









FOR PUDUCHERRY

©National Centre for Coastal Research



MARINE SPATIAL PLANNING (SAHAV)

Dashboard User Guide

Version 1.0

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FOREWORD

During the recent decades, ocean life is considerably under threat. Overfishing, climate change, marine pollution etc create a serious risk to the marine environment. If we are to ensure that the sea's resources are to be used in a sustainable way, proper planning of the marine environment is essential for an imperishable future. A successful blue economy emerges when economic activity is in balance with the long-term capacity of ocean ecosystems to remain resilient and healthy. Marine Spatial Planning (MSP) is one such process which uses broad stakeholder participation and transparent spatial mapping of nature values and environmental pressures from human activities. MSP not only helps to understand the spatial and temporal distribution of human activities in the ocean but also encourage in minimizing the conflicts and promote compatibilities among such uses as well as the environment.

In 2019, under the Indo-Norway International Ocean Management and Research Initiative an MoU was signed and Integrated Ocean Management was identified as an area of mutual interest for future cooperation. Marine Spatial Planning (MSP) was the first activity that was taken up under this collaboration and the Ministry of Earth Sciences, through the National Centre for Coastal Research, leads the MSP initiative in India. NCCR along with Department of Science and Technology, Govt. of Puducherry have developed Marine Spatial Plan for UT-Puducherry, a web-GIS based dashboard known as SAHAV (SAgar - Indian and HAV - Norwegian, signifying OCEAN), to provide decision-makers with comprehensive details and data related to various project aspects, progress, and underlying parameters.

As part of its commitment to transfer knowledge on the scientific tools and techniques to the coastal states for effective management of coastal areas, the present training programme on "Marine Spatial Planning portal (SAHAV)" has been exclusively organized for the Officers of UT administration and I am sure this programme will be helpful in implementing the MSP Programme in Puducherry.



(M.V.Ramana Murthy)

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FOREWORD

In the vast expanse of our oceans lies both challenges and opportunities. Challenges with respect to preserving the delicate ecosystem of the ocean and opportunities in terms of harnessing the vast resources sustainably. As we stand at the intersection of responsible governance and marine conservation, the importance of effective Marine Spatial Planning (MSP) cannot be overstated

The oceans are not only the lifeblood of our planet but also a source of livelihood for countless communities and a treasure trove of biodiversity. Yet, the increasing demands on marine resources necessitate a strategic and integrated approach to their management. With this understanding, the U.T. of Puducherry has fostered the initiative on Marine Spatial Planning and has developed the SAHAV Dashboard with the help of NCCR, Chennai,

It is with great pleasure and a sense of profound responsibility that I introduce this training manual on Marine Spatial Planning tailored for the Government Officers of the U.T. of Puducherry. With a resolute determination to protect and conserve the marine ecosystem while also harvesting the touristic, livelihood and ecological opportunities it offers, it is very much essential that the knowledge, skill, capacity and technological prowess of our officers are enhanced in terms of their understanding and management capabilities and to maneuver through the complexities of marine spatial planning.

This manual on Marine Spatial Planning is designed to be more than just a guide. I believe it would be a companion on the journey toward effective marine governance. As Government Officers, we are entrusted with ensuring economic prosperity, and safeguarding the ecological integrity of our marine ecosystems and I believe, this manual simplifies the tasks of the users in working with the SAHAV Dashboard.

I extend my deepest appreciation to all those involved in the creation of this manual. Your commitment to fostering expertise and promoting sustainable practices in marine spatial planning is commendable.

I hereby entrust that the successful implementation of MSP requires a collaborative effort transcending departmental boundaries and technological challenges. It is my sincere hope that this training manual fosters a sense of shared responsibility among government officers, encouraging crosssectoral collaboration for the sustainable management of our marine spaces and helps conserve the our precious marine resources for generations to come.

(A. Muthamma, I.A.S.)

Date:

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Background

The Government of India's Vision of New India by 2030 enunciated in February 2019 highlighted Blue Economy as one of the ten core dimensions of India's growth. The Ministry of Earth Sciences, Government of India has prepared the draft Blue Economy policy framework identifying marine spatial planning as a major vertical under blue economy. In 2019 under the Indo-Norwegian collaboration on Integrated Ocean Management and Research Initiative, Marine Spatial Planning (MSP) was taken up as the first activity and two pilot sites, Puducherry and Lakshadweep Islands were determined for developing MSP. The draft MSP framework has been conceptualized by the National Centre for Coastal Research (NCCR), Ministry of Earth Sciences, along with Institute of Marine Research, Norway and the Norwegian Environment Agency and coordinated by the Department of Science and Technology, Govt. of Puducherry involving stakeholders namely the Department of Fisheries, Tourism, Ports & Harbours, Coast guard, Town & country Planning, disaster management etc.

MSP for Puducherry is one of the first of this kind that has been developed to aid in better and sustainable utilization of the coastal and marine space of Puducherry. This tool is aptly called 'SaHav' an amalgamation of Sagar and Hav, the Hindi and Norwegian words meaning 'Ocean'. The Government of Puducherry have made an administrative order and is actively leveraging the SAHAV to streamline the planning, implementation, and monitoring of new infrastructure developments and projects. The utilization of this portal marks a significant step towards efficient governance, providing a centralized platform for comprehensive planning, real-time project implementation tracking, and continuous monitoring.

1. Introduction

MSP for Puducherry is a platform to bring diverse stakeholders together in the maritime domain to understand the current spatial usage of the coastal and ocean space by various sectors, MSP will help in tracking key sectoral indicators to enable course correction and formulate action plans for sustainable development, minimize inter sectoral conflicts and enhance synergy for optimal utilization of coastal and ocean space to ensure inclusive and sustainable development.

The MSP for Puducherry was developed with the best available datasets in the form of a spatial data repository with all thematic maps relevant to the pilot sites. MSP aims to enhance regional planning, integrating current and future plans of all coastal and marine regions. Ecosystem health is being assessed through indicators such as Water quality index, Mangroves area under economic pressure etc and these status indicators play an important role to plan course correction or remedial actions to maintain the health of the ecosystem and wellbeing of the society.

1.1 What is a Web GIS Dashboard and what can you do with it?

A web GIS dashboard refers to a web-based application that displays geospatial data in a visual and interactive manner. It combines the power of geographic information systems (GIS) with the accessibility and convenience of the web.

Web GIS dashboard is diverse and can be beneficial in various domains.

1. Data Visualization: It allows users to visualize complex geospatial data in the form of maps, charts, graphs, and other visual representations. This helps in understanding patterns, trends, and relationships within the data.

2. Decision Making: By providing real-time and up-to-date information, a web GIS dashboard assists in making informed decisions. It enables users to analyze data, identify patterns, and gain

insights that can support planning, resource allocation, and policymaking processes.

3. Collaboration and Sharing: It facilitate collaboration among multiple stakeholders by providing a centralized platform to access and share geospatial data. It allows users to collaborate on projects, exchange information, and work together on spatial analysis tasks.

4. Monitoring and Tracking: With a web GIS dashboard, users can monitor and track various phenomena in real-time.

5. Public Engagement: Web GIS dashboards can be used to engage the public by providing access to geospatial data and information. This promotes transparency, citizen participation, and awareness about various issues, such as urban planning, environmental conservation, or disaster management.

1.2 Who should use this manual?

This manual is specific to the tasks that will be performed by the registered members of the District Administration officers.

2. Getting Started

2.1 Supported Browsers

In order to use the application to its full capabilities, a supported web browser is mandatory. The browsers compatible with SAHAV are: Google Chrome and Firefox 11 and above To begin working with the system, launch the SAHAV link in a supported web browser.

NOTE: Using an unsupported browser will limit the functionality of the application

2.2 How to start using the Application

On Google Chrome/ Firefox , type the following address to access the Application URL:

http://marinespatialplanning.in/puducherrygeo/

The following home page will appear



Upon Clicking anywhere on the above screen, Login screen will appear. In order to login to SAHAV, you must have a Authorised User ID and Password. If you are new user, please refer to **Section 2.3** for further instructions. There are two types of logins. One is for the government officials of various departments. Another Login is for the consultants.

2.3 New Users Registration:

If user is a new User then he/she has to create the account by clicking.

-Register option as shown in below screen



Registration Form:

There are two user Roles. One for Government officials and, another for consultants. For Government Officials, username and password is required to be able to login. You must enter a valid mobile number which will be used for the OTP verification. The registration will be successful



once all the fields entered are successfully verified. Below is the description of all the fields present on the form when Government official role is selected.

Sr. No	Field Name	Desc
1.	User Role	Select Your Role.
2.	Your Email	Enter your Email Id
3.	Phone Number	Enter your phone number
4.	Department	Enter Your Department
5.	Username	Enter your name
б.	Password	Enter Password
7.	Confirm Password	Confirm password by re-entering the
		password

If your selected role is **Consultant**, following fields will be shown. Password is not required.

Sr. No	Field Name	Desc
1.	User Role	Select Your Role.
2.	Your Email	Enter your Email Id
3.	Phone Number	Enter your phone number
4.	Organization	Enter Your organization name
5.	Username	Enter your name

Once entered all the details, click on the Register option. After clicking on the "Register" option, an OTP will be generated and sent to your registered mobile number. After successful verification you can log in

For Example:

Your one time OTP is: XXXX, and is valid for 2 minutes. This OTP is to be used for the registration purpose. Message will be received on your registered mobile no. Once the OTP is received user have to enter the OTP in the textbox and click on submit button. After successful registration, user will be taken to SAHAV dashboard or proposals screen as per his selected role.

Government Login:



Once you select Government Login, following screen will appear where you need to enter username and password used at the time of registration. You need to enter captcha text that is shown on screen. Upon successful verification, OTP will be sent to the registered phone number.



Below is the OTP verification screen where user needs to enter the OTP number sent to his registered mobile number and Click on the Submit button.



After successful verification, government user will be directed to the SAHAV home dashboard. The home dashboard contains : the map area, menu bar (top) and the right-side menu. This easy-to-use navigation allows for intuitive and quick operation and is further examined in the pages to follow.

Consultant Login:

Consultant Login screen will allow user to enter registered mobile number and after captcha verification, OTP will be sent to that number.

G2 GOVERNMENT OF PUDUCHERRY	Marine Spatial Planning	
		Welcome to SALHAV SALHAV Araine spatial Planning Portal for Puducherpre Mobile Number Ter your registered phone number Actional Enter caption and the subscience Description Actional Locinal Storber Click here to Register

After OTP verification, user will be directed to Proposals Screen where he can upload project proposals and check the status of submitted proposals.

Consultant Dashboard:

If the login user is a consultant, following screen will be shown where he can upload proposals and check status of the submitted proposals. Here, user can search by date of submission or by file number.

User can upload files of various types as indicated on the screen. Shape files need to be in zip format. Related documents can also be uploaded for processing.

Upload Project	Proposals for M	ISP Puducherry						
	*Allowed File types(pdfxlsx,xls,csv,pdf,txt,rtf,docx,doc,pptx,zip,rar,kml.shp) (please upload shape files in zip form)							
	Drop files here							
Select	File			Select File Please select file(s) to upload				
Search by Da	te of submission		File Number Enter username			Search		
Search by Da	te of submission		File Number Enter username			Search		
Search by Da	te of submission		File Number Enter username			Search		
Search by Da Select date	te of submission	File Name	File Number Enter username File Type	Date Uploaded	Status	Search	Download	
Search by Da Select date File No 2024020611 44367fafa	te of submission User Name vipin	File Name Groynes.zip	File Number Enter username File Type	Date Uploaded 02/06/24 11:44:36 AM	Status Approved	Search	Download	

3. Understanding the SAHAV Dashboard

After successfully signing in with your Login ID and password, you will be directed to the SAHAV home dashboard. The home dashboard contains : the map area, menu bar (top) and the right side menu. This easy-to-use navigation allows for intuitive and quick operation and is further examined below



3.1 Navigation Menu



One Contains the following information



- a) Home is used to navigate to the Home Page from any page in the dashboard to the main screen
- b) Welcome Admin is used to refer to Welcome Usernamei.e. for example
- c) Welcome Arun Logout is used to logout from the application

3.2 Map Tool and Functionality



It contains the tools required for the map Application



It shows the layers currently displayed on the map and the corresponding colour codes of each GIS layer.



It shows the list of GIS Layers in a tree view which can be turned on or off to be displayed on the map. As new layers or added to map, Legend gets updated.



Information about layers on the map is described and summarized.



Clicking this icon, a search box is displayed where user can search any village provided in the dropdown and zoom to that location on map. User can also enter survey number in the selected village. If one wants to view all survey plots and all survey numbers, user can select survey plots and survey numbers Layers in Layers List.



It zooms out to initial zoom position of map.



Users can switch between various base maps like Gray, Satellite or Dark maps and view the changes in the background map as per requirement. The user's choice of the map is saved until user changes basemap again.



Print Icon prints the map as it is visible on the screen at the time of clicking print button. User need to zoom and adjust the map like how he would like to print the page. It is downloaded in Pdf format along with headers and footers.



It contains the following icons



This icon is used for the distance and area measurement

This icon is used to capture the current screen

4. Working with SAHAV Dashboard

The following page demonstrate what each drop-down menu will look like. Further explanation into the drop-down menus and their sub-menus is explored more throughout this manual.



The Top navigation menu includes the following items

Data Repository:

It includes a complete collection of datasets which is essential for effective spatial planning in the marine environment

Data Repository Sectoral Plans 🔹 Status Indicators 👻 Project Proposals Conflicts & Compatibilities 👻 Proposed MSP Services-MoES 👻 Feedback

Boundaries

This dataset describes the demarcation of administrative units within the MSP study area.GIS maps with district boundaries are valuable tools for planning and analysis purposes. They can be used to assess population distribution, demographic characteristics, infrastructure development, resource allocation, and other spatially related factors.

To view Boundaries Click on Data Repository ---> Boundaries

Land use

Land-use provides insights into the terrestrial activities around the marine space. It includes information about coastal development, infrastructure, and human activities that impact the marine environment. Understanding the intersection between land and sea is essential for effective spatial planning.

To view Land use Click on Data Repository ---> Land Use

Water Resources

This repository is dedicated to providing comprehensive insights into vital water resources, focusing on primary elements: tanks, canals, and water bodies.

To view Water Resources

Click on Data Repository ---> Water Resources



• Environment

This repository contains a comprehensive compilation designed to provide a deep understanding of the marine ecosystems. This repository includes key datasets such as water quality, marine pollution, geomorphology, precipitation and humidity.

Environment has submenu that includes

a) Water Quality: The Water Quality dataset delivers insights into the chemical, physical, and biological characteristics of marine waters. The datasets monitor parameters such as dissolved oxygen, nutrient levels, and pollutant concentrations, and serves as an important tool for assessing the health and its suitability for various uses.

To view Water Quality

Click on Data Repository ---> Environment -----> Water Quality





b) **Marine Pollution**: Marine Pollution datasets collate information on anthropogenic impacts, waste disposal and pollution sources in the marine realm. This dataset can be used to track pollutants such as oil spills, plastic debris, and chemical contaminants. This dataset helps in identifying areas of concern, formulating mitigation strategies, and promoting sustainable practices to combat marine pollution.

To view Marine Pollution

Click on Data Repository ---> Environment ----> Marine Pollution

c) **Geomorphology:** Geomorphology dataset provides a detailed understanding of the physical features and geological formations of the ocean floor. Including data on underwater topography, sediment composition, and coastal morphology, this dataset assists in identifying ecologically sensitive areas, potential habitats, and geological factors influencing marine spatial planning.

To view Geomorphology Click on Data Repository ---> Environment ----> Geomorphology

d) **Precipitation:** Precipitation dataset contributes meteorological insight by providing information on rainfall patterns within the marine spatial boundary. Understanding precipitation trends is crucial for assessing freshwater input to marine ecosystems, identifying potential runoff impacts, and managing the dynamic interaction between terrestrial and marine environments.

To view Precipitation

Click on Data Repository ---> Environment ----> Precipitation

e) **Humidity**: This dataset focuses on atmospheric moisture levels, a key factor influencing weather and climate patterns in the marine region. This information helps us understand the atmospheric conditions that affect marine ecosystems, supports climate resilience assessments, and enhancing the overall understanding of the environmental dynamics.

To view **Humidity**

Click on Data Repository ---> Environment -----> Humidity

• Ecology

The Ecology Repository serves as a pivotal component, providing valuable insight into the diverse and complex ecosystems that shape our marine environments. By encompassing datasets related to mangroves, coral reefs, biodiversity hotspots, sandy areas, and potential fishing zones, this repository empowers users to make informed decisions about sustainable marine spatial planning.

Ecology has submenu that includes

a) **Mangroves**: The Mangrove dataset offers a detailed overview of mangrove ecosystems within our defined spatial boundary.

To view **Mangroves**

Click on Data Repository ---> Ecology ----> Mangroves

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♠ Home Welcome €→ Logou



b) **Coral Reefs:** This dataset provides information on the location, health status, and biodiversity associated with coral reefs, aiding in the conservation and management of these delicate environments.

To view Coral Reefs

Click on Data Repository-----> Ecology-----> Coral Reefs

c) **Biodiversity Hotspots:** The Biodiversity Hotspots dataset highlights areas of exceptional marine biodiversity. Users can explore these hotspots to understand the richness of species and ecosystems, contributing to targeted conservation efforts and sustainable planning.

To View Biodiversity Hotspots Click on Data Repository-----> Ecology-----> Biodiversity Hotspots d) **Sandy Area:** This dataset provides information on sediment composition, coastal dynamics, and the role of sandy areas in supporting various marine species.

To View Sandy Area

Click on Data Repository-----> Ecology-----> Sandy Area



e) **Fish Potential Zones:** The Potential Fishing Zone dataset aids in identifying areas with high fishery potential. Users can leverage this information for optimizing fishing activities, promoting sustainable practices, and minimizing environmental impact.

To View Fish Potential Zones Click on Data Repository-----> Ecology-----> Fish Potential Zones

Oceanographic

This repository contains key datasets that address the dynamic characteristics of the ocean and provide a comprehensive understanding of the marine environment.

Oceanography has submenu that includes

a) **Exclusive Economic Zone (EEZ):** The Exclusive Economic Zone outlines the maritime boundary within which our nation holds special

rights for the exploration and use of marine resources. This dataset is vital for understanding jurisdictional frameworks and resource management within our economic maritime zone.

To View Exclusive Economic Zone (EEZ) Click on Data Repository-----> Oceanography-----> EEZ

b) **12 Nautical Miles (12NM):** The 12NM provides detailed information within the immediate coastal area, influencing decisions related to coastal development, conservation efforts and maritime activities. This dataset important for assessing the land-sea interface and ensures a holistic approach to spatial planning.

To View **12 Nautical Miles** Click on Data Repository-----> Oceanography-----> 12NM

c) **24 Nautical Miles (24NM):** Extending the coverage further, the 24NM offers insights into a broader maritime region. This dataset is valuable for analyzing medium-range maritime activities, resource distribution, and potential environmental impacts within the specified boundary.

To View 24 Nautical Miles

Click on Data Repository-----> Oceanography-----> 24NM

d) **Bathymetry:** The Bathymetry provides a comprehensive understanding of underwater topography, aiding in the identification of seabed features, potential hazards, and areas of ecological significance. This dataset is fundamental for safe navigation, habitat assessment, and overall marine spatial planning.

To View Bathymetry

Click on Data Repository-----> Oceanography-----> Bathymetry

Human Activities

This repository is a vital component of the comprehensive approach to spatial planning in marine environments. It encompasses essential datasets that shed light on activities crucial to the sustainable management of our oceans. The Human Activities repository includes information on Coastal Protection Structures, Navigational Routes, Ocean Instrument Deployments, Defence and Naval Operations and infrastructures

Human Activities has submenu that includes

a) Coastal Protection Structures: This dataset provides information on structures designed to safeguard coastal areas as it plays a vital role in preserving shorelines from erosion and natural events, ensuring the safety and resilience of coastal.

To View Coastal Protection Structures Click on Data Repository---> Human Activities---> Coastal Protection Structures

b) **Navigational Routes:** Understanding navigational routes is essential for managing maritime traffic, enhancing safety, and preventing conflicts in busy marine areas. Navigational routes data outlines the pathways utilized by maritime vessels.

To View Navigational Routes

Click on Data Repository--> Human Activities-->Navigational Routes

c) **Ocean Instrument Deployments:** Information on instruments deployed in the ocean for research and monitoring purposes. These instruments gather valuable data, contributing to scientific research and aiding in the understanding of marine ecosystems and conditions.

To View Ocean Instrument Deployments Click on Data Repository--->Human Activities---> Ocean Instrument Deployments d) **Infrastructures:** Infrastructures include ports, offshore platforms, and other facilities impacting marine spaces. This information is essential for comprehensive spatial planning and sustainable development.

To View Infrastructures

Click on Data Repository--->Human Activities---> Infrastructures

Socio Economic

This repository is designed to capture critical socio-economic information that plays a pivotal role in shaping sustainable marine development strategies. The datasets include Coastal aquaculture, Surface Boat Sports, Scuba Diving, Fish Farm and Salt Farm.

Socio Economic has submenu that includes

a) Surface Boat Sports: This shows the distribution and intensity of surface boat activities within the study area. Understanding boat traffic patterns is crucial for assessing potential impacts on marine ecosystems, safety considerations, and optimizing maritime infrastructure.

To View Surface Boat Sports

Click on Data Repository--> Socio Economic-->Surface Boat Sports

b) **Scuba Diving:** It focuses on mapping and analyzing scuba diving activities in the marine area. This information is valuable for identifying popular dive sites, assessing tourism impact, and implementing measures to protect sensitive underwater ecosystems.

To View Scuba Diving

Click on Data Repository---> Socio Economic---> Scuba Diving

c) **Coastal Aquaculture:** It provides a comprehensive view of aquaculture activities along the coast. This includes information on the types of aquaculture, their spatial distribution, and the potential socioeconomic implications. Incorporating this data aids in sustainable planning and balancing economic development with environmental conservation.

To View Coastal Aquaculture

Click on Data Repository---> Socio Economic---> Coastal aquaculture

CRZ

The Coastal Regulation Zone (CRZ) is a designated area along the coastal zone with specific regulations and guidelines aimed at conserving and managing coastal ecosystems. It encompasses a range of coastal environments, from ecologically sensitive areas to zones with high human activity.

To View CRZ

Click on Data Repository---> Socio Economic---> CRZ

Risk

This repository plays a crucial role in enhancing the decision-making process by providing comprehensive insights into potential risks associated with marine activities and environmental factors.

To View Risk Click on Data Repository---> Socio Economic---> Risk

Sectoral Plans:

It shows the various departments and their role in contribution towards msp. It is broadly categorized into following sub menu.

- Department of Fisheries
- Department of Tourism
- Department of Ports and Harbors
- Department of Town And County Planning
- Department of DSTE
- Department of PWD
- Department of Revenue
- Coast Guard

Status Indicators:

It shows the status of socio economic indicators in the region.

- Ecological Status depicting Water quality and Mangroves growth
- Economic Status depicting impact of fisheries and tourism
- Social impacts like Marine pollution affects on the population.

Conflicts & Compatibilities:

It shows the conflicts and compatibilities among various sectors as indicated below

- Ecology / Human Activities
- Tourism / ShoreLine
- Fisheries / Tourism

Services - MoES:

It shows the various services offered by Ministry of Earth Sciences

Services from IMD – indicates observed and forecasts of regional weather in Study Area



Credits source from IMD

Services from INCOIS



Credits source from Incois

Services from NCMRWF – shows extended forecasts of weather

Shoreline



Vulnerability

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Thoondil – Mobile App for Fishermen



5. Submitting Project Proposals



Logged in users can upload the proposals to be taken up in the region through .KML or .SHP files or any other formats as mentioned in the screen.

Users can also upload documents or reports from Project proposals upload files option

rine spatial planning puduc	herry				Welcome		
Upload Project Proposals for MSP Pud	ucherry						
	*Allowed File types(pdfxksx,xls,csv,pdftxt,rtf,docx,doc,pptx,zip,rar,kml,shp) (please upload shape files in zip form)						
Drop files here							
Select File				Please	select file(s) to upload.		
Search by Date of submission	File Number				_		
Select date	Enter username)		Search			
File No User Name Fil	e Name File Type	Date Uploaded	Status	Comments	Download		
		No Records Found					

The uploaded files will be followed up by the relevant authorities and the processed files can be viewed in the project proposals view upload files menu option

6. Query Analyser

Query Analyser is used for searching any village on the map and zoom to that location. One can also search for survey numbers.

Query Analyser window provides two tabs for searching.

- 1. Search for a village
- 2. Search for a survey number in a village.

1. Search a Village:

Screen below shows the list of villages in the dropdown. User can select any village and click search button and map is zoomed to that village.



For Example:

Screen below shows how Manapattu region (highlighted in red) has been zoomed to as per user's selection/query.



2. Search for a Survey Number:

When user wants to search for survey number in 'Manapattu' village, he can enter the exact survey number in textbox highlighted below. Or he can click search button without entering any survey number. In this case, all survey numbers in the selected village are shown as below.

Screen below shows all survey numbers in Manpattu village if no survey number is entered.



Screen below shows entered survey number (212) in manapattu village.



7. Report Generation

First need to select the required layers from layers list and adjust the layout the way you want to appear in the print out. Then click the print button on right side of screen.

Dialog will appear asking for proposed by and the project name. They will be printed on the report.







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