

Mobile Application for Jalyukt Shivar

(Version 3.0.0)

HELP MANUAL

By



Maharashtra Remote Sensing Application Centre (MRSAC)

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1. BACKGROUND:

Maharashtra Remote Sensing Application Centre (MRSAC), Nagpur established as an autonomous body under the administrative control of Planning Department, Government of Maharashtra is working in the field of Remote Sensing (RS) and Geographic Information System (GIS) since 1988. The Centre has carried out various projects important to State and Central Government. Today, MRSAC has repository of geospatial database comprising of village/city cadastral database administrative boundaries and a wealth of natural resources database generated using satellite remote sensing and GIS technology and has been declared as a 'Nodal Agency' in this regard. The Centre is making sincere efforts for conservation of natural resources of the State by providing innovative and effective solutions to natural resources management challenges. MRSAC is striving hard to make effective use of Remote Sensing & GIS technologies for achieving twin targets of meeting the demands of increasing population and maintaining ecosystem balance by way of creating data warehouse and information dissemination. As a recent mandate assigned by Government of Maharashtra, MRSAC is working on a strategy for using such vast database in shared mode by State as well as Central Government Department for geo-spatial services in G2G and G2C domains. In order to make effective use of these databases and to achieve the e-governance objective of the State, MRSAC has designed and developed an integrated information system/unified geo-portal. The aim of designing of an integrated information system - "MAHA Geo-Portal" is multi-fold:

- To create central repository of department assets in GIS.
- To develop graphic reach integrated information system/ geo-portal with sector specific requirements and Decision Support System (DSS).
- To create Web services of various services databases so that these could be consumed by various departments in their own applications.
- To minimize the physical supply of geospatial database to the users and create an easy access through the web to avoid data duplication and inconsistency by various departments.
- To create inventory of government assets using innovative geo-spatial technology through centralized Web Server.
- To develop various department applications to run on web with various MIS linkages and displays to achieve the departmental day-to-day workflow.

2. OBJECTIVES:

- Mapping of assents using Mobile app (Jalyukt) provided by MRSAC.
- To gather and collect information on the status and success of each assets with photographic evidence and video evidence.
- To send the information from the field or later.

To maintain, manage and visualize the information on Web portal

<http://mrsac.maharashtra.gov.in/jalyukt/>

- for showing the mapped assets of jalyukt shivar.

3. DESCRIPTION OF THE APPLICATION :

To mapped Jalyukt Shivar assets with the help of mobile app.

The Mobile application has 6 modules viz.

- Registration,
- Download Manager,
- Mapping,
- Send Manager,
- Help & Credits and
- Exit

The application is designed to work offline in the remote locations and the user can upload the file/data wherever and whenever the connectivity is established.

3. Minimum Specifications of mobile -

Sr.No.	Feature	Description
1	Operating System	KitKat (4.4).* or higher
2	Sensors	A-GPS, GLONASS, Accelerometer
3	Internet	4G or WiFi
4	Storage	min 1 GB RAM + internal memory (8GB) and higher Also expandable up to 64 GB

4.Installationof App

User will get apk named as "**Jalyukttest.apk**" file on his mobile. He can get it by mail or can download from jalyukt shivar web portal or **Share it**. He needs to click on that apk file.

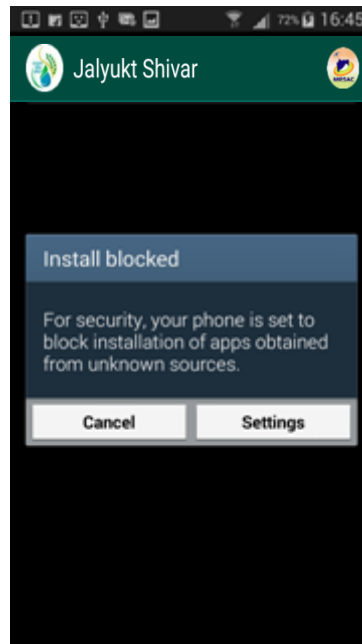


Fig4.1

Click on the Jalyukt.apk icon to install the app.

This window will appear.
(Depends on device)

Click on setting option to obtain unknown source.

OR

Go to setting => security=> unknown source

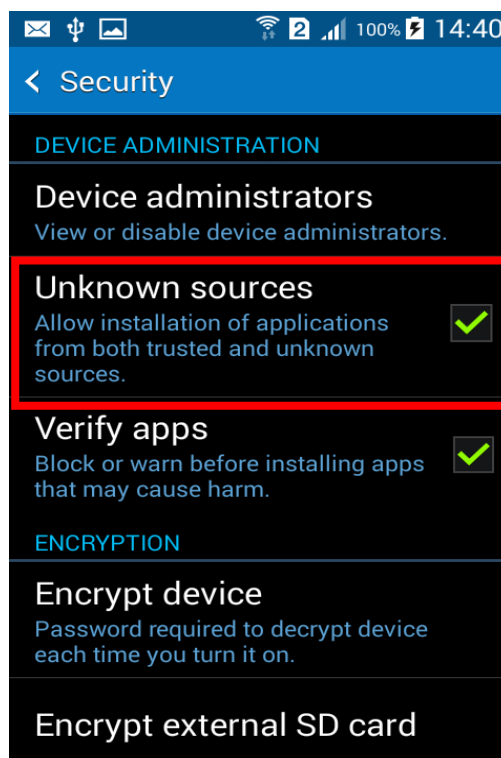
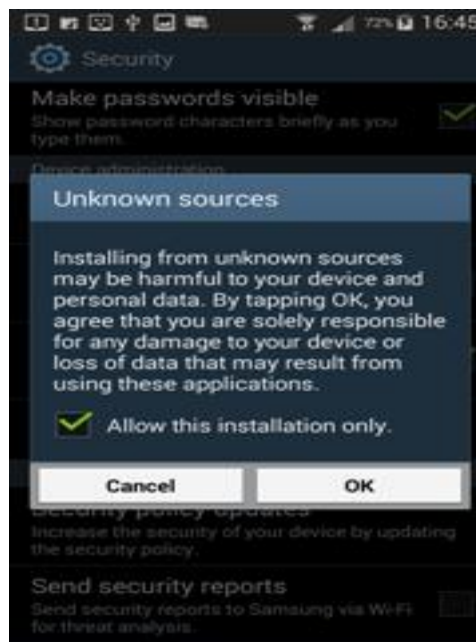


Fig4.2

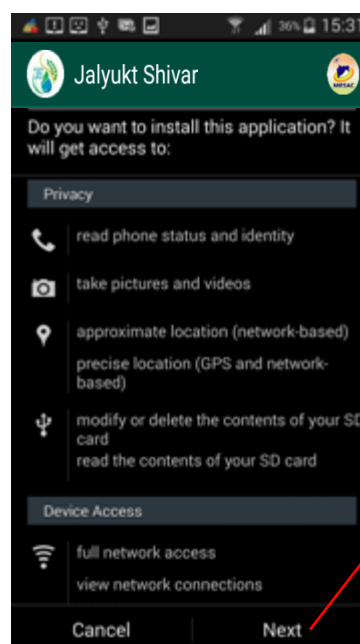
Here, click on the Unknown source check box.

Unknown source dialog will open.



Here, click on the Unknown source check box. Unknown source dialog will open.

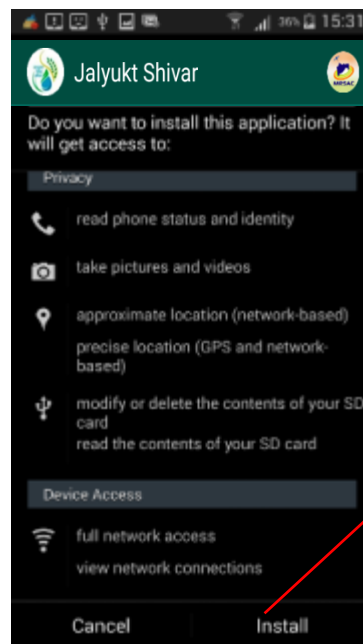
Fig4.3



Click on **"Next"**.

Fig4.4

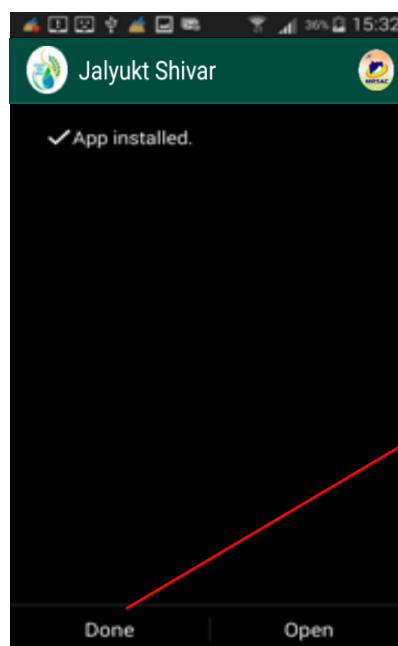
Click on **"Next"** to give permission for installation of apk.



Click on "Install".

Fig4.5

Click on "**Install**" to install app.

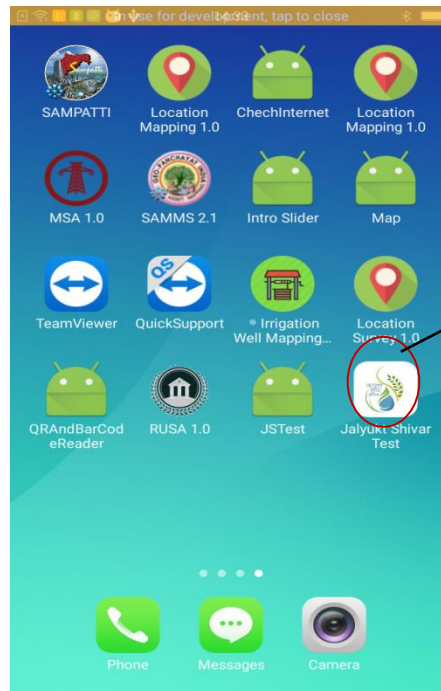


Click on "Done"

Fig4.6

5. MOBILE APPLICATION WELCOME SCREEN:

When user want to open the application it will be available on his mobile screen as below.



User need to click on this icon when he want to use the app.

Fig 5.1

7. MOBILE APPLICATION LOGO:

User need to click on this logo when he needs to start the app any time.



Fig7.1

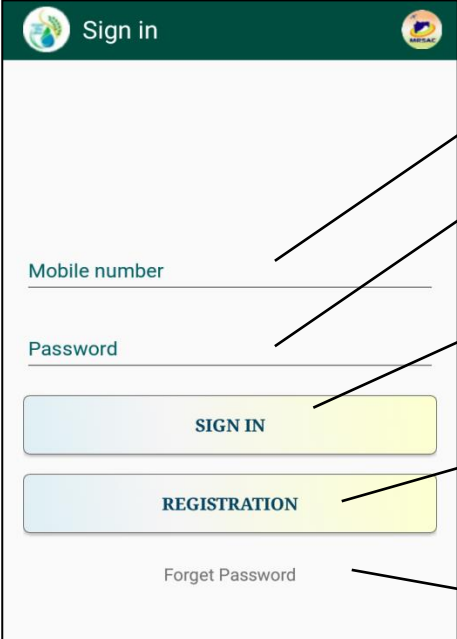
8. MODULES:

There are 6 modules in Jalyukt shivar app. They are:

- Registration
- Download Manager
- Mapping Manager
- Profile Manager
- Send Manager
- Exit

8.1)Log in :

Login screen:

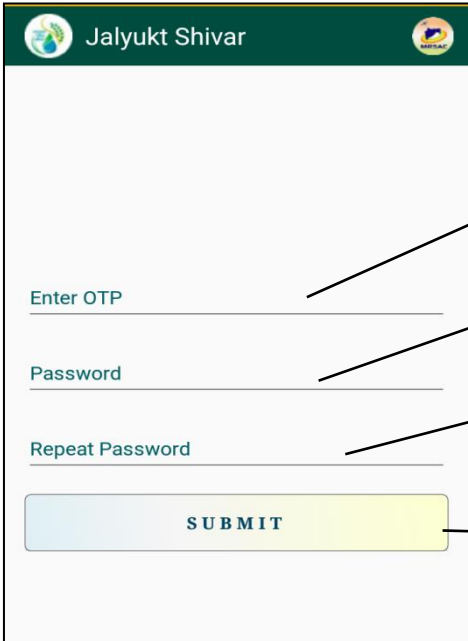


The screenshot shows the 'Sign in' screen of the Jalyukt Shivar application. It features a dark green header with the app's logo and name. Below the header, there are two input fields: 'Mobile number' and 'Password'. Below these fields are two buttons: 'SIGN IN' and 'REGISTRATION'. At the bottom, there is a link for 'Forget Password'. Arrows point from each of these elements to descriptive text boxes on the right.

- Enter mobile number
- Enter password
- Click on 'SIGN IN' button to enter in the app.
- Click on 'REGISTRATION' button for registration
- Click on 'Forget Password' if you forget your password

8.2)Forget password:

Forget Password Screen:

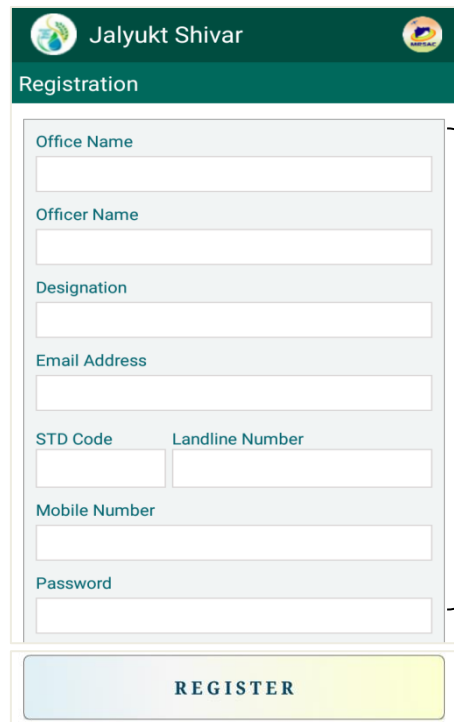


The screenshot shows the 'Forget Password' screen of the Jalyukt Shivar application. It features a dark green header with the app's logo and name. Below the header, there are three input fields: 'Enter OTP', 'Password', and 'Repeat Password'. Below these fields is a 'SUBMIT' button. Arrows point from each of these elements to descriptive text boxes on the right.

- Enter otp which you received
- Enter new password
- Re enter password
- Click on submit to change the password

8.3) Registration:

- **User need to be online during the registration process.**
- This Module contains the registration of User and Login details.



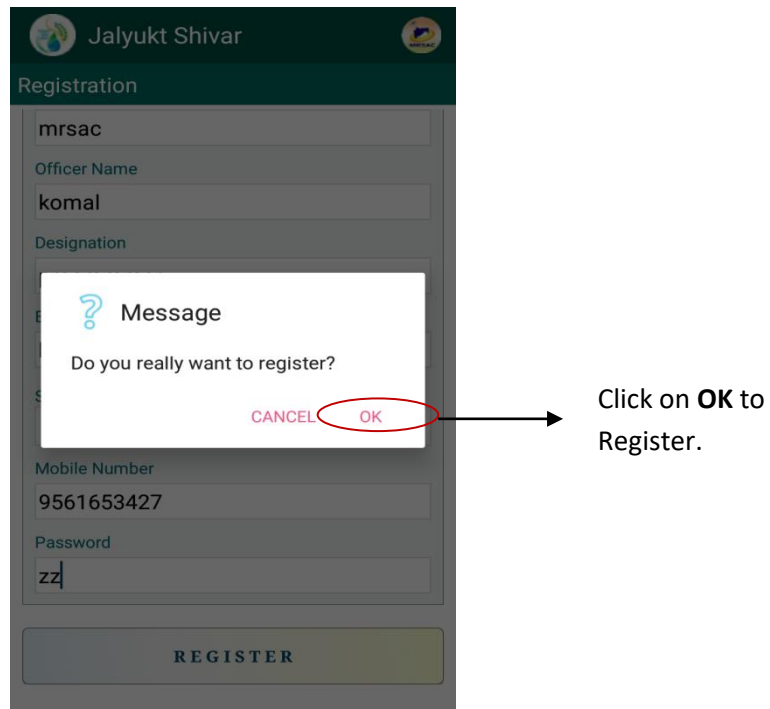
The registration form for Jalyukt Shivar includes the following fields:

- Office Name
- Officer Name
- Designation
- Email Address
- STD Code
- Landline Number
- Mobile Number
- Password

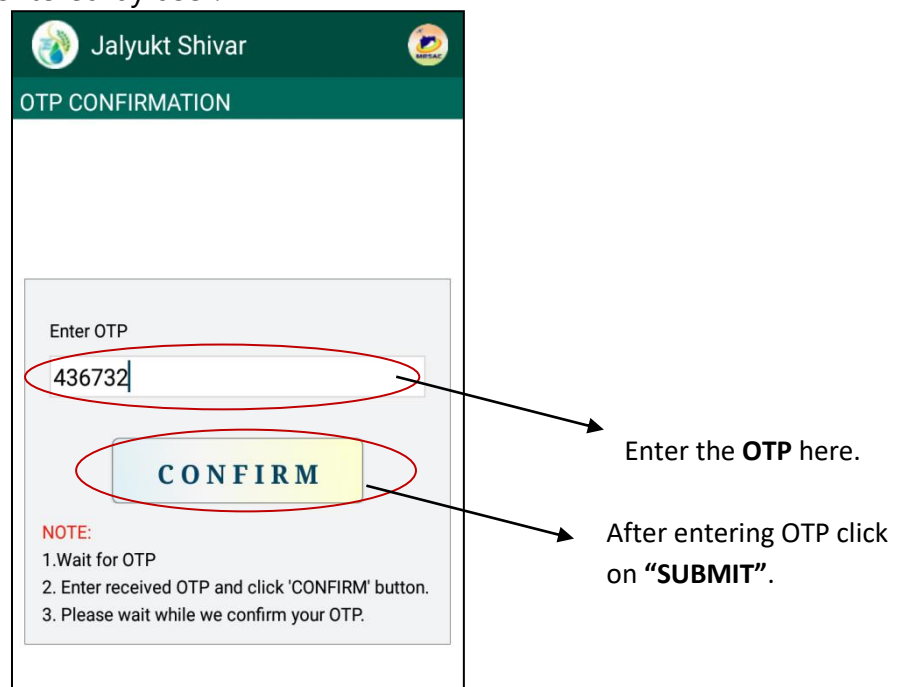
A yellow button labeled **REGISTER** is located at the bottom of the form. A bracket on the right side of the form indicates that the user must fill all these fields at the time of registration.

Fig 8.1.1

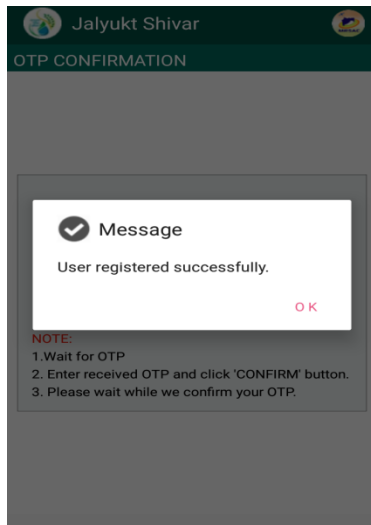
- First time registration is required. Registration will be done by filling required fields such as name of the office, officer, mobile no., designation and email address etc.
- Once the user (Jalyukt shivar official person) fills all these details and click on **“REGISTER”** it will ask you **“Do you really want to register?”**

**Fig 8.1.2**

- If user clicks on “**OK**”an 6 digit **OTP** (one time password) will be sent on the mobile no. which was entered by user.

**Fig 8.1.3**

- On receiving **OTP** user has to enter that **OTP** in the textbox present on the screen.
- When user will enter the **OTP** correctly a message will be pop up -“**User Registered Successfully.**”User needs to click on “**OK**” to complete the process.



Click on **OK** to go to dashboard.

Fig 8.1.4

- **User need to be online during this process.**
- Once the user is registered he will not be needed to register again until he changes his handset or formats his handset. For each mobile one time registration is required.
- If user Clicks back button of the mobile during registration process **“Your information will be lost”** message will get displayed on back press. So please don't click Back button during this process.

DASHBOARD:

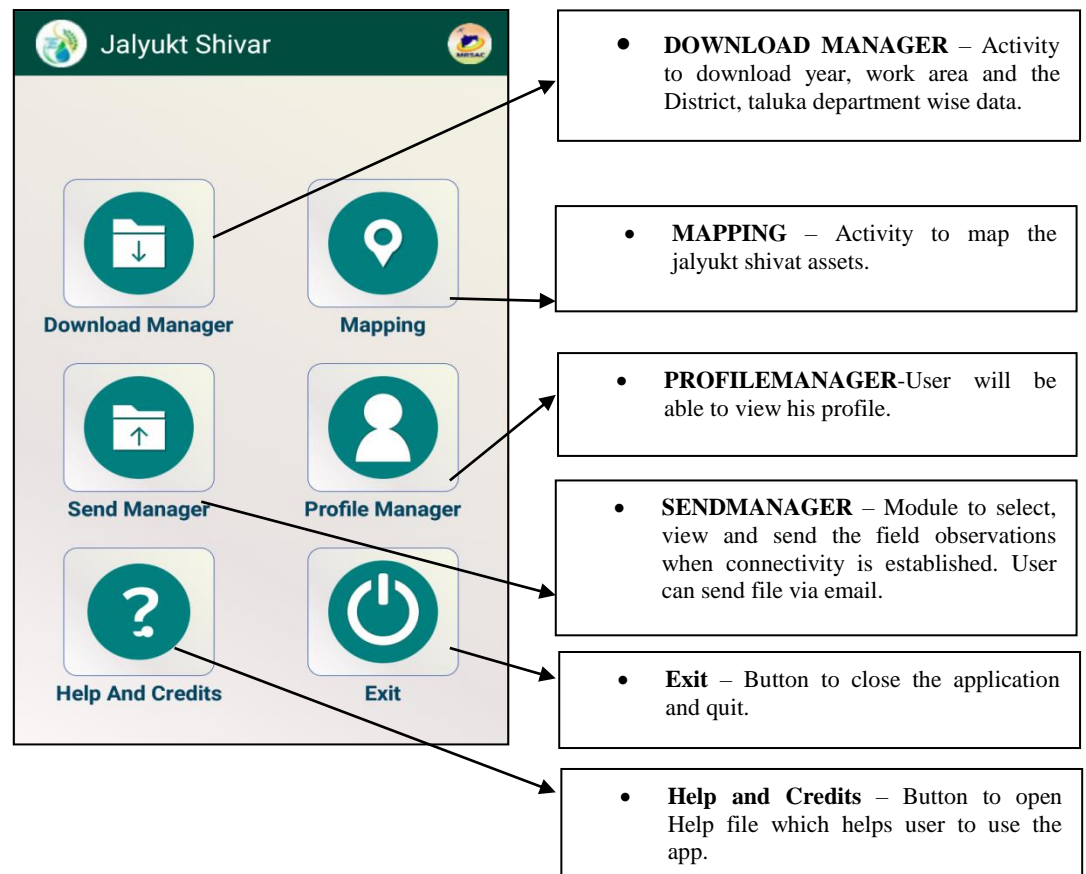
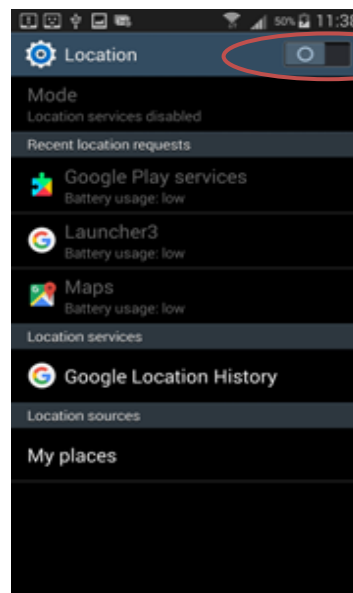


Fig 8.1.5

This is the **"DASHBOARD"** screen appears once the User is successfully registered. The Dashboard consist of 6(six) modules and perform different task. User has to navigate among the modules to achieve the activities of Irrigation well mapping.

- If GPS is not enable on users mobile he will get the following alert.
- He needs to click on YES.

He will be render to following screen



Click on this button to turn on GPS.

Fig8.1.6

After click on this button it will get enable GPS of users mobile as follows

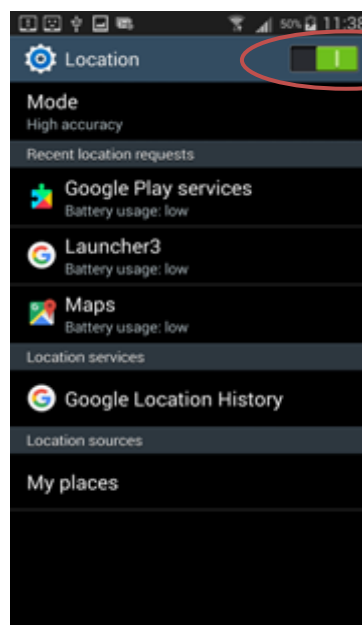


Fig8.1.7

Now user will be ready to get GPS. Go back to app.

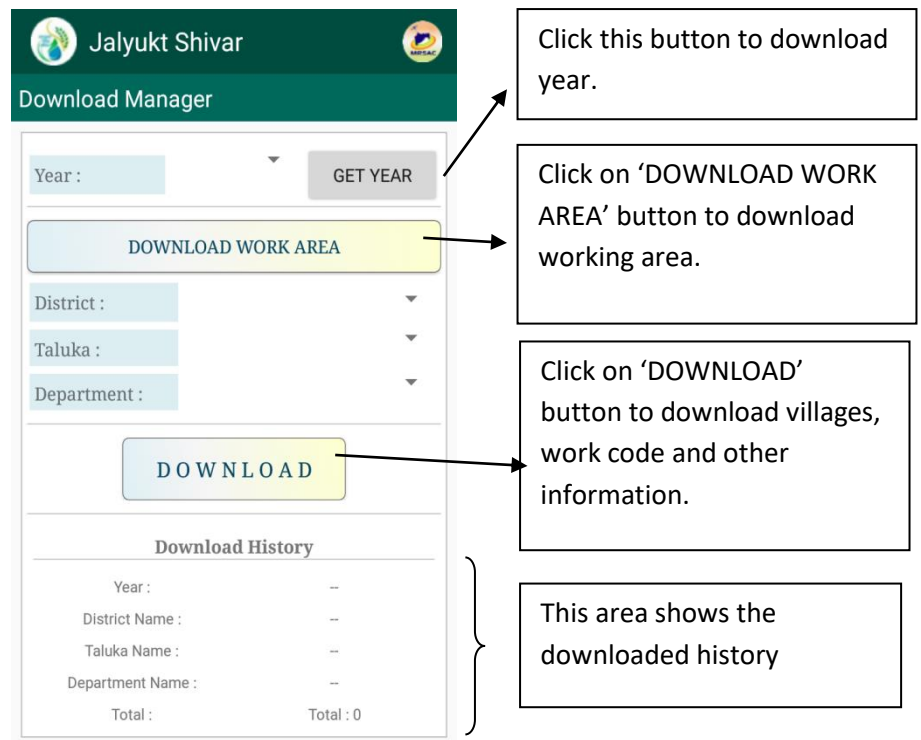
- It is recommended that user has to take GPS until accuracy is 15 meter(i.e. 15 miter)
- For this user has to click that button again and again until Accuracy is got under 15 m.

8.2) Download Manager

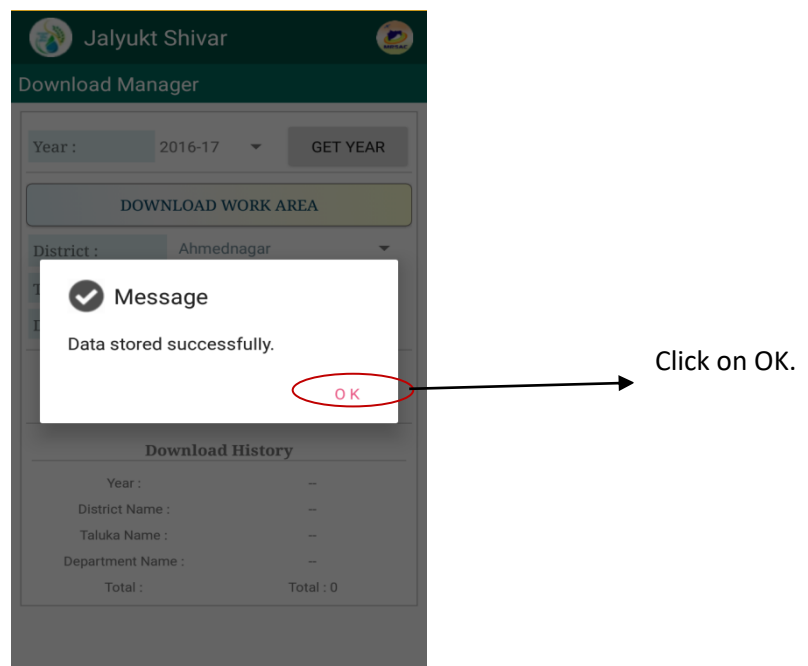


Fig8.2.1

- User need to click on above icon on the dashboard to download data.
- This module DOWNLOAD's the District & Taluka records containing the following details of the irrigation wells as entered on Mahaonline server and whose status is "**Completed**" :
 - Village name
 - Work code
 - Beneficiary name
 - Gat number
 - Work type, etc.
- User first need to download data for mapping.
- **User need to be online during downloading records.**
- **High speed internet connectivity should be needed to download data.**
- And Signal strength should also be good for downloading data.
- Then user will get the District, taluka and department list on the dropdown.
- He need to select His working area by selecting District, taluka and department.
- Then he needs to click on "**DOWNLOAD**" button.
- The data will get saved on his mobile.

**Fig8.2.2**

- Fig 8.2 will be displayed after click on the icon on the dashboard User need to wait till data get downloaded in the app.
- Then following message will get displayed user need to click OK

**Fig8.2.3**

After downloading, the data will be look like this.



Download History	
Year :	2016-17
District Name :	Hingoli
Taluka Name :	AundhaNagnath
Department Name :	Agriculture
Total :	Total : 88

Fig8.2.4

8.3) Mapping Activity



Fig8.3.1

User need to click on the above icon available on the dashboard to start mapping. Once the data is downloaded from the download manager and saved, the actual mapping can start.

8.3.1 Mapping Activity

If User click on the Mapping activity .He will be render to Mapping activity.

User doesn't need internet connectivity for this mapping activity.

On click of "SAVE" the records will get stored in users mobile.

The screenshot displays the 'Jalyukt Shivar Mapping' application interface. It is divided into several sections with corresponding annotations:

- Your Work Area :** A table showing details for Year (2016-17), District (Ahmednagar), Taluka (Akkalkuwa), and Department (Agriculture). An annotation points to this section: "Showing working area details".
- Mapping Input :** Fields for Select village (Gaman), Select work code (525009AG011), and Current work status (Select Current). An annotation points to this section: "Mapping inputs".
- Other Details :** Fields for Beneficiary name (सामुदायिक), Gat number (1), Work type (खोल सलग समतल चर), Work order (१३२७), Work order date (11/03/2016), Contractor name (पावन सुभाष साली नंदुरबार), Bhotik sankya (0), and ACRE (20). An annotation points to this section: "Showing work code details".
- Get Position :** A 'GET LOCATION' button and input fields for Latitude, Longitude, Accuracy, and Date. An annotation points to the button: "Click on 'GET LOCATION' button to get current location".
- Photo 1 :** Instructions: "1) Click on camera icon to take photo", "2) Move to landscape mode". A camera icon is shown. An annotation points to the icon: "Click on camera icon to capture photo 1."
- Photo 2 :** Instructions: "1) Click on camera icon to take photo", "2) Move to landscape mode". A camera icon is shown. An annotation points to the icon: "Click on camera icon to capture photo 2."
- Capture Video :** Instructions: "1) Click on video icon to take video", "2) Move to landscape mode". A video icon is shown. An annotation points to the icon: "Click on video icon to capture video".
- Remark :** A text input field for entering remarks. An annotation points to it: "Enter remark".
- SAVE :** A large yellow button at the bottom. An annotation points to it: "Click on 'SAVE' button to save the information".

Fig 8.3.2

- After filling all the values user need to get location of that place that is Latitude,longitude.
- After this user need to click on that camera icon to take photo.

After click on camera it will ask user to move to landscape mode user need to turn his camera to landscape mode.

It doesn't mean user has to turn the phone in upside down landscape mode.

- It is recommended that for taking photo of asset user can move from his place , so that he can take full photo of that asset.

fig8.11

Camera button will be visible only if user is in correct position of taking photo.

The user will take photo at the location by clicking on that camera button.



Click on this to move to landscape mode

Fig8.3.3



Fig8.3.4

User need to click on this button for taking photo.

After click on the button photo will get save on the app as Follows.

- After getting GPS and the **photographs** of the assets as photographic evidence and **SAVE** the activity with proper **REMARKS**, if required.
- The data will get saved.

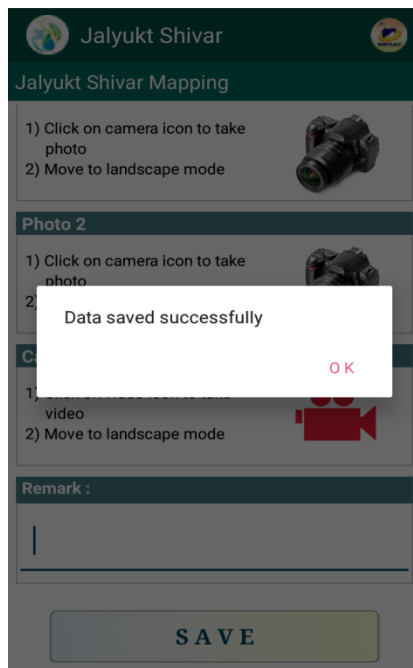


Fig 8.3.5

8. 4)Send Manager



Fig 8.4

- On click of this icon on dashboard user will render to SEND MANAGER.
- User needs strong internet connectivity for send Manager and also signal strength should be good for operating Send Manager.

8.4.1 SEND MANAGER (UNSENT)

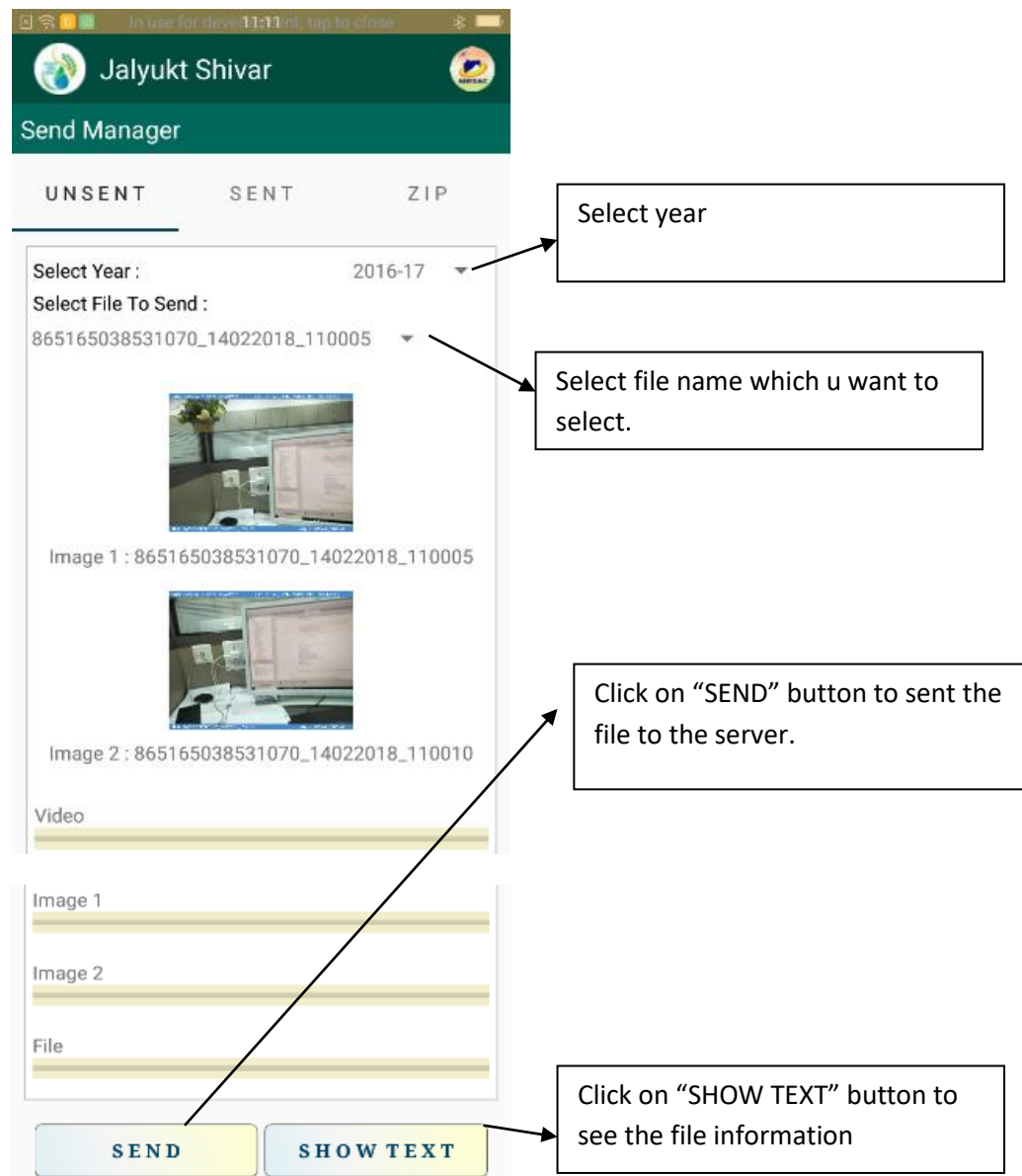
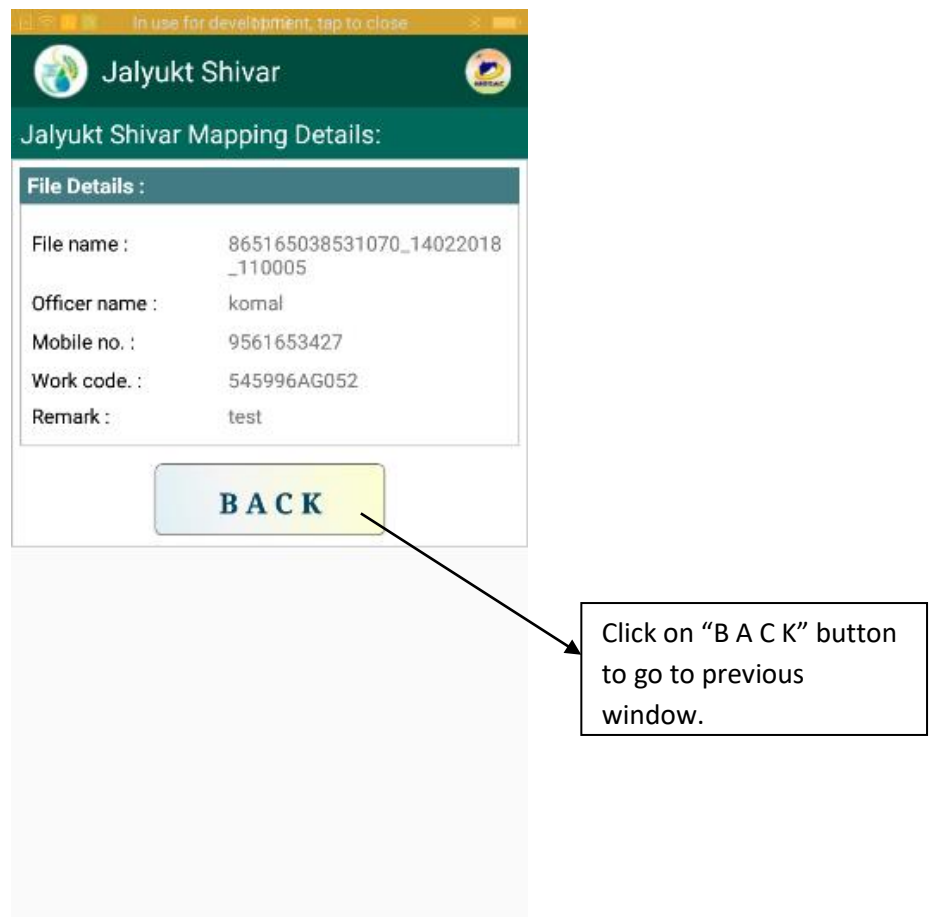


Fig8.4.1

After clicking on "SHOW TEXT" button bellow window will open.

**Fig 8.4.2**

After clicking on "SEND" button user will get 'File uploaded successfully' message. Uploaded file will remove from "UNSENT" and further available in "SENT" tab.

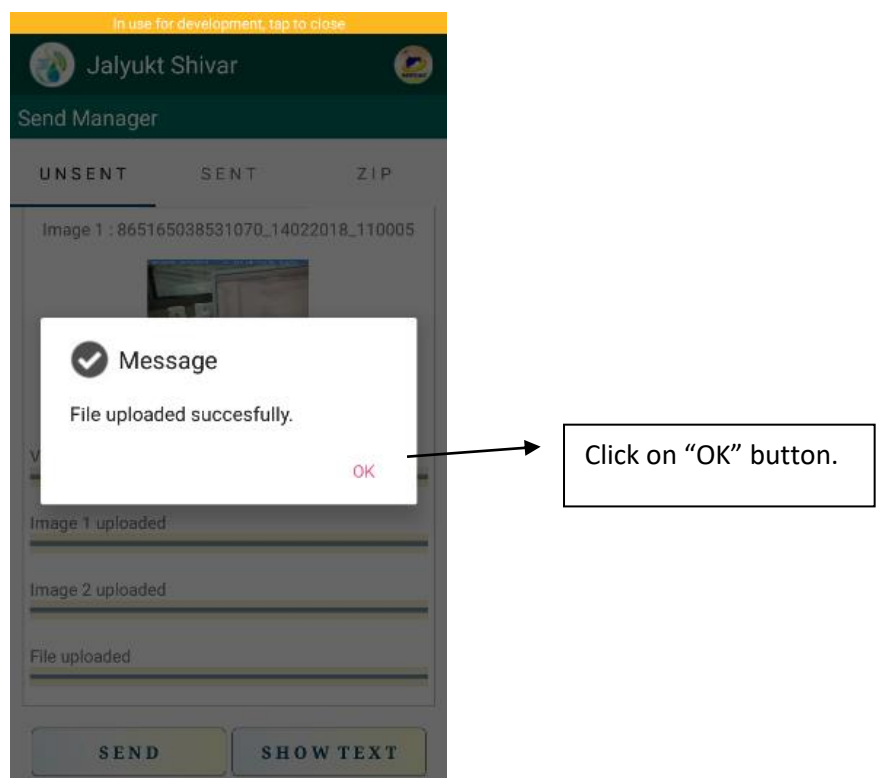
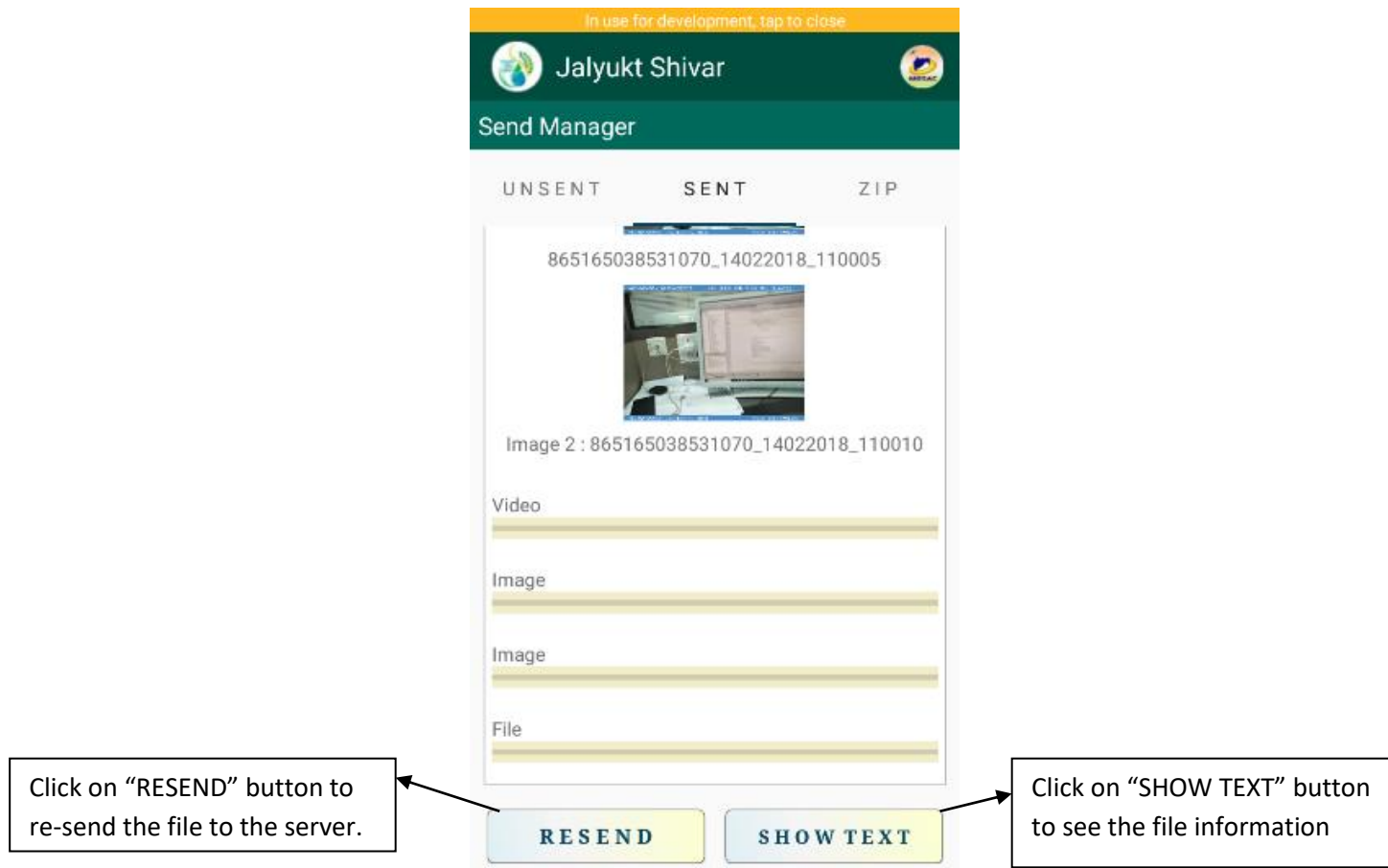


Fig 8.4.3**8.4.1 SEND MANAGER (SENT)**

Functionality of “SENT” tab is same as “UNSENT” tab. But from “SENT” tab user can re- send the file to the server by clicking on “RESEND” button.

**Fig 8.4.4****8.4.1 SEND MANAGER (ZIP)**

By using “ZIP” user can send file to the server via the email.

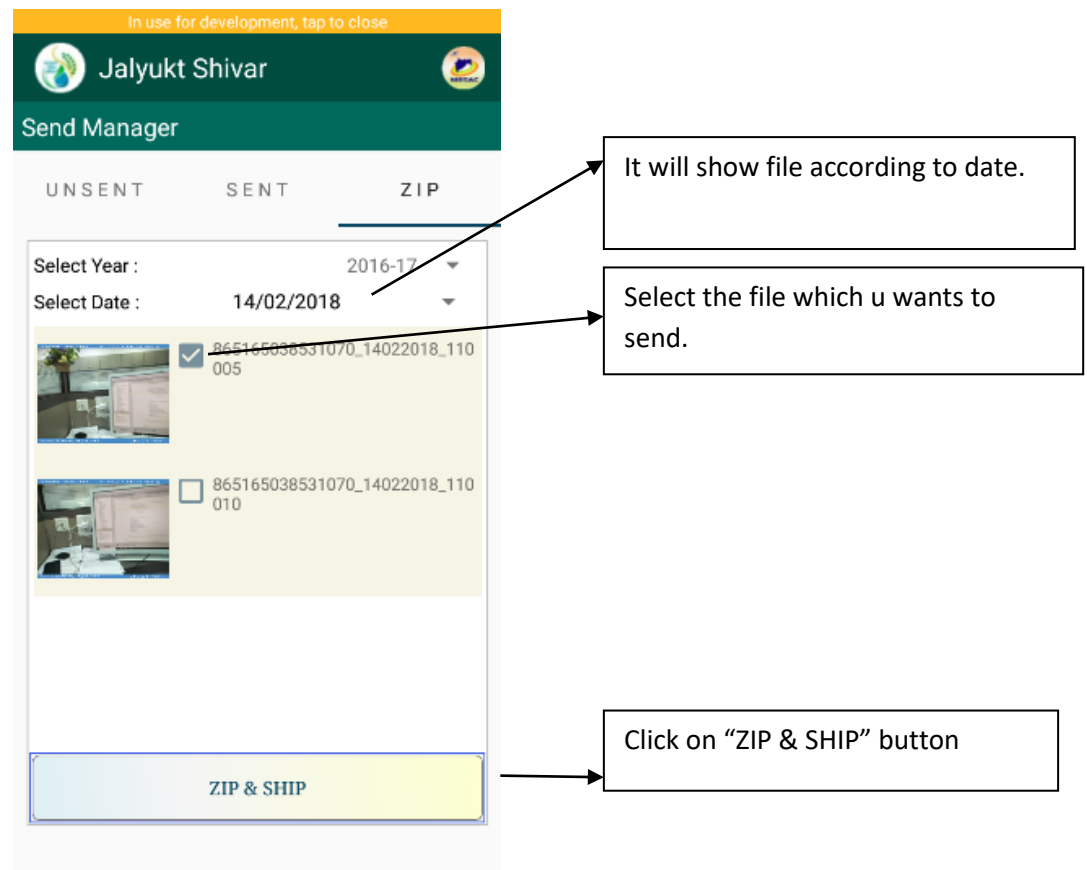


Fig 8.4.1

After clicking on "ZIP & SHIP" button, the following window will open.

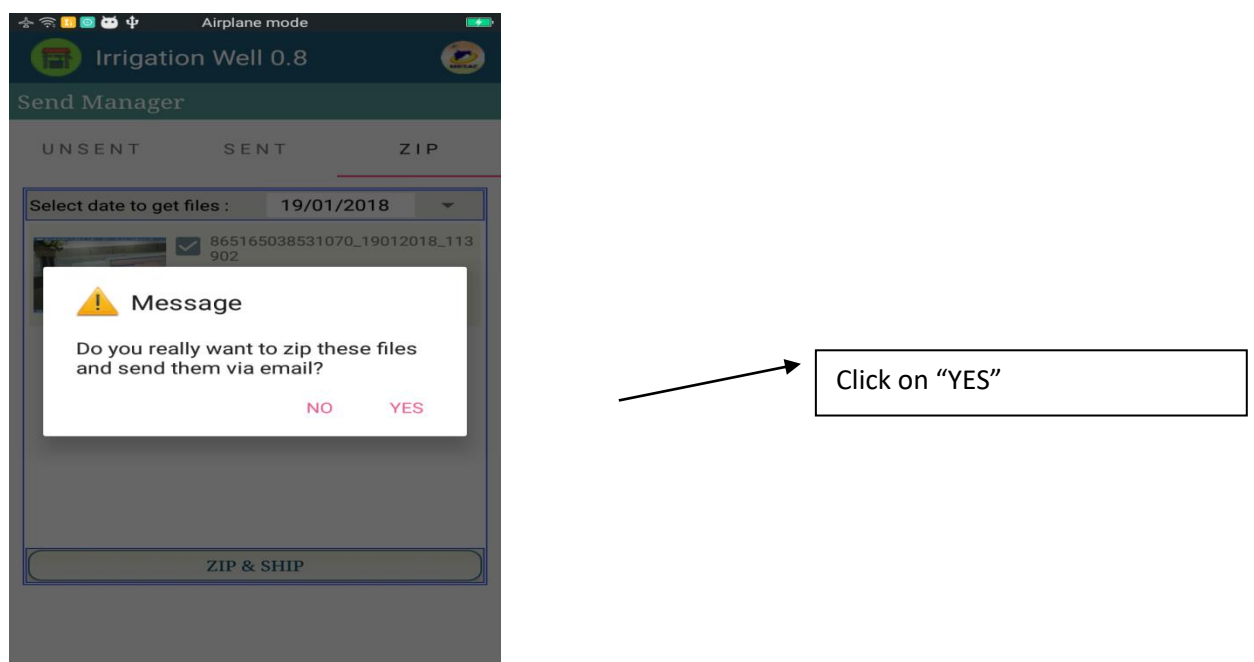
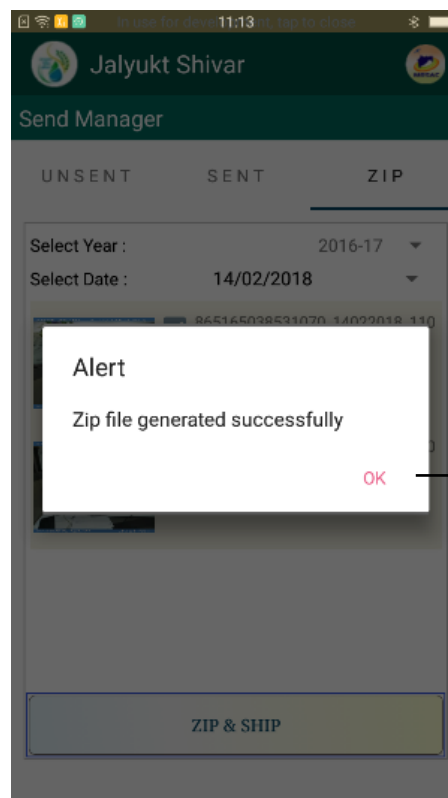


Fig 8.4.2

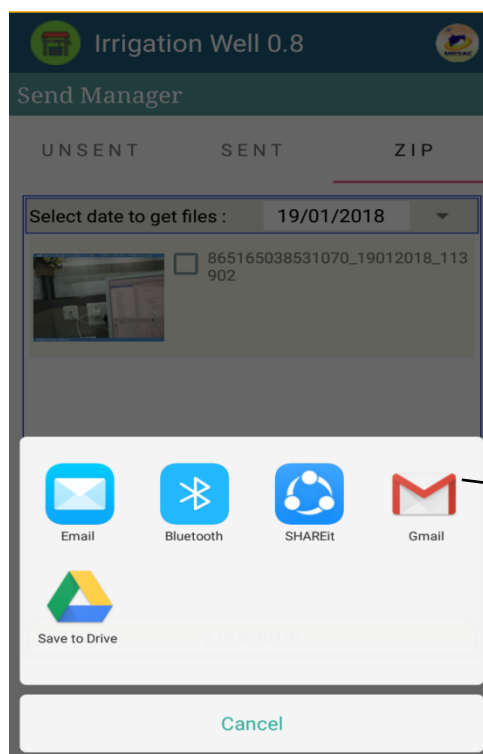
After clicking on “YES” button, the following window will open with ‘Zip file generated successfully’ message.



Click on “OK”

Fig 8.4.3

As soon clicked on “OK”, the following window will open with some icons. Click on “Gmail” icon.



Click on “Gmail” icon.

Fig 8.4.4

After clicking on “Gmail” icon, following email box will open, just click on right arrow to send the file.

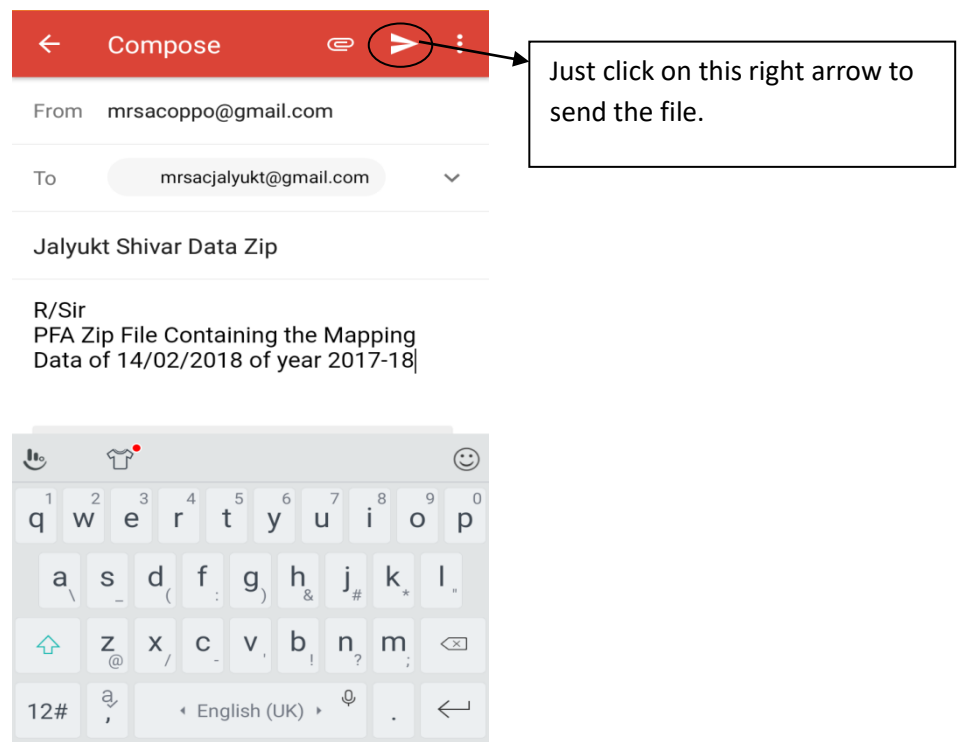


Fig 8.4.5



8.5) PROFILE MANAGER



Fig 8.5.1

- Click of this icon available on the dashboard. user will be able to see his detail which he filled at the time of registration.

In use for development, tap to close

 **Jalyukt Shivar** 

Profile Manager

User Details :

Office Name :	<input type="text" value="komal"/>
Officer Name :	<input type="text" value="komal"/>
Mobile Number :	<input type="text" value="9561653427"/>
Designation :	<input type="text" value="pro"/>
Email :	<input type="text" value="komal@gmail.com"/>

BACK

Fig 8.5.2

8.6) Exit



Fig 8.61

- On click of logout user will get exit from the app.

8.7) Help and Credits

**Fig 8.7.1**



Click on above icon available on dashboard to download help file to see how to use the mobile app.

- On click of Help and Credits user can open the Help file to see how to use the app.

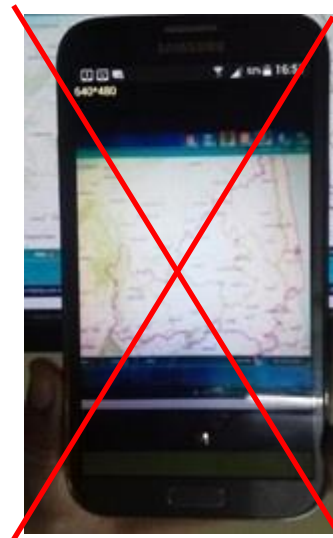
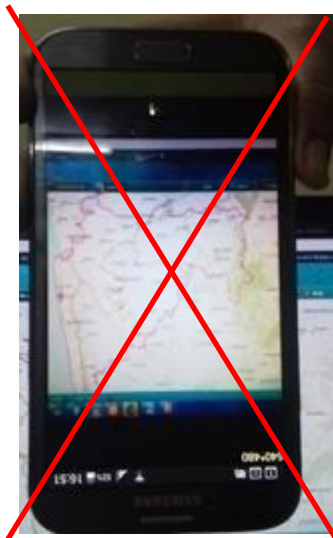
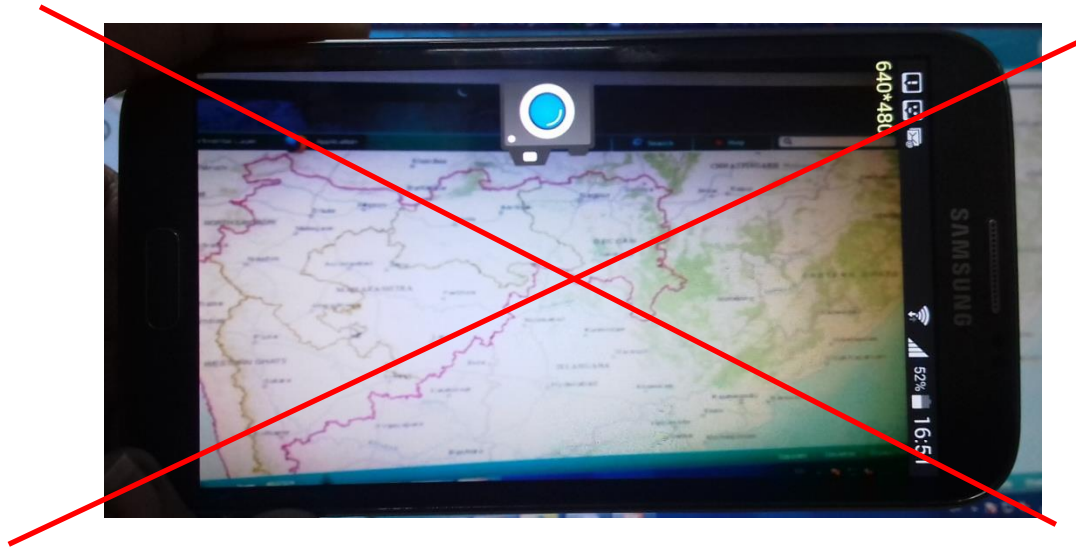
9. Do's And Don'ts

Sr.no.	Do's	Don'ts
1)	User should do registration when full network is available and internet connectivity is activate in mobile	Without internet connectivity registration will not be possible.
2)	User should wait for OTP(that will come in mobile as sms)	Please do not press back button in OTP page otherwise information will be lost and user will need to register again.
3)	At the time of downloading data, user should have internet connectivity and good network range. Downloaded data will be of his working area. So, once if working area is downloaded user can turn off mobile data.	Without internet connectivity Data downloading is not be possible.

4)	If user goes on field for mapping ,after reach to the field he has to enable his GPS for getting location.	Without enabling GPS user should not take photo of assets.
5)	User should stay near the well for taking GPS, but for taking photo of well,he can move from his place, So he can capture full image .	
6)	User should save all mapping details.	User should not press back button during mapping otherwise all details filled by user will be deleted.
7)	If user want to view the saved details in the field, he can see by clicking "Show Text" button available in send Manager without internet connectivity.He can't send it, because sending file needs internet connectivity.	
8)	For using send manager user need full internet connectivity and network range.	Don't send data on server from field if it is in so much interior area. Because internet connectivity won't be there.
9)	Photo should be taken in landscape mode	User should not take photo in upside down landscape mode.

	only but correct landscape mode.	
10)	Do's for taking photo of irrigation well	
	Correct position for taking photo	
		<p>Correct position to take photo camera button should be in down position.</p>
11)	Wrong position for taking photo.	
		<p>Wrong position to take photo camera button should not be in up position.</p>

Wrong Positions of taking photos



User should not take photos in above three conditions.

FAQ

1. Why i am not getting location in my mapping place ?

Ans. Please on your Location/GPS before going on field because location is captured on the basis of satellites and it takes time to get location in so much interior area at least 15 minutes after clicking on button . Also mobile should have A-GPS or Glonass sensor for getting location. And mobile GPS sensor should be in good condition for getting location.

2. Why zip file is not getting generated ?

Ans. Please don't move images and text files from data folder of the app also don't rename images name folder name of the application.

3. Photos are not visible after uploading on server ?

Ans. Please check internet connectivity while sending photos from app also wait for 24 hrs. After uploading to be visible on portal.