

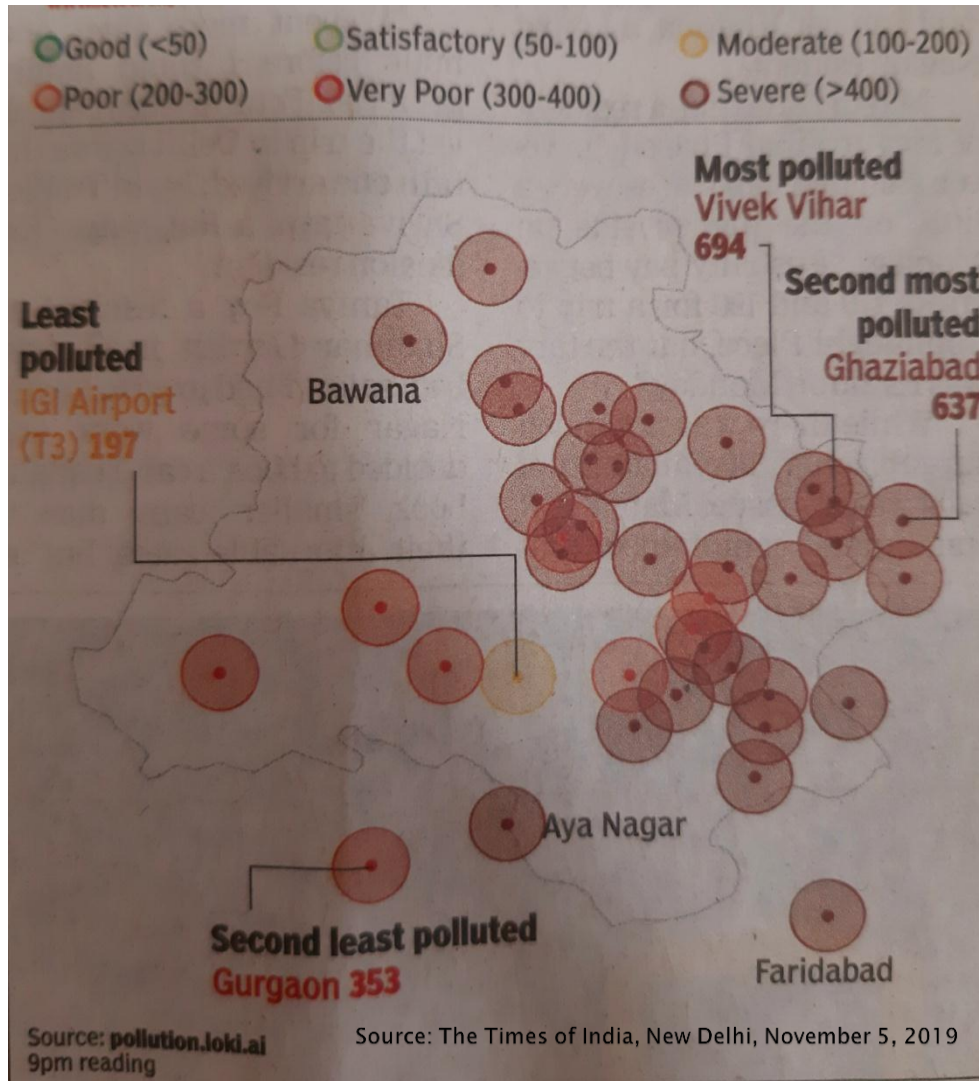
# Delhi: Air Quality Index, 2019

## On

# School Bhuvan NCERT

Professor Aparna Pandey, DESS,  
NCERT, New Delhi  
Srijani Guha, JPF, DESS, NCERT,  
New Delhi

# Air Quality in Delhi-NCR



# Objective:

To develop map of Delhi–NCR on School Bhuvan NCERT geo portal and locate areas affected by air pollution.

➔ **Open School Bhuvan NCERT geo portal and Scroll Down**



Ministry of Human Resource Development

(Department of School Education & Literacy)

School Bhuvan - NCERT

An e-learning portal for the students

About

Level1

Level2

Level3

Bhuvan 3D

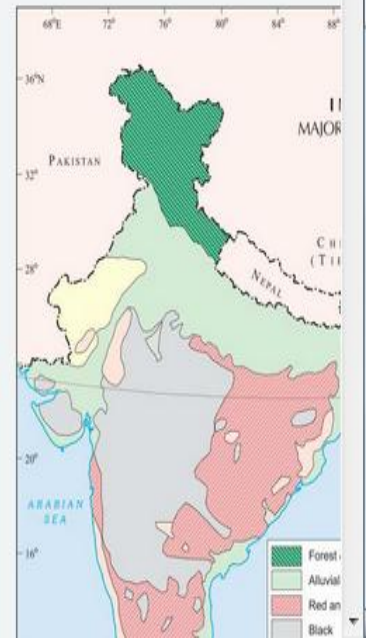
GIS Viewer

Help

# Welcome to School Bhuvan - NCERT

A portal providing map based learning to bring awareness among the students about country's natural resources, environment and their role in sustainable development. To know about Bhuvan, [click here](#). E-learning courses in Remote Sensing and Geospatial Technologies. To know more, [click here](#).

**Click Explore** → Explore



THEMATIC SERIES 1    THEMATIC SERIES 2

Find

Map    Satellite    Hybrid    Terrain    Tools

- Climate**
  - Annual Rainfall
  - Monsoon Advance
  - Monsoon Retreat
  - Seasonal Rainfall
- Drainage**
- Natural Vegetation & Wildlife**
- Physical Features**
- Population**
- Census (2011)**
- Admin Boundary**
- Hydrological Boundary**

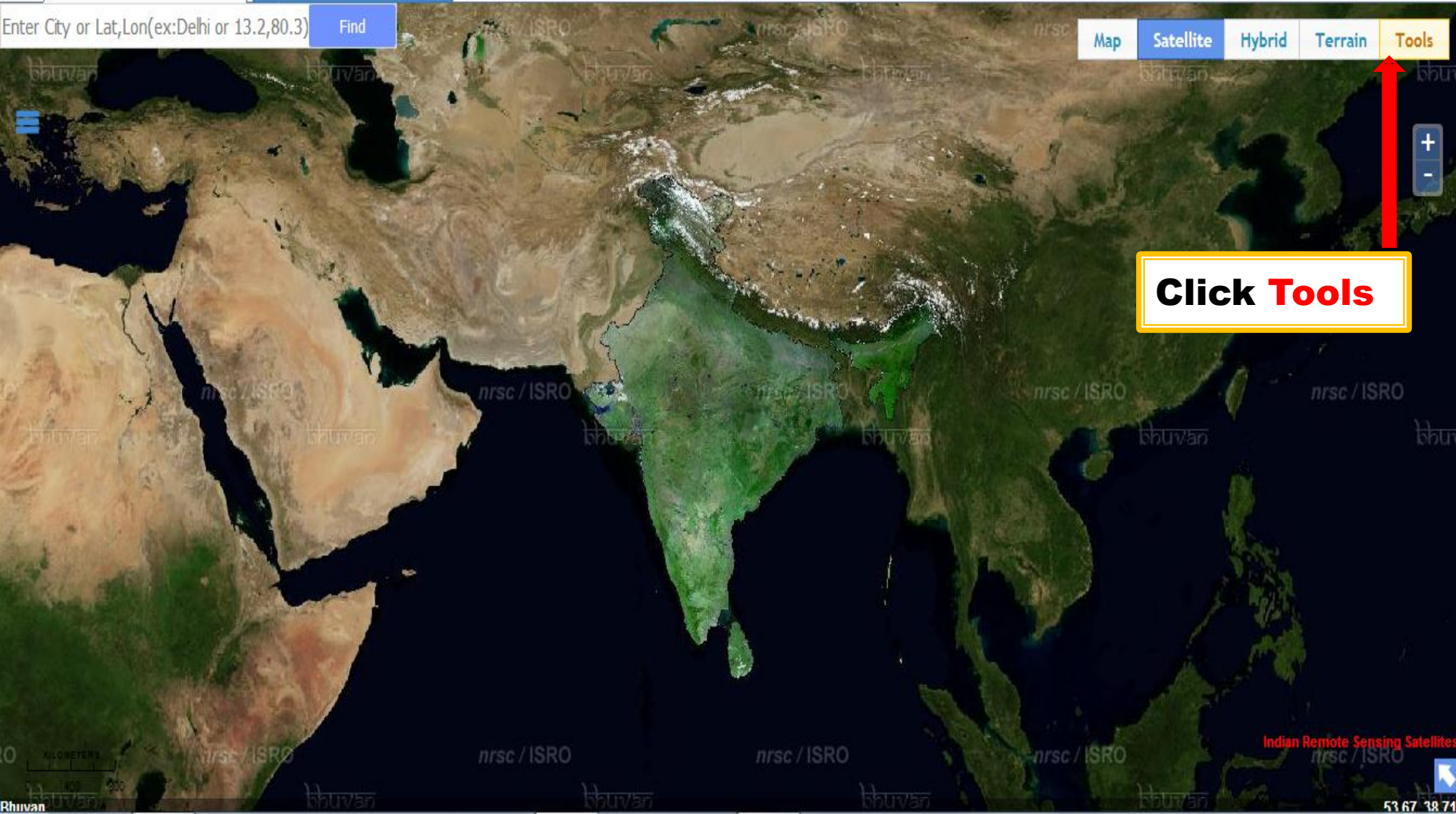
**Click to Close Thematic Series 1**



THEMATIC SERIES 1 | THEMATIC SERIES 2

Enter City or Lat,Lon(ex:Delhi or 13.2,80.3)

Map | Satellite | Hybrid | Terrain | **Tools**



**Click Tools**

THEMATIC SERIES 1 | THEMATIC SERIES 2

Enter City or Lat,Lon(ex:Delhi or 13.2,80.3)

Map | **Satellite** | Hybrid | Terrain | Tools

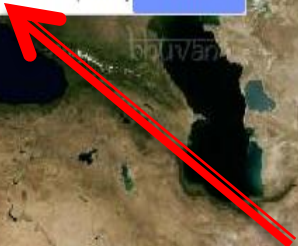
- Add Layer
- Draw Tool**
- Measure Area
- Measure Length
- WMS Manager
- Add Photos/POI
- Navigation
- Proximity

**Click Draw Tool**



THEMATIC SERIES 1 THEMATIC SERIES 2


Enter City or Lat,Lon(ex:Delhi or 13.2,80.3) Find





**Write Name of the Place here**

**DRAW TOOL**

Use the Draw tool to add graphic elements to the terrain and export them as a shape file

66F 

Use  to delete feature and  to export shape file

THEMATIC SERIES 1 | THEMATIC SERIES 2

Bawana Delhi, Delhi, Delhi

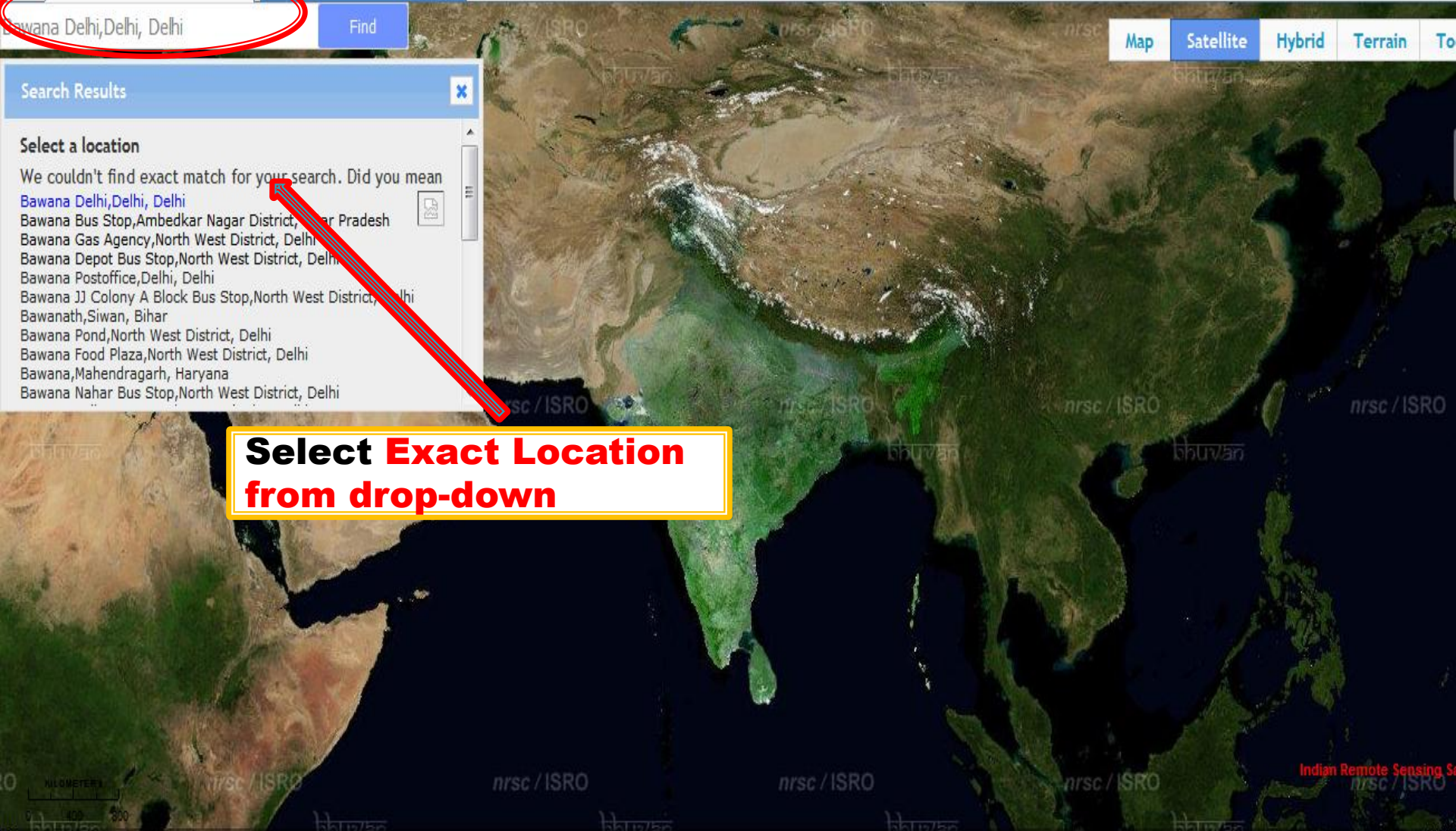
**Search Results**

Select a location

We couldn't find exact match for your search. Did you mean

- Bawana Delhi, Delhi, Delhi
- Bawana Bus Stop, Ambedkar Nagar District, Uttar Pradesh
- Bawana Gas Agency, North West District, Delhi
- Bawana Depot Bus Stop, North West District, Delhi
- Bawana Postoffice, Delhi, Delhi
- Bawana JJ Colony A Block Bus Stop, North West District, Delhi
- Bawanath, Siwan, Bihar
- Bawana Pond, North West District, Delhi
- Bawana Food Plaza, North West District, Delhi
- Bawana, Mahendragarh, Haryana
- Bawana Nahar Bus Stop, North West District, Delhi

**Select Exact Location from drop-down**



THEMATIC SERIES 1 | THEMATIC SERIES 2

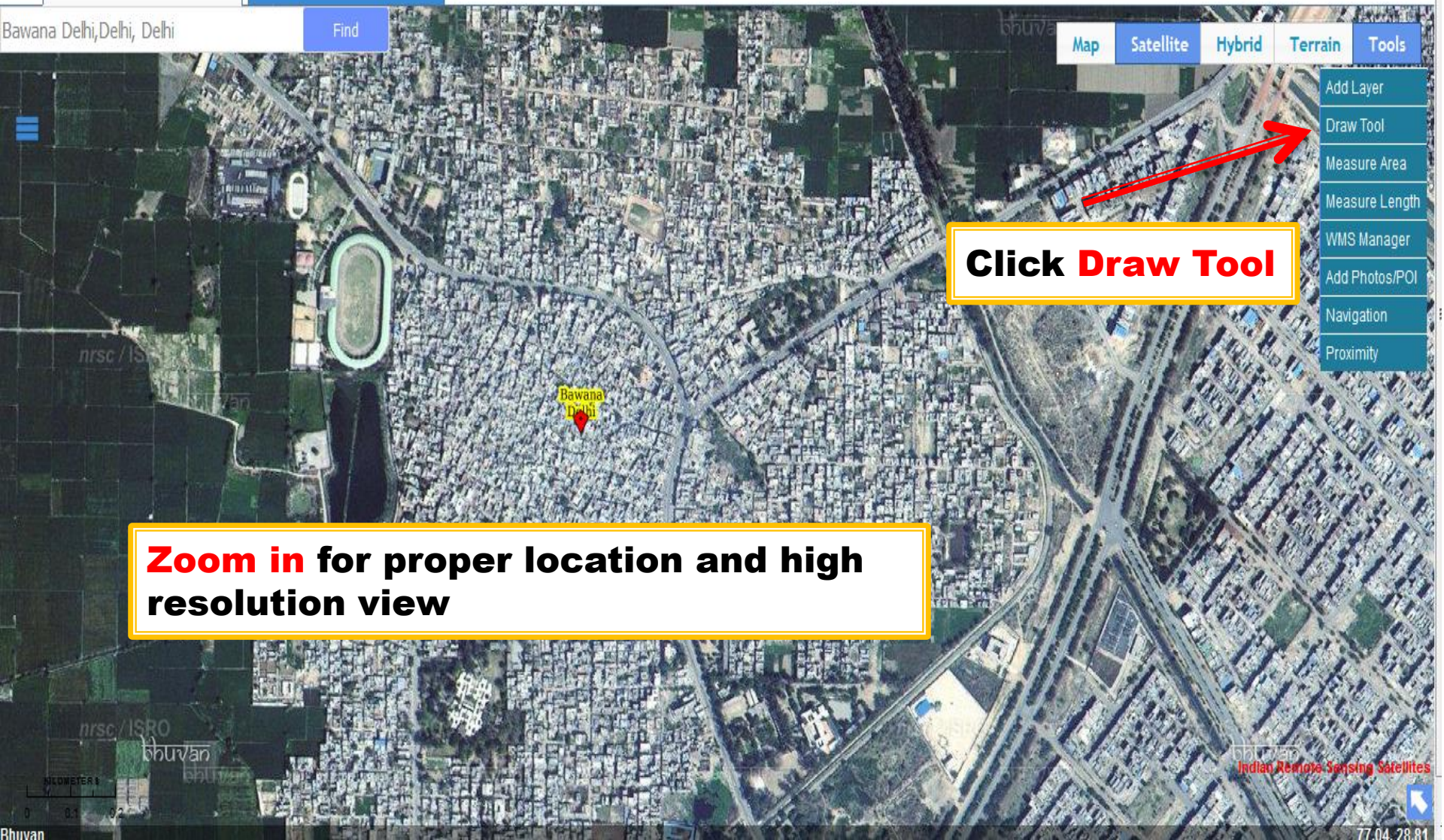
Bawana Delhi, Delhi, Delhi | Find

Map | Satellite | Hybrid | Terrain | Tools

- Add Layer
- Draw Tool
- Measure Area
- Measure Length
- WMS Manager
- Add Photos/POI
- Navigation
- Proximity

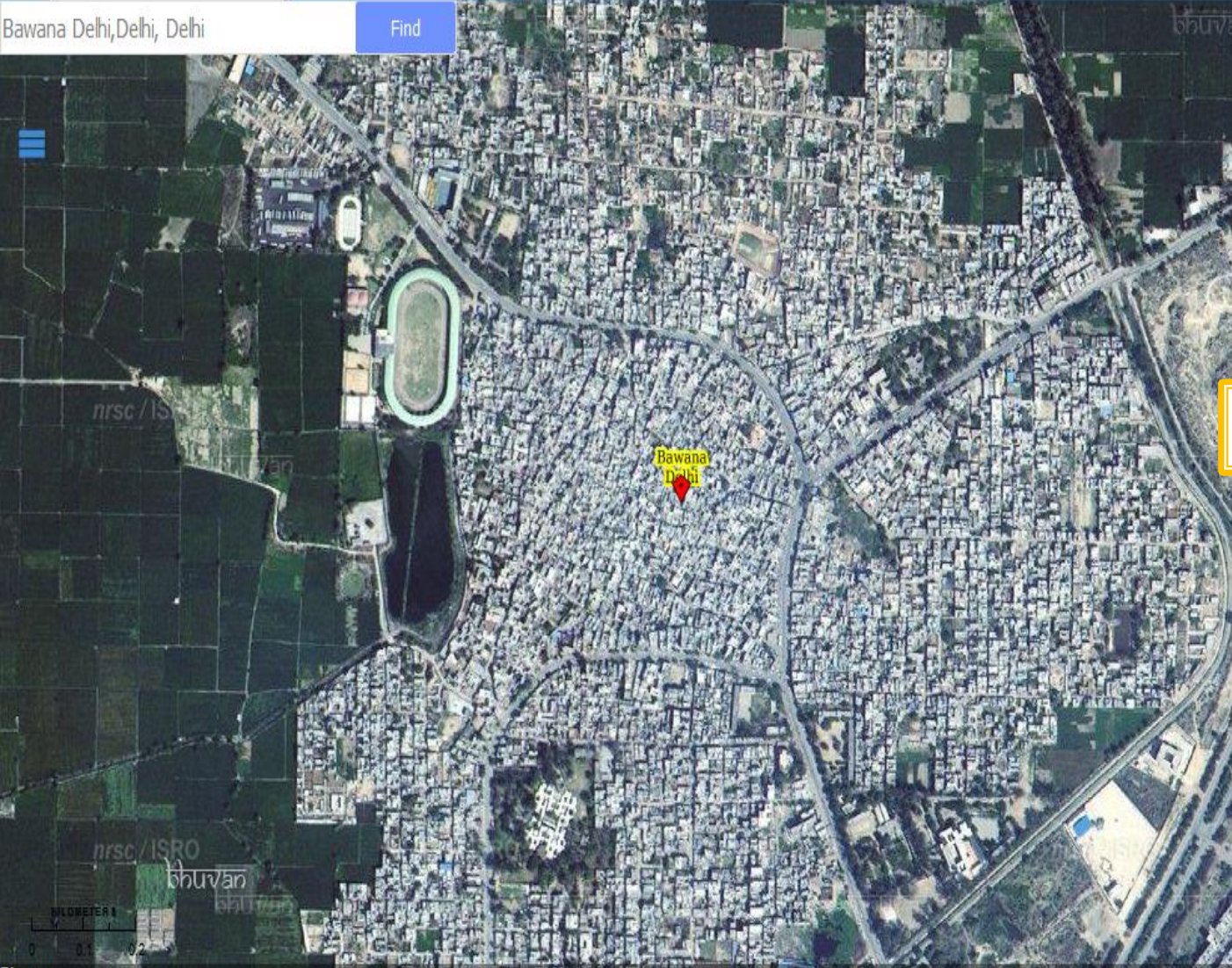
**Click Draw Tool**

**Zoom in for proper location and high resolution view**







THEMATIC SERIES 1 | THEMATIC SERIES 2



Bawana Delhi, Delhi, Delhi



**DRAW TOOL**

Use the Draw tool to add graphic elements to the terrain and export them as a shape file

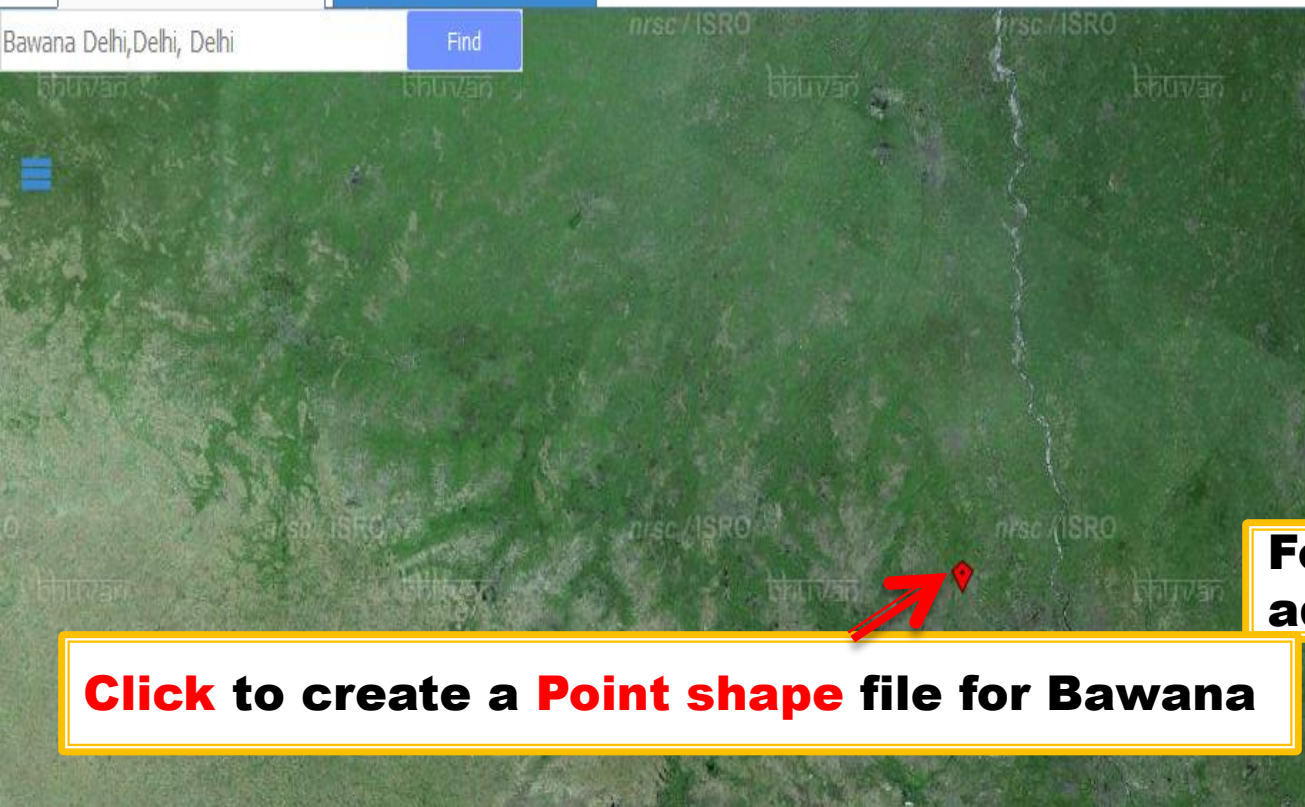
66F    

Use  to delete feature and  to export shape file

**Click Point Tool**

THEMATIC SERIES 1 | THEMATIC SERIES 2

Bawana Delhi, Delhi, Delhi



**Tools**

Layer

Draw Tool

Measure Area

Measure Length

Layers Manager

Photos/POI





Navigation



Proximity

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**DRAW TOOL**

Use the Draw tool to add graphic elements to the terrain and export them as a shape file

66F    

Use  to delete feature and  to export shape file

**Feature1**

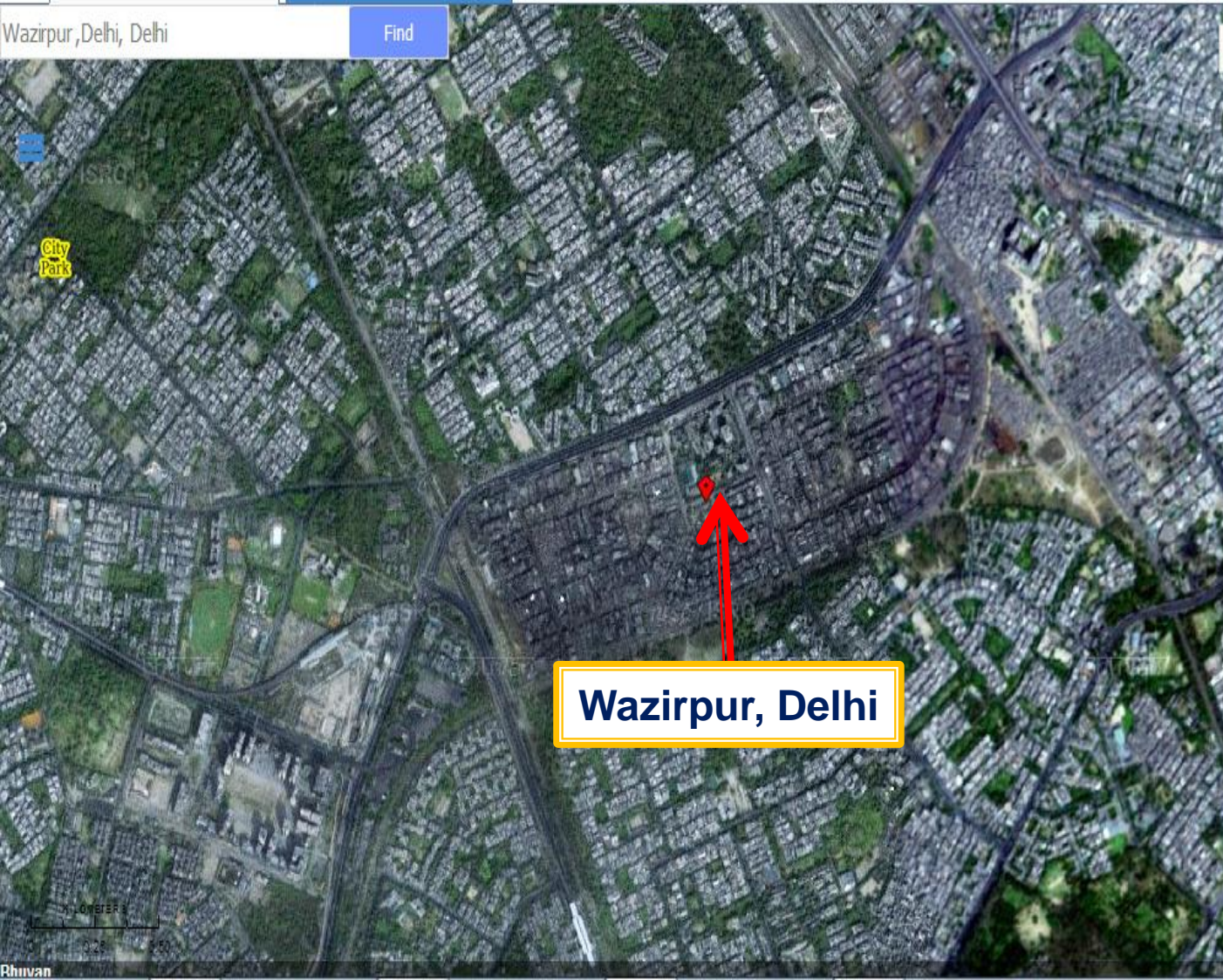
**Click to create a Point shape file for Bawana**

**Feature will be added**

As you have created **Point shape file** for **Bawana** on the satellite imagery, use same method for **other locations**





THEMATIC SERIES 1 | **THEMATIC SERIES 2**



Wazirpur, Delhi, Delhi











**DRAW TOOL**

Use the Draw tool to add graphic elements to the terrain and export them as a shape file

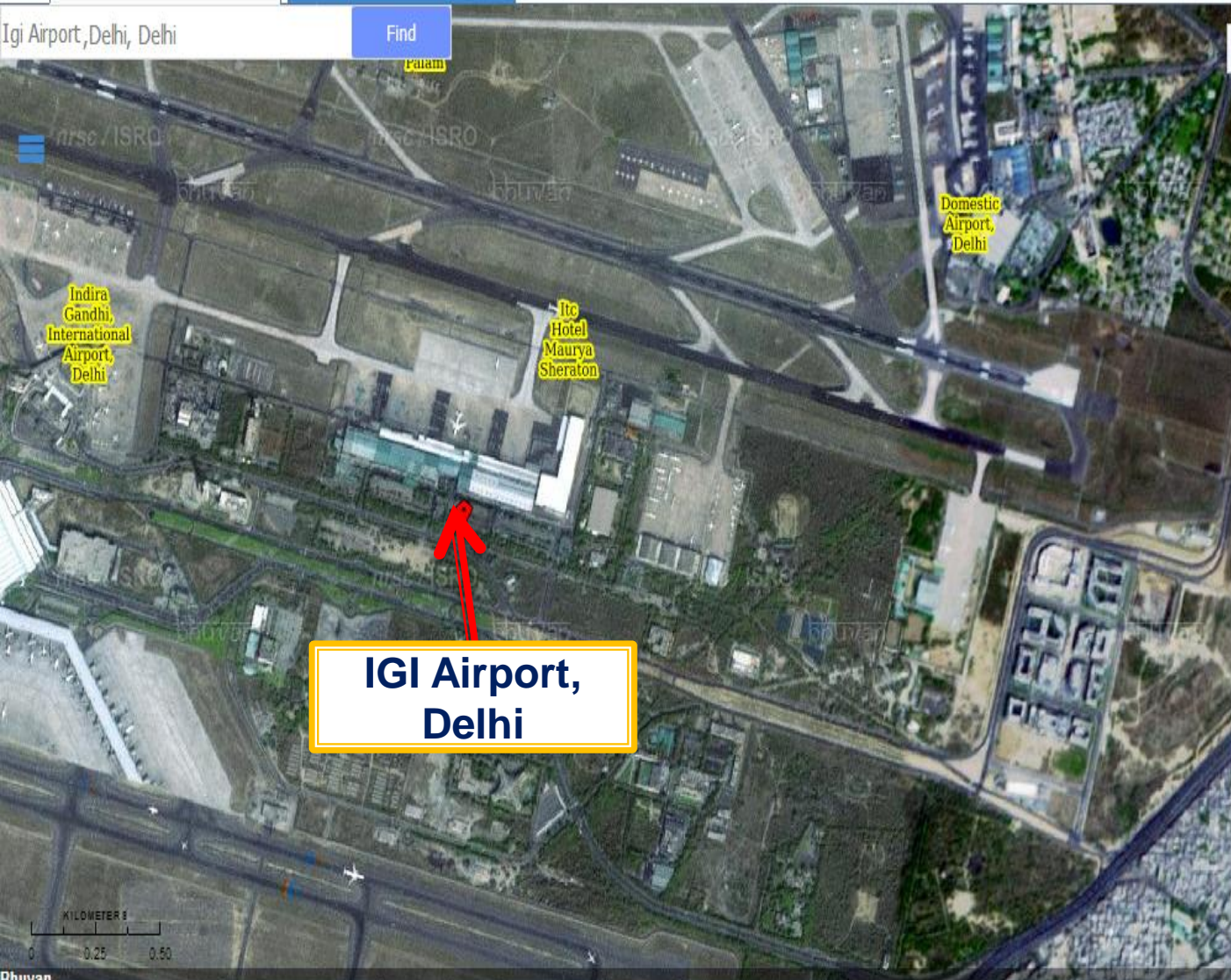
66F    

Use  to delete feature and  to export shape file

-   Feature1
-   Feature2
-   Feature3
-   Feature4

THEMATIC SERIES 1 | **THEMATIC SERIES 2**





Igi Airport, Delhi, Delhi









**IGI Airport,  
Delhi**

**DRAW TOOL**

Use the Draw tool to add graphic elements to the terrain and export them as a shape file

66F    

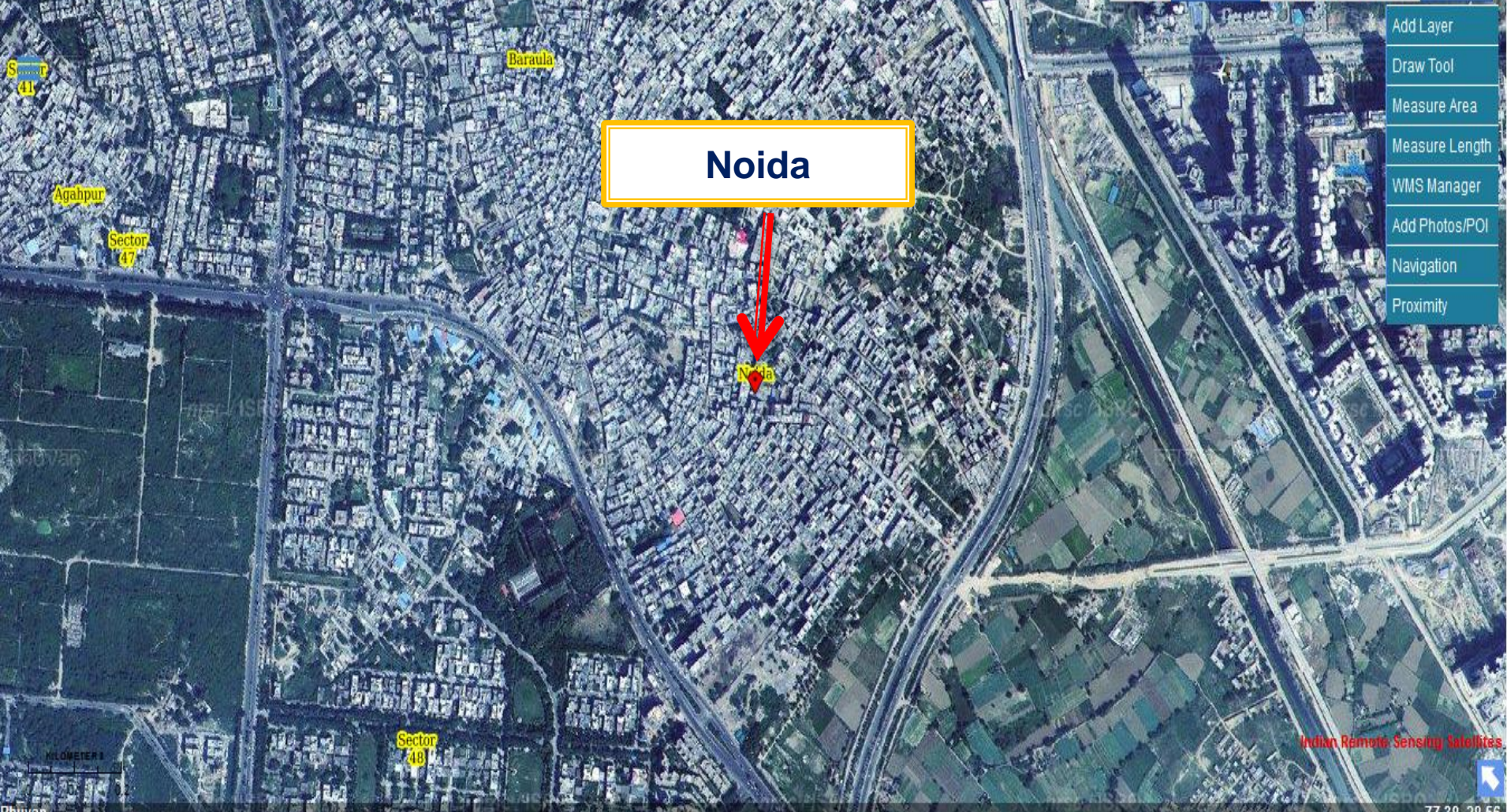
Use X to delete feature and  to export shape file

- X  Feature1
- X  Feature2
- X  Feature3
- X  Feature4
- X  Feature5

THEMATIC SERIES 1 | THEMATIC SERIES 2

Noida, Gautambudh Nagar, Uttar Pradesh

Map | Satellite | Hybrid | Terrain | Tools



- Add Layer
- Draw Tool
- Measure Area
- Measure Length
- WMS Manager
- Add Photos/POI
- Navigation
- Proximity



THEMATIC SERIES 1 | THEMATIC SERIES 2





Vivek Vihar, Delhi, India


Find












**DRAW TOOL**

Use the Draw tool to add graphic elements to the terrain and export them as a shape file

66F    

Use X to delete feature and  to export shape file

- X  Feature1
- X  Feature2
- X  Feature3
- X  Feature4
- X  Feature5
- X  Feature6
- X  Feature7
- X  Feature8
- X  Feature9





THEMATIC SERIES 1 | THEMATIC SERIES 2



Nsit Dwarka, Delhi, Delhi























**DRAW TOOL**

Use the Draw tool to add graphic elements to the terrain and export them as a shape file

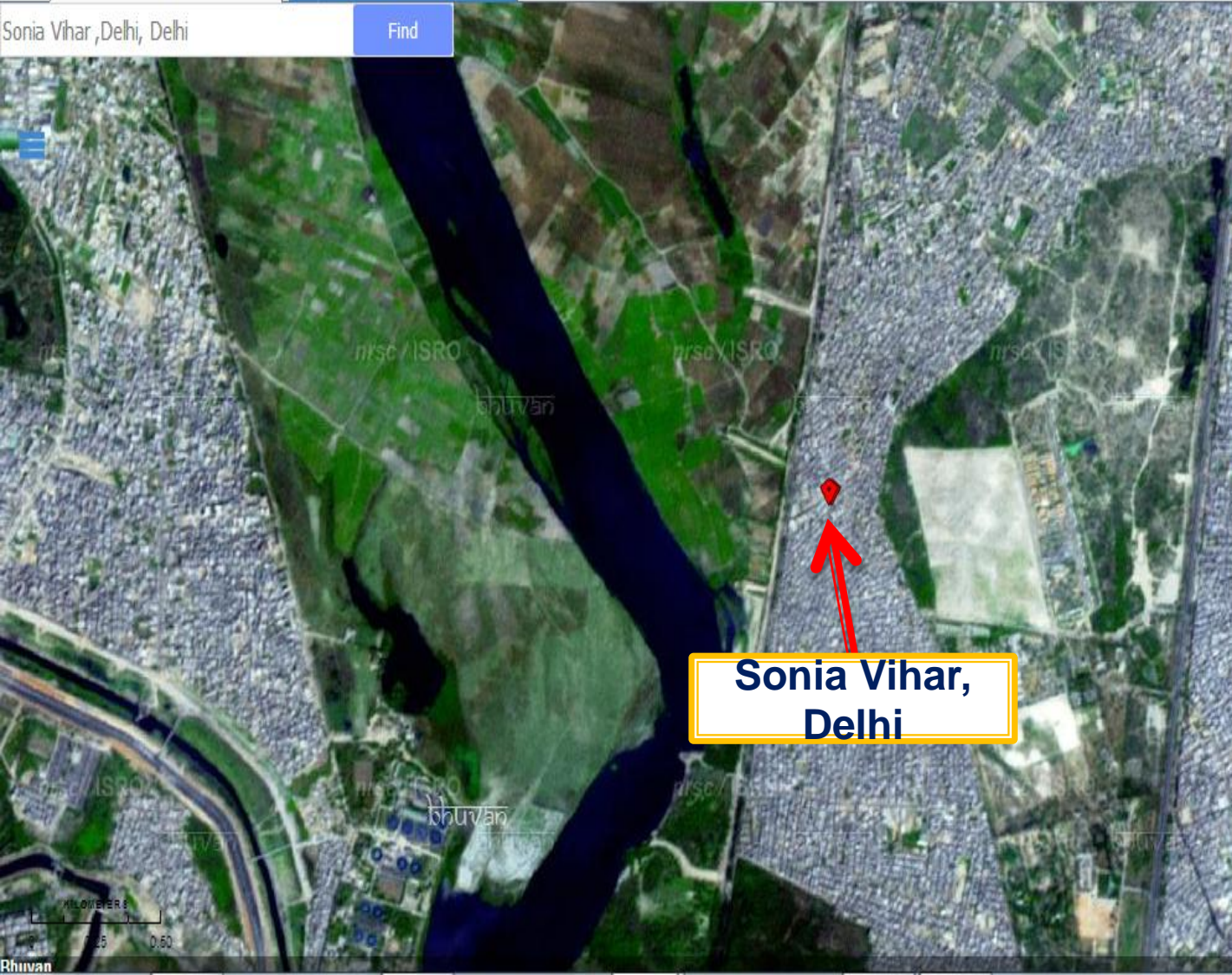
66F    

Use  to delete feature and  to export shape file

-   Feature1
-   Feature2
-   Feature3
-   Feature4
-   Feature5
-   Feature6
-   Feature7
-   Feature8
-   Feature9
-   Feature10

THEMATIC SERIES 1 | **THEMATIC SERIES 2**





Sonia Vihar ,Delhi, Delhi


















**Sonia Vihar,  
Delhi**

**DRAW TOOL**

Use the Draw tool to add graphic elements to the terrain and export them as a shape file

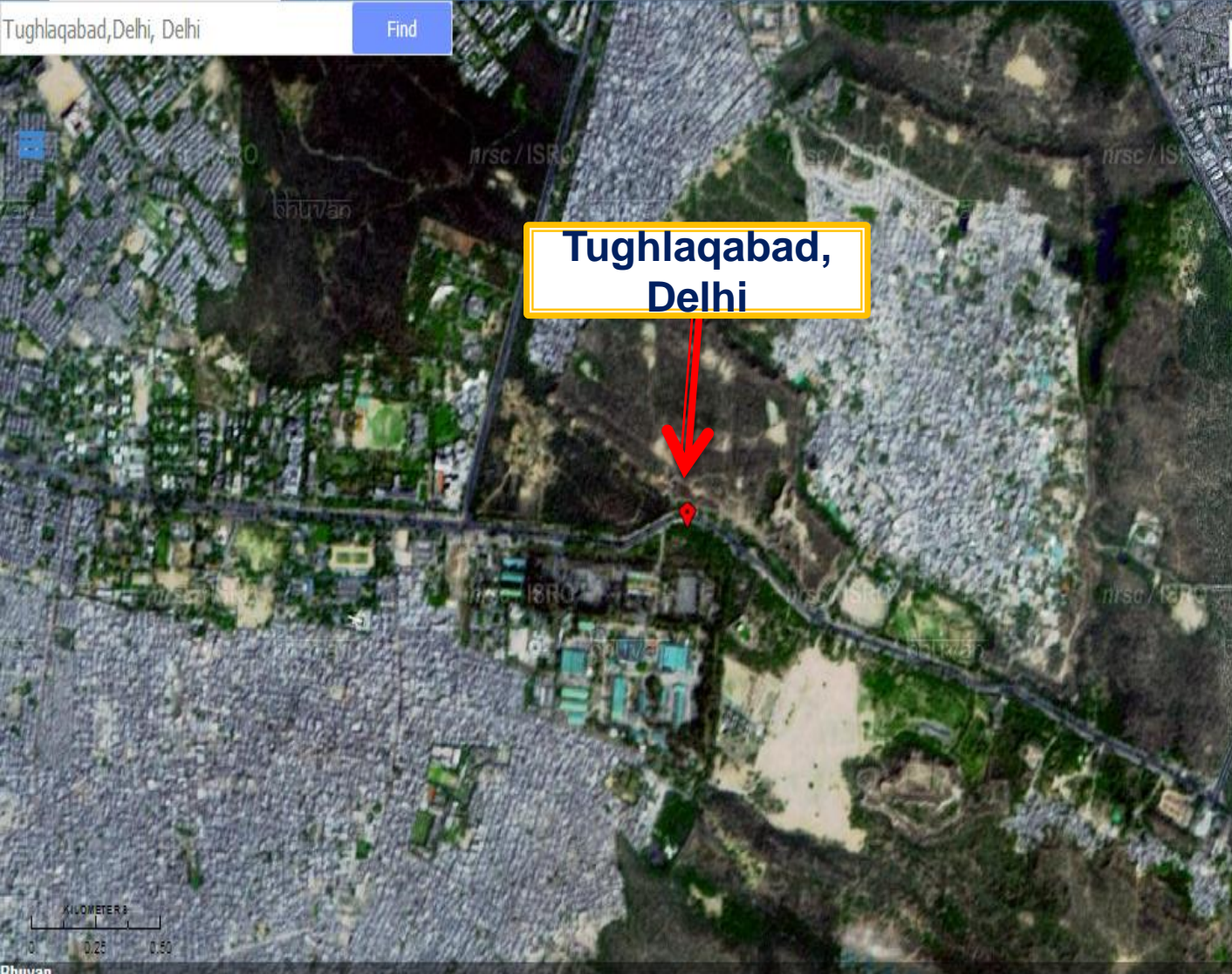
66F    

Use X to delete feature and  to export shape file

-   Feature1
-   Feature2
-   Feature3
-   Feature4
-   Feature5
-   Feature6
-   Feature7






THEMATIC SERIES 1 | **THEMATIC SERIES 2**



Tughlaqabad, Delhi, Delhi

























**DRAW TOOL**

Use the Draw tool to add graphic elements to the terrain and export them as a shape file


Use  to delete feature and  to export shape file



-   Feature1
-   Feature2
-   Feature3
-   Feature4
-   Feature5
-   Feature6
-   Feature7
-   Feature8
-   Feature9
-   Feature10
-   Feature11

























THEMATIC SERIES 1 | THEMATIC SERIES 2

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66F 

Use  to delete feature and  to export shape file

-   Feature1
-   Feature2
-   Feature3
-   Feature4
-   Feature5
-   Feature6
-   Feature7
-   Feature8
-   Feature9
-   Feature10
-   Feature11
-   Feature12

Map | Satellite | Hybrid | Terrain | Tools

 **Click on Map**

- Add Layer
- Draw Tool
- Measure Area
- Measure Length
- WMS Manager
- Add Photos/POI
- Navigation
- Proximity

**Zoom Out**

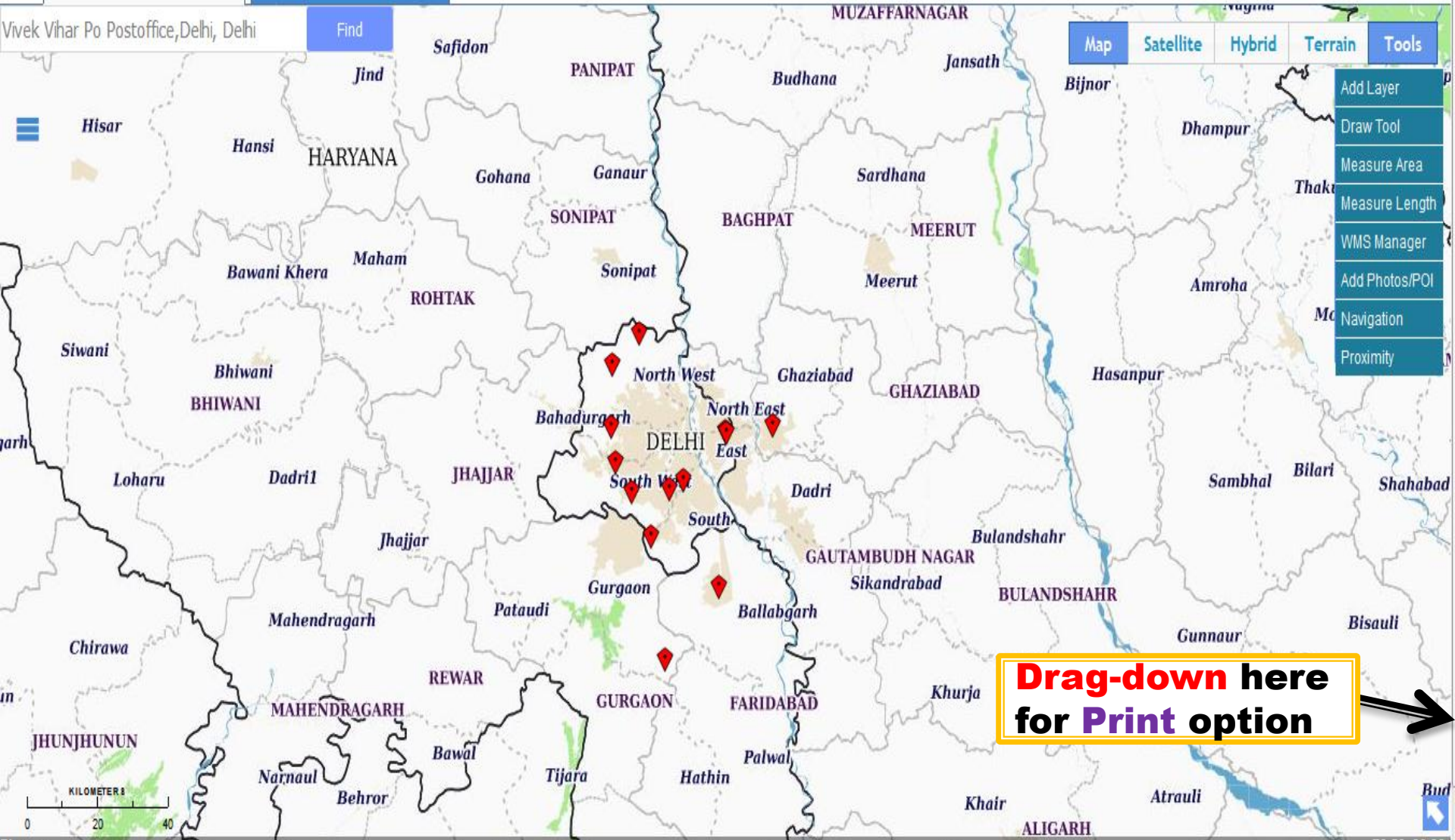
THEMATIC SERIES 1 | THEMATIC SERIES 2

Vivek Vihar Po Postoffice, Delhi, Delhi

Find

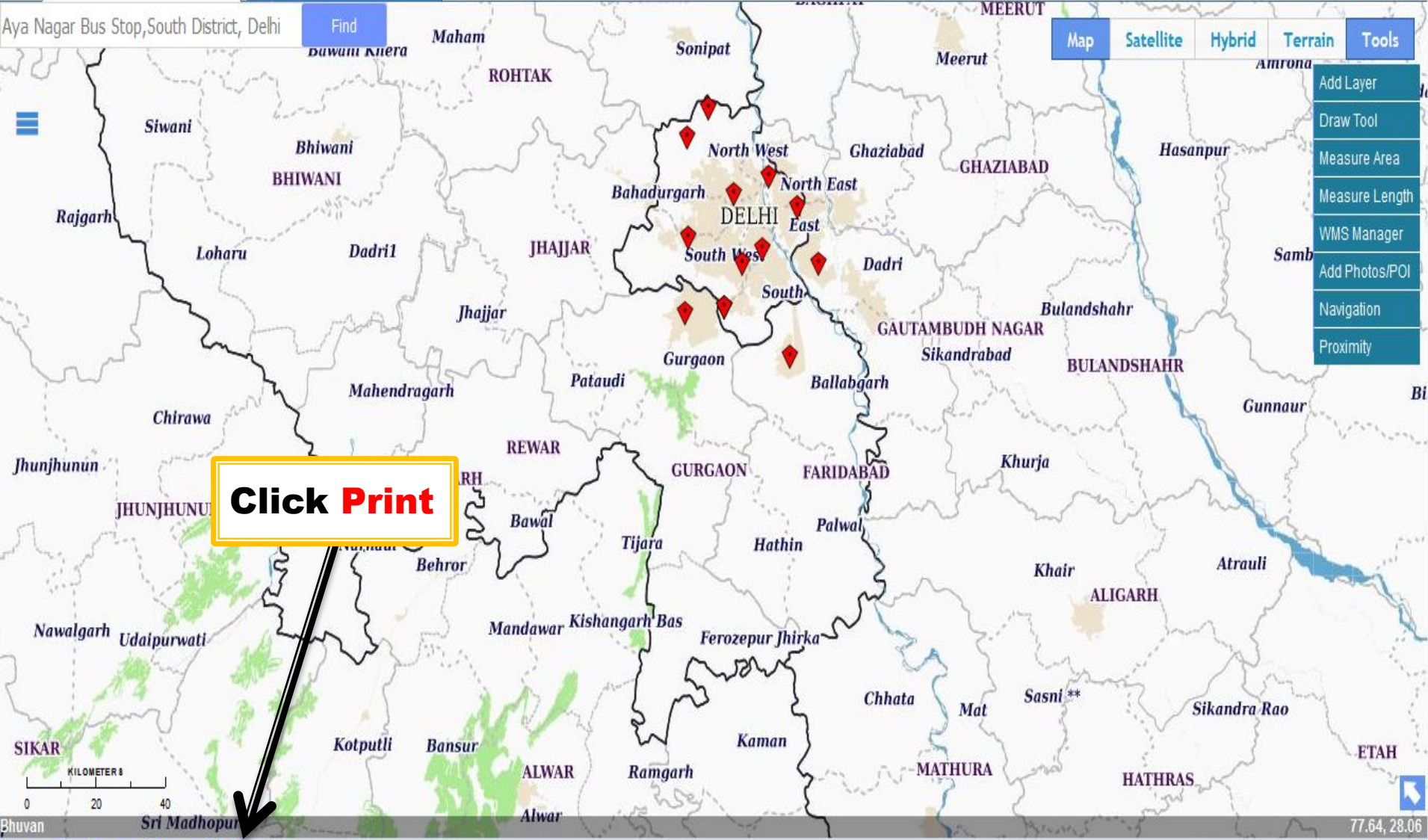
Map | Satellite | Hybrid | Terrain | Tools

- Add Layer
- Draw Tool
- Measure Area
- Measure Length
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- Add Photos/POI
- Navigation
- Proximity



**Drag-down here for Print option** →

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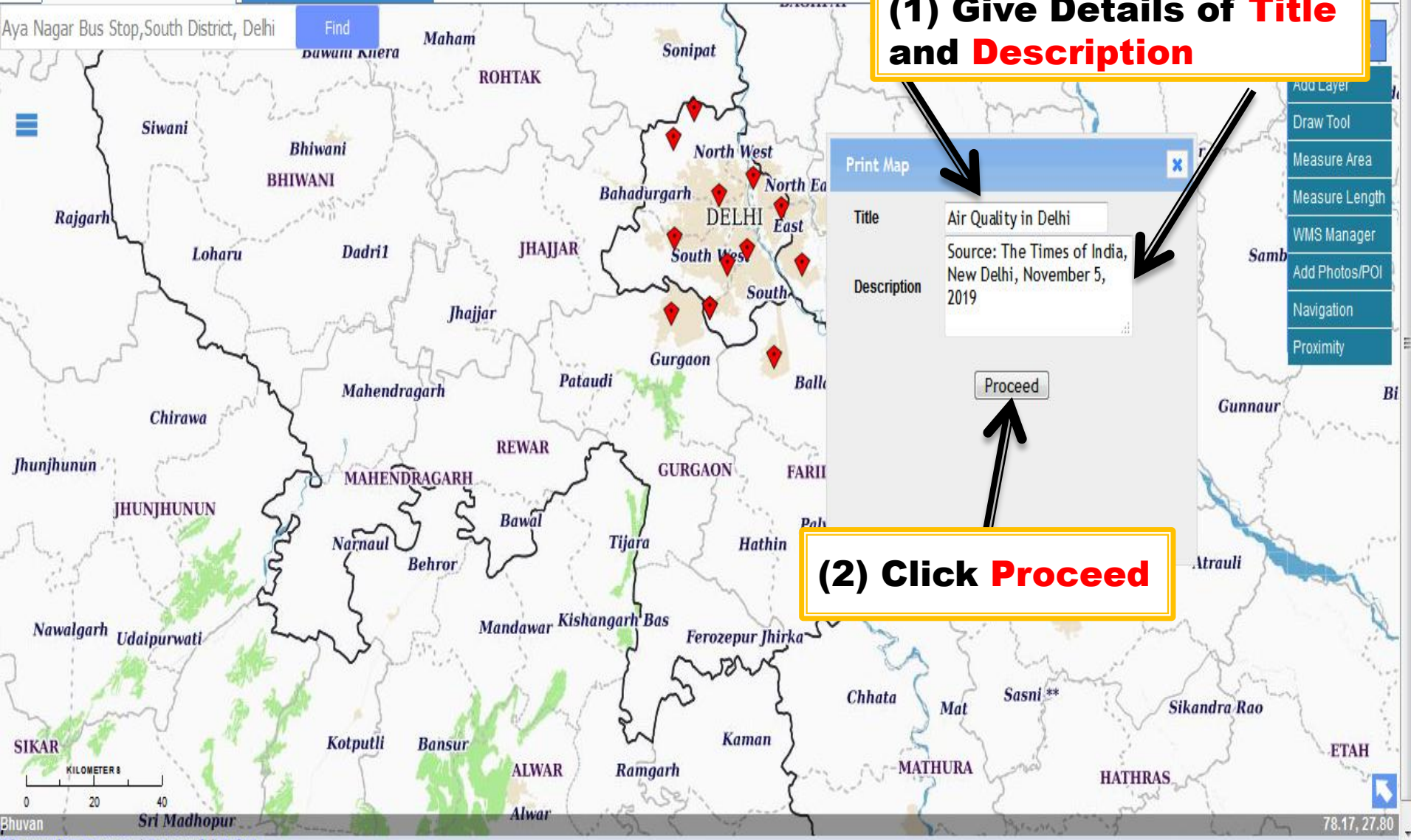
THEMATIC SERIES 1

THEMATIC SERIES 2

Aya Nagar Bus Stop, South District, Delhi

Find

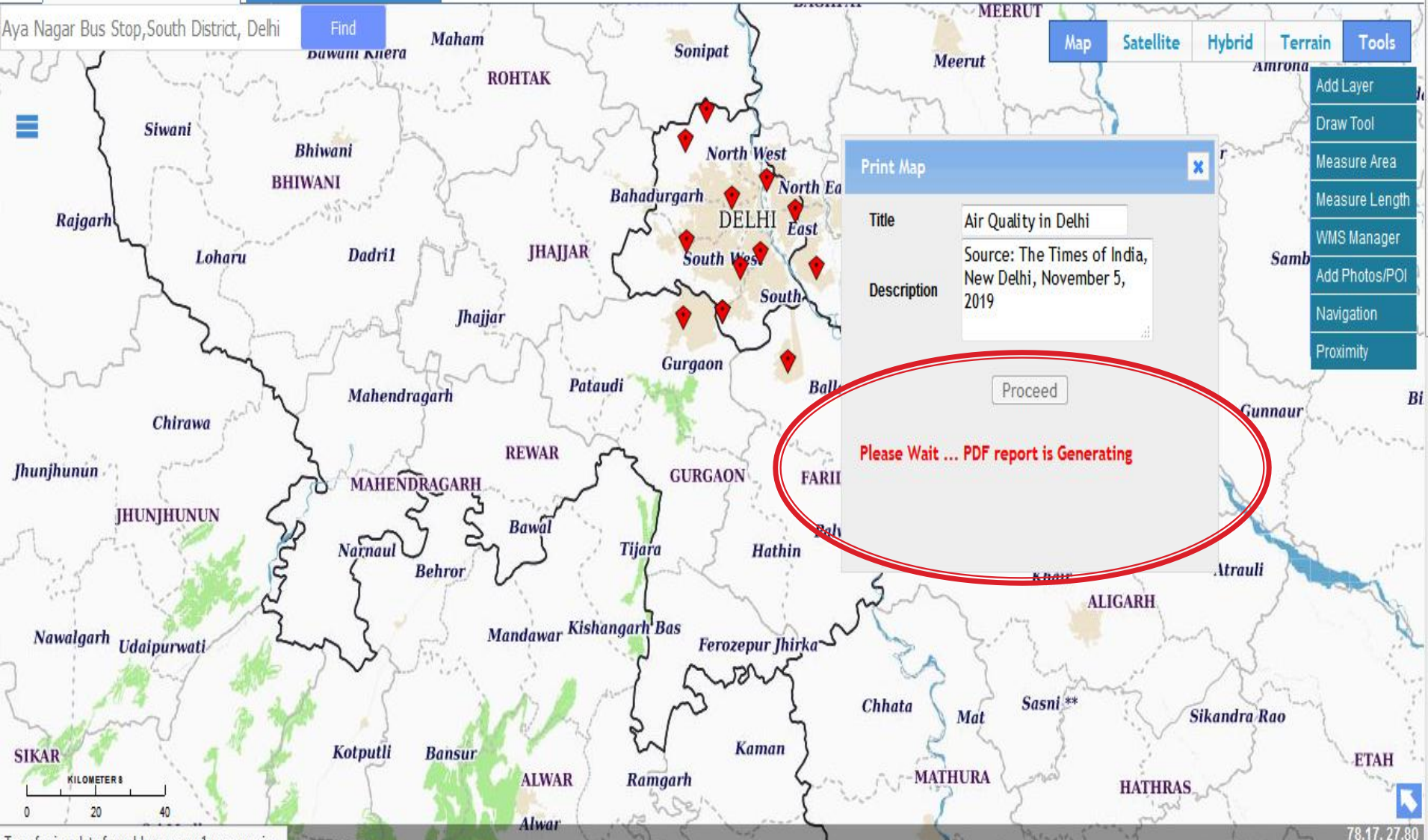
**(1) Give Details of Title and Description**



**(2) Click Proceed**



THEMATIC SERIES 1  
**THEMATIC SERIES 2**



**Print Map** [X]

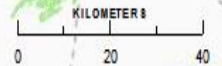
Title: Air Quality in Delhi

Description: Source: The Times of India, New Delhi, November 5, 2019

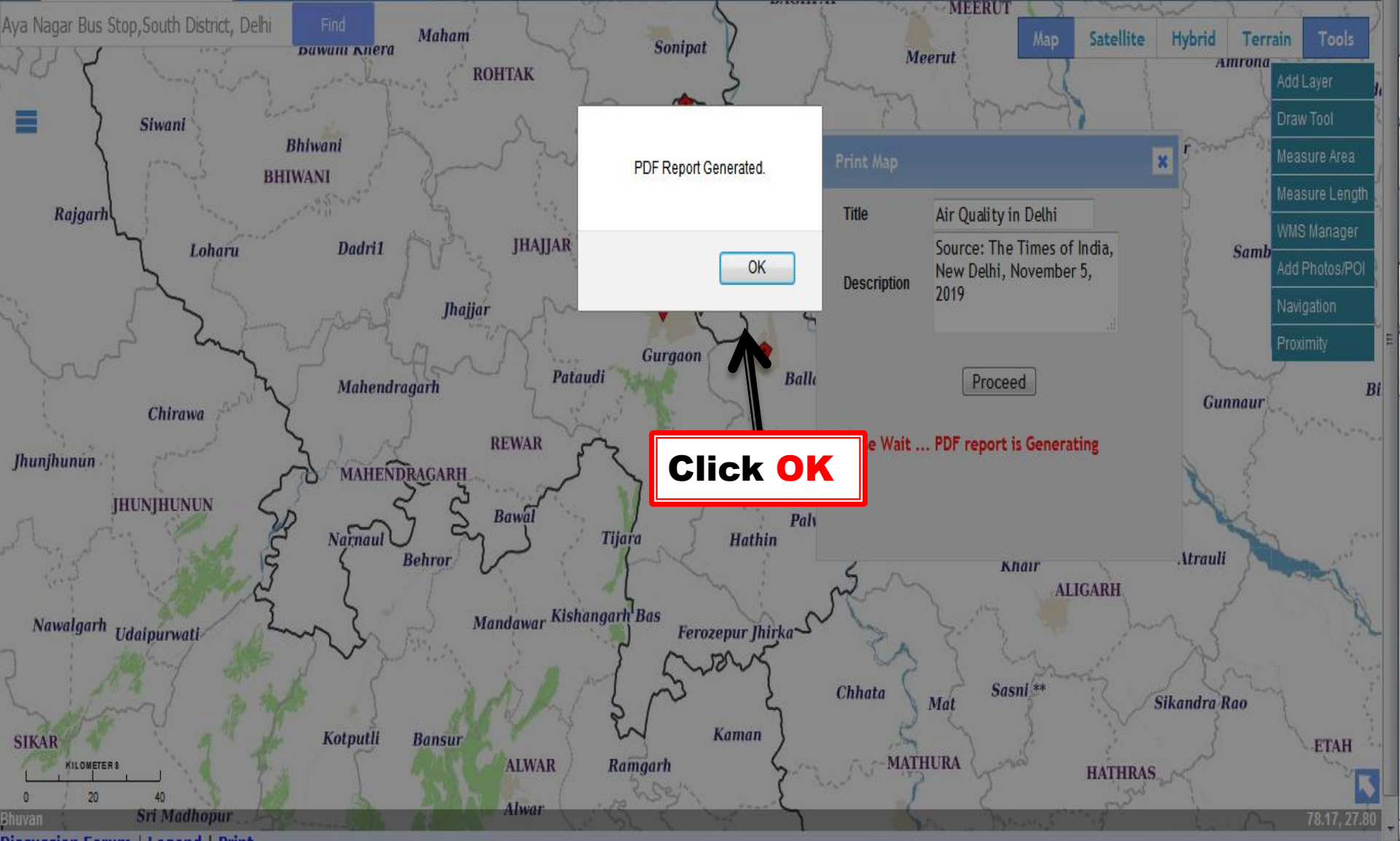
Proceed

**Please Wait ... PDF report is Generating**

- Add Layer
- Draw Tool
- Measure Area
- Measure Length
- WMS Manager
- Add Photos/POI
- Navigation
- Proximity



THEMATIC SERIES 1 **THEMATIC SERIES 2**



PDF Report Generated.

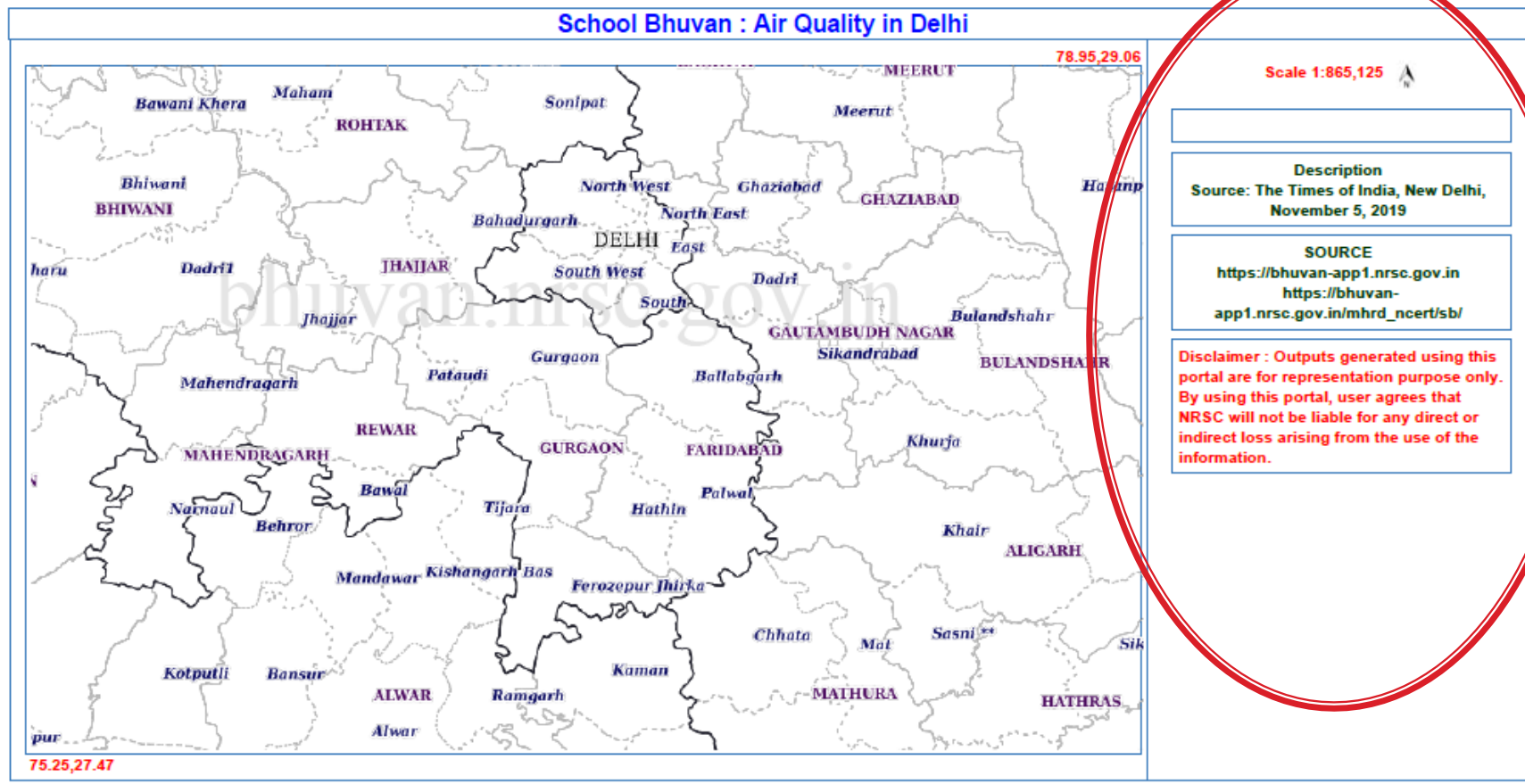
**Print Map**

Title: Air Quality in Delhi  
Source: The Times of India, New Delhi, November 5, 2019  
Description: [Empty field]

**Click OK**

Please Wait ... PDF report is Generating

- Add Layer
- Draw Tool
- Measure Area
- Measure Length
- WMS Manager
- Add Photos/POI
- Navigation
- Proximity



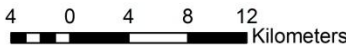
# Air Quality in Delhi-NCR (November 5, 2019)



**Air Quality Index  
(Levels of PM 2.5 & 10 in Micrograms per cubic metre)**

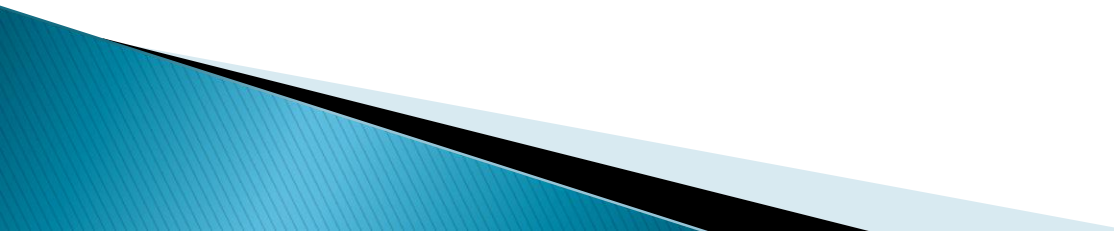
- Moderate(100-200)
- △ Poor(200-300)
- ★ Severe(>400)
- ☆ Very Poor(300-400)

Delhi



Source: TheTimes of India, New Delhi 05.11.2019

# Activities:

- ▶ Find out the causes of air pollution in Delhi-NCR.
  - ▶ What will be the measures to prevent air pollution?
  - ▶ Compare the air pollution index map, 2018 (uploaded on School Bhuvan NCERT geo portal) with air pollution index map, 2019 and discuss with your friends.
- 

# Let's Do-

Develop a map of your own city/town on School Bhuvan NCERT Geo portal to locate areas affected by air/water/noise/soil pollution.