GIS for Town Panchayat

Ponneri Town Pachayat,
Ponneri Taluk, Tiruvallur District, Tamil Nadu

User Manual

Directorate of Town Panchayat
and
NIC-TNSC

Contents

GIS for Ponneri Town Panchayat

I. Introduction

Ponneri Town Panchayat Profile:

Located on the bank of Arani River in Thiuvallur District and 35 KM away from Chennai

Parliamentary Constituency	: Thiruvallur
Assembly constituency	: Ponneri
Taluk	: Ponneri
No. of Revenue villages	: 3 (Ponneri 1, Ponneri 2 and Chinnakavanam
Population	: 31,025 (2011 census)
Density	: 3859
No. of wards	: 18
Area	: 8.04 Sq.Km.
No. of Households	: 7842
No. of assessment (MIS)	: 8180

Web based GIS for Ponneri Town Panchayat should enable the TP officials to leverage the GIS technology to do effective planning and administration, optimized utilization of resources, etc.. In view of this the present website is an attempt as a proof-of-concept to exhibit the advantages offered by the geo-spatial technologies for the Ponneri Town Panchayat in Tamil Nadu.

Outcome

❖ Identification of encroachments in map
❖ Identification of un-assessed properties
❖ Identification of under taxed properties
❖ Registration of complaints by Map / Online
❖ Online Map based Monitoring of utilities:
▪ Water supply
▪ Street lights
▪ Public Toilets
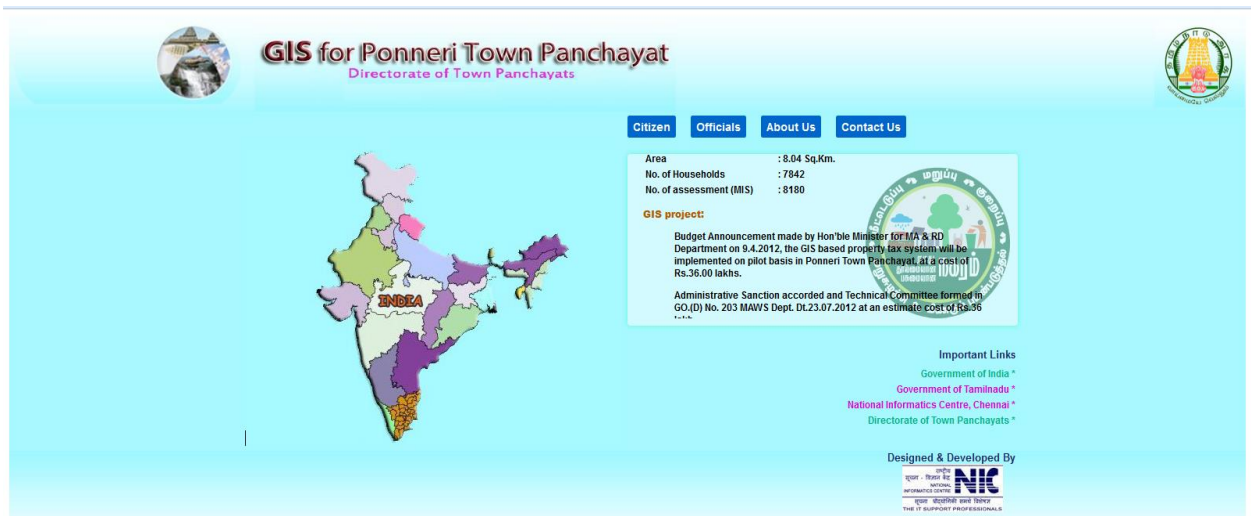▪ Sanitation

DTP, Chennai and NIC, TNSC

II. Home Page

Fig 1: Home Page

This Application has 2 modules

I. **Citizen** – Maps for General Public to view various spatial features and overlay them over various popular Web Maps like Google, OpenStreetMap etc.

II. **Official** – Highly Interactive, analytical online maps with enriched GIS Functionalities for Town Panchayat Officials and Directorate of Town Panchayat Officials.

III. Citizen Interface

This is for General Public to view the Ponneri Interactive Online Maps which can be superimposed over online web Map Serivces(Google,Open Street Map etc)

Citizen Module has two options 1. View Maps 2. Complaints / Suggestions
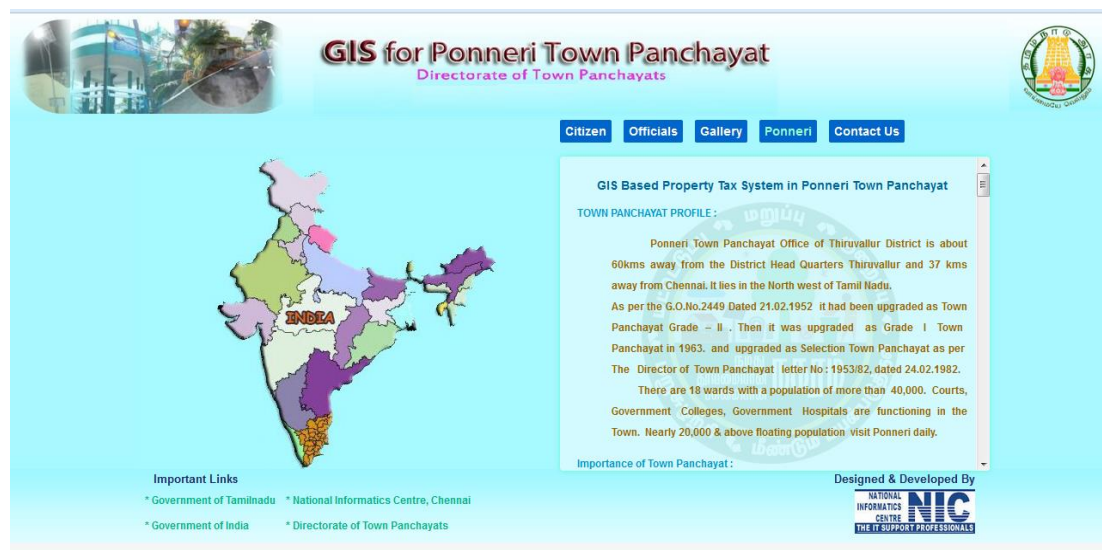
Fig 2: Citizen Interface

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1. View Maps

Ward boundary with Google Hybrid map: User may choose any one of the base maps from left side tree view.
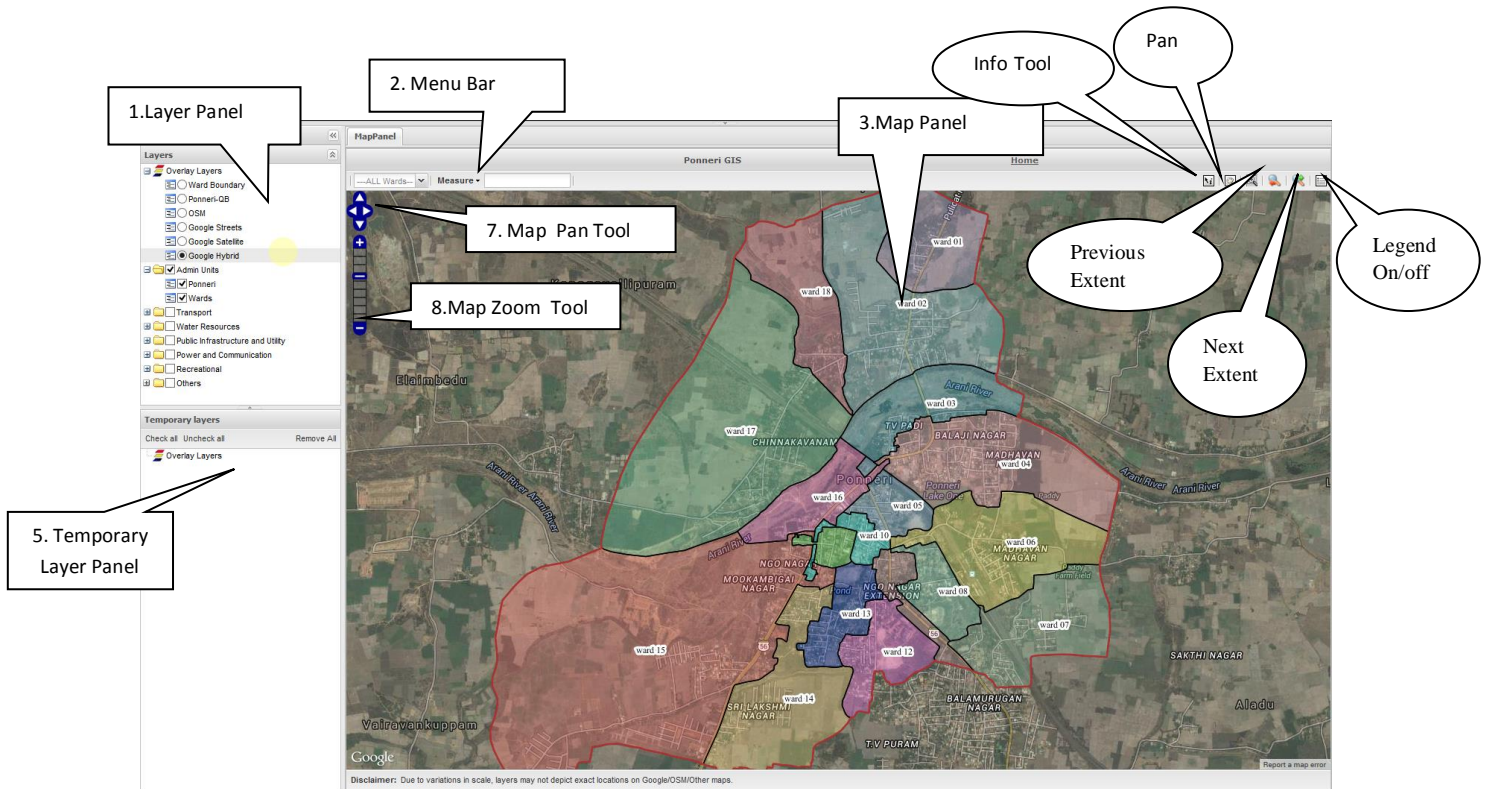
Fig 3: View Maps Page Layout

Ponneri Town Panchayat Ward Boundary as Base Map:-
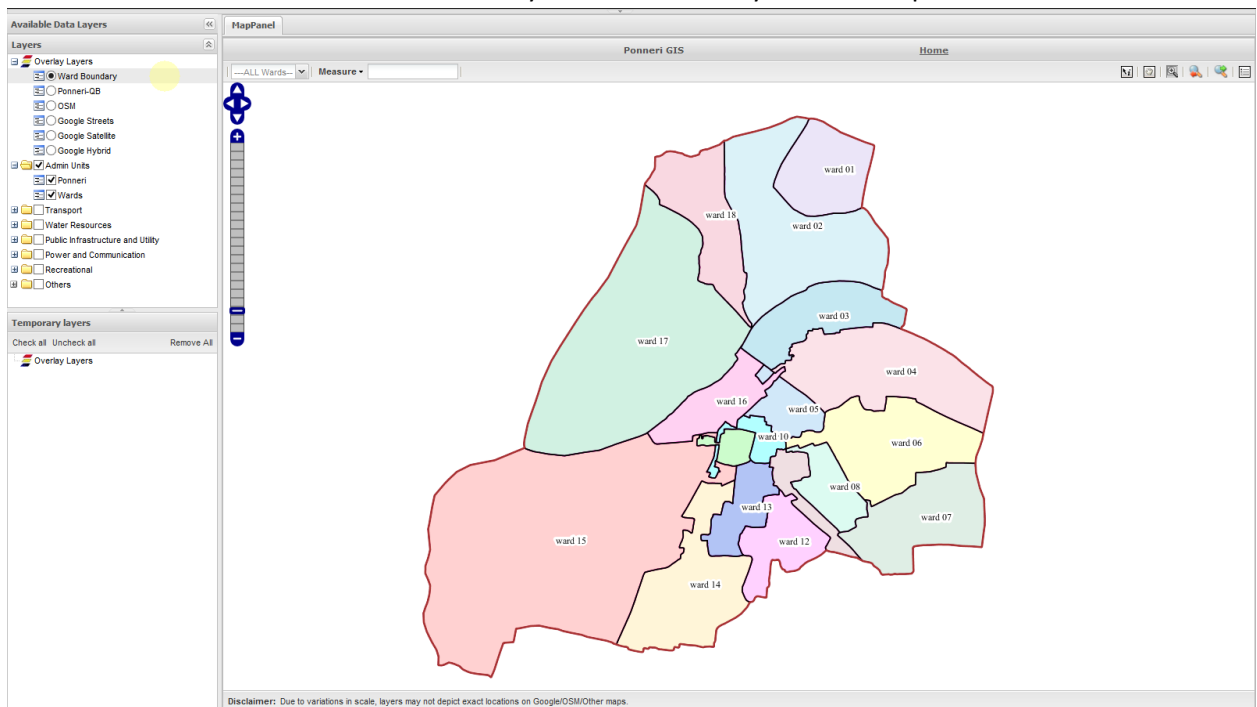
Fig 4: Selection of Base Maps

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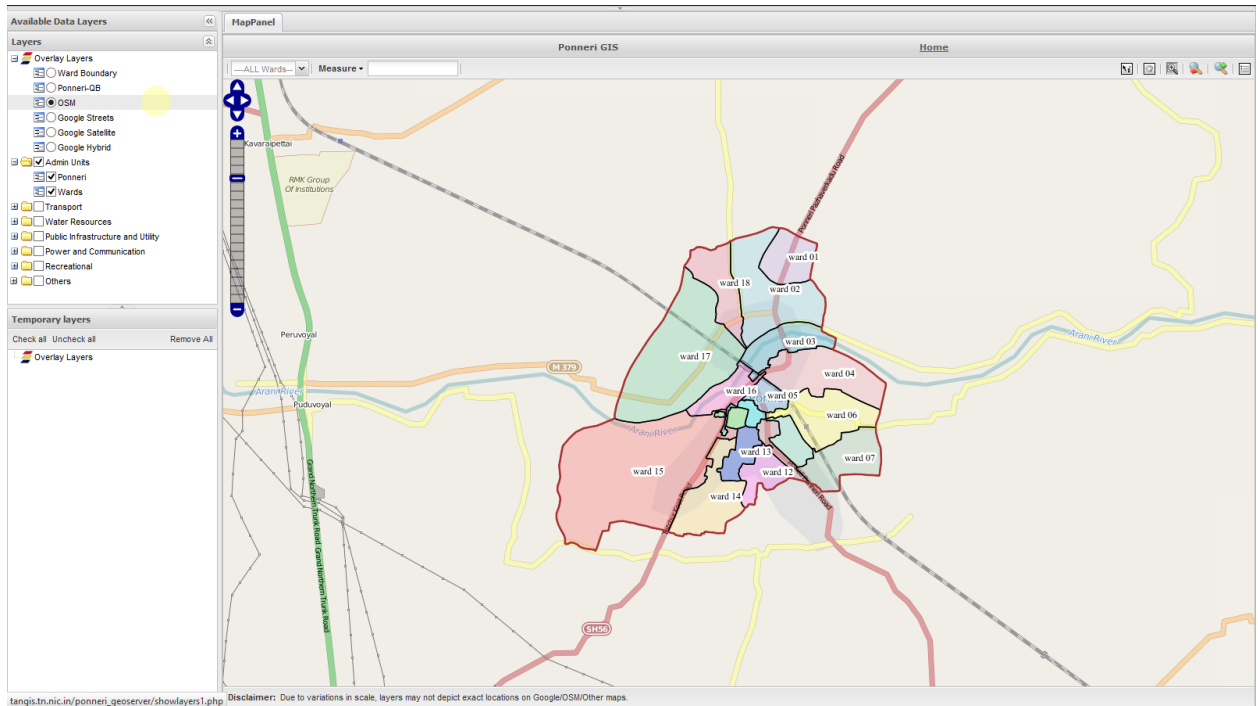Ward Boundary with Open Street Map as base map in the background :

Fig 5: Open Street Map as Base Map

One of the following could be used as base map behind the other layers for easy visualization:

1. Ward Boundary
2. Ponneri Quick Bird (QB) Imagery
3. Open Street Map
4. Google Streets
5. Google Satellite
6. Google Hybrid

2. Overlay Layers

All the Layer Groups / Layers are toggleable i.e user can switch ON/OFF. User can Swtich On any number of layers / Layer groups depending on their requirement and clear visibility on Map. The following screenshots show all the Layer Groups one by one.

a) Administrative Unit

Following 2 layers are available under Admn Units:

1. Ponneri TP Boundary
2. Ponneri Ward Boundary
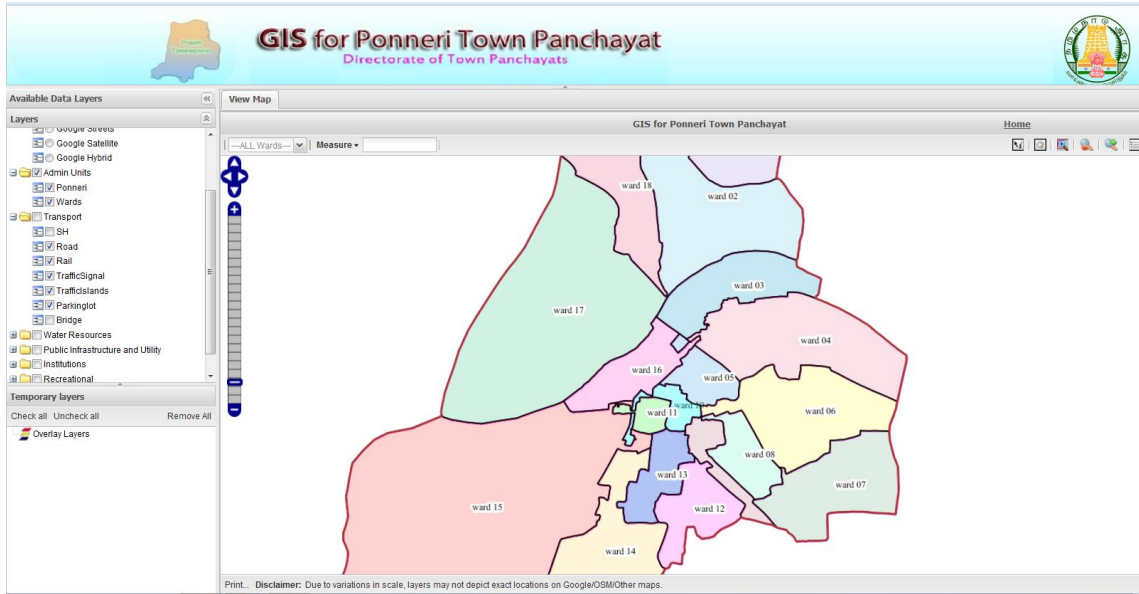
Fig 5:

Fig 6: Ward Boundary of Ponneri TP

b) Transport

Following layers are available under Transport :

1. SH
2. Railway
3. Road
4. Traffic Signal
5. Traffic Islands
6. Parking Lots
7. Bridge
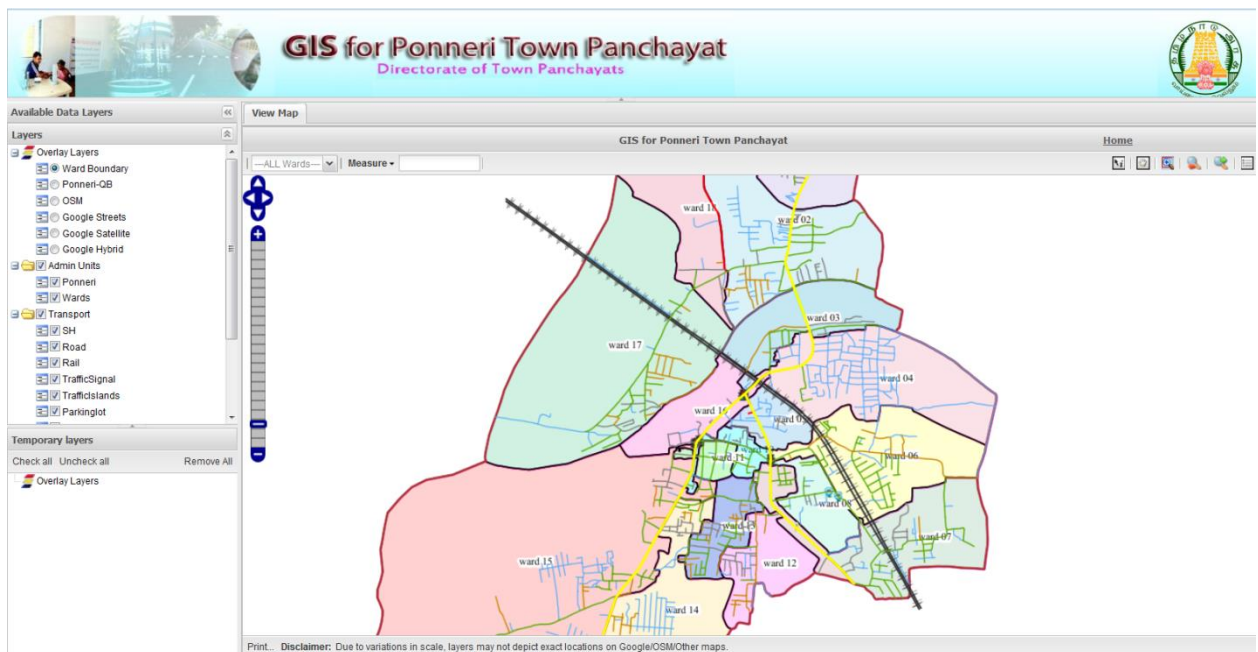
Fig 7: Road and Rail network in TP

c) Water Resources

Water Resources include the following layers:

1. Water Body
2. Taps
3. Hand pumps
4. Water Tanks
5. Power Pumps
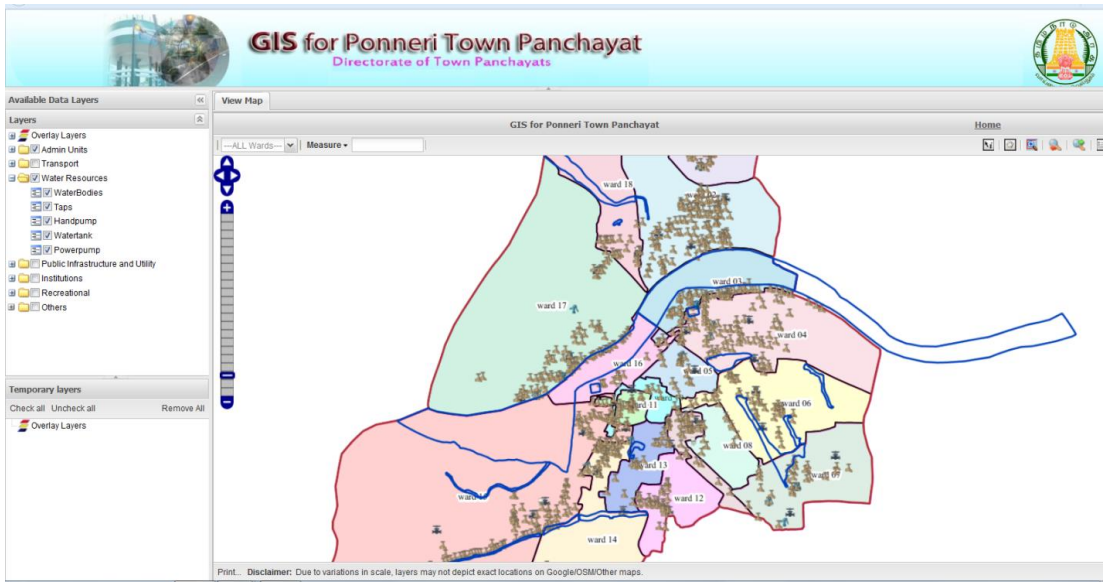
Fig 8: Water Resources in TP

d) Public Infrastructre and Utilities

The following layers are listed in this category:

1. Streetlights
2. Police/Fire Station
3. Dustbin
4. Burial Ground
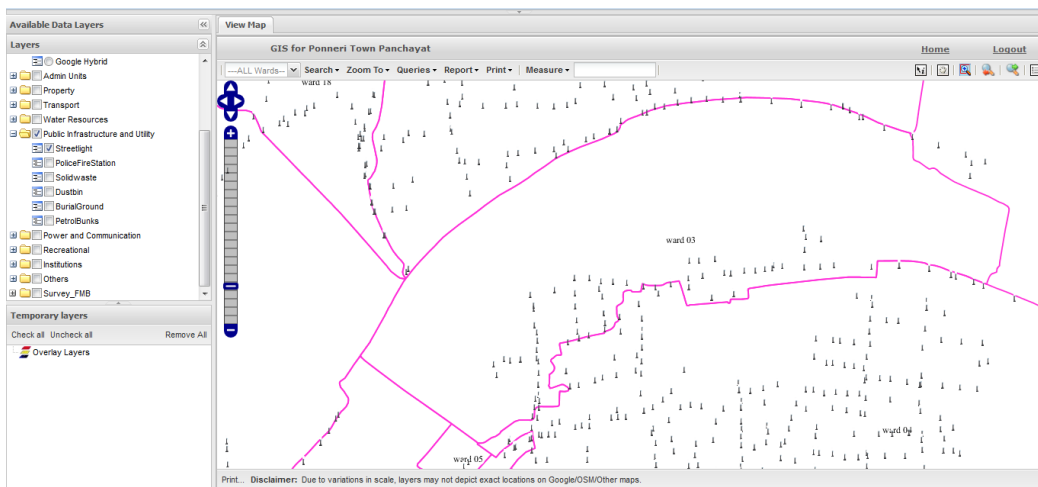
Fig 9: Tubelights in TP

e) Institutions

The following layers appear under Institutions category:

1. Court
2. Taluk Office
3. Religious Places
4. Colleges
5. Schools
6. Anganwadi
7. Hospitals
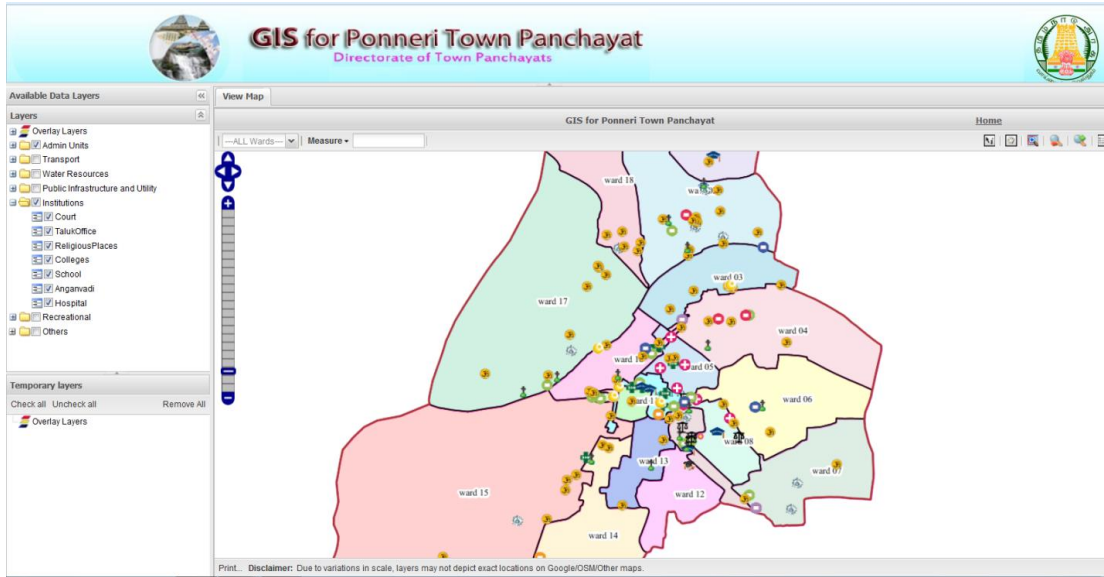
Fig 10: Spread of Institutions such as Hospitals in TP

f) Recreations

This category includes the Parks / Play Grounds
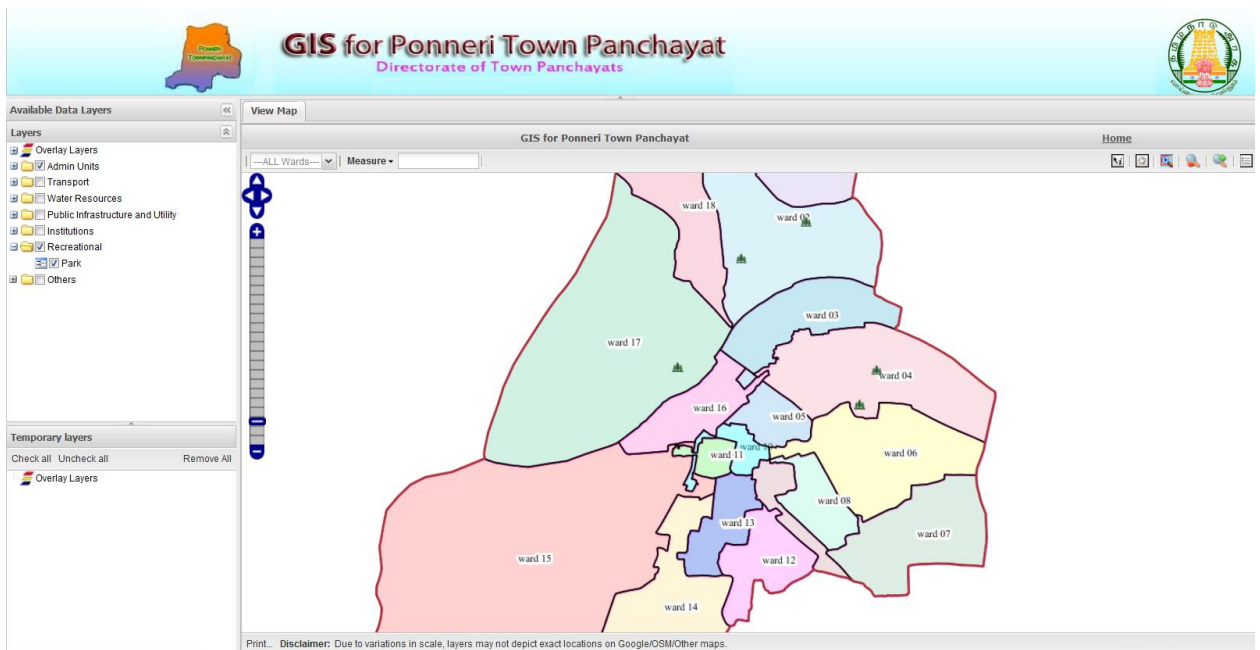
Fig 11: Parks and Play Grounds in TP

g) Others

The following layers appear under this category:

1. Name boards
2. Trees
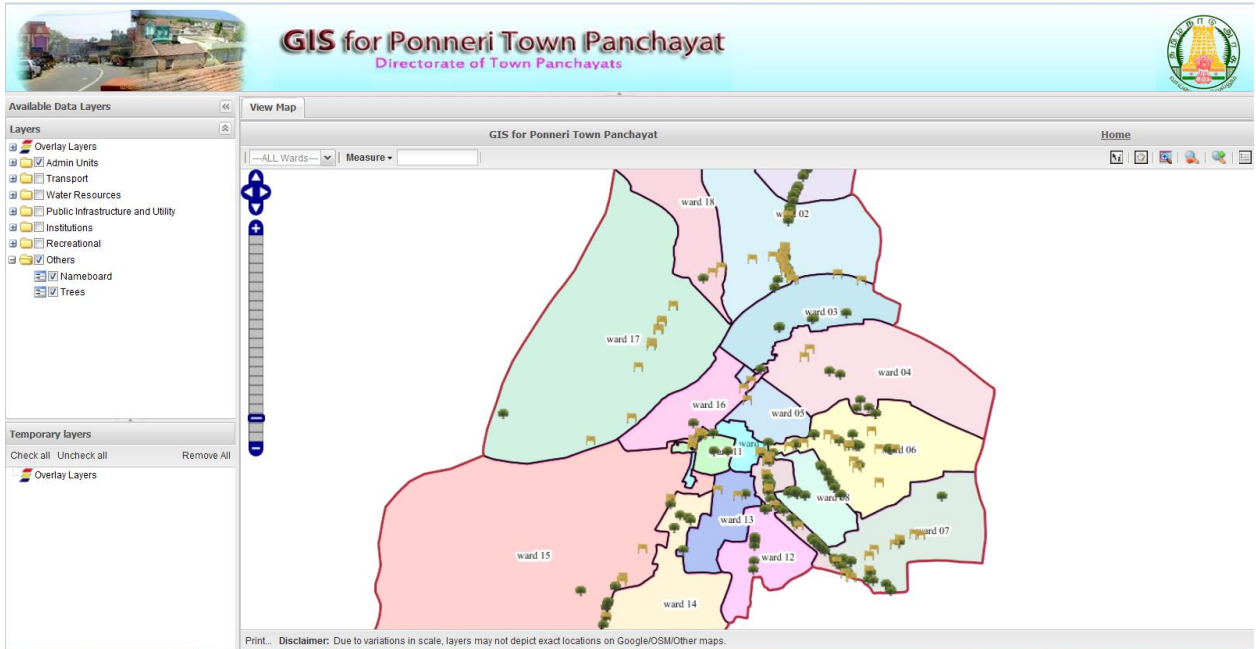
Fig 12: Name Boards and Trees

IV. Complaints/Suggestions
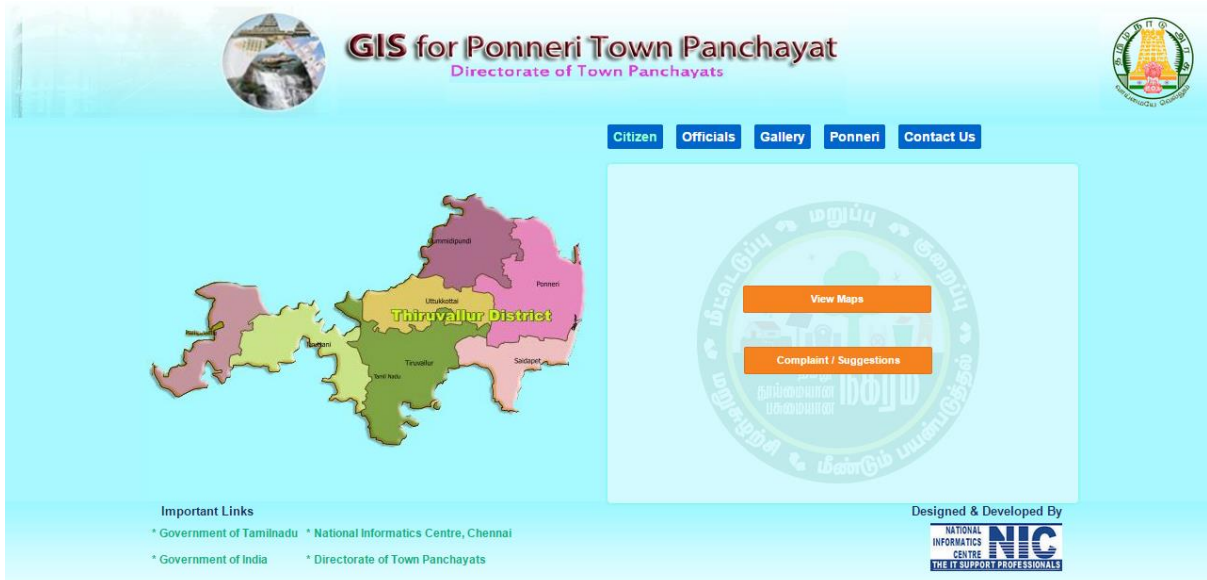
Fig 13: Links available for Citizens

By Clicking on Complaint/Suggestion from Citizen Menu, the following menu would be shown :-
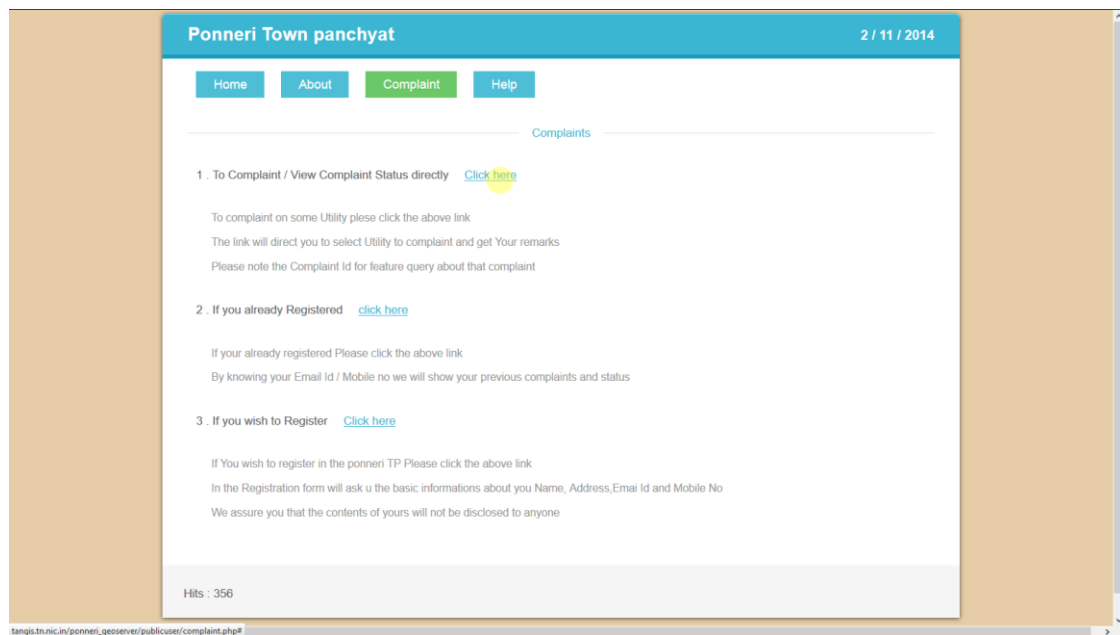
Fig 14: Complaints and Suggestions

This Complaint/Suggestion Module has the following functionalities :

➢ Home: Back to Main Menu
➢ About: About Citizen Module of the Applicatiion
➢ Complaints: Facilitate user to launch complaints about any Utility in Ponneri TP

There are 3 options available under Complaint Menu Complaint / View Complaint Status

i. Directly without registering as a User
ii. Use Registeration credentials created earlier
iii. To Register

i. Complaint / View Complaint Status directly (Unregistered User)

Choose a Ward->Choose a Street in selected Ward & ->Choose a Facility about which you wish to launch complaint -> Click on Get Report.
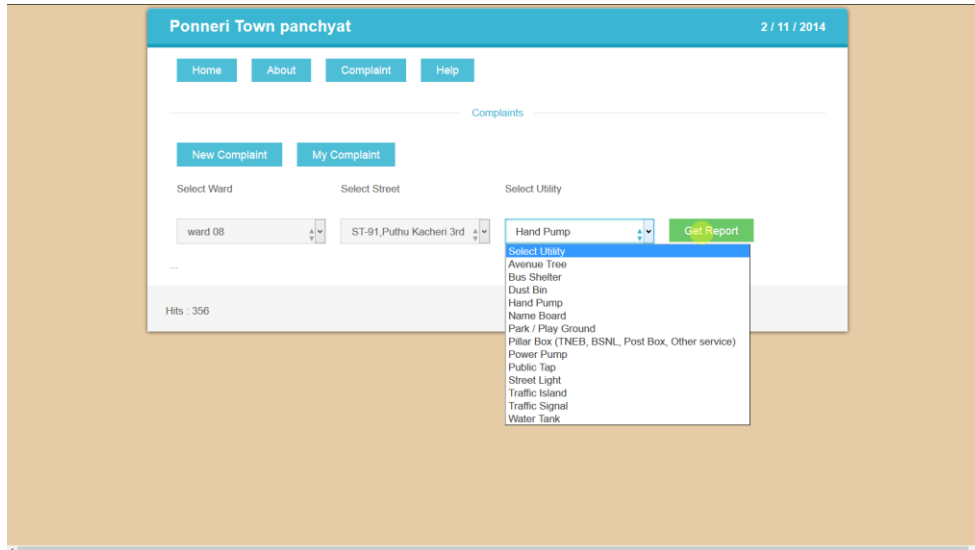
Fig 15: Parameters to select for lodging a Complaint

It will show the list of all selected Facilities available on selected Street & Ward as shown below:-
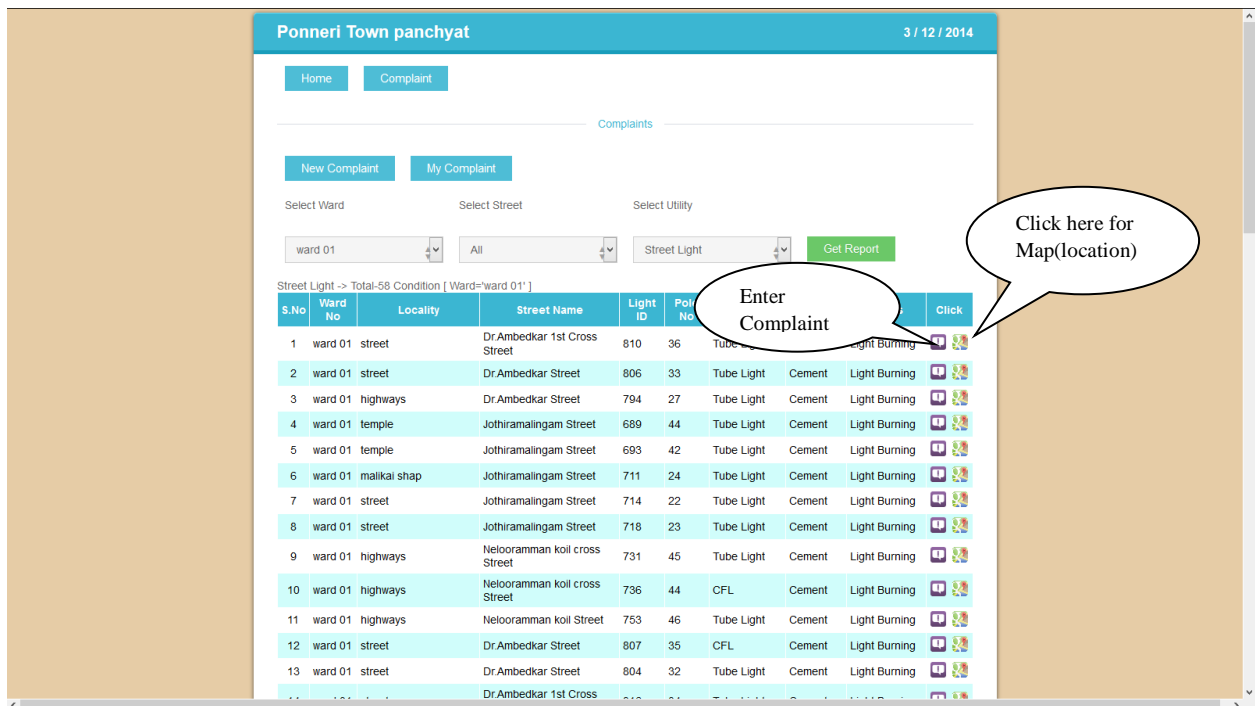
Fig 16: List of Utilities – Street Lights

Click on Map Icon against any desired Utility from the list to view the location of the selected Utility on Map.
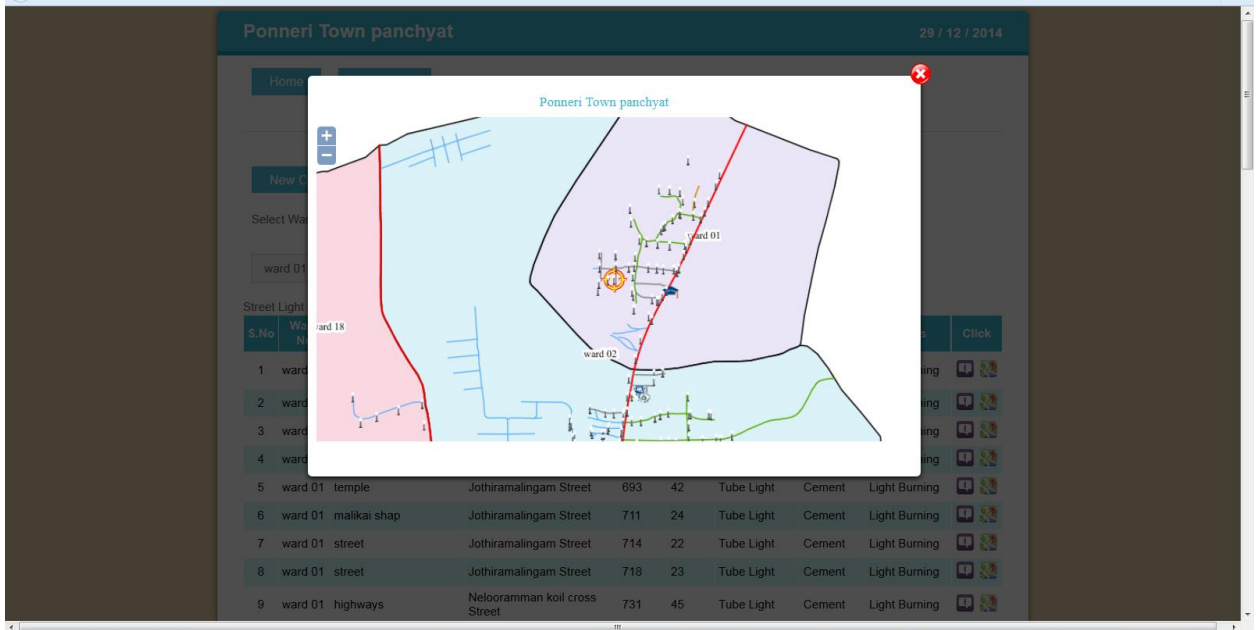
Fig 17: View the selected utility's location on map

Click on Complaint icon against any desired Utility from the list, to lodge the Complaint form   on that particular Utility.
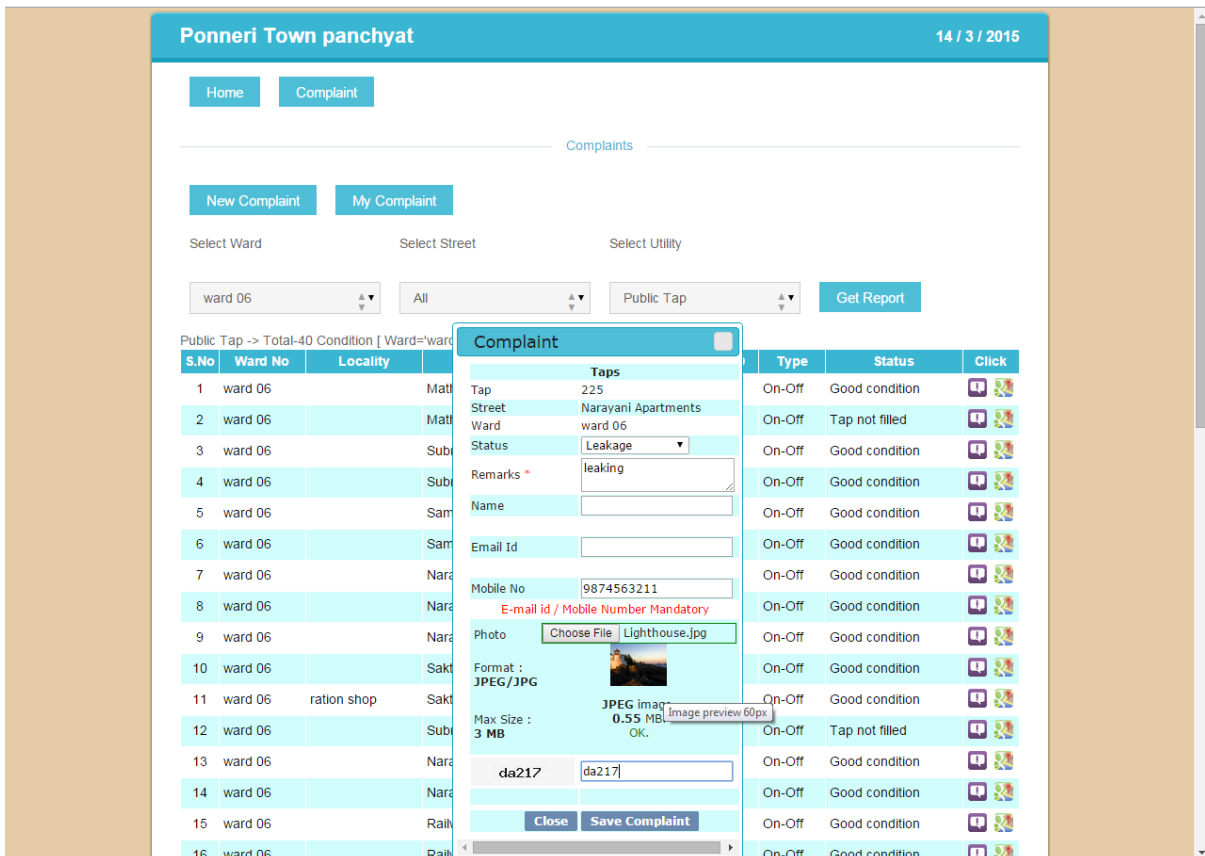
Fig 18: Details of the actual complaint with provision to upload photo

After lodging the complaint, Complaint ID is shown to the user. This unique number is to be used in future to verify the status of the Complaints by the user.

Screen showing complaint id:

Fig 19: Complaint Number with which user can track the status

My complaints
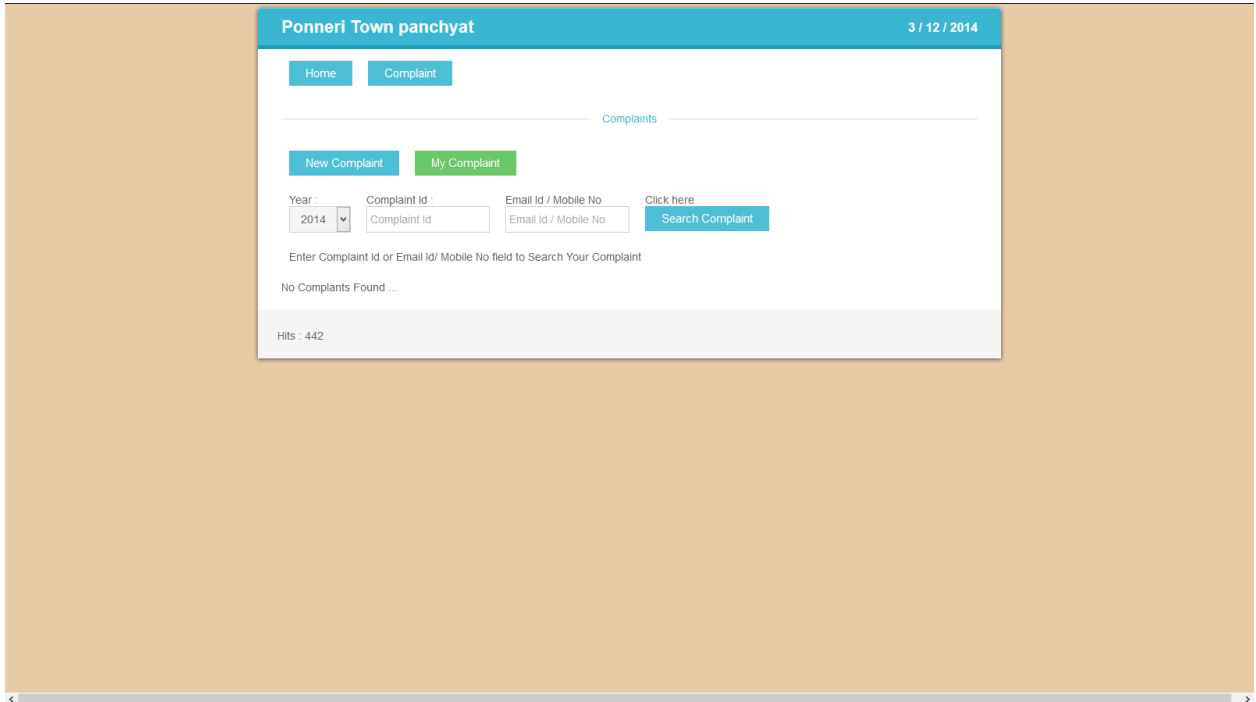
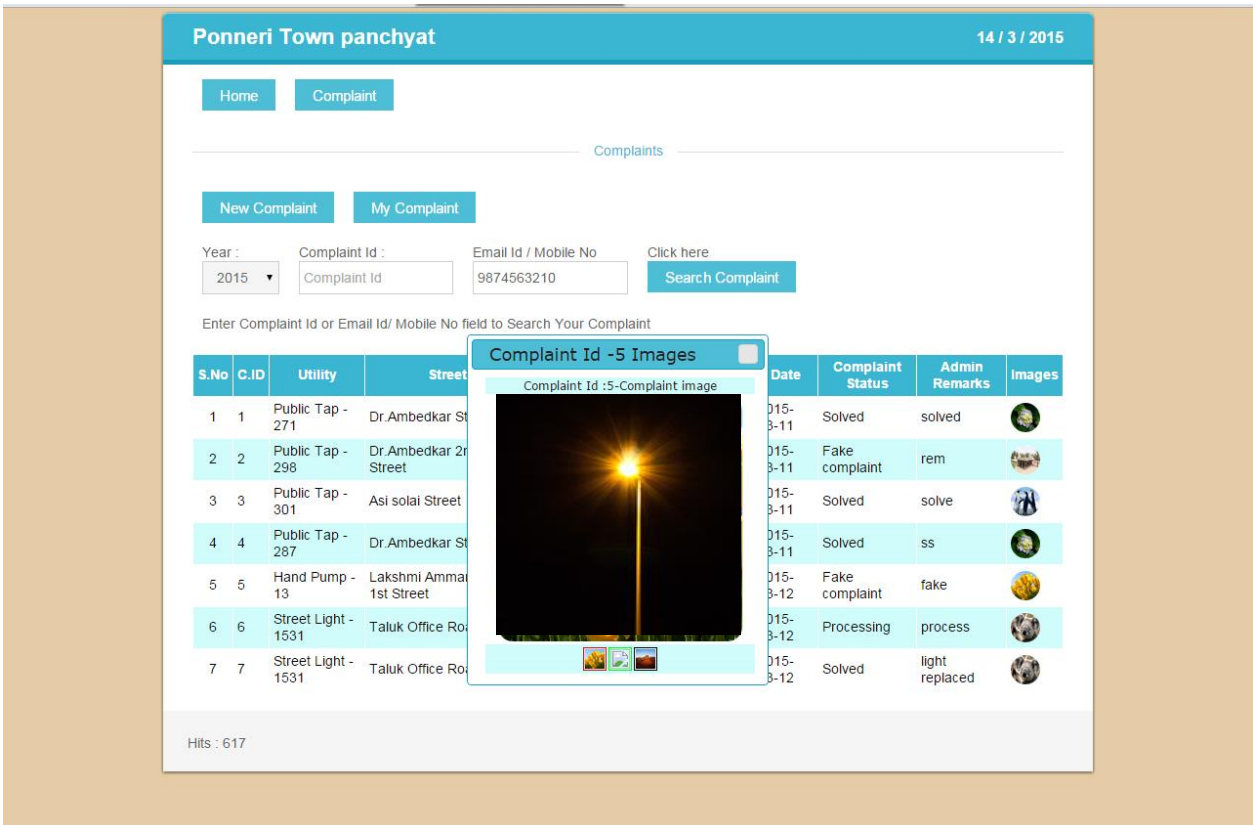Fig 20: Check the status with the help of Complaint Number

Fig 21: Check the status with the help of Complaint Number

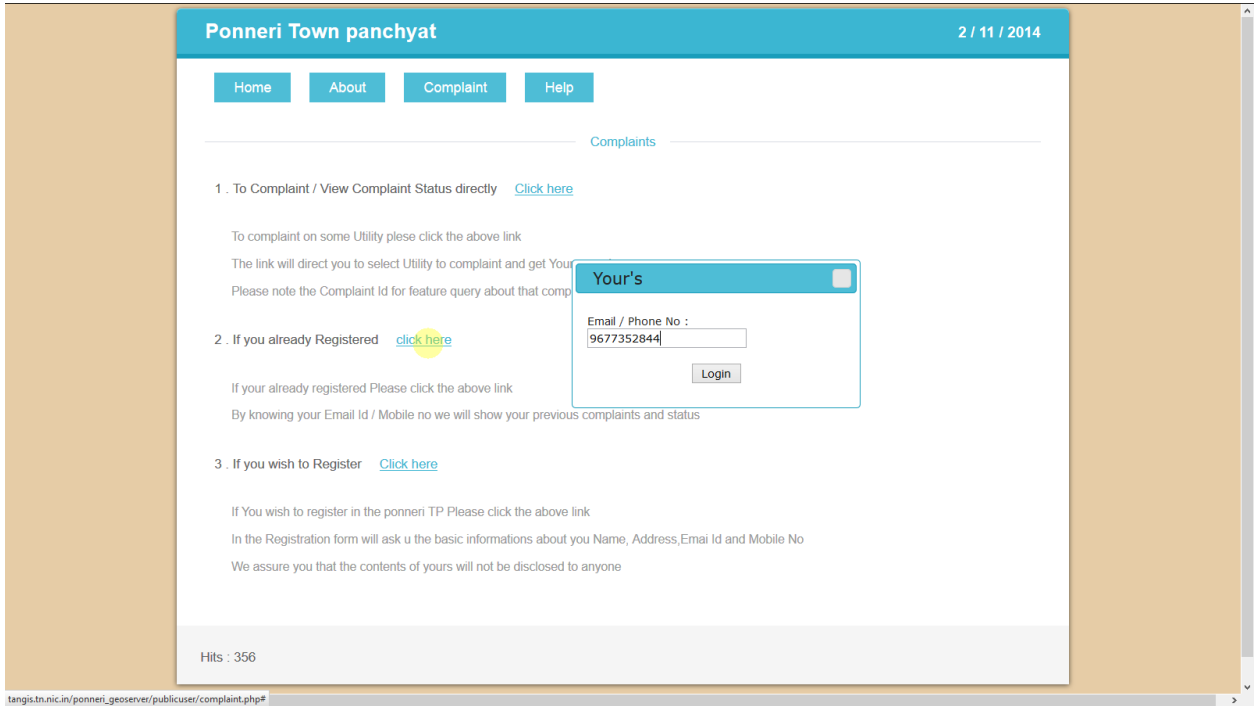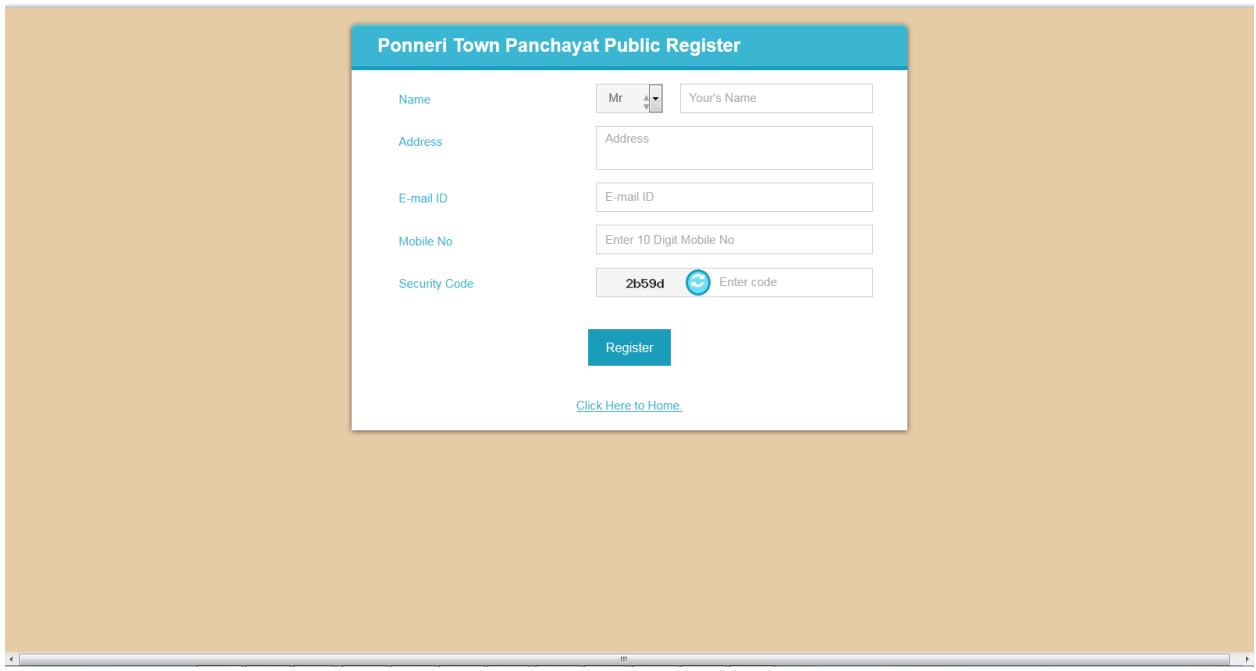## ii.   For already Registered users:

Fig 22: Check the status with the help of Mobile number used to register in the website