User Operations Manual for
WAMSI Data Catch version 1.1
Android Mobile App for SWBs

[WAMSI-DataCatch-MobileApp-v1.1]

Minorities Affairs Informatics Division
National Informatics Centre (HQ), Government of India
New Delhi
User Operations Manual
for
WAMSI Data Catch version 1.1
Android Mobile App for SWBs
Beta Version Released on April 3, 2018

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<td>October 13, 2017</td>
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About WAMSI Data Catch Mobile App

WAMSI Data Catch Mobile App is designed and developed by NIC under Nation WAMSI Project for the use of Staff of State/UT Waqf Boards in India to conduct GPS Survey, take Photographs, capture Managers & their Contact details etc of the Waqf Properties to enrich the WAMSI Database for GIS capabilities and other data gaps.

It is a fact that every GPS Device has some degree of inaccuracy due to evolving technologies and other site-specific factors such as high-rise buildings nearby, etc. Here, an effort has been made to help the surveyor to correct the GPS Errors on the field itself while surveying. Surveyed property is laid-out as a Polygon on the Satellite Imagery while surveying. If any vertex is not representing correctly then it can be pulled-in to its correct position before finally saving all the Vertices' GPS Coordinates in the Mobile App for later importing into WAMSI On-line System.

Now-a-days every Smart Mobile Phone has an inbuilt Camera which is utilized in this Mobile App for taking Photographs of the Waqf Property in WAMSI desired format, size and naming convention. Moreover, it will also write Waqf ID, Prop.ID and Date of Photograph at the bottom of each Photograph for easy identification of the Waqf Property.
Since Surveyor is visiting an actual site of the Waqf Property where he/she will meet the Mutawalli/Managing Committee (Manager of the Waqf Property), so it was thought that Data Gaps in the Management Module could also be filled-up by collecting the information about the present Management along with authorized Management Document issued from Waqf Board. It will also collect Photograph, Identity Proof & Contacts of the person(s) involved in the Management. Therefore, Mobile App has been upgraded to capture Management details during survey.

Searching Facility is included in this Mobile App to know the correct Waqf ID and Prop.ID of the Waqf Property. Waqf Properties can be searched on the basis of:

(i) Waqf ID (Unique Identity given to each Waqf Estate), or
(ii) Waqf Estate Name or its part, or
(iii) Location till Town & Village level.

During Search, General Public can drill-down till the level of individual Waqf Property, where they can see: Present Status, GIS Map, Photographs, Present Management among other attributes of the Waqf Property.

WAMSI Data Catch App creates Data Files (XML, JPG, PDF) in separate Folders by the name of “WaqfID_Prop.ID” under a main Folder “WAMSI” in an internal memory (or Secondary Memory) of the Smart Mobile Phone for the Surveyed Immovable Waqf Properties. When you click on "Download XML, JPG, etc" Button, you will be able to browse such Folders on your Mobile. Later, you can download these Folders on your PC from Mobile using USB Cable for uploading in WAMSI On-line System using Waqf Board’s Registration Module Credentials. You can also access WAMSI On-line System from Browser of your Mobile and upload the files without downloading these Files on PC.

This is a semi automated Data Input process to the WAMSI On-line System for the surveyed immovable Waqf Properties with the help of WAMSI Data Catch Mobile App.

For any technical query, contact Mr. Naeem Ahmed, Senior Technical Director & National WAMSI Project Coordinator, National Informatics Centre (HQ), Room No.359, A-Block, CGO Complex, Lodhi Road, New Delhi – 110003, Email: naeem@nic.in, Phone: +91-11-24305346 or WAMSI Technical Help Desk: +91-11-24305348, nicpmu@wakf.gov.in
Search

Searching Facility is included in this Mobile App to facilitate verification of Waqf ID and Prop.ID for correct linking of surveyed data in the WAMSI Database. Waqf Properties can be searched on the basis of:

(i) Waqf ID (Unique Identity given to each Waqf Estate), or
(ii) Waqf Estate Name or its part, or
(iii) Location till Town & Village level.

During Search, General Public can drill-down till the level of individual Waqf Property, where they can see: Present Status, GIS Map, Photographs, Present Management among other attributes of the Waqf Property.

Data Capture

When you press 'Data Capture', Mobile App will take you to next Screen where you will be asked to provide Waqf ID, Prop.ID and Surveyor Name, Designation and Office to start the process of Survey of Immovable Waqf Property.

If your Mobile is Internet ready then as soon as you entered the 'Waqf ID', it will display the Name of the Waqf Estate with the Thumbs-Up Sign. Otherwise, a Thumbs-Down Sign will be displayed. That is, Waqf ID is not verified from the WAMSI Database.

Similarly, as soon as you entered the 'Prop.ID', it will display the Name of the Waqf Property with the Thumbs-Up Sign. Otherwise, a Thumbs-Down Sign will be displayed. That is, Prop.ID is not verified from the WAMSI Database.

Displaying Name of the Waqf Estate & Name of the Waqf Property is to help you to correctly supplying the 'Waqf ID' & 'Prop.ID' for the Waqf Property being surveyed by you, to avoid wrong linkages of Data to the Waqf Properties.

Please enter the Name, Designation and Office of the person who is doing Waqf Property Survey in the 'Surveyor Name, Designation, etc' Field.
Survey Details

Waqf ID*
KA123456

WaqfID could not be verified!
Internet is not available.

Prop.ID*
PL001

Prop.ID could not be verified!
Internet is not available.

Surveyor Name, Designation, etc.
Mr. Surveyor, Distt.Survey Officer, Gulbarga, KSBW. Property demarketed by Muttawali Mr. Muttawali.

Buttons:
- GPS SURVEY
- PHOTO CAPTURE
- MANAGEMENT
(a) GPS Survey

GPS Survey involves recording of GPS Coordinates (‘Pairs’ of Latitude and Longitude) of all the Vertices (i.e., Points or Corners) enclosing the Immovable Waqf Property in a cyclic order (either Clock-wise or Anti-Clockwise direction) in decimal formats with precision upto 8 decimal places.

When you press 'GPS Survey' then Mobile App will open new Screen where it will load Satellite Imagery if Internet is available and try to fix your Smart Mobile Phone location using its inbuilt GPS Chip. If GPS found out your Phone Location then it will show on the Satellite Imagery by Blue Circle with a Centre. Location fixing may take 2 to 5 minutes for first time if GPS Service is ON.

Now, Zoom-In the Satellite Imagery to the locate your position where you are presently standing (i.e., Staring Vertex/Point/Corner of the Waqf Property) with respect to 'Pin' Ground Point. You will see the values of Latitude and Longitude changing as you are moving the Satellite Imagery with respect to Waqf Property. 'Capture' that 'Pair' of Latitude and Longitude, which is coinciding with the desired Vertex coinciding with the ground point of the 'Pin'. Once 'CAPTURE' s pressed, this 'Pair' is added in the Vertices List above and simultaneously, a marker is placed with Vertex Number on the Satellite Imagery.

While 'Capturing' you can delete last 'Pair' from the Vertices List by pressing 'Bin' Icon placed in between the Latitude and Longitude Values, when you feel that Vertex is not representing correctly on the Satellite Imagery with respect to Actual/Registered Layout of the Waqf Property.

As you go around the Waqf Property with 'Capturing' of all the Vertices in a cyclic order, you will see all the lines are drawn on Satellite Imagery starting from First Vertex to Last Vertex without closing the polygon. You need not to worry when you have ‘Captured’ the last Vertex and your Polygon is still not closed. Mobile App will join Last Vertex with First Vertex to close the polygon when you press “Save” button and it will also show the underlying Area as well.

Press 'SAVE' and Mobile App will display the closed Polygon Layout and its calculated Area in sqkm/ sqm/ sqyd/ sqft. If drawn polygon is matching with Registered Layout and Area of the Waqf Property then press 'OK' otherwise press 'CANCEL'.
If 'CANCEL' is pressed then you can correct the Polygon by continuously deleting 'Pairs' starting from the last 'Pair' till you delete the 'Pair' of incorrect Vertex. From there you again start 'Capturing' the 'Pairs' for remaining Vertices in the same cyclic order of the Waqf Property, to get the desired layout on the Satellite Imagery.

If 'OK' is pressed then Mobile App will internally stores all the GPS Coordinates of the Waqf Property, as XML File in the designated Folder.

DEMONSTRATION

For demonstration of GPS Survey, we have taken a Property having an Actual Area of 300 sqm in New Delhi and having geometry with 8 Vertices as shown below. We have numbered each Vertex as 1, 2, 3, 4, 5, 6, 7 and 8 clockwise. Begins GPS Survey with Vertex 1 and ends at Vertex 8 by moving clockwise. No need to revisit Vertex 1. App will join the line itself.

Polygon Area comes out to be very close to 300 sqm i.e., 298.17 sqm, which is comparable and considered correct for GPS Survey. Surveyor has to ensure that Polygon Area should match or come close to an Actual Area of the Property while GPS Surveying. VERY IMPORTANT ASPECT
### GPS Survey

**Waqf ID:** KA123456  
**Prop ID:** PL001

<table>
<thead>
<tr>
<th></th>
<th>Lat</th>
<th>Lng</th>
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</thead>
<tbody>
<tr>
<td>3</td>
<td>28.60568708</td>
<td>77.23833214</td>
</tr>
<tr>
<td>4</td>
<td>28.60571563</td>
<td>77.23839819</td>
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<td>5</td>
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<td>77.23845954</td>
</tr>
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<td>6</td>
<td>28.60565617</td>
<td>77.23851051</td>
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<tr>
<td>7</td>
<td>28.60558376</td>
<td>77.23856080</td>
</tr>
<tr>
<td>8</td>
<td>28.60554991</td>
<td>77.23850917</td>
</tr>
</tbody>
</table>

**Capture:** 28.60554991  
**Save:** 77.23850917
GPS Screen:

Saving 8 set of GPS Coordinate(s).

Polygon Area (Approx.):
0.00029817 sq.km = 298.17 sq.m
= 356.61 sq.yd = 3209.48 sq.ft

CANCEL  OK
(b) Photo Capture

"Photo Capture" basically uses Mobile Camera to capture Photographs of Waqf Property and store them in a pre-defined Size, Format and Naming Convention.

It will also write Waqf ID, Prop.ID and Date of Photograph at the Bottom of each Photograph for easy identification of the Waqf Property.

You can save upto 5 (Five) Photographs for each Waqf Property. It is advisable to capture all the four directions of the Waqf Property by taking 4 Photographs one in each direction and 5th photograph from Inside the Waqf Property.

You can delete any un-wanted Photograph by Pressing on its Thumbnail for few seconds and capture new photographs for the deleted ones.

Finally, you can press "SAVE" Button to save XML File as well as Photographs (JPG Files) in the designated Folder.
(c) **Management**

Since Surveyor is visiting an actual site of the Waqf Property where he/she will meet the Mutawalli/Managing Committee (Manager of the Waqf Property), so it was thought that Data Gaps in the Management Module could also be filled-up by collecting the information about the present Management along with authorized Management Document issued from Waqf Board. It will also collect Photograph, Identity Proof & Contacts of the person(s) involved in the Management. Therefore, this Mobile App has been upgraded to capture the Management details during the survey.
Download XML, JPG, PDF Files

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Later, you can download these Folders on your PC from Mobile using USB Cable for uploading in WAMSI On-line System using Waqf Board’s Registration Module Credentials. You can also access WAMSI On-line System from Browser of your Mobile and upload the files without downloading these Files on PC.

KNOWLEDGE BASE

What is Waqf ID?

Waqf ID consists of 8 characters, which identify a Waqf Estate uniquely across India. Its Format is as follows:

1st and 2nd characters indicate the 'State Name' Abbreviation in Caps (e.g., AP for Andhra Pradesh) and remaining 6 characters are Numbers representing the Serial Number of Auqaf Register preceded by Zeros.

If the Waqf Board on the basis of their Districts maintains different Auqaf Registers then 3rd and 4th Characters will represent the District either through Transport Department Code or Census Code (Either Alphabets or Numbers). Please check-up with the concerned Waqf Board what they have adopted for Waqf ID.

You may like to verify the correctness of Waqf ID, from 'Search' Menu available in this Mobile App.

Alternatively, you may like to verify the correctness of Waqf ID, from WAMSI On-line System’s Public Interface @ http://wamsi.nic.in/ by clicking 'Search Properties' Menu Hyperlink after selecting a desired 'State' from the Map or from the List available there.
What is Prop.ID?

Prop.ID consists of 5 characters, which identify the Waqf Property uniquely within a Waqf Estate (identified by Waqf ID). Its Format is as follows:

1st and 2nd characters comprises of Alphabets in Caps indicating the Type of Property and remaining 3rd, 4th and 5th characters are Numbers preceded by Zeros.

Prop.ID is automatically generated by WAMSI On-line System while adding an attached Waqf Property under a Waqf ID (i.e., Waqf Estate).

You may like to verify the correctness of Prop.ID, from 'Search' Menu available in this Mobile App.

Alternatively, you may also like to verify the correctness of Prop.ID for a given Waqf ID from WAMSI On-line System’s Public Interface @ http://wamsi.nic.in/ by clicking 'Report Card' Menu Hyperlink after selecting a desired 'State' from the Map or from the List available there.

For any suggestion to improve the content of this Document, please write to:

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