

Dishaank - User Manual

1. Introduction

Dishaank, the mobile application is developed for Survey Settlement and Land Records (SSLR) department for the use of general public and departmental users of Karnataka. The application is developed under Karnataka GIS (K-GIS) Program. K-GIS is being implemented by Karnataka State Remote Sensing Applications Center (KSRSAC). The objective of this app is to enable the citizens to avail the information about the land and its ownership as recorded in Bhoomi database. This is expected to bring in transparency and enable citizens to identify the actual owner, location of land and the extent as available in RTC in their fingertips thereby reducing the land related disputes.

It is to be noted that the Dishaank app is launched for the general use of understanding the land and its related info. The boundaries / data shown are **NOT to be used for any LEGAL purpose**. Disputes in the data / contents displayed in the application should be brought to the notice of SSLR and the resolution need to be obtained by following due administrative process.

The current version of **Dishaank mobile app is 1.10**

2. Background

KSRSAC was entrusted to carry out the digitization of Village maps by SSLR. These maps are available in different scales (1:7920, 1:3960, 1:1980) and these maps were digitized in AutoCAD format by KSRSAC, Quality verified and Certified by SSLR and handed over to SSLR. These individual maps have been published by SSLR for public use / reference – as PDF files.

Further, KSRSAC geo-referenced all 30854 village maps and created seamless mosaic on the CartoSAT (2.5m spatial resolution) satellite image and later spatially geo-referenced the same on 50 cm satellite data and mosaic generated under Karnataka GIS (K-GIS). This geo-referenced seamless village maps, referred as cadastral maps are being used by various departments of GoK for implementation and monitoring of their respective schemes, survey number wise.

SSLR decided to share the available geo-referenced village map data to the public and link the bhoomi records so that the need of citizens to visit the revenue department for knowing the land details and their extent can be largely reduced.

Disclaimer:

1. **The digital boundaries shown in the app may not exactly match to the land boundaries, on the ground. These boundaries are notional which can be used for relating the location of land and its adjacent parcels and can't be used for any legal purpose or measurements. While care is taken to ensure that the villages and survey numbers mentioned are correctly related to bhoomi database.**

there are possibilities of mismatch. Hence, any disputes / corrections noted need to be brought to the notice of SSLR and get it rectified, separately.

2. There are few villages whose cadastral data need to be updated which will be completed and updated which will be completed, in the due course.
3. There are few villages which are not linked with bhoomi database and hence, the ownership records may not be fetched from bhoomi for such villages. Colour coding of these villages / survey numbers are done for easy identification and reference.

3. Broad Functionalities of Dishaank

The list of functionalities available in this application is as follows:

1. Dishaank mobile app available in Kannada and English Language – both in Android and iOS platform.
2. It enables users to identify the administrative boundaries and the survey number of the land as available in the village maps of SSLR department based on their current location or on a click of button on the Karnataka map.
3. To give the benefit of doubt on the accuracies of the map the device variants that are being used by the users, adjacent survey numbers which lies within 30mts from the user current location / clicked location is also shared.
4. Alternatively, the location of survey numbers can also be searched through the hierarchical contents : District – Taluk – Hobli – village – survey number
5. The application enables users to switch between basemap and satellite image view of multiple variants.
6. Option for measuring the distance, area and locating the co-ordinates in multiple units system is available.
7. The option to download the village maps for offline use (non-internet areas) are given so that village / cadastral boundaries can be referred.
8. Options of route navigation to the identified survey numbers from the current user location is available enabled through Google maps.
9. Based on the identified survey numbers, the ownership info of each subdivision within the selected land is displayed.
10. The ownership info includes the name of owner, its extent as per records, ownership type, land type, restriction / litigations any on the land, category of land and any other active transactions being done on the land are displayed on a single click.
11. Apart, the RTC information available for such land / owner is displayed through online connection with land records system of Karnataka, Bhoomi.

12. Separate module for government surveyors are present for them to report the discrepancies on the maps, its linkage to Bhoomi database and the survey numbers, if any.

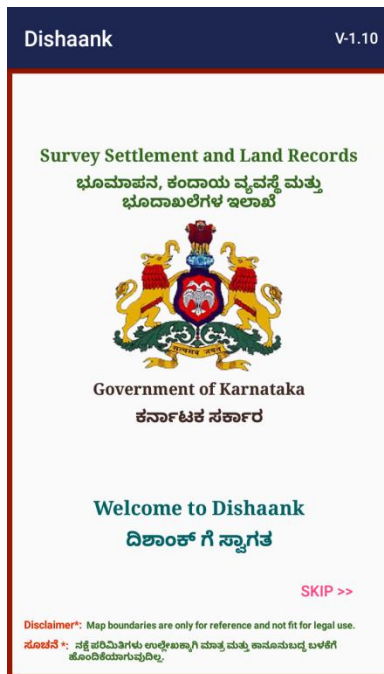
4. Functional Screens with Context based explanation

Mobile Application to be developed to know the Survey number and adjacent survey numbers which lies in user current location for SSLR Dept. The mobile application performs the task of locating the user location, and respective survey number and if any other survey numbers are adjacent within 30mts of the current location in online mode with Map view.

Develop an option to select the survey number of a village based on district, taluk, hobli and know the distance to selected survey number from current location.

Functionalities

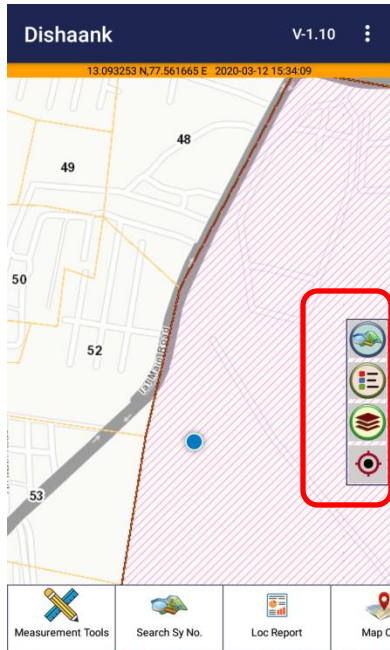
Welcome Page - This welcome page has skip button, which can be used to avoid the delay of 2 seconds taken to go to main page.



Main Page - This page has a map display with current location of user displaying in a blue dot. The coordinates of the users in latitude/longitude

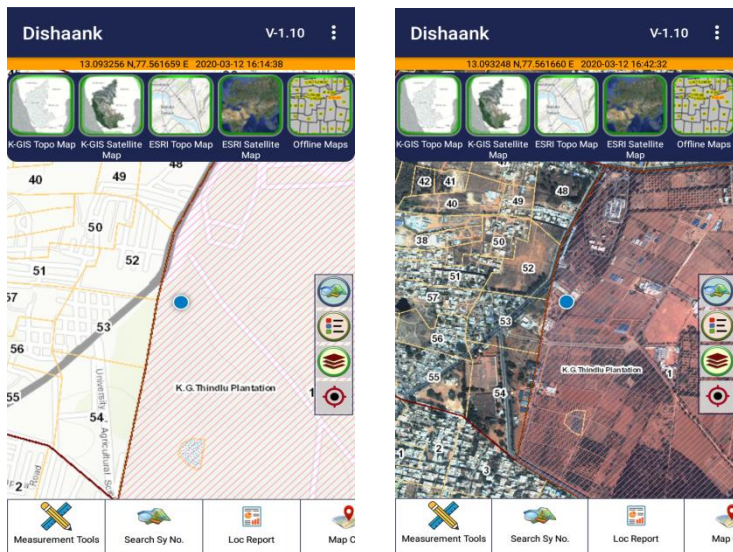
And there are 4 functional buttons in this page.

1. Measurement Tools
2. Search Sy No
3. Loc Report
4. Map Click

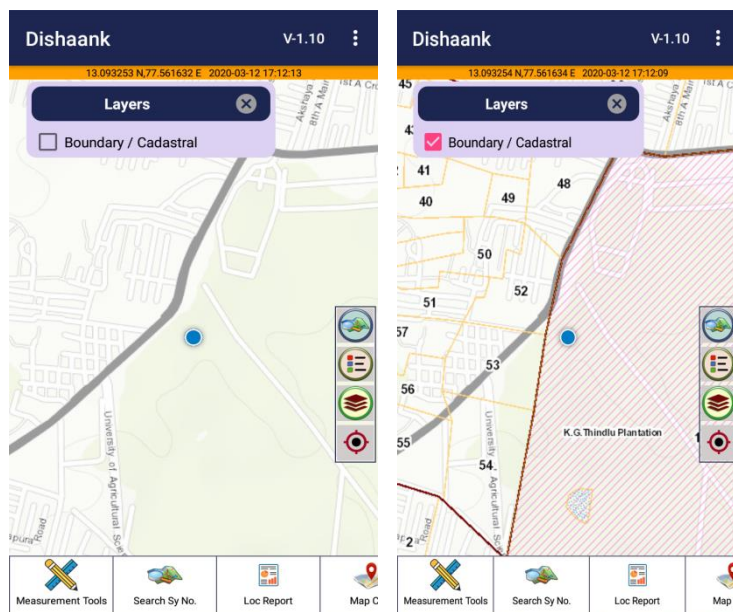


Apart from the 4 main buttons, the main screens also have 3 toggles **OFF**, **ON** buttons at right side of the map in this page.

1. Location: to zoom to the current location
2. Layer View: to display the layer list
3. Legend: to display the legend / symbols used in the map
4. Basemap Gallery: to select the variants of background from topomaps and satellite images



Layer View - The User can see the Boundary Layers which can be displayed ON/OFF by clicking the check box on the layer list.



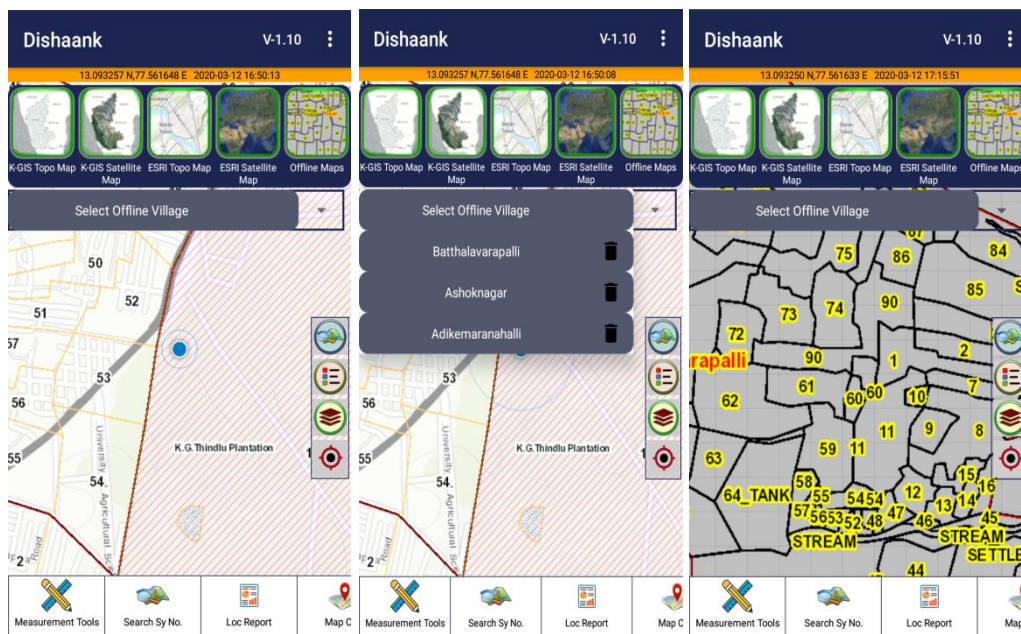
Legend – The User can see the description of various colours / symbols used in the boundary or cadastral layers on the map.



Offline Map

This option gives offline village dropdown, user has to select village name it zooms to the selected Village name will be displayed with map. To select a village and the user has to download data.

Note – User should have option to download only 3 village’s maximum

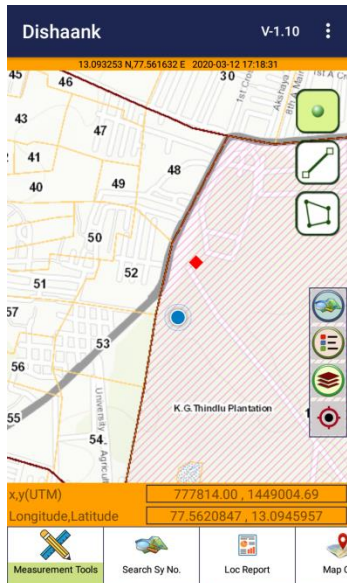


Measurement Tools

Tool can be used to locate a point, measure distance of line segment and measure area of a closed polygon.

1. Locate Point

This tool will be used to identify the co-ordinates of a point clicked on the map. The co-ordinates are displayed in decimal degree ('Latitude' & 'Longitude') & in meters in UTM Zone 43 of WGS 84 coordinate system.



2. Measure Distance

This tool will be used to measure the distance between two locations on the map. The distances are displayed in meters, Km's, Feet & Miles. The user has to click on the map and draw the line between every clicked point



3. Measure Area

User has to draw the Area (free hands) on the Map & has to select the Measuring Unit. Minimum 3 points need to be clicked for displaying the area. The area of the polygon will be displayed in Sq_meter, Sq_Km, Sq_Feet & Sq_Miles.

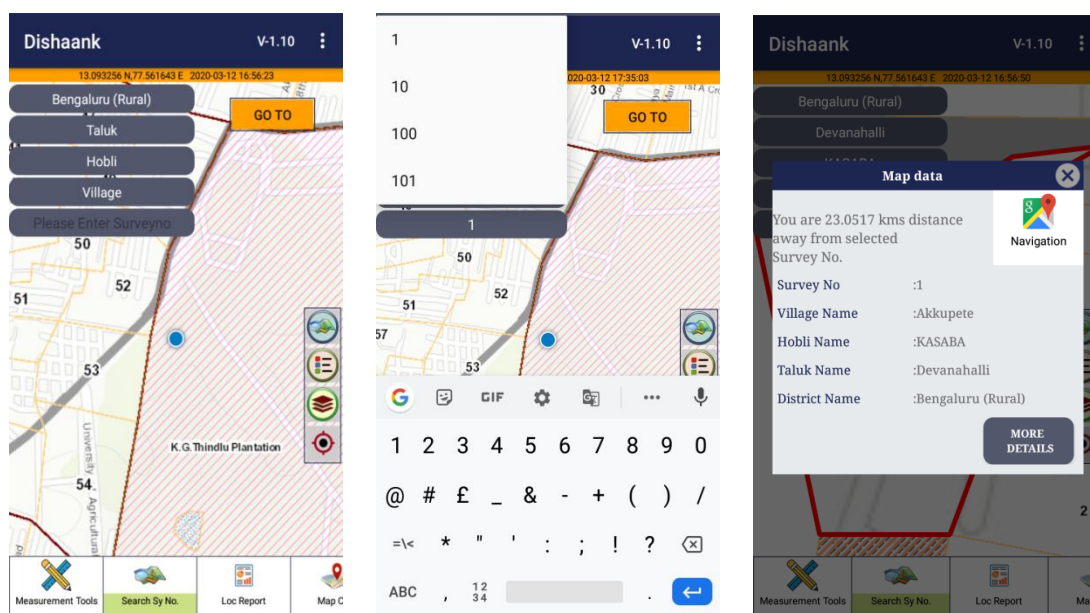


Search Survey No

This button is used for user to select a survey number by entering the textbox based on administrative hierarchy. By clicking on this image button user need to enter respective Survey No. in the hierarchical order of District, Taluk, Hobli and Village name.

On selection of a survey number, the specific survey number is highlighted and zoomed to its location. An automatic output displaying the details of land and its distance from the current user location is displayed with an additional button named “More details”. Also, a **navigation** button is given for the user to identify the optimal route to the selected survey number from the current user location - using the google maps application.

GO TO – While selecting the district / taluk / Hobli / Village hierarchy, user can navigate (zoom to) the specific boundary of interest, by clicking the “Go To” button.



“More Details” popup option gives Owner details & RTC. For this, the Surnoc No & Hissa No need to be selected by the user from the dropdown. On Click of the **“Owners”** tab the ownership information with full details of the land are listed.

The ownership info includes the name of owner, its extent as per records, ownership type, land type, retriCTION / litigations any on the land, category of land and any other active transactions being done on the land are displayed on a single click.

The screenshot displays the Dishaank application interface. On the left, a map shows a route from Vignana Kendra to Maralu Oni, with travel times of 43 min (28 km) and 50 min. The top right shows the 'RTC data' section with fields for Village Name (Balathimmanahalli), Survey No (1), and RTC data. Below this is the 'Owners Details' form with fields for Surnoc No. and Hissa No., and buttons for 'OWNERS' and 'RTC'. On the right, a detailed 'Owners Details' form is shown, including Owner Name, Extent, Is he main owner?, Land Type?, Is land Govt. restricted?, Is there a court stay?, Is land Alienated?, and Any Trnsc running?.

On click of **RTC** button, the details available in the RTC are displayed. This is achieved by transferring the request to the landrecords of karnataka's web portal wherein the RTC is displayed for the selected owner/land, automatically. This contains the Land Details, Owner Details extent, Cultivator and crop details.

Records of Rights, Tenancy And Crops (R.T.C) Form No. 16

Taluk	Hobli	Village	Survey Number	Valid from	Language
Channarayana	Channarayana	Channarayana	1/2/2/2	20/03/2016	English

Land Details

1. Survey Number	2. Extent of Land	3. Acre Ganta
1	Total Extent	5.01.00.00
	Kanaboli	0.00.00.00
	Kanaboli	5.01.00.00
	Remaining	0.00.00.00

Owner Details

9. Owner Name, Father Name and Address	Extent	10. Acquisition Type and Description	11. Other rights and Liabilities
Channarayana Channarayana Channarayana	0.00.00.00	0	
Channarayana Channarayana Channarayana	0.00.00.00	90	
		MR 10/2003-2004	
		04/02/2004	
		Channarayana Channarayana Channarayana	

Cultivator Details

12. Cultivation and Tenancy Details /Previous year crop details printed since current year details yet to be recorded	13. Land utilization and Crop Details													
Year & Season	Cultivator Name & Place of Residence	Cult type	Tenancy Details	Land Utilization	Dry wet of Garden	Crop Name	Crop Extents	Water Source	Yield	Mixed Crop				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2019-2020 sown	Channarayana Channarayana Channarayana	90						No Crop Info.	0.00.00.00	0.00.00.00	0.00.00.00	-	0.00	
2019-2020 sown	Channarayana Channarayana Channarayana	90	5.28.00.00					No Crop Info.	0.00.00.00	0.00.00.00	0.00.00.00	-	0.00	
2019-2020 sown	Channarayana Channarayana Channarayana	90	0.13.00.00					No Crop Info.	0.00.00.00	0.00.00.00	0.00.00.00	-	0.00	

Click on <https://landrecords.karnataka.gov.in/services53/> link contains details of Land Details & Owner Details. The below-mentioned details is available on Bhoomi portal.

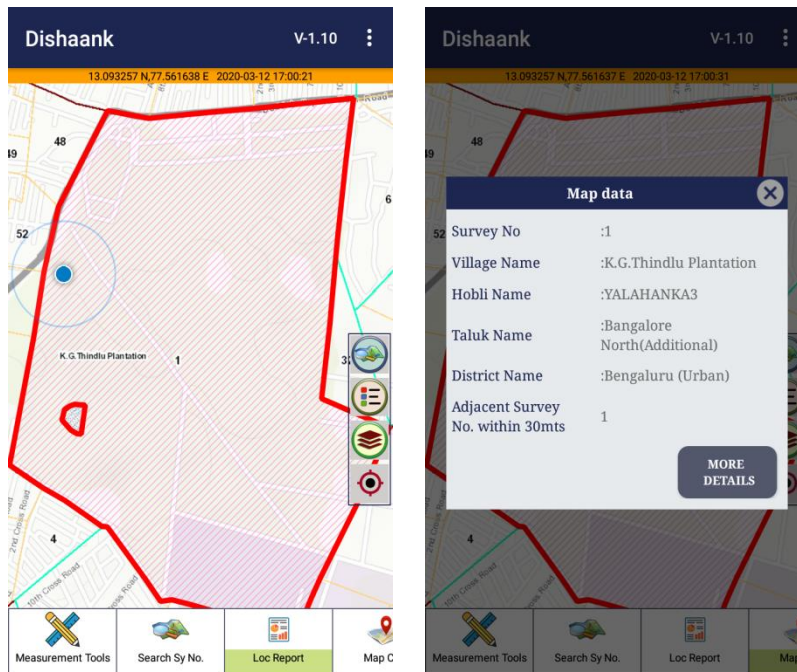
The image displays three panels from the Bhoomi portal. The first panel, titled 'Land Details', shows filters for District (BENGALURU URBAN), Taluk (BENGALURU-NORTH), Hobli (YASHAVANTAPURA1), and Village (ABBAGERE). The second panel, titled 'Survey No. Wise' and 'Owner Wise', shows the same filters and a 'View Details' button. The third panel, titled 'Owner Details', shows a table with columns 'View' and 'Owner Name'. The table contains several entries, each with a 'View' link and the owner's name in Kannada.

View	Owner Name
View	ಖಾತೆದಾರರ ಪುನರ್ವತೀಕರಣಗಿದೆ
View	ಎಲ್ ಪಿ ಅಶ್ವತ್ಥನಾರಾಯಣಮೂರ್ತಿ
View	ಎಲ್ ಪಿ ಶ್ರೀನಿವಾಸಮೂರ್ತಿ
View	ಎಲ್ ಪಿ ಸತ್ಯನಾರಾಯಣಮೂರ್ತಿ
View	ಪಿ ಶೃಂಗಮೂರ್ತಿ
View	ಅಶ್ವಯ್ಯಮ್ಮ
View	ಚೌಡಯ್ಯ
View	ಎ.ಸದಾಶಿವಯ್ಯ

Note: The user may see the “more details” Information in **Loc Report, Map Click & search Survey No** buttons. The functionality remains the same in all locations.

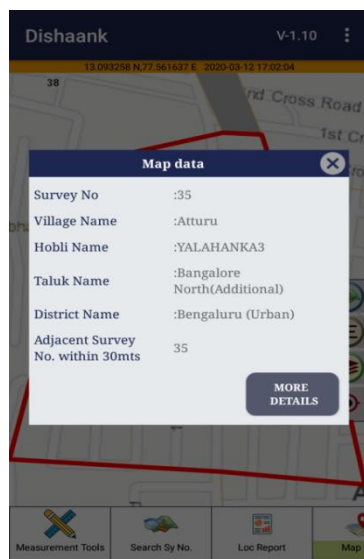
Loc Report

Location report - When this button is clicked, it zooms to the current location, and extracts the information of administrative hierarchy from District, Taluk, Hobli, Village and Survey number based on the current co-ordinate of user. In case if the co-ordinate lies within 30m of any survey number boundary, the details of the adjacent survey numbers are also displayed.



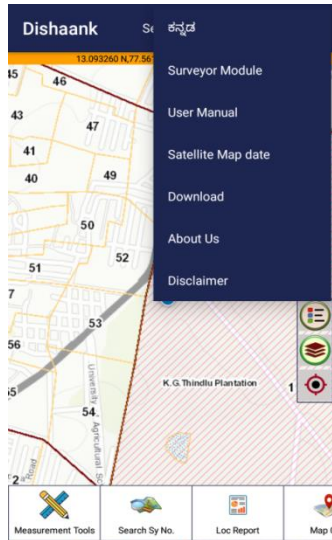
Map Click

By clicking on **Map Click** the user need to click a point on the map anywhere within Karnataka. The map zooms to the clicked location, and extracts the information of administrative hierarchy from District, Taluk, Hobli, Village and Survey number based on the point clicked on the map by the user. In case if the co-ordinate of the point lies within 30m of any survey number boundary, the details of the adjacent survey numbers are also displayed.

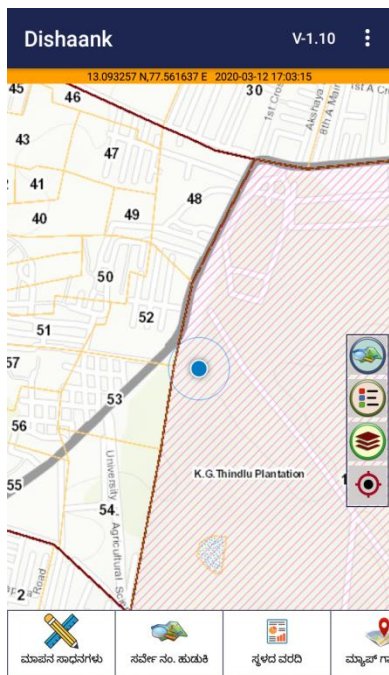


Menu Bar

In menu bar there are 6 options like Surveyor Module, User Manual, Satellite Map date, Download, about us and Disclaimer.

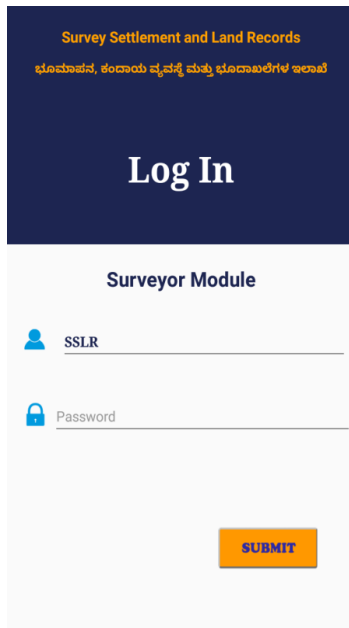


Kannada - User can switch to Kannada language from English and vice versa.



Surveyor Module

Surveyor Module is developed for internal departmental use for recording field issues.

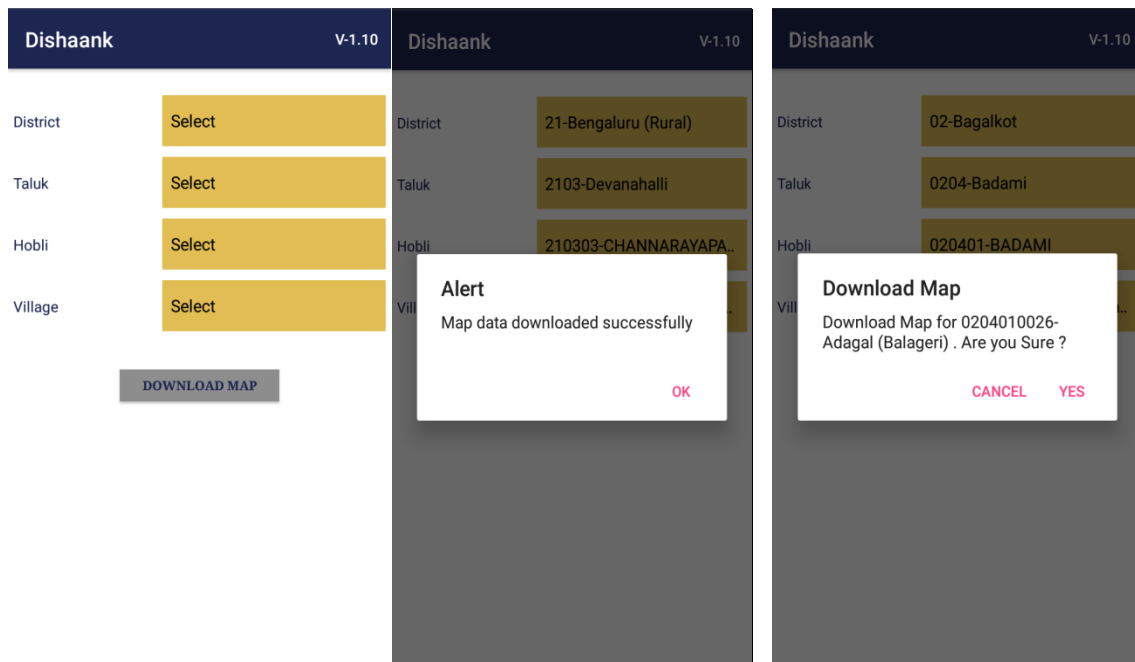


The screenshot shows a login interface for the 'Survey Settlement and Land Records' system. At the top, the title is in English and Kannada. Below it is a large 'Log In' button. Underneath, there is a section titled 'Surveyor Module' with two input fields: one for 'SSLR' (with a user icon) and one for 'Password' (with a lock icon). A 'SUBMIT' button is located at the bottom of the form.

Download

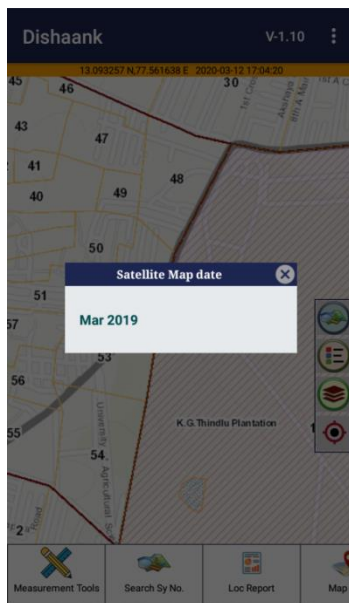
Download button is to download a village map for offline use ie whenever internet is not available, the pre-downloaded village map data can be used for display the boundaries. The user has to download a village data by clicking on Download Map button, and then select district, taluk, hobli, village drop down. After download, a message will be displayed like “Map data downloaded successfully”.

Note – A user can have the option to download a maximum of 3 village’s only – for offline use.



Satellite Map Date

User can see the date of Satellite Map.



About Us

Here it shows the information about the department which developed this application.

Dishaank V-1.10

About Us

Name: Dishaank
Version: 1.10
Designed and developed by : Karnataka-GIS , KSRSAC
K-GIS : <https://kgis.ksrsac.in>
KSRSAC : <http://ksrsac.in/web/>

Disclaimer

Here it shows the disclaimer about the application.

Dishaank V-1.10

Disclaimer

Map boundaries are only for reference and not fit for legal use.

