



# **NABARD Bhuvan Portal**

## **USER MANUAL**



## Remote Sensing Cell Farm Sector Development Department NABARD

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#### 1. Introduction

#### 1.1 Background

NABARD has been implementing participatory watershed projects as a part of Natural Resource management since last three decades with an aim to reduce risk associated with rainfed farming systems and livelihood security through holistic development involving soil and moisture conservation, productivity enhancement measures, climate proofing interventions and alternative livelihood interventions, etc. NABARD entered into watershed development space in the year 1992 through Indo-German Watershed Development Programme (IGWDP) in Maharashtra, wherein participatory approach of watershed development was adopted on a large scale for the first time.

Based on the success in implementation of the participatory watershed development under IGWDP, Watershed Development Fund (WDF) was set up at NABARD in 1999-2000 with an initial corpus of ₹ 100 crore contributed each by GoI and NABARD. It is augmented over the years through the interest differential earned under RIDF and interest accrued on the unutilized portion of the fund. The programme follows "Ridge to valley approach".

Under watershed development, the various programmes currently under implementation in 28 states are as follows:

- i. Participatory watershed development under WDF (including CSR collaborated projects)
- ii. Sustainable Development Plans (SDPs)
- iii. Climate proofing in completed watershed projects (WDF-CP)
- iv. Springshed Development Programme in NER
- v. Integrated Water Management Scheme (IWMS)
- vi. Pilot projects on reclamation of saline & alkaline soils
- vii. Restoration and rehabilitation of degraded soils for food security (SEWOH)

Cumulatively, as against 3,401 watershed development and related projects sanctioned, 1,914 projects were completed successfully while 334 projects were closed prematurely. The total project area covered is 23.43 lakh ha. Grant assistance

committed under all programmes was at ₹2,389.52 crore, out of which an amount of ₹1902.46 crore was released.

With the increased in the number of projects and need for digitization of NABARD's intervention in NRM sector, NABARD entered into an MoU with National Remote Sensing Centre (NRSC), Hyderabad in 2015 for web-based monitoring of on-going projects. NRSC created NABARD BHUVAN portal which facilitates HO and ROs to track physical and financial progress of implementation of the projects on real time basis, apart from monitoring of the assets created in the project areas. A provision was made for geo-tagging of assets created in the watershed projects through mobile Application developed by NRSC Hyderabad for the purpose.

NRSC also carried out impact evaluation studies of watershed projects in terms of changes in cropped area, cropping intensity, area under afforestation, area under horticulture, water spread area, pasture land area, etc., through analysis of time series satellite data procured by NRSC from ISRO. Further, to carry forward the activities of NRSC, in-house Remote Sensing Cell (RSC) was set up at NABARD, HO which has been operational since March, 2021.

#### 1.2 Geospatial technology for Web-based Monitoring of Watershed Projects

NABARD Bhuvan Portal is a Web-based GIS platform which is being used for regularly monitoring the progress of ongoing watershed projects. The portal has multi-temporal satellite images as well as various thematic layers (viz. geomorphology, drainage, slope etc.) which aids in web-based monitoring.

#### 1.2.1 Remote Sensing

Geospatial Technology ("Geo" is a Greek word meaning Earth and "Spatial" means relating to space) can be defined as a technology used to collect, analyze, and store geographic information. It includes Remote Sensing and GIS among others.

Remote sensing is the science (and to some extent, art) of acquiring information about the Earth's surface without actually being in contact with it. This is done by sensing and recording reflected or emitted energy and processing, analyzing, and applying that information. Remote sensing systems which measure energy that is naturally available (Sun) are called passive sensors while active sensors, on the other hand, provide their own energy source for illumination. Remote Sensing offers various advantages over conventional techniques such as:

- Continuous acquisition of data
- Frequent and regular re-visit capabilities resulting in up-to-date information
- Capability to achieve a synoptic view,
- $\circ$  use of multispectral data for increased information,
- o inaccessible area coverage
- o all weather and day/night capability
- simultaneous observations from a single platform at different resolutions, angles, spectral regions over land, atmosphere and oceans

While there are many advantages, remote sensing has certain limitation:

- Periodic calibration of sensors is required
- Passive remote sensing data may be affected by cloud coverage
- Validation of information is required from other sources
- Sometimes different phenomena being analyzed may look the same during measurement which may lead to classification error.



Figure 1-1 Remote Sensing System (Passive)

#### 1.2.2 GIS and WebGIS

A geographic information system (GIS) is a system that creates, manages, analyzes, and maps all types of data. GIS connects data to a map, integrating location data

(where things are) with all types of descriptive information (what things are like there). This provides a foundation for mapping and analysis that is used in science and almost every industry. GIS helps users understand patterns, relationships, and geographic context.



Figure 1-2 World into GIS Layers

The World Wide Web (WWW) has transformed everything and GIS is no exception. WebGIS is an advanced form of Geographic Information Systems available on web platforms.

The exchange of information takes place between a server and a client, where the server is a GIS server and the client is a web browser, mobile application and desktop application. The server has a unique Uniform Resource Locator (URL) so that clients can find it on the web. WebGIS brings GIS into the hands of the people. It reduces the need to create custom application. It provides a platform for integrating GIS with other business systems and enables cross-organizational collaboration.



Figure 1-3 Web GIS

#### 1.2.3 Shapefiles

GIS data can be separated into two categories: spatially referenced data which is represented by vector and raster forms (including satellite imagery) and attribute tables which is represented in tabular format. A shapefile is a simple, vector format for storing the geometric location and attribute information of geographic features. Geographic features in a shapefile can be represented by points, lines, or polygons (areas).



#### Figure 1-4 (a) Line (b) Point (c) Polygon

Point data is most commonly used to represent nonadjacent features and to represent discrete data points. Points have zero dimensions; therefore, you can measure neither length nor area with this dataset. Line (or arc) data is used to represent linear features. Common examples would be rivers, roads etc. Polygons are used to represent areas such as the watershed, lake, or forest. Polygon features are two dimensional and therefore can be used to measure the area and perimeter of a geographic feature. While

Advanced Software's like ArcGIS and QGIS offer various GIS capabilities, Bhuvan Portal can also be used for making shapefiles.

#### 1.2.4 Watershed and Springshed

A watershed is synonymous to catchment area and it is an independent Hydrological unit. It can be defined as the drainage basin or catchment area of a particular stream or river. Simply stated it refers to the area from where the water to a particular drainage system, like a river or stream, comes from. A watershed may be small, consisting of a few hectares or huge, covering several thousands of hectares.

Watershed development refers to the conservation, regeneration, and the judicious use of human and natural (like land, water, plants, animals) resources within a particular watershed. Watershed development attempts to bring about the best possible balance in the environment between natural resources on one side and man and grazing animals on the other. It requires people's participation because conservation is possible only through the whole hearted involvement of the entire community.

Springshed is an area within a ground or surface water basin that contributes to the spring flow. The boundaries of springsheds are dynamic – they change based on the level of the aquifer (otherwise known as its potentiometric surface). Also spring sheds are the areas within ground-water and surface-water basins that contribute to the discharge of a spring. An aquifer is very much like an underground watershed. Unlike plain areas, in hilly areas, the spring shed is the fractured rocky area under the hills which contribute to flow of water as the springs at the drainage outlet. The direction of the flow of water /spring shed outlet depends on the type of rocks and their geological formation.



Figure 1-5 Watershed



Figure 1-6 Springshed

NABARD Bhuvan Portal is based on this open source web based GIS technology. Verified watershed boundary shapefiles are hosted on the portal after which implementing agencies can geotag the interventions in the project areas along with photographs and other details. This helps to monitor the physical and financial progress for each activity/sub-activity. Also, rating and monitoring status is also available on the portal.

As on 28<sup>th</sup> February 2022, 901 watershed boundaries have been on-boarded on the portal (Table 1.1 & Table 1.2) with more than 55,000 geo-tagged assets.

Veen	RSC	NRSC	Programme	Uploaded
rear	Uploaded	Uploaded		on NBP
2018-2019	20		IGWDP	95
2019-2020	140	624	IGWDPCP	40
2020-2021	69	(Cumulative)		
		(Cumulative)	KFW	226
2021-2022	48		Springshed	36
Total		901	WDF	371
			WDFCP	133
			Total	901

#### Table 1-1 (a) Watershed on NABARD Bhuvan Portal (b) Programme wise Distribution

#### 1.3 Purpose

This user manual would serve the purpose of effective use of the NABARD Bhuvan portal and Mobile Application and hence help in optimal monitoring and evaluation. The manual provides step by step procedure on the followings:

- Creation and Verification of watershed boundary Shapefile using NABARD Bhuvan Portal
- Entering Watershed primary data and physical and financial information by Implementing Agencies
- Moderation of Watershed primary data /physical and financial information and geotagged assets by DDM
- Monitoring of watershed development projects by RO/HO and visualization for citizens

#### 2. Creation and Verification of Watershed Boundary Shapefile

Bhuvan is a Geoportal of ISRO which is an interactive versatile Earth-Browser which showcases multi-sensor, mutli-platform and multi-temporal images with capabilities to overlay thematic information. Bhuvan Geo-portal consists of geospatial database including administrative boundaries like state boundaries, district boundaries, village boundaries and data like drainages, roads, settlements, waterbodies, watershed etc. of India. Instead of sophisticated Desktop softwares, Bhuvan portal can be utilized to create watershed boundaries shapefiles. Toposheet of the watershed area will provide an understanding of the drainage pattern that will aid in watershed boundary. Based on certain preliminary, village boundary layer and drainage layer available on the Bhuvan portal, watershed boundary will be decided.

#### 2.1 Creation of Watershed Boundary Shapefile

The following is a step by step, procedure to delineate watershed boundary shapefile using Bhuvan Portal:

1. Enter the following URL name for accessing the Bhuvan Portal:



#### "http://bhuvan.nrsc.gov.in/map/bhuvan/bhuvan2d.php"

#### Figure 2-1 NABARD Bhuvan Home page

2. Identify a Latitude and Longitude within the selected watershed project for example: 32.66, 75.10 (Lat, Long). In the search bar, click on the "x" to clear input value and enter the identified Lat Long on the portal as shown in the figure 2.2 below. Lat Long in Degree Minutes Seconds should be converted to decimal degrees before entering.



Figure 2-2 (a) Search bar

(b) Identified Location

3. Under "Map" select "Base Hydrology" for demarcation of the watershed area as it requires data like drainages and administrative boundaries.



Figure 2-3 Map-Base Hydrology window

4. Click "Tools" followed by "Draw Tool" to create Watershed boundaries. Select draw polygon option.



Figure 2-4 (a) Draw Tool (b) Select Polygon Tool

5. After selecting draw polygon tool, "+" shaped cursor will appear on the screen for digitization. Identify a drainage outlet, and based on the preliminary information start digitizing along the desired watershed boundary and right click to complete the polygon.



Figure 2-5 Procedure for boundary delineation

6. After completion, double click to get the area estimate. Further, details like name and district of watershed can be saved in the attribute. Download the shapefile from "export as shapefile" tool.



Figure 2-6 (a) Area information (b) Download shapefile

#### 2.2 Verification of watershed boundary shapefile

To verify an existing watershed boundary shapefile, the following procedure shall be followed:

1. Open folder containing shapefile and select .shp, .shx, .dbf and. prj. Right click and zip only these four files.



Figure 2-8 Procedure for ZIP format

2. Enter the following URL name for accessing the Bhuvan Portal:

"http://bhuvan.nrsc.gov.in/map/bhuvan/bhuvan2d.php"

3. Select "Tool", click on "Add Layer". Select "Shapefile" to upload the shapefile of Watershed boundary. Upload the file zipped in step 1.





Figure 2-7 (a) Uploading shapefile (b)Watershed boundary and it's details

4. Once uploaded, shapefile can be visualized on the portal to verify the watershed boundary. To make changes, create a new shapefile (steps given above in 2.1) with reference to old shapefile.



Figure 2-8 Area measurement tool

 The area of watershed can be measured using 'Measure Area' option available under 'Tools'. Area of the watershed must be within 1000 ha and for springshed 300 ha (+/-10%).

#### 3. Updating watershed development activity on the portal

The primary information, physical and financial details will be entered on the portal by PFAS. The geotagging process using NABARD BHUVAN mobile app will commence only after the details of watershed activities approved by DDM. Once activity accepted by DDM, information is fixed and cannot undergo any changes. The following are the steps to enter the watershed data on the portal: 1.

#### 1. Open NABARD BHUVAN portal using the URL given below:

https://bhuvan-app1.nrsc.gov.in/nabard/



Figure 3-1 NABARD BHUVAN portal home page

1. Select PFA and enter Username & Password provided by NABARD. Data provider window will open after logging in.

Lo	qin	👸 Bhuvan-Single Sign On
Cit	izen	Username:
Administrator	Data Provider	Password:
Head Office	DDM/PMU	ZeBoEek C
Regional Office	PFA	Enter Captcha:
	11100	
Mobile App Download	App User Manual	LOGIN

Figure 3-2 PFA Login



Figure 3-3 Data Provider Window

2. Select NABARD WATERSHED and click on Primary WS Data and enter the details on the "Inventory of Watershed Details" page.

Indian Geo-Platforn	n of ISRO
Bhuvan NABARD	Enter City or Lat,Lon(ex:chenna
NABARD Watersh	ieds
Watershed	Watershed on Bhu 🔻
Project	Choose 🔻
State	All ×
Photograph Upl Satellite Data Geographical/Physic Activity Sub-activity Primary WS Data Activity wise-Phy &	oad Status cal Striistics y wire Financial Statistics

Figure 3-4 NABARD Watershed

	Inventory of Watershed Details		
		Name of VWC	
Name of the Program	WDF (Watershed Develop •	Name of PEA	Angargaria Srijoni Siksha Niketan (ASSN)
State	JHARKHAND		
		Name of Corporate	
District	PAKUR		
Name of the Watershed	Dharani Pahar 🔹	No of Households	904
Name of taluka/block	Maheshpur	Total Geographical Area(Ha)	901
Name of village		Forest land	
No of villages covered		% Irrigated land in	
Watershed Code		watersneu	

Figure 3-5 Primary Watershed Data

3. After entering the details, go back to NABARD Watershed window and select Activity wise Physical and Financial Details

Sateway to Indian Earth Observation		Monitoring of NABARD Watershed Projects					Welcome jh_b ational Remote Sensing	ok_koh_pfa	ûLogout इसरो		
			Invento	ry of Physical and Fi	inancial Details						
Note: 1. We can add new record for any watershed 2. Update and Delete option can be used to u 3. List of records below visualize all the rece	Name of the Program WDF (Wa Name of the Watershed KOH Name of the Watershed KOH Fin activity-subactivity which is not in the below pdate and delete any existing not yet modera it instances of watershed-activity-subactivity	atershed Dev uancial Sanc list. ted or rejected rentries.	tion Approval S records.	state JHARKHANI	0 •	Distri	a BOKARO	v	Add Ne	w Record	
Activity	Sub Activity	Unit	Physical Sanction	Physical Achievement	Financial Sanction (in Lakh)	Financial Achievement (in Lakh)	Year & Month	Present Status	Remarks	Update	Delete
NRM-Plantation and Horticulture	Afforestation	На	25	(	2.14718	0	2021-07	Accepted		Update	Delete
NRM-Plantation and Horticulture	Dryland Hoticulture	На	10	(	1.25493	0	2021-07	Accepted		Update	Delete
NRM-Soil conservation	Continuous Contour Trench	RM	2087	(	1.30183	0	2021-07	Accepted		Update	Delete

Figure 3-6 Activity wise Physical and Financial Details

4. To add new record, click on add new record. New record can be added for any watershed-activity-sub activity, which is not visible in the list of activities on portal list.

Add New Record
Activity
Allied activties- Dairy
Sub-activity
Crossbred Cows
Unit
Nos
Month & Year
September, 2021
Physical Sanction
2
Physical Achievement
1
Financial Sanction (in Lakhs)
0.02
Financial Achievement (in Lakhs)
0.01  \$
Add Record Cancel



5. The records can be updated and deleted only for the records that are yet to be moderated by the DDM



Figure 3-8 Activity wise Physical and Financial Details-Update/Delete

Update
Activity
NRM-Plantation and Horticulture
Sub-activity
Afforestation
Unit
На
Month & Year
July, 2021
Physical Sanction
25
Physical Achievement
0
Financial Sanction (in Lakhs)
2.14718
Financial Achievement (in Lakhs)
0
Submit Cancel

Figure 3-9 Updating Activity wise Physical and Financial Details-Submit

#### 4. Moderation of Data on NABARD BHUVAN portal

The details of watershed entered by PFA will be moderated by DDM. The list of activity for the particular watershed will be displayed on the portal after moderation. The PFA can start geotagging activities using mobile app after approval of primary, physical and financial information.

- 4.1 Moderation of Primary Watershed data and Physical and Financial Information
- 1. Open NABARD Bhuvan portal from the following URL

https://bhuvan-app1.nrsc.gov.in/nabard/

2. On the homepage of NABARD Bhuvan Portal, click on DDM/PMU and enter login credentials

Login	🔁 Bhuvan-Single Sign On
Citizen	Username:
Administrator Data Provider	Password:
Head Office DDM/PMU	Ze8oEek
Regional Office PFA	Enter Captcha:
Mobile App Download App User Manual	
	LOGIN

Figure 4-1 DDM Login page

3. The DDM moderation window will appear after the login. Select NABARD Watersheds.



Figure 4-2 Monitoring of NABARD Watershed projects

Bhuvan NABARD	Enter City or Lat,Lon(ex:chenn			
Monitoring and Ra	Monitoring and Rating Report			
NABARD Watersh	eds			
Watershed	Watershed on Bhu •			
Project	Choose 🔻			
State				
STATISTICS				
Photograph Upload Status				
Satellite Data				
Geographical/Physic	cal Statistics			
Activity Sub-activity	wise Financial Statistics			
Moderate Primary WS data				
Moderate Activity W	ise-Pity & Fin. details			

Figure 4-3 NABARD Watershed

4. Select Moderate Primary WS Data for verifying the details.

Sateway to Indian Earth Observation	Monitoring of NABARD Watershed Projects Inventory of Watershed Details	Welcome jha_pa	M_wdfcp Logol इसरो डिन्व
Name of the Program	WDFCP (Watershed Devel *		
State	JHARKHAND		
District	PALAMAU		
Name of the Watershed	Select an Option	Previous Accepted Data	
No data available for modera	tion		

Figure 4-4 Moderate Primary Watershed data landing page

5. Similarly, click on Moderate Activity wise Physical and Financial Details to verify the same.

Sateway to Indian Earth Observation	Monitoring of NABARD Watershed Projects					Nat	Welcome tn_dha_d						
			Inve	ntory of Physica	al and Financial	Details							
	Name of the Program	WDF (Watershed De)		State TAM	IIL NADU	~		District DH	ARMAPUF V	~			
	Name of the Watershee	l Naickenahalli 🗸		Moderation Sta	atus Yet to b	e Modera 👻							
Watershed Pending for Moderation are as follows: Naickenahalli           Note:         .           1. Update option can be used to update any record before acceptance or rejection.         .           2. We can view the previous accepted record details for any particular watershed-activity-subactivity as a reference.         .           3. List of records below visualize all the recent instances of watershed-activity-subactivity entries for moderation.         .													
	Activity	Sub Activity	Unit	Physical Sanction	Physical Achievement	Sanction (in Lakh)	Achievement (in Lakh)	Year & Month	Accept	Reject	Accepted Detail		
Allied acti	ities- Dairy I	/ini-Dairy	No.	0	0	(	D	0 2018-05	Accept	Reject	Info		
Allied acti	vties - Poultry F	Poultry	No.	0	0	(	D	0 2018-05	Accept	Reject	Info		
LWD- Live	lihood activities	Dairy Animals	No.	0	0	(	D	0 2018-05	Accept	Reject	Info		

Figure 4-5 Activity wise Physical and Financial Details Summery

#### 4.2 Field Data Verification

The geotagged assets are to be moderated by DDM. Based on the details of the geotagged assets and photographs DDM can either accept or reject the same. RO/HO can also view the moderation status. Geotagged assets are highlighted as below based on the moderation status:







(a)Yet to be moderated data (Orange) (b)Accepted data (Green) (c)Rejected data (Red)

1. For field data moderation click on click NABARD Watershed and select field data.

NABARD Wa	tersheds		Martin Martin
Field Data			
Project	WDF (Watershed *	वर्यण्यदेव	• • • • • • • • • • •
State	TAMIL NADU	A AND AND AND AND AND AND AND AND AND AN	9799
District	DHARMAPURI *	17 - Carlos and a start	A CONTRACTOR OF THE OWNER
Watershed	Naickenahalli ×		
Activity	All	and the second sec	
Subactivity		State - 1	and the second second
Date Mode	O Day  Period	bburyan	bbuvan
Start Date:	dd-mm-yyyy		
End Date:	dd-mm-yyyy	The state of the second second	A PART A PART
Accepted	Points C Rejected Points	and the second second	
	Remove	The second second	
Total No of	Points Found:34	The second second	A STATE AND A STATE

Figure 4-6 data yet to be moderate

2. Click on the point (geotagged asset) to verify the details with photos then select accept/reject/edit option given at the bottom of the table.

mobilonor	10043244222	and the second second second
mobileno.	2010 5 27 0 50 24	
creationtime:	2019-5-27 9:50:34	
	7b39c54caeeddcZc	444 - 9 <sub>80</sub>
deviceid:	96	T. Barrata - Frank - Park
projcode:	WDF	and the first the
projname:	Watershed Development Fund	
state_code:	33	The second secon
state_name:	TAMIL NADU	
dist_code:	3305	Pages Market Harks
dist_name:	DHARMAPURI	
watershed:	Naickenahalli	See Contraction and
SubActivity:	Vermicompost or Nursery	and the second s
VillageName:	Periyamalli Right Click on Geo-	राहणगतन
WorkCode:	23 WDF 201 tagged point for	
StatusOfActivity:	Completed moderation	CARSTELL'S STORE TO
StartDate:	12012016	and stand and the stand
CompletionDate:	22042016	and the second s
FarmerName:	Munusamy	and a state of the
LandType:	Private	and states and the second states and
AmountSanctioned:	5000	A COMPANY AND A
AmountDisbursed:	5000	Carlo Carlo Carlo
PhysicalDetails:	01	the second s
Physical Details Init:	Nos	and the second second

Figure 4-7 Photo moderation activity

3. If rejected, PFA is required to geotag the asset again.

#### 5. NABARD BHUVAN portal for RO/HO/Citizen

RO and HO can monitor the progress made under watershed development project using the portal. The dashboard provides summery of watershed, activity/sub-activity wise physical and details and also the monitoring reports. The HO/RO have viewing and report generation authorization, while citizen can only visualize project wise watershed boundaries along with geotagged photographs.

1. To login, click on Head Office or Regional Office on the portal homepage and enter your login credentials. For Citizen, "NO" login credentials are required.

Login	🔂 Bhuvan-Single Sign On
Citizen	Username:
Administrator Data Provider	Password:
Head Office DDM/PMU	7e8oEek
Regional Office PFA	Enter Captcha:
Makila Ann Daumland Ann Haar Manual	
Mobile App Download App User Manual	LOGIN

Figure 5-1 RO/HO Login page

2. The NABARD Bhuvan portal window will appear after the login



Figure 5-2 Data viewing/monitoring window

3. Click on NABARD Watershed and select watershed details from the dropdown list.

Dashboard	_			
NABARD Watersh	neds			
Watershed	Watershed on Bhu 💌			
Project	KFW (KfW Soil Pro *			
State	TELANGANA ×			
District	Choose			
Watershed	Select Project *			
5	TATISTICS			
Photograph Up	load Status			
Satellite Data				
Geographical/Physical Statistics Activity Sub-activity wise Financial Statistics				

Figure 5-3 Selection of Watershed for data moderation

4. Click on Statistics to view the state-wise summery report

	Last Updated 2022-03-04 11:51:07am State-wise Summary											
S 1	o. Stal	e	District	No. of Blocks	No of Watersheds	Geographical Area (Ha)	Households Covered	Total PFAs	Shape Files Uploaded	Amount Sanctioned (In Lakhs)	Amount Disbursed (In Lakhs)	Amount Utilized (In Lakhs)
1	TELANO	ANA	DILABAD	6	6	7945.92	3629	4	6	299.99	299.99	298.86
2	TELANO	ANA	1AHBUBNAGAR	4	6	6024.00	2480	3	6	299.96	299.96	298.90
3	TELANO	ANA	RANGAREDDY	5	8	9418.75	5276	3	8	400.00	400.00	399.95
		Tota	l	15	20	23388.67	11385	10	20	999.95	999.95	997.71
_	Export to XLSX!											

Figure 5-4 Summery report for state-wise summery

5. Click on photograph upload status to view the geotagged photo summery report

	Last Updated on 04 Mar 2022 11:30:51									
	Photograph Upload Status									
State Name	District Name	No. of watersheds	Yet to be Moderated	No of photos accepted	No of photos rejected	Total No of Photos				
TELANGANA	ADILABAD	6	0	648	304	952				
TELANGANA	MAHBUBNAGAR	6	1	1141	894	2036				
TELANGANA	RANGAREDDY	8	0	808	664	1472				
Total		20	1	2597	1862	4460				
	Export to XLSX!									

Figure 5-5 Summery report for geotagged photo

	Physical Details of Watershed									
SI. No	Name of Watershed	Geographical Area(Ha)	Forest land(Ha)	Irrigated land(Ha)	Wasteland(Ha)	Revenue land(Ha)				
1	Battuvanipali	1175.00	50.00	20.00	750.00	200.00				
2	Chelepalli	751.00	0.00	129.00	0.00	0.00				
3	Cherlopali	1050.00	8.00	26.00	184.00	270.00				
4	Dhaniyancheruvu	540.00	100.00	19.00	30.00	110.00				
5	Garudapuram	1075.00	60.00	30.00	38.00	120.00				
6	Goundlapalli	1080.50	0.00	86.00	65.00	120.00				
7	Marutla-III	978.00	0.00	579.00	0.00	0.00				
8	Peddapalli	1271.50	0.00	13.84	184.00	314.12				
9	Somarajukunta	800.00	80.00	15.00	40.00	50.00				
10	Toopalli	1001.00	17.00	2.00	66.00	378.00				

6. Click on Geographical/Physical statistics to view the physical details of watershed.

Figure 5-6 Summery report for physical details of watershed

7. Click on Activity/Sub-activity wise financial details to view the financial details

Financial Details of Watershed							
Name of activity	Name of sub-activity	Units	Units sanctioned	Units achieved	Amount sanctioned(Rs lakh)	Amount disbursed (Rs lakh)	
Additional SWC Structures	Bore well recharge pits or structures	Nos	6	6	0.48	0.48	
Additional SWC Structures	Cemented Check Dam	No.	1	1	3.89	3.89	
Additional SWC Structures	Check Weir	No.	1	1	0.76	0.76	
Additional SWC Structures	Drainage Point Recharge Pit	No.	5	5	0.39	0.39	
Additional SWC Structures	Farm Pond	No.	2	2	1.43	1.43	
Additional SWC Structures	Farm Pond	Nos	1	1	0.78	0.78	
Additional SWC Structures	Field Bund	M3	940	1000	1.53	1.53	
Additional SWC Structures	Field Bund	RM	1053	874	1.68	1.68	
Additional SWC Structures	Fodder Plantation for gully stabilization	No.	1000	0	0.05	0.05	
Additional SWC Structures	Grass seeding	NA	266	316	0.37	0.37	

Figure 5-7 Summery report for financial details of watershed

8. To view the geotagged assets, click on field data and select watershed details in dropdown option

Indian Geo-Platform of ISRO	
Bhuvan NABARD Enter City or Lat,Lon(exchemna	ai or 13 🔜
Dashboard	▼ Summary of Watersheds
NABARD Watersheds	
Field Data	
Project IGWDPCP (Indo G *	Telpura / Moti Tembi
State RAJASTHAN x	Gameerputo
District BANSWARA #	T estication
Watershed Khunta It 🗶	
Activity All	bbuvan Rem Ra Munntbbuvan
Subactivity All *	11 Doth (charcell
Date Mode O Day  Period	
Start Date: dd-mm-yyyy	Bhongapuro Gaderiya
	Contraction of the second
Remove	an Rant Rafpure Borkunde
Total No of Points Found:249	Churcher P

Figure 5-8 Geo tagged asset window

9. Click on any geotagged point on the map to view activity details along with field photos.

N.S. 12	V Summary of Watershed	5	
Dashboard	-	and the second se	
NABARD Watersheds		×	5
Field Data		bbuvan	
Project IGWDPCP (Indo G *			A R
State RAJASTHAN X			
District BANSWARA X			N.R.S.
Watershed Khunta Ii 🗙		A LANGE AND A LANGE	
Activity All *		12	
Coloretta All	SI No:	4531675	
Subactivity	EDCorpiectname	BhuvanNABARD	
Date Mode ODay 🖲 Period	themename:	BhuvanNABARDEDC1dot4	
Start Date: dd-mm-yyyy	profilename:	PromotionSustainableNRMCCAFarmin	
End Date: dd-mm-yyyy	observername:	Viiav Sanadva	8
	org:	NM Sadguru water and development	
Remove	mobileno:	8140821000	
	creationtime:	2020-8-17 13:27:25	R
Total No of Points Found:249	uuid:	ce14e4662b2b7f5e	
	deviceid;	sanadyay gmail.com	3
	projcode:	IGWDPCP bbuvan	10
	proiname:	Indo-German Watershed Developme	
	Party of the second second second		24.0

Figure 5-9 Geotagged details with photograph data monitoring page

10. HO and RO can view the dashboard data. Click on Dashboard Data (Figure 5.10) to view all project statistics and reports

Indian Geo-Platform	of ISRO	NABARD DASHBOARD							National Remote Sensing Centre 🌉 🚮 💷		
DASHBOARD	Physical and Financial Report										
Networks Set 1	No OF PREACTS 901	тино бластоя - окласно - отклато и у наказа их лаки: Rs: 10565344 - Rs: 45044178 - Rs: 3286196	PROJECT COMPLETION 12%		5	ANY 50734000 58794					
	Physical - No of Projects	Financial - Sanctioned Amount (in Lakhs)	Project Implementation Status					±.			
			Programme	Total Projects	Ongoing Projects				Completed Projects		
	and the second sec	95 <b>55</b>			> 5 yrs	3 <= 5 yrs	1 <= 3 yrs	<- 1 yr			
	105 105		IGWDP	95	46	1	0	0	39		
	15		IGWDPCP	40	0	0	39	0	0		
			KFW	123	0	79	34	0	10		
	IGWDP IGWDPCP KFW KFW_RSC	755	KFW_RSC	103	8	15	0	0	0		
	Springshed_HSC WDP WDPCP WDPCP_HSC	IGWOP I IGWOPCP I KFW WDF I WDFCP	Springshed_RSC WDF	273	105	56	15	1	62		
			WDFCP	93	7	67	0	0	0		
			WDFCP_RSC	40	0	4	0	0	0		
			WDF_RSC	98	4	3	0	0	0		
			Total	901	170	225	89	1	111		
	Shape files liplead Status	*	Financial Progress ONR La Rs 2000 Rs 1100 Rs 1100 Rs 1100 Rs 1200 Rs 1200 Rs 200 Rs 2	kks)	199545	<u>553</u> 44 25	21138 1442 12556	<sup>3050</sup> 2310 1826			

Figure 5-11 Summery and report generation page

11. On the dashboard data window, click on Rating and Monitoring report to visualize and download the reports.

DASHBOARD	Monitoring and Rating Report												
Ecg out	ND 67 MOAKTS 901			PUIND SANCTION - BY NARAAD DIN LA Rs: 10565344	тако закстон : новинало итпере итпалае (ит цами) Rs: 10565344 - Rs: 45044178 - Rs: 3286196		PROJECT COMPLETION 12%			Ater Conscio 58794			
In Reports Set II	Summary of Monitoring Visits Store e petries Search											÷	
In. Rating and Monitoring												:	
Summary Reports	Year	1: Quarter		Visits Taken By RO Official		Visits Taken By Consultant		Visits Taken By DDM	ti.	Total Visits	:: % of Total Projects	11	
	2018-19		Q1 (Apr - Jun)		1	25		4		30		5	
	2018-19		Q2 (Jul - Sep)		2	17		3		22		4	
	2018-19		Q3 (Oct - Dec)		0	12		8		20		3	
	2018-19		Q4 (Jan - Mar)		2	36		2		40		7	
	2019-20		Q1 (Apr - Jun)		2	33		1		36		6	
			lotal		14	218		37		269		43	
	Showing 1 to 5 of 14 entries												
	Summary of R	latings										*	
	Show entries Search												
										·			
	t. Year	: Half	n n Poor	Poor %	i 11 Average Av	erage %	Good	Sood %	Excellent	11 Excellent %	Total Rated	% of Total % Projects	
	2018-19	H1 (Apr - Sep)	0	0	1	100	0	0	0	0	1	0	
	2018-19	H2 (Oct - Mar)	0	0	2	100	0	0	0	0	2	0	
	2019-20	H1 (Apr - Sep)	3	17.647058823529413	5	29.411764705882355	9	52.94117647058824	0	0	17	3	
	2019-20	H2 (Oct - Mar)	1	14.285714285714285	3	42.857142857142854	3	42.857142857142854	0	0	7	1	
	2020-21	H1 (Apr - Sep)	1	16.666666666666666	4	66.6666666666666	1	16.66666666666666	0	0	6	1	
		Total	5		18		14		0		37	5	

Figure 5-12 Monitoring and rating report page

12. Select Summary Reports to generate various reports as shown in Figure 5-12. The reports can be generated State-wise, district and watershed wise.



Figure 5-13 State-wise, district and watershed wise summery report page for RO/HO

#### 6. DOs and Don'ts

#### 6.1 Dos

- a) Mark the watershed boundary in reference with toposheet, village boundary and drainage.
- b) Consider only one outlet for watershed
- c) Area of the watershed must be within 1000 ha and for springshed 300 ha (+/- 10%)
- d) The projection of shapefile should be GCS/WGS84
- e) Amount while entering the watershed financial details should be in lakh (upto 2 decimal)

#### 6.2 Don'ts

- a) Don't select draw line tool for drawing shapefile
- b) Don't Zip the entire folder containing shapefiles. Only select .shp, .prj, .dbf, .shx and zip for uploading on Portal
- c) Don't enter the latitude, longitude in degree minutes seconds while searching the location on portal