

# Gram Manchitra

(Version – 1.1.1)

Developed and Designed by NIC



**Ministry of Panchayati Raj**

**Government of India**

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# Gram Manchitra

The Gram Manchitra Application developing under this project will have following major functionalities.

1. Layers
2. Select Area (Gram Panchayat Selection)
3. Gram Panchayat Profile
4. Basic Mapping Tools
  - a. Clear
  - b. Zoom Out
  - c. Zoom In
  - d. Pan
  - e. Previous Extent
  - f. Next Extent
  - g. Full Extent
  - h. Menu Navigation
5. Elevation Profile
6. Swipe
7. Print
8. MetaData
9. Measure
10. Query Builder
11. Proximity/Multiple Buffers
12. Measure
13. Identity
14. Legend
15. Base Map Gallery
16. Reports

The following are the functions of the Gram Manchitra application.

## 1. Map Display

### Description:

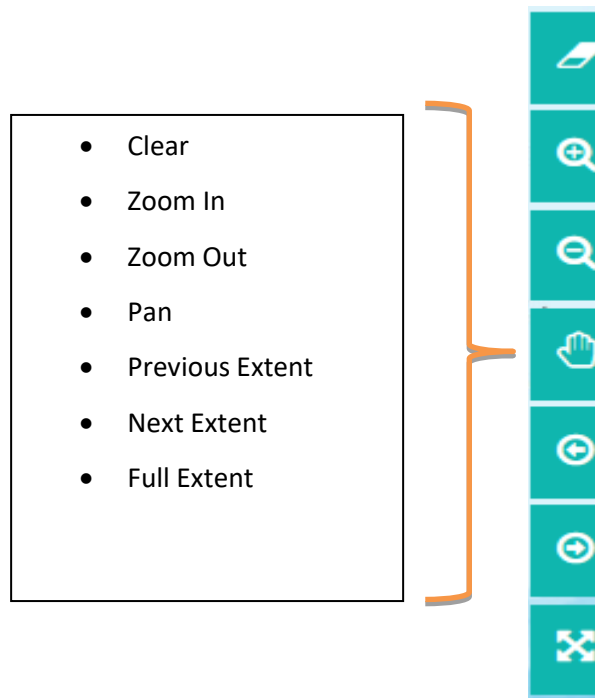
Map display function allows the user to view the map in Gram Manchitra application. The map displayed in Gram Manchitra application will help the user to view spatial features on the map and it will also help the users to perform all major actions like navigation and querying.

This function will include the following:



### Map Tool bar





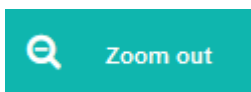
## 2. Map Tools

### i. Clear Tool



The clear selection tool allows the user to clear any graphics that have been added to the map. If the user wishes to clear the map, then a simple click of the clear selection tool will suffice.

### ii. Zoom Out



Zoom Out function allows the user to zoom out the map in Gram Manchitra application. The displayed map in the Gram Manchitra application will be reduced from the current view and will show more features and an area on the map.

This function includes the following feature.

- The application provides an option to draw a graphic to reduce the current extent of the map.

### iii. Pan



This functionality allows the user to use pan tool for quicker navigation with maps

### iv. Previous/Next view



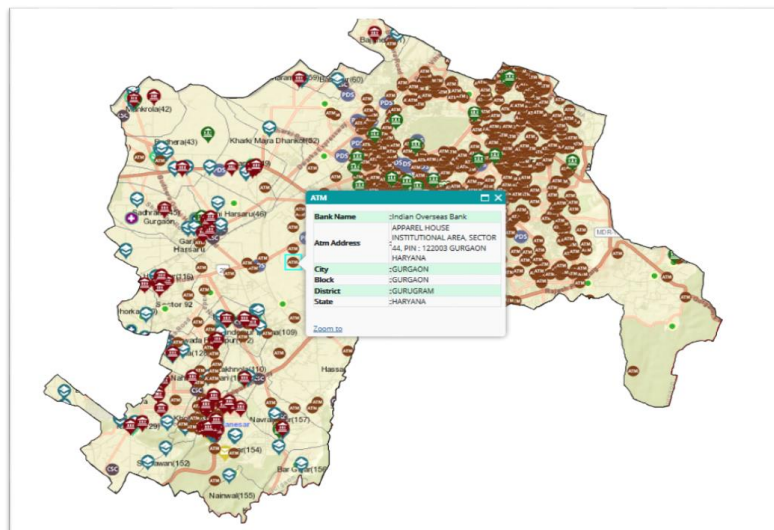
Previous view function enables the previous view when the user had already navigated on the map. This tool works as a back button in browsers or windows.

Next view function enables the next extents when the user had navigated back on the map. This tool works as a forwarding button in browsers or windows.

This function includes the following:

- System shall show the previous extent of map when user clicks previous extent tool in navigation toolbar
- System shall show the extent before the previous extent tool has been triggered

### v. Identify



This function enables the user to identify the features’ information in the map regardless of their geometry and number of layers on the map. The user can choose to click at any location on the map area, and the identify tool will show the layer’s attribute information on the map.

This function includes the following features:

- The application will provide results of identified features of selected layer in pop up window with various other tools like zoom to.

## vi. Menu and collapse



The Menu icon displays the sidebar which contains panels like Layer, ‘Select Area’, multiple buffer and gram panchayat profile.

On click of collapse the sidebar is collapsed along with moving the map to the center.

**On click of Menu icon:-**



**On click of Collpase icon:-**



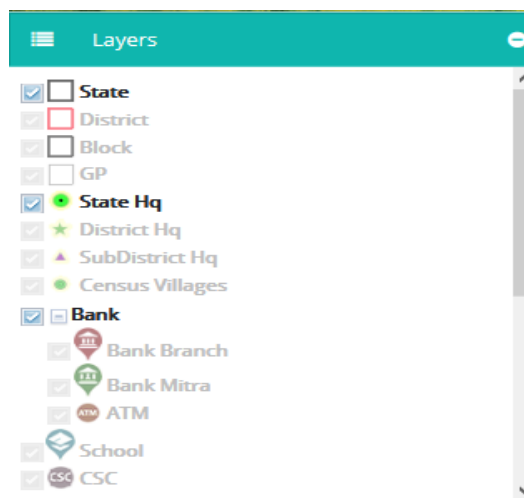
**vii. Full Extent**

On Click on this full extent button, map will come to default extent. The default extent is the initial extent of the base map.

**3. Layers**

The Layer list widget displays a list of the Layers that are added to the Map Viewer. This widget also includes the following functionalities:

- The list highlights the layers that are visible in the current map scale.
- The tool allows for checking and unchecking the visibility of layers as whole or individual sub-layers.
- Legend will show user which layers are visible and active on map





## 4. Select Area

The 'Select Area' tool provides the functionality that allows the user to navigate to any State, District, or Block on the map.

- The user has to select the desired State from the dropdown and, on selection; the map will zoom to the particular State and create a mask around it.
- Based on the selected State, respective Districts are populated in the District dropdown.
- Similarly, on selecting the District from the dropdown menu, the map zooms to the selected district and creates a mask around it and populates the Block dropdown.
- The "Reset" button sets the Map back to its original state, and make all dropdown clear.

## 5. Gram Panchayat Profile

When a gram panchayat is selected in the 'Select Area' This pane displays various information regarding the gram Panchayat like economic data, census-demographic data and GDP status along with basic details of the gram panchayat like list of villages, key functionaries, key skill set office details.

Gram Panchayat Profile
⌵

Gram Panchayat

**Manesar( 29303 )**

**Pooja Kumari**

Key Skill Set	
Total Functionaries	
Office Details	
List of villages	Navrangpur Manesar Khoh Nainwal

**GPDP Status**

Category	2018-19 *	2019-20 *
GPDP Available	Yes	Yes
Count of Activities planned	100	61
Activities yet to start	0	42
Activities under progress	44	19
Activities Completed	0	0
Activities Suspended	14	0

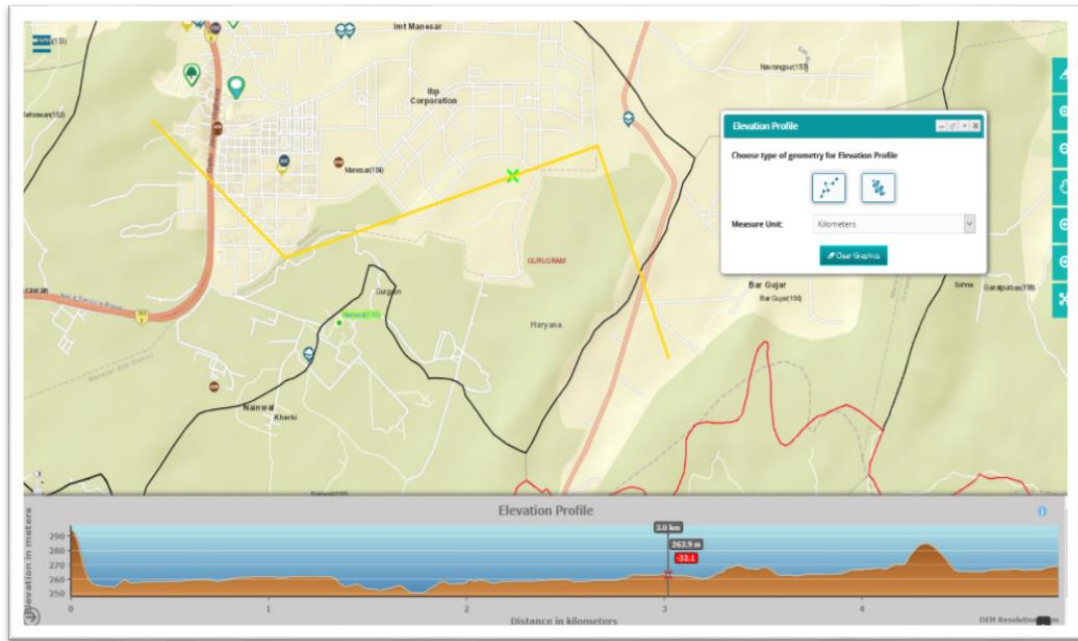
\* Financial Year

**Census - Demographic Data**

#	Category	Total	Male	Female
1	Total Population	46896	28762	18134
2	Child Population(0-6 years)	6764	3698	3066
3	Scheduled Caste Population	3548	1960	1588
4	Scheduled Tribe Population	0	0	0
5	Literates Population	36210	23918	12292
6	Illiterates Population	10686	4844	5842
7	Workers Population	19840	18632	1208
8	Non-Workers Population	27056	10130	16926

## 6. Elevation Profile

The Elevation Profile widget allows a user to create an elevation profile based on a polyline geometry input parameter or existing features.



### 7. Resource Envelope

Display the resource envelope available with Planning Unit/ Gram Panchayat. It shows the allocation of funds for different schemes for the plan year.

S No.	Name	Count
1	NA	0

Category	Total	Male	Female
1. Total Population	46896	28762	18134
2. Child Population(0-6 years)	6764	3698	3066
3. Scheduled Caste Population	3548	1960	1588
4. Scheduled Tribe Population	0	0	0
5. Literates Population	36210	23918	12292
6. Illiterates Population	10686	4843	5843
7. Workers Population	19640	18632	1108
8. Non-Workers Population	27256	10130	16926

### 8. Swipe Tool

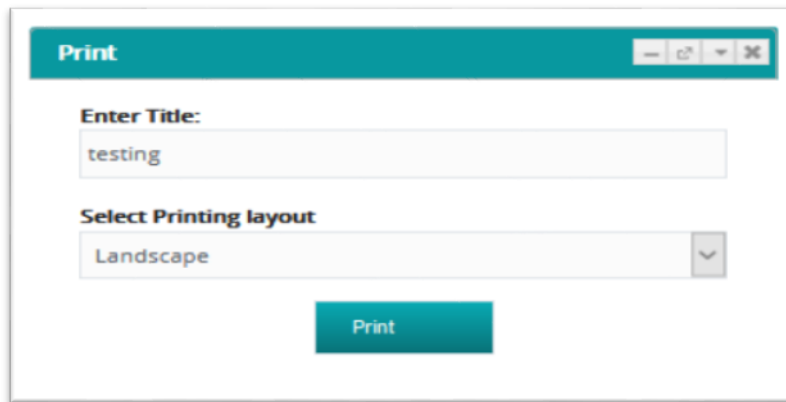
With the help of swipe tool, users can compare the content of multiple layers in a map using the swipe widget to reveal the contents of layers on the map.

Three types of swipe tool available in Gram Manchitra Application as below shown in pictures.

### Horizontal, Vertical & Spotlight



## 9. Print



The Print widget simplifies the process of printing a map using landscape and portrait mode. Users can give the title of the print. The Print widget displays a simple button. After clicking the print button, a hyperlink 'Printout' to the print page appears in place of the button.

## 10. Metadata

Layer Name	State Boundry
Abstract	Administrative boundaries of 29 States and 7 Union Territories (UT) of India including newly created state of Telangana. Source of this data is the digital administrative boundary database on SOI reference system. The data is linked with Census,2011 codes.
Date of Generation	Updated in 2017
Updated Frequency	As and when new entity(i.e.State or UT) will be created.
Source Agency	Survey of India
Attribute Definition	State Code, State Name
Scale / Positional Accuracy	1:1M
Completion Status	Complete

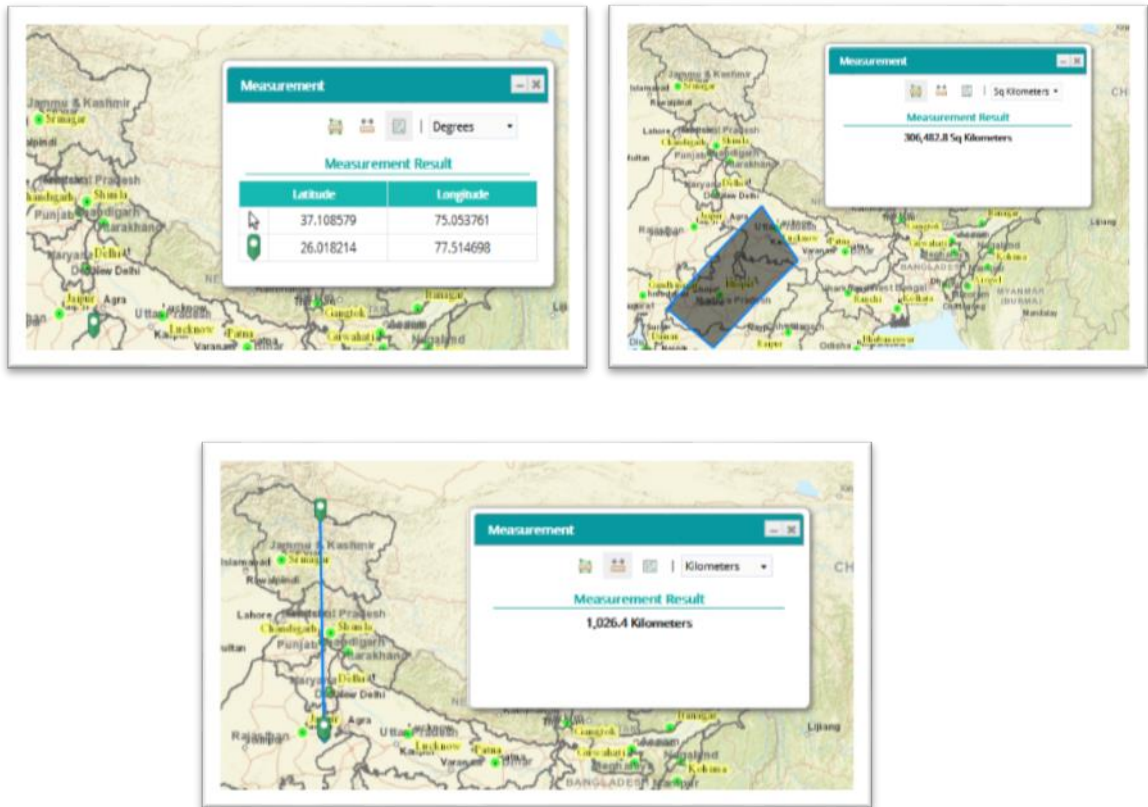
The metadata module involves layers such as Administrative boundaries, data layers and PES layers and their description such as layer name, abstract, date of generation, updated frequency, source agency, attribute definition, scale/positional accuracy, completion status.

## 11. Measure

Measure functionality in the Gram Manchitra application is used to measure the distance and area on the map. User can measure the length of a line drawn over the map and calculate the area of polygon drawn over the map.

This function includes the following features:

- The user can draw a point on the map and identify the co-ordinates of that point using the measure tool.
- Similarly, the user can draw a line on the map and determine the length of the line. This is useful when the user needs to determine the length between any two points on the map.
- The measure tool also allows the user to draw a polygon to determine the area of the drawn polygon on the map. The user can also choose the desired unit of measurement.



## 12. Query Builder

- The Query Builder Module allows the user to select features based on his requirements
- The user must select a target layer from the drop down menu, from which the user wishes to select the features.
- On selecting any layer from the dropdown, the fields of that layer will be shown. The user has to select any field and click on “Get Unique Values” button to get values for the selected field.
- User has to double-click the ‘Field’ and ‘Value’ to create his query and click on “Execute” button to get result for his query. And the result will be highlighted on the map. And the same can be downloaded as Pdf or Excel using “Results”.
- The User clear the query using “Clear Query” button and Reset the tool using “Reset” button.

**Query Builder**

Select Layer : Bank Mitra

Select Field	Operators	Unique Values
Address	= % <	IDFC bank
Bank Name	> ( )	
Block	<= >= IN	
District	IS OR AND	
Gram Panchayat	LIKE NOT	
Manager		
Mobile Number		
State		

[Bank Name] = 'IDFC bank'

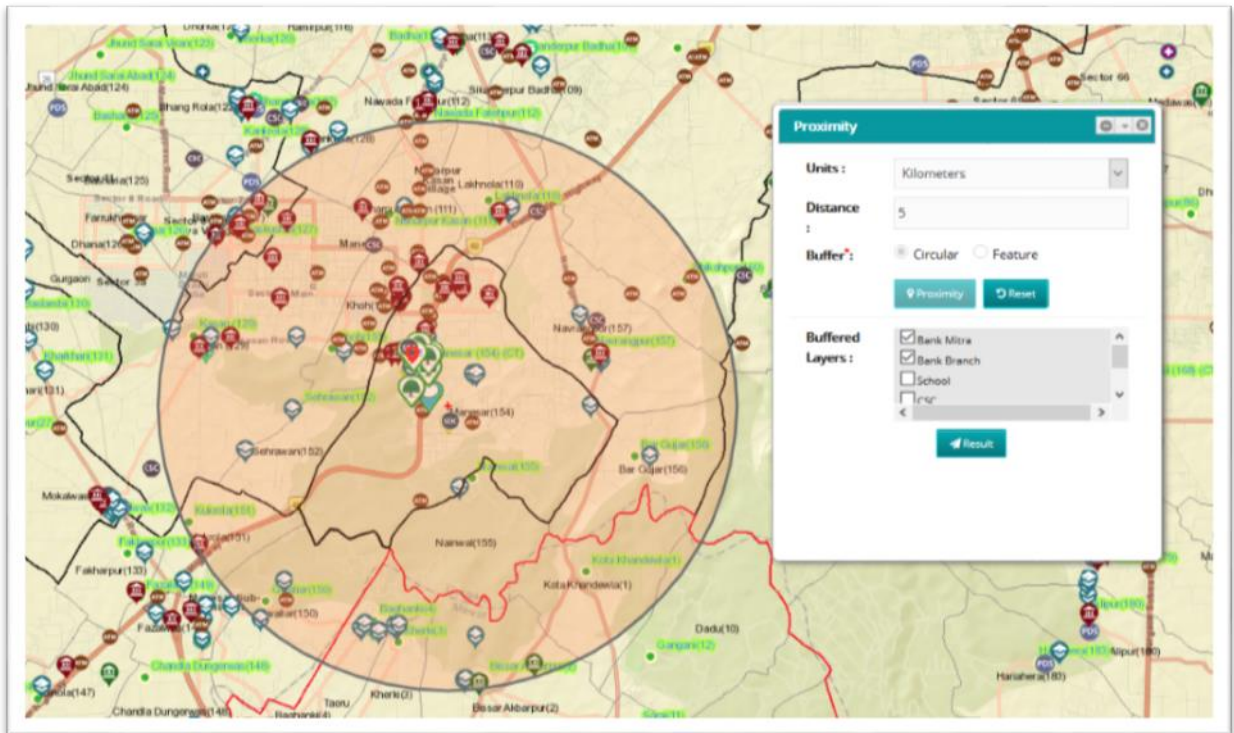
Execute Reset

**Query Result**

S.No	Manager	Bank Name	Mobile Number	Address	Gram Panchayat	Block	District	State
1		IDFC bank		DELHI JAIPUR HIGHWAY NH8 ManesarMANESAR GURGAON HARYANA	Manesar(154)	GURGAON	GURUGRAM	HARYANA

### 13. Proximity

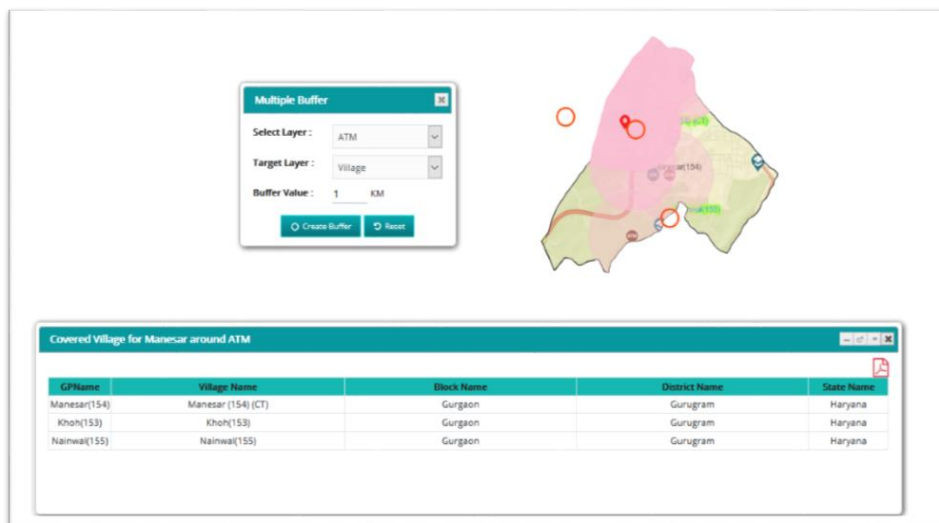
- User has to select the unit such as meter or kilometer and also distance for the selected units.
- There are two types of buffer such as circular and feature.
- In circular buffer, buffer will create as a circle for the user specified distance and units.
- The features within the buffer distance is listed in the buffered layers as a checkbox.
- If the user wants to view the report, check the layers and the click the result button.
- Reports will be shown only for the selected layers in the buffered layers.
- In the feature buffer, first the user has to select the layers which they want from the input layers dropdown.
- Click the selected layers on the map and the circular buffer will be created for the user specified units and distance.
- And the selected layers within the buffer distance will be shown in the grid report.



#### 14. Multiple Buffer

When a Gram Panchayat is selected, multiple buffer functionality is enabled

Select a layer around which a buffer is to be created. Select village layer in target layer. Specify the buffer radius and execute. Multiple buffer will be created and villages intersecting those buffer will be displayed in a dialog box. These details can also be downloaded as a report from the print icon in dialog box.





## 15. Basemap Gallery

This module provides the user with a list of base maps that the user can select from to view along with the feature data. The base map gallery provide below mentioned base maps :

- India
- NIC Street
- NIC Satellite
- NIC Terrain
- ESRI Street
- Bing Maps
- ESRI Satellite



## 16. Reports

### i. Profile of Gram Panchayat

#### a. GP Basis Information

This report includes the basic details, skill set, description, contact details, connectivity and demographic data such as total number of male and female population, scheduled caste population and scheduled tribe population in the selected gram panchayat.

Elected representative and Functionaries Details and Tourist Places & Boarding and Lodging Details can also be found in this GP Basis information report.

#### Assets Created Under FFC

- **Work Status:**

Asset information such as asset category, asset subcategory, asset name, work name and work status can be found in the report.

- **NAD (National Asset Directory) Asset Details:**  
NAD information also printed in the report.

Both the assets and NAD layers are displayed on the map.

## **b. Financial Institutions in Gram Panchayats**

Financial Institutes includes ATM, Bank Branch, Bank Mitra and Post Office layers in the map. The reports are generated based on the financial layers.

## **c. Educational Institutes in Gram Panchayat**

Educational Institutes contains school layers and the reports are generated only for school layers and available schools in the user selected gram panchayat will be visible on the map.

## **d. Public Distribution System in Gram Panchayat**

Public Distribution contains PDS layers and the reports are generated only for PDS layers and available PDS in the user selected gram panchayat will be visible on the map.

## **e. Health Services in Gram Panchayat**

Health Services involves District Hospitals, sub district hospitals, CHC, PHC and sub center layers and the reports are generated for the available health centers in the user selected gram panchayat and same health services layers will be visible on the map.

## **f. Common Service Centre In Gram Panchayat**

Common Service center contains CSC layers and the reports are generated only for CSC layers and available CSC in the user selected gram panchayat will be visible on the map.

- ii. **SECC Report**
- iii. **Mission Antyodaya Report**
- iv. **Mission Antyodaya – Gap Analysis Report**