USER MANUAL



Rural Water Supply and Sanitation Fund Development Board Monitoring

(Rwssfdb Monitoring)

Version 1.0.0

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Chapter Summary

Chapter 1 contains a brief introduction of the software and this manual.

Chapter 2 contains details about the Splash Screen.

Chapter 3 explains the contents and working of the Home Page.

Chapter 4 explains how to fetch data from server.

Chapter 5 deals with adding a new observation including its initial detail, observation detail and media files.

Chapter 6 explains how to edit an existing observation.

Chapter 7 explains how to upload an observation report to the server.

Chapter 8 provides information about the Map view and its features.

Chapter 9 explains how to check and update you application.

1 Introduction

The objective of Rwssfdb Monitoring would be to help monitor structures and items installed with the help of RWSSFDB. The application is developed as a comprehensive system for observation, data collection and analysis for strategic planning and sustainable management of the structures.

This manual presents the various operating aspect of the system including instruction and guide for the users of Rwssfdb Monitoring.

2 Splash Screen

The first window the user sees after opening the application is the '**Splash Screen**' as shown below. This screen simply shows the logo of RWSSFDB and Softwel, along with the version of the app. It can be viewed for a short span of 2 seconds after which it disappears and the '**Home Screen**' is displayed.



Figure 1: Splash screen

3 Home Page

The figure below shows the main page of the application. User has the options of entering a new observation by clicking 'New Observation' represented by \bigcirc in the figure, editing them by clicking 'Edit Observation' represented by \bigcirc in the figure, uploading them to the server by clicking 'Upload' represented by \bigcirc in the figure, fetching data from a server by clicking 'Sync from Server' represented by \bigcirc in the figure and also viewing the observations in a map by clicking 'Map' represented by \bigcirc in the figure below.

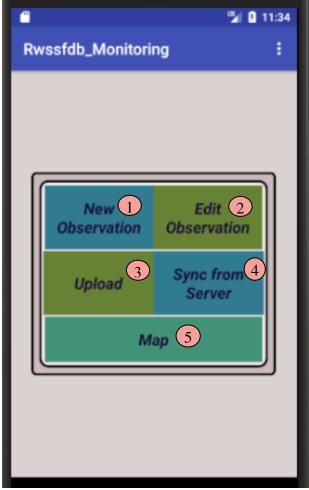


Figure 2: Home page

Before choosing any options from the home page, the user should set up their account. If the user tries to click any of the option without setting up account, alert dialogue appears as shown below.

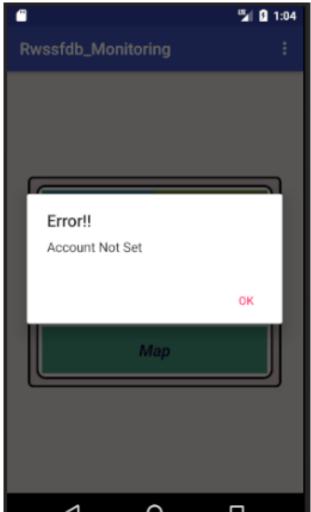


Figure 3: Alert box shown when account is not set

To set the user account, the user has to click on the menu icon on the upper right corner of the mobile screen, represented by \bigcirc in figure 4. On other devices such as tablets, the menu is displayed by clicking the bottom left icon.

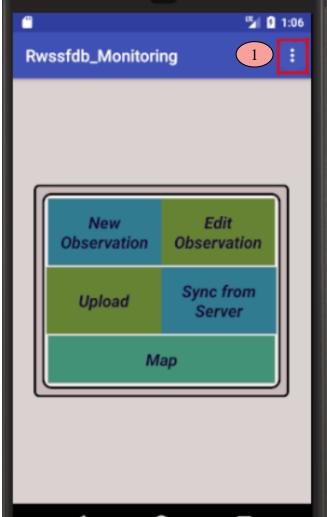


Figure 4: Menu icon to be clicked

Clicking on the menu item gives the user options to:

- Set the user details, represented by 1 and
- Check for updates, represented by 2 in Figure 5.

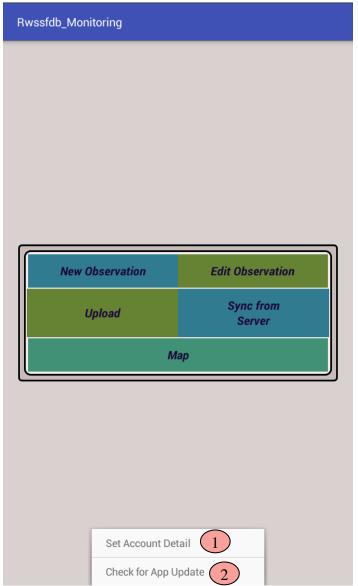


Figure 5: Menu with options to set account and check for app updates

After clicking the 'Set Account Detail' from the menu option, a login form is shown as in figure below. Users need to input their User id in the field represented by 1, respective password in the field represented by 2 and then click on the SET button

represented by 4. Clicking on the CANCEL button represented by 3, will dismiss the login form.



Figure 6: Form to set account

4 Sync from server

After setting up the account, the user has to sync data from server before adding any observation. Otherwise alert box is shown as in figure below.



Figure 7: Alert box when user has not synced data from server

To sync data from server, the user has to click the 'Sync from Server' button, represented by 1 in figure 8.

eefdb Monitori		11:34
sstab_monitorii	ng	:
New Observation	Edit Observation	
Upload	Sync from Server 1	
Ма	эр	
	New Observation Upload	SSFdb_Monitoring New Edit Observation Unlocd Sync from

Figure 8: Home page

On clicking the button, user is asked if they really want to sync from server, since the synchronization needs internet connectivity and takes up some time. On the alert dialogue shown in figure 9, if the user selects 'Cancel' as represented by \bigcirc , the dialogue is dismissed and no synchronization occurs. If the user selects 'OK' as represented by \bigcirc , the synchronization process starts as shown in figure 10. The data fetched from the server varies according to the user logged in. Users can only add observations belonging to those districts and schemes that are specified to them.



Figure 9: Alert dialogue asking user confirmation for Synchronization



Figure 10: Progress dialogue while synchronization occurs

After synchronizing data from server, 'Sync completed' pop up is seen as seen in figure 11. After this process, a new observation can be added by clicking 'New observation' represented by 1, in the figure below.

Rv	Rwssfdb_Monitoring		
	New 1	Edit	ו
	Observation	Observation	
	Upload	Sync from Server	
	Мар		
	Sync Complete		

Figure 11: Pop up seen after synchronization completed

5 New Observation

5.1 Initial details

When the user clicks 'New observation' button, a form for '**Initial Details**' is shown as in figure below. The home icon on the top right corner of the screen, denoted by 1, directs the user back to the home page at any given time. The check box 'Test data', denoted by 2 exists so that user can check it if the data they are entering is just a test data and not a real observation. User can select a district and D-year by clicking on the drop down arrow, denoted by 3 and 4 respectively.

Depending on the district selected by the user, the values in the drop down of scheme code and scheme name are updated. ⁵ Denotes the scheme code whereas ⁶ denotes the scheme name. When the drop down arrow is clicked, a list of options is visible for the user to choose from as shown in figure 13. User has the option to choose scheme code or scheme name and the corresponding scheme name or scheme code is auto selected and displayed for the user.

In the figure 12, 7 denotes the date of observation which is auto inserted by the application by reading the date and time of users device. This field cannot be changed. After all the fields are entered or rather selected by the user, they should click the 'SAVE' button, denoted by 8. All the initial details data is then saved to a database and the user is directed toward 'Observation List' page.

Rwssfdb_m	1
Initial Details	2 V Test data
District	
Okhaldhunga	3 🗸
D-Year	
2074/75	4 🗸
Scheme Code	
100630	5 🗸
Scheme Name	
Khahre Khola Tallo Chhanga Jarayotar Wss	6 🔻
Date of Observation	
2018-01-12 10:32	7
SAVE 8	

Figure 12: Form for initial details

5.2 Adding observations

In the 'Observation List' page the user can add new observations by clicking on 'ADD OBSERVATION' button represented by \bigcirc in the figure below. When this page is loaded, an empty observation named 'Observation 1' is already added to the list as seen below. To add details to an observation, user should click the respective observation from the list. In this case, user should click on 'Observation 1' denoted by \bigcirc 2.



Figure 14: Observation List page seen initially

On clicking 'Observation 1', an alert box as shown in figure 15 is displayed, asking user if they want to update or delete the selected record. If user clicks 'DELETE' i.e. 1, the record is deleted. If the user clicks 'EDIT' i.e. 2, the user is taken to the 'Observation Details' form.

Note: User cannot add new observation until the last one is filled.

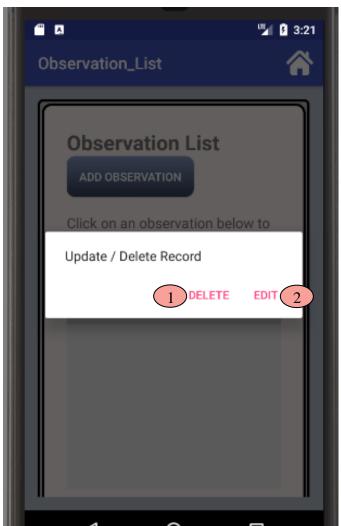


Figure 15: Alert box to either edit or delete the record

'Observation Details' form is opened as shown in figure 16. User should select one of the Observation item from the given list of Observation item as represented by 1 and if user wants to add any other observation item apart from the ones in the list, they can choose 'Other' option and type the item they want in the text field represented by 2. User should add their Location in the field represented by 3, Observation Notes in the field represented by 4, Observation Rating from the drop down list represented by 5 and Geo location. To get the Geo location, the user should click on the location symbol on the right side of 'Geo Location' represented by 6. The user must have their GPS on to get their location. If the GPS of the user device is not already switched on, an alert dialogue as in figure 17 is displayed.

R 😕	🗊 📶 56% 🛑 11:44
Rwssfdb_m	
]
Observation Details	
Observation Item	
ВРТ	
Other item	2
Location	
	3
Observation Notes	
	4
Observation Rating	
Excellent	5 🗸
Geo Location	
Latitude	0.0
Longitude	0.0
Elevation	0.0
Media files	
Audio (Maximum 1)	Ŷ⊙►

Figure 16: Form for observation details

Rwssfdb_m		
Observation Details		
Observation Item		
IC	•	
Other item		
Location		
🚵 Alert!		
Please enable your location > Go to Settings > Location Services > Enable (Access to my location) and (Use GPS satellites).		
ОК		
Geo Location	\overline{O}	
Latitude	0.0	
Longitude	0.0	
Elevation	0.0	
Media files		
Audio (Maximum 1)	⊎ ⊙ ▼	
	 -	

Figure 17: Alert asking user to switch their GPS on

5.3 Adding media files on the observation

User can view the area to add media below the Geo Location. As shown in figure 18, they have options to add audio files, images and video. To add an audio recording, user should click the mic icon as represented by 1 and to stop the recording user should click the stop icon as represented by 2 in the figure below. Once the recording is stopped, it is added under the Audio section. By clicking the play button as represented by 4, the user can hear the recording. By clicking the audio name as represented by 5, user are given the option to delete the media. To add a photo, user should click the photo icon, as represented by 6. Similarly to add a video, the video icon as represented by 8 should be clicked. The user is taken to the camera and video recording page according to the icon selected.

The show/hide arrow that can be seen on the rightmost side of the icons represented by 3, 7 and 9 show or hide the audio file, photos and video file respectively. After the user has filled in all the data, 'SAVE' button represented by 10 should be clicked.

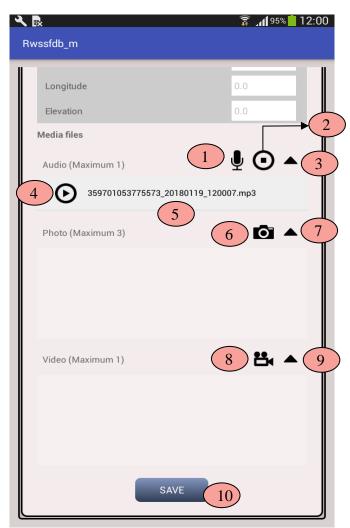


Figure 18: Adding medias

User can add maximum of one audio file, three photos and one video in an observation. In figure 19, we can see that the user has added one audio, two photos and one video. Suppose if the user wants to add another video and clicks the video icon, a message is displayed informing the user that the 'Maximum limit for video has been reached' and the user is not allowed to take another video.

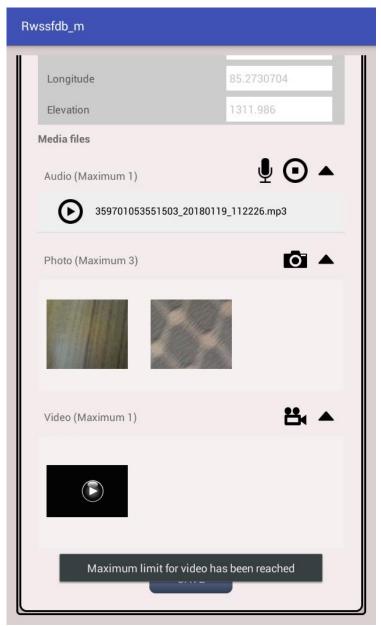


Figure 19: When trying to add a second video

However, user can take a new video, audio or image if they delete the existing media by clicking on them. They are presented with a delete option as shown in figure 20. If the user clicks on 'Yes' represented by 2^{2} , the record is deleted and new media can be taken. If the user clicks on 'No' represented by 1^{1} , the record is not deleted.

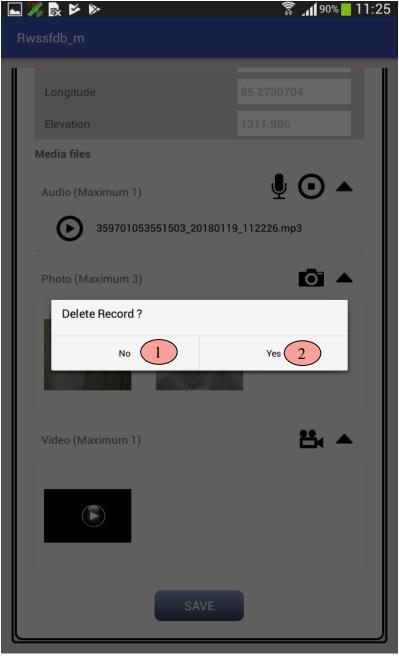


Figure 20: Option to delete a media record

User should then click on 'SAVE' button to save all the details and it is saved as shown in figure 21.

Observation_List	
Observation List	
Click on an observation below to edit or delete it.	
Obs 1 (Pipeline)	

Figure 21: Observation list with one observation added

6 Edit Observation

The 'Edit Observation' button directs user to the dialogue box where uploaded and not uploaded reports are listed from which users can choose an observation to edit. They can view the scheme codes, date and time of the report which will help them choose. After selecting the report, they should click 'Edit', represented by 1 in figure 22.

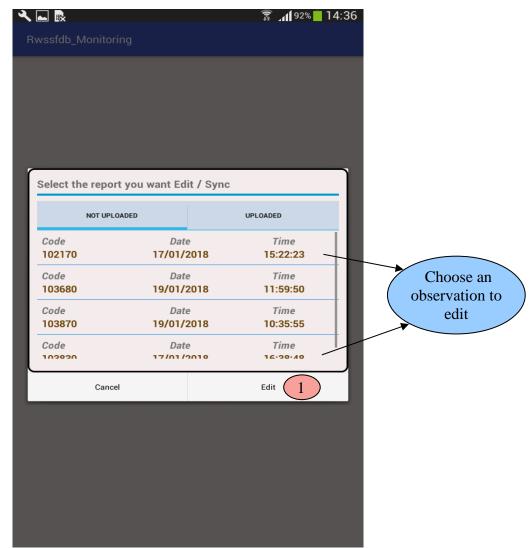


Figure 22: Dialogue displayed for editing existing reports

The user is then taken to the 'Initial Details' page. User cannot edit the records in this page as seen in figure 23 but can edit data of the observations as before. The observations in the reports already uploaded before cannot be deleted.

Initial Details	🗸 Test data
District	
Bhaktapur	•
D-Year	
2074/75	•
Scheme Code	
101480	•
Scheme Name	
Chhaling khanepani Yojana	•
Date of Observation	
2018-01-17 15:22	
SAVE	

Figure 23: Initial details cannot be edited

7 Upload

When the user clicks 'Upload' button, a dialogue box is displayed with uploaded and not uploaded section. After user selects a report and clicks the 'Sync' button represented by 1 in figure 24, the report is uploaded to the server only if there is an internet connection.

102170 17/ Code 103680 103680 19/ Code 103870	Date 01/2018 Date	U	PLOADED 15:22:23	
NOT UPLOADED Code 102170 17/ Code 103680 19/ Code 103870	Date 01/2018 Date	U	15:22:23	
NOT UPLOADED Code 102170 17/ Code 103680 19/ Code 103870	Date 01/2018 Date	U	15:22:23	
NOT UPLOADED Code 102170 17/ Code 103680 19/ Code 103870	Date 01/2018 Date	U	15:22:23	
NOT UPLOADED Code 102170 17/ Code 103680 19/ Code 103870	Date 01/2018 Date	U	15:22:23	
NOT UPLOADED Code 102170 17/ Code 103680 19/ Code 103870	Date 01/2018 Date	U	15:22:23	
NOT UPLOADED Code 102170 17/ Code 103680 19/ Code 103870	Date 01/2018 Date	U	15:22:23	
NOT UPLOADED Code 102170 17/ Code 103680 19/ Code 103870	Date 01/2018 Date	U	15:22:23	
Code 17/ 102170 17/ Code 103680 103680 19/ Code 103870	01/2018 Date		15:22:23	
Code 17/ 102170 17/ Code 103680 103680 19/ Code 103870	01/2018 Date		15:22:23	
102170 17/ Code 103680 103680 19/ Code 103870	01/2018 Date	3	15:22:23	
103680 19/ Code 103870				
Code 103870 19/			Time	
103870 19/	01/2018	3	11:59:50	
	Date		Time	
	01/2018	3	10:35:55	
	Date		Time	
103830 17/	01/2018	3	16:38:48	
Cancel			Sync 1	

Figure 24: Dialogue for uploading existing reports

8 Map

Map is displayed when the user clicks 'Map' button from the home page as shown in figure. 'MY LOCATION' button represented by 1 gives current location of the user and 'LOAD MY OBSERVATION POINTS' button represented by 2 gives the current report's observation points. In figure 26, the blue location pin symbolizes the observation points and the red symbolizes the current location of the user.

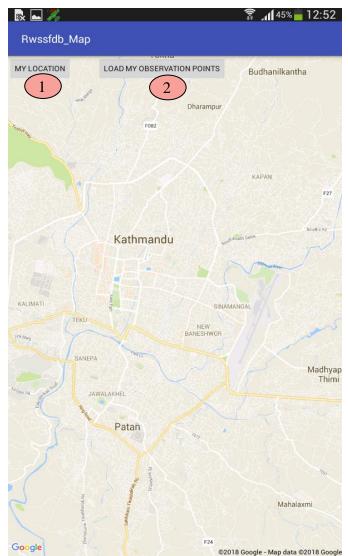


Figure 25: Map of Baneshwor, Kathmandu is displayed when the map page is first loaded.



observation point and users current location

9 Updating your application

To check application updates or to update the application, click the menu icon in the home page. There user can see the option to check for app update as represented by 1 in the figure 27.

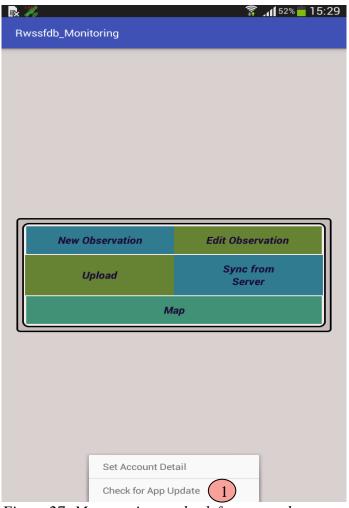


Figure 27: Menu option to check for app update

On clicking that, if an update for the application is available then user is asked if they want to update the application. If yes is clicked as 1 in figure 28, new version of application is downloaded and installation page is displayed as shown in the figure 29.

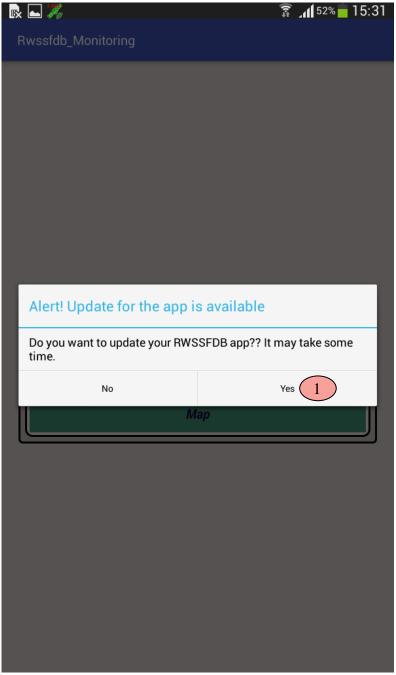


Figure 28: Dialogue asking the user if they want to update the app

If the user clicks 'Install' button, as in 1 in the figure below, after the download, the newer version of application is installed and launched.

RWSSFDB_Monitoring	RWSSFDB_Monitoring		
Do you want to install an up application? Your existing updated application will ge	data will not be lost. The it access to:		
New	All		
This update requires	no new permissions.		
Cancel	Install 1		

Figure 29: After the new version is downloaded, user is asked if they want to install it

THE END