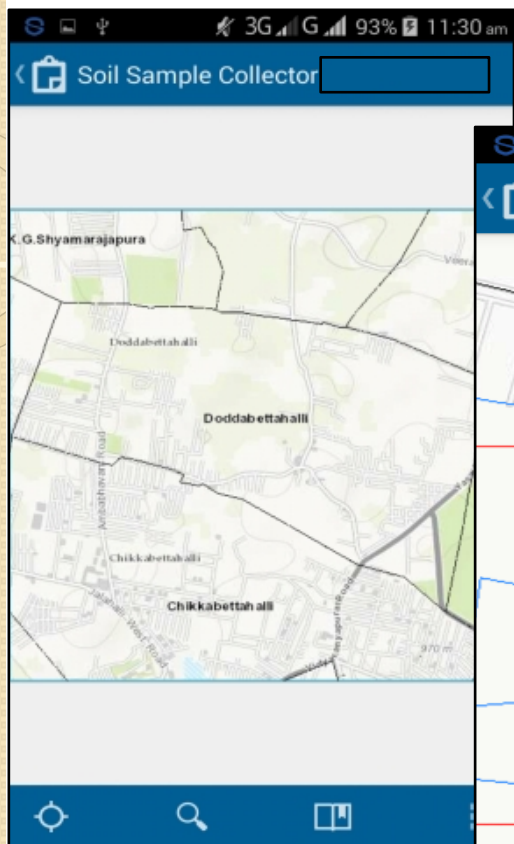
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Mobile Application for Soil Sample Collection Soil Health Mission - Agriculture Dept.



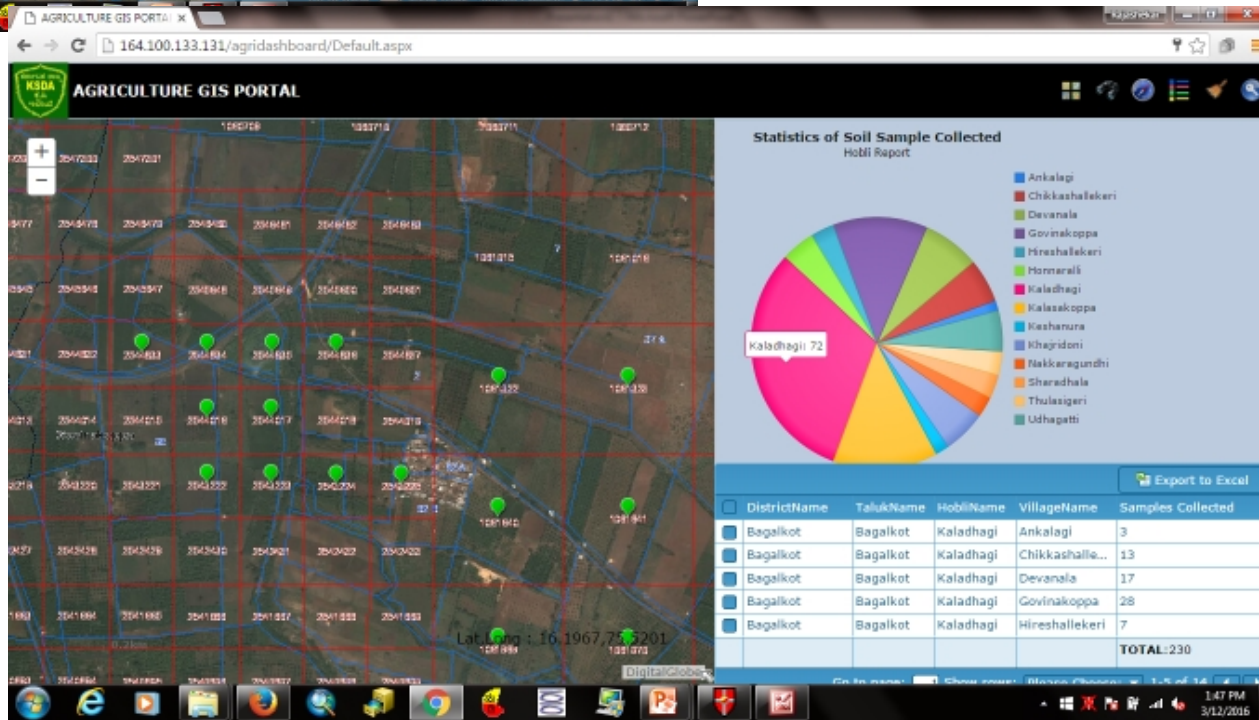
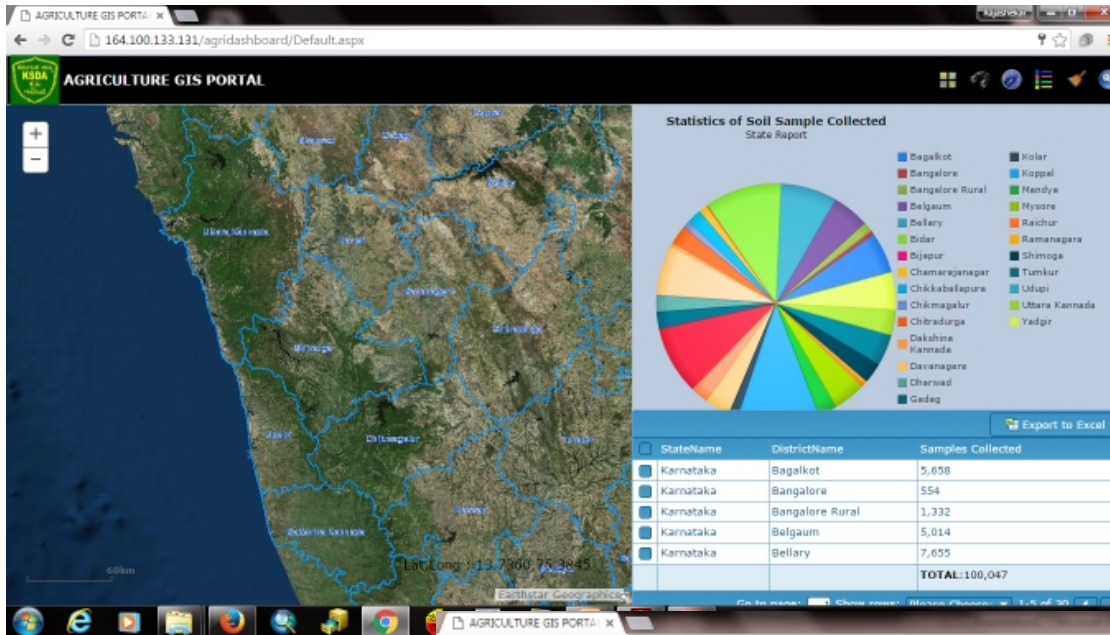
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Web GIS Dashboard for Soil Sample Collection Monitoring



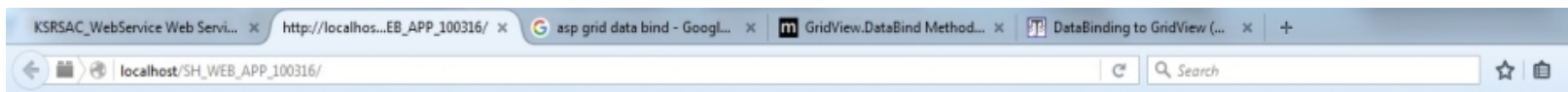
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Grid-wise and Sy. No.-wise Integration of Bhoomi RTC data with Soil Health Card Portal



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Soil Health - Web Service Data Extraction from KRSAC

Farmer Details

Unique ID(KRSAC)	1722265	GO	Extracting data from KRSAC...	
Farmer Name	ಸಾಕು	Name in local language		
State/UT	Karnataka	District	Mandya	
Taluk	Krishnarajpet	Hobli		
Village	Kotekere	PIN		
Adhar No.		Mobile No.		
Address		Address in local language		

Land Details(Location of Farm)

Survey No.-Khasra No./Dag No.	8	Hissa No. :	223-TRIAL-P1 250
Land Extent	225-TRIAL-28.19.00.00 0	Soil Type :	
Latitude	12.67563354	Longitude :	76.4419559
Crop Name			

Save Clear

	Sl No.	Unique ID	State Code	State Name	District Code	District Name	Sub District Code	Taluk Name	RSK Name	Village Code	Village Name	Survey No.	Hissa No.	Owner Name	Land Extent	Soil Type	Latitude	Longitude
Select	1	1722265	29	Karnataka	573	Mandya	05546	Krishnarajpet		2957105541612440	Kotekere	8	223-TRIAL-P1 250	*ಗೋಮಾಳ	225-TRIAL-28.19.00.00 0		12.67563354	76.4419559
Select	2	1722265	29	Karnataka	573	Mandya	05546	Krishnarajpet		2957105541612440	Kotekere	8	223-TRIAL-P1 250	ಸಾಕು	225-TRIAL-28.19.00.00 0		12.67563354	76.4419559
Select	3	1722265	29	Karnataka	573	Mandya	05546	Krishnarajpet		2957105541612440	Kotekere	8	223-TRIAL-P1 250	*ಬಡಿಯಯ್ಯ	225-TRIAL-28.19.00.00 0		12.67563354	76.4419559



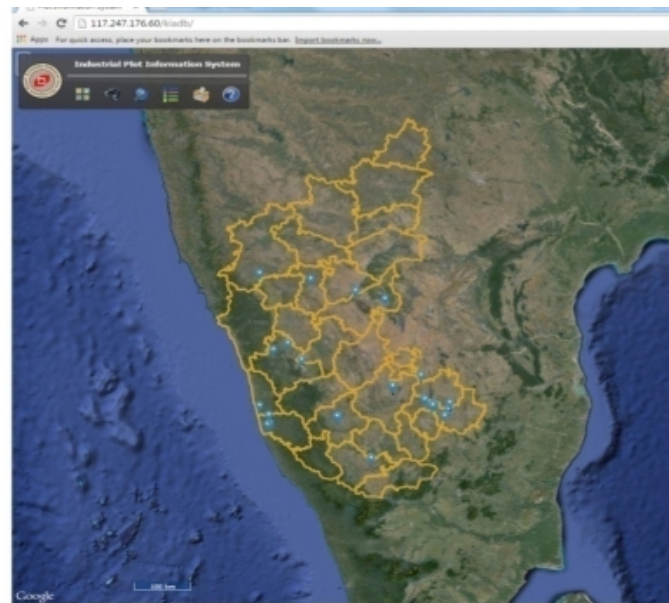
Industrial Plot Information System Portal for Karnataka Industrial Area Development Board, Industries Dept.

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Functions

- Login for different users
- Query locations of industrial area
- Show map of district and industrial area boundary
- Show map of industrial plot status
- MIS information for plots
- Query on plots
- Weekly updation of plot information



Search by Attribute

by Industrial Area by Acres by Status

District : Bangalore Rural

Industrial Area : Bangalore Aerospace IIC

Search Cancel

Table of Contents

Legend Layers On/Off

- Other
- Vacant
- Allotted
- Park and Open Spaces
- Litigation
- Transportation
- Residential
- Amenities
- Waterbody
- Commercial
- Habitation
- Parking/Truck Terminal

Industrial Plot Details

Sl. No.	Index	Plot Number	Area (Acres)	Address
1	Vacant	Vacant	0.04	
2	Vacant	Vacant	0	
3	Allotted	Allotted	2.489979	Plot No. 487-485
4	Vacant	Vacant	0	
5	Vacant	Vacant	0	

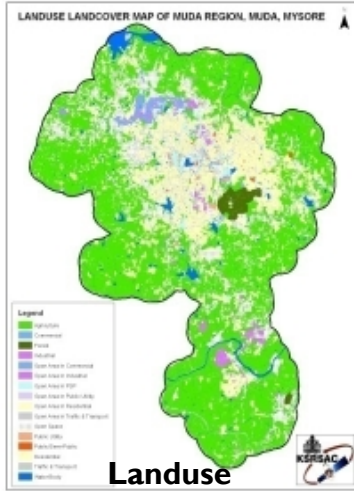
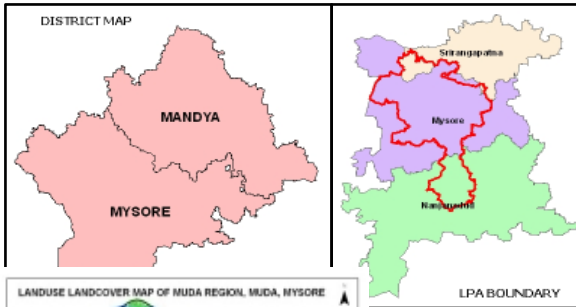
Go to page: Show rows: 5 - 1 of 79

77.7490, 13.1853

Urban GIS – MUDA, Mysuru



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**MYSURU URBAN DEVELOPMENT AUTHORITY
DECISION SUPPORT SYSTEM GEOPORTAL**

ಮೈಸೂರು ನಗರಾಭಿವೃದ್ಧಿ ಪ್ರಾಧಿಕಾರ
ಬೋರ್ಡ್‌ಫೋರ್‌ಟಲ್

HOME ABOUT MUDA CITIZENS

- Important Links
- Services
- Contact Us
- FAQ's

DEPARTMENTAL USER LOGIN

User Name:

Password:

Login Reset

Forgot Password

DECISION SUPPORT SYSTEM GEOPORTAL
Mysuru Urban Development Authority

Tools: Measurements, Data Sources, Selection, Search, Team Planning

Map Content

Layers: Data Sources, Categories

- mysuru_gis_raster_mandatory
- muda_gis_inspection_area
- muda_gis_layout_boundaries
- muda_gis_localities
- muda_gis_localities_2009
- muda_gis_hbl_2013
- muda_gis_monopolizable_boundaries
- muda_gis_muda_development_plan
- muda_gis_planning_district
- muda_gis_proposed_hblc
- muda_gis_state_boundaries

Search geographic names

Search for data (metadata)

Analysis

3D Features

Settings

Land Details

Layout Type: MUDA, Private
Layout Name: Taluk, Hblc, Village

Land Acquisition Section Reports

Acquisition Status: Taluk, Hblc, Village, Layout Type, Layout Name, Survey No, Hissa

MIS Selection

MIS Table: Table 1
Select Field: Field 1
Operator: Select
Value: >= 10

Sno	MIS Table	Field	Operator	Value
1	Table 1	Field 1	>=	10
1	Table 2	Field 2	=	Final Notification

Show Details Clear Close

Site Acquisition Analysis

Area of Interest (AOI): Taluk, Hblc, Village, Risk Boundary

Layer for Selection: Survey Boundaries

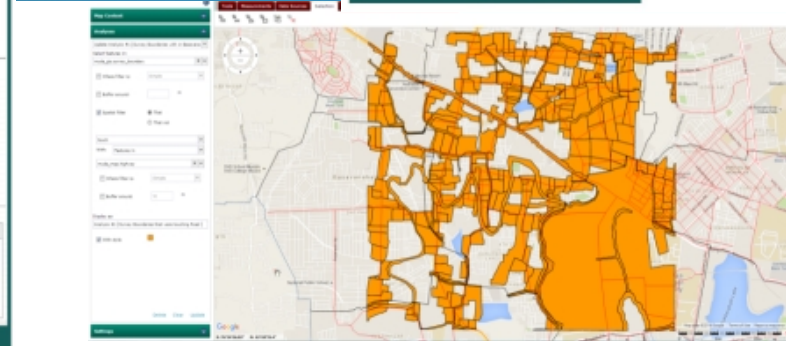
Selection Criteria

Layers for Criteria: Layer 2
Select Field: Field 2
Operator: >=

Selection Method: Buffer, Not Buffer, Drawing, Not Drawing

Site	Layers	Layer Field	Layer Conditions	Condition Values	Spatial Method	Spatial Value
1	monopoly_2013_01	Site Type	=	Agricultural, Openland, Residential	Overlap With	-
2	Road	Road Type	=	All	Buffer	1000
3	Water Bodies	Type	=	All	Not Buffer	5000

Clear Execute Close Export CSV



Mine Lease Information System - Mines & Geology Dept.



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GIS based Crime Analysis and Reporting Engine (G-CARE) (SCRB, GoK)



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Crime Analysis Query for

1. Crime Density
2. Heinous Crime
3. Crime Pattern
4. Automobile Crime
5. Property Crime
6. Road Accidents
7. Date range/ Year wise Crime
8. Hot Spot Analysis

The screenshot displays the G-CARE web application interface. At the top, it shows the Karnataka State Police logo and navigation tabs for Districts, Ranges, Commissionerates, and Bangalore City Commissionerate. The main map area shows the state of Karnataka divided into several ranges: North Eastern Range, Northern Range, Eastern Range, Central Range, Western Range, and Southern Range. To the right, there are several tool panels including 'SELECT BY ATTRIBUTE', 'EXPORT (IMAGE)', and 'Input Layer'. Below the map, there is a 'TABLE OF CONTENTS' panel and a 'Crime Density Analysis' panel. The 'Crime Density Analysis' panel includes a 'Select' dropdown, a 'Chart' dropdown, and a 'Crime Density Analysis' button. Below this, there are fields for 'Date' (From Date: 01/01/2012, To Date: 08/08/2013), 'Symbology' (Min: [red square], Max: [blue square]), and 'Classification Method' (Equal Interval, Num Breaks: 6). A 'Show chart on map' checkbox is also present. To the right of the 'Crime Density Analysis' panel, there is a 'RESULTS' table and a 'Crime Density Analysis' pie chart. The 'RESULTS' table has columns for 'ACTION', 'COUNT', 'PS_CODE', 'PSNAME', 'COUNT', 'COUNT', and 'COUNT'. The 'Crime Density Analysis' pie chart shows the distribution of crime density across different police stations.

ACTION	COUNT	PS_CODE	PSNAME	COUNT	COUNT	COUNT
...





M Tech Geo informatics Programme

KRSRSAC & VTU

Eligibility for the M Tech Course

BE/BTech

- Civil,
 - Environmental Science,
 - Computer Science &
 - Information Science
-
- 117 post graduates passed out
 - Presently 37 students in 1st & 2nd year

Training for GoK Officials

- RS & GIS applications for various line departments such as DTCP, CADA, WDD, KFD, SCRB, DMG, Agriculture, Horticulture, Sericulture, DES, RDPR, etc.
- UG & PG Students of Various Colleges & Universities

Establishment of K-GIS was approved by the Cabinet and subsequently GO. No. ITD14 ADM 2015, Dated 02-06-2015 was issued

- State Government to meet the entire cost i.e. Rs. 149.59 crores and as and when Government of India links National GIS to K-GIS, funds provided by central government then to be adjusted to subsequent AMC and operations cost
- E-Governance Department to provide hosting infrastructure of State Data Centre for this project at their own cost.
- K-GIS to be implemented by Karnataka State Remote Sensing Applications Centre in association with Karnataka State Council for Science and Technology and Karnataka State Natural Disaster Monitoring Centre.
- Establishment of an apex K-GIS Council at the State level, under the chairmanship of a GIS expert.
- All the line Departments of the State Government to compulsorily use the K-GIS for planning, development, better governance and improved citizen services.



Major Elements of K-GIS

- **K-GIS Asset**

- a seamless, state-wide GIS-Ready dataset of about 53+ map/image data layers that are standardised and updated and configured to meet the GIS data and application needs of government, citizens and enterprises.

- **K-GIS Infrastructure**

- a state-of-art “common” state-level computing and networking infrastructure for hosting/serving the K-GIS Asset and serving K-GIS Applications.

- **K-GIS Portal and DSS Applications**

- a suite of GIS applications for decision- and work-processes of different departments; GIS applications for public services and citizens and also hosting/publishing enterprise GIS solutions.



Major Elements of K-GIS

- **K-GIS Capacity building**
 - a sustained effort for training and orientation of users/professionals from government and enterprise in GIS and for positioning an integrated programme of education and research in GIS.
- **K-GIS Policy Management and Practices**
 - through a constant policy-definition and review that promotes GIS usage in the state and creates the environment for success of GIS activity in the state.



