

# Bhuvan

### The enabling platform for Locational Intelligence



www.bhuvan.nrsc.gov.in

The Gateway to Geospatial World





#### **Developed with Open source Solutions**

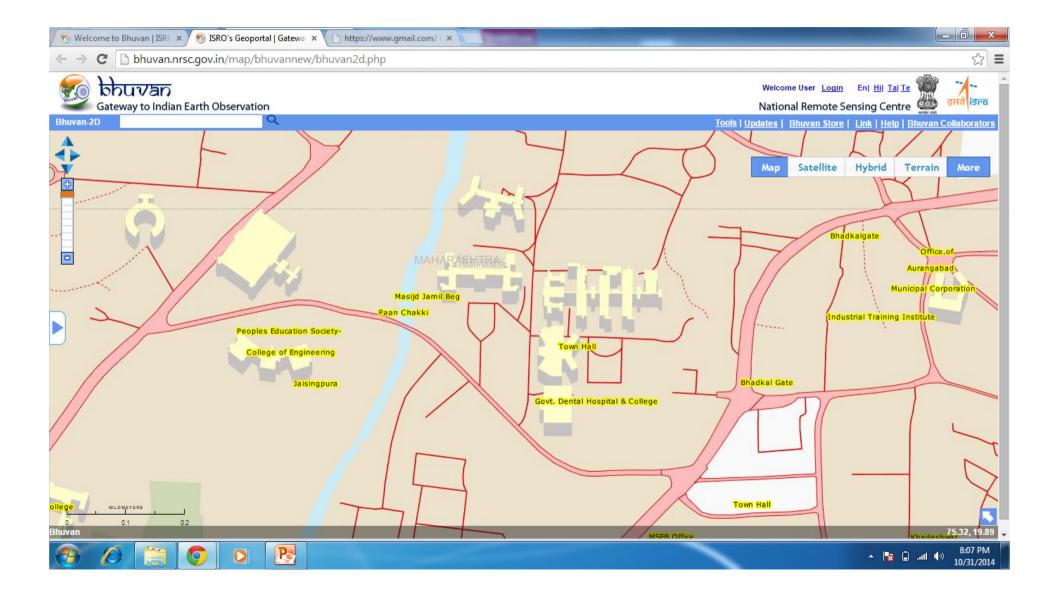
### **National Remote Sensing Centre**

Indian Space Research Organization Department of Space, Hyderabad

#### Vinod M Bothale

Group Director Geoportal and WebGIS Services

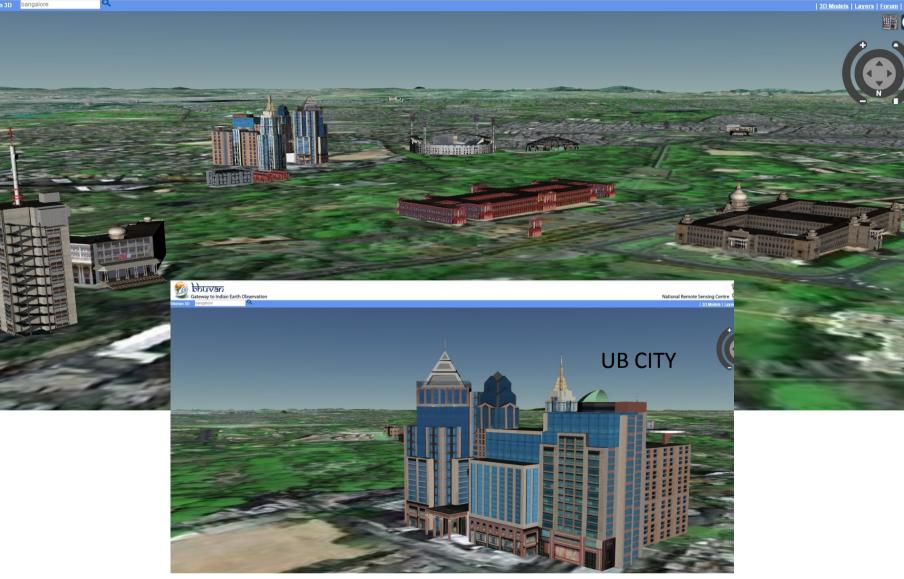
## 1 m Meter Resolution 212 cities



# **3D MODELS IN BENGALURU**



National Remote Sensing Centre



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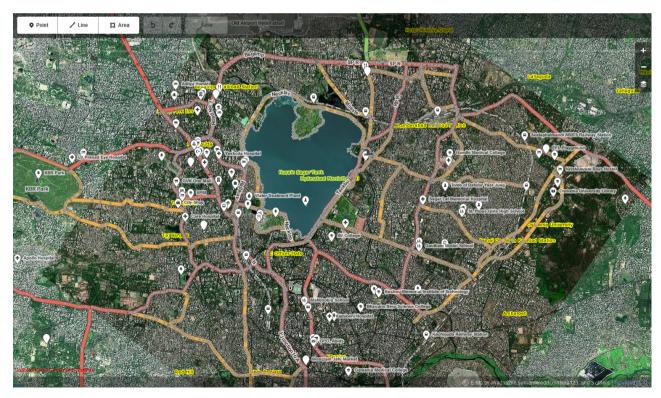
# Bhuvan

### **Crowd Sourcing**

#### Mobile Apps

- MNCFC, Pest/ Disease Surveillance , MANU, NABARD
- Bhuvan Mapper (EKTA)
  - City Mapping , MANU, MERI, HUDHUD

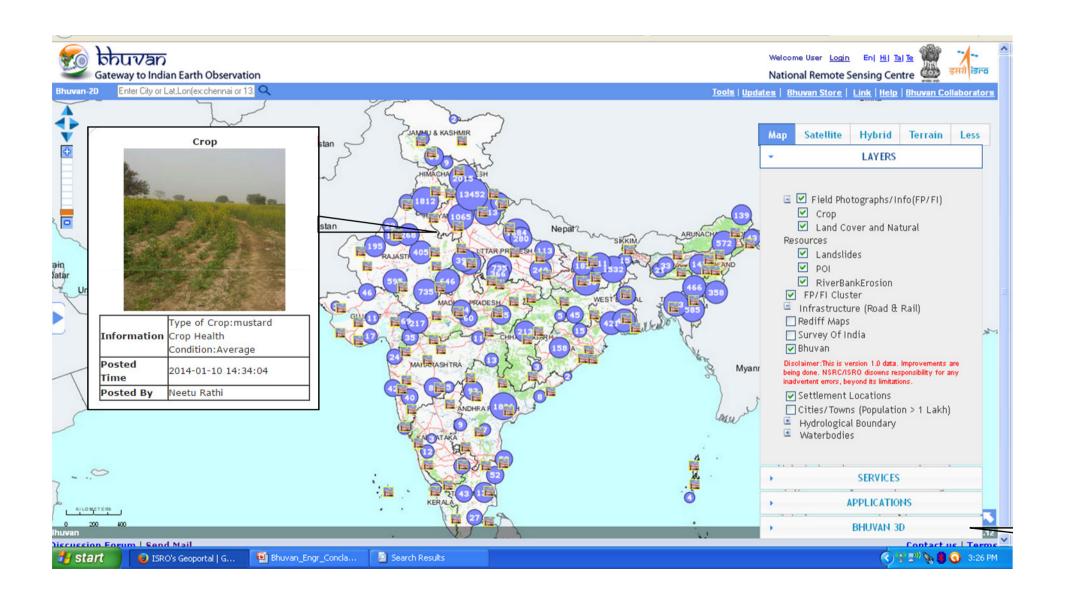




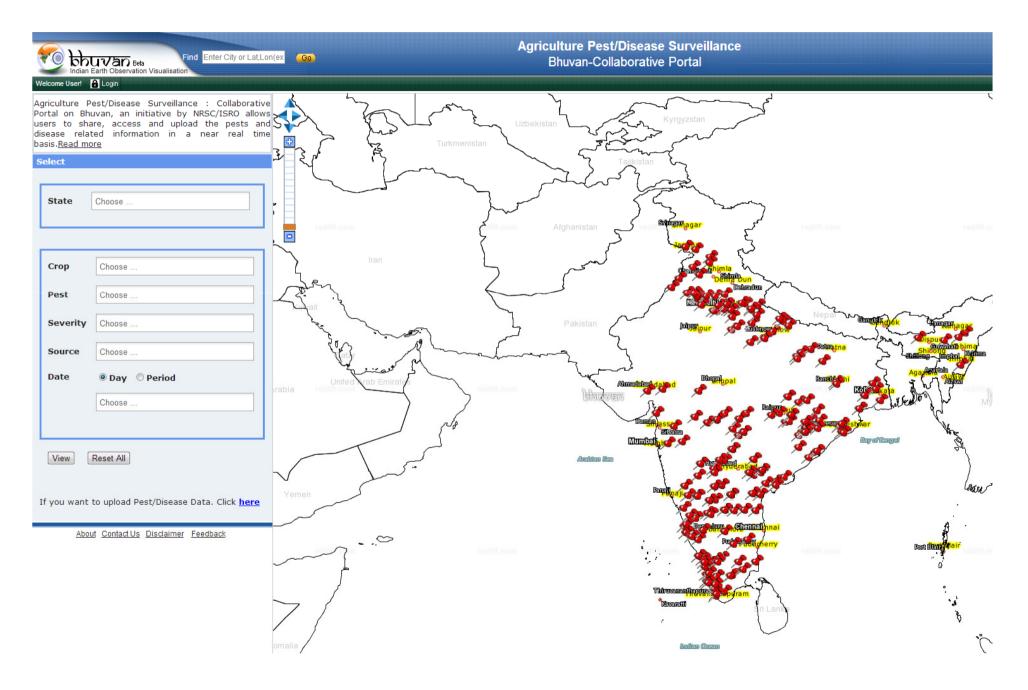
Field/SiteID(YYYYMMDD-NNN) Enter here Type of Crop Enter here . SizeofCropField/site Enter here CropGrowth-Stage Transplanting CropHealth-Condition Good CropCover-on-Ground 0-20% CropVariety Enter here DateOfSowing,Exp.date-of-Harvesting Home Reset Save Send Send Later

FDC app - MNCFC version 1.1 © National Remote Sensing Centre / ISRO Priso

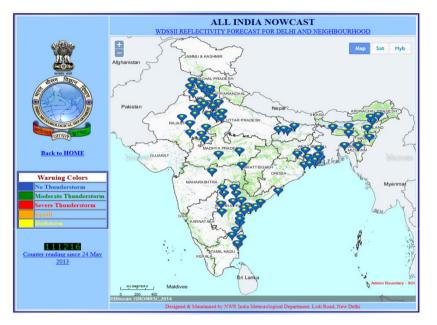
### Locational Requirements of different Kind



## **Agriculture : Pest / Disease Surveillance**



## **IMD Nowcast: Visualization on Bhuvan**



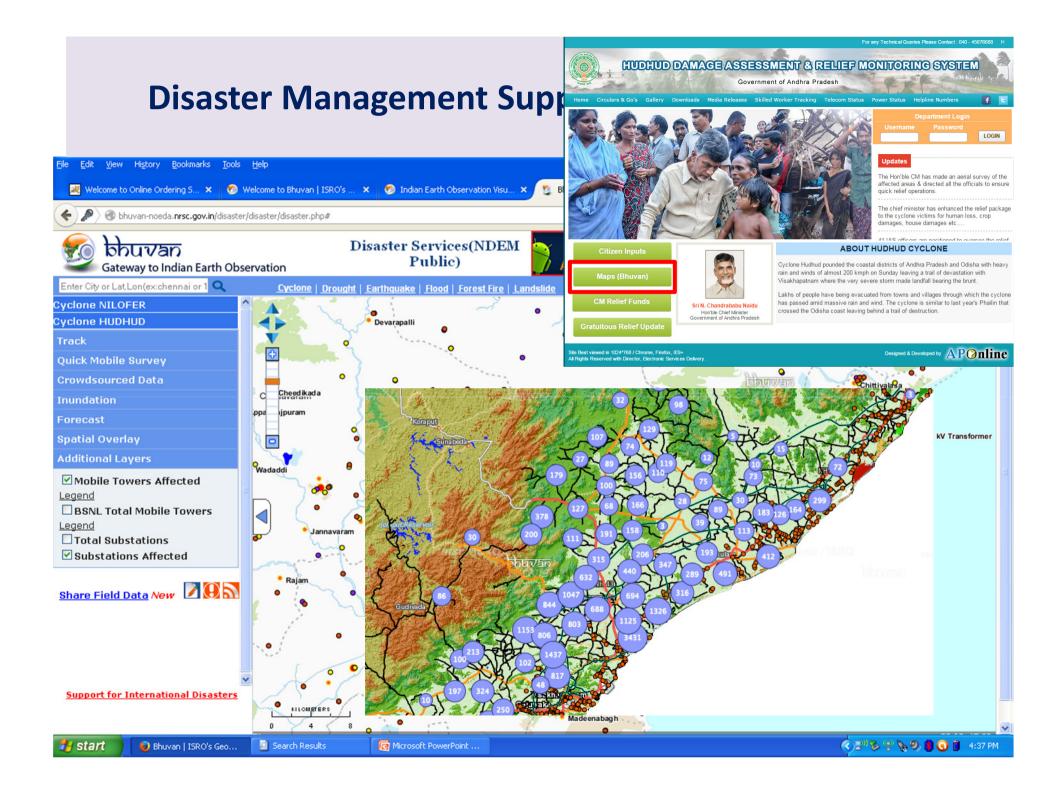


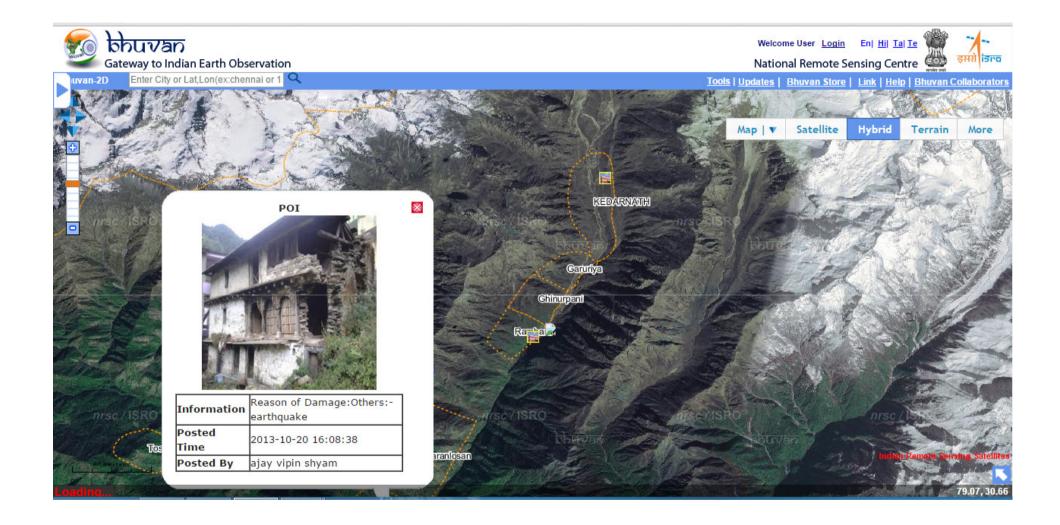
- Visualization of IMD Nowcast Fog and Thunderstorm using Bhuvan services
- OGC Compliant services Bhuvan Satellite and Base map
- Custom application from IMD servers
- Classification and mouse hover info

Knowledge Transfer to migrate all visualization from "Google to Bhuvan"

http://imd.gov.in

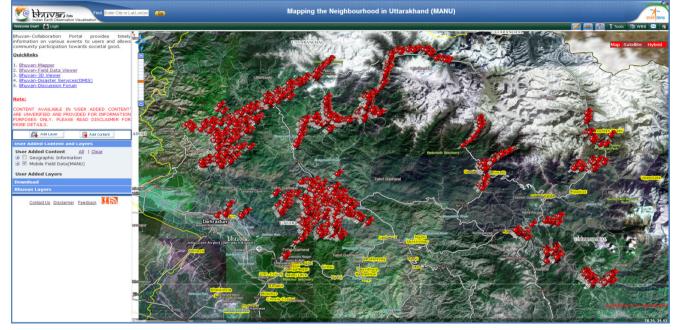




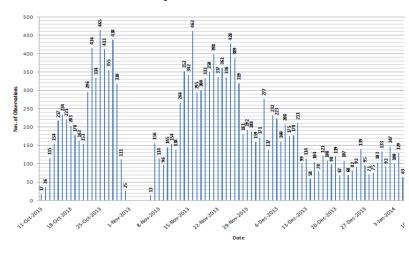


#### MANU : Collaboraton Portal : Field data Collected from Mobile

#### "Trained : 150 Students of 3 University ; On Field : 30 Teams of 3 each"



#### Profile of Day wise data collection

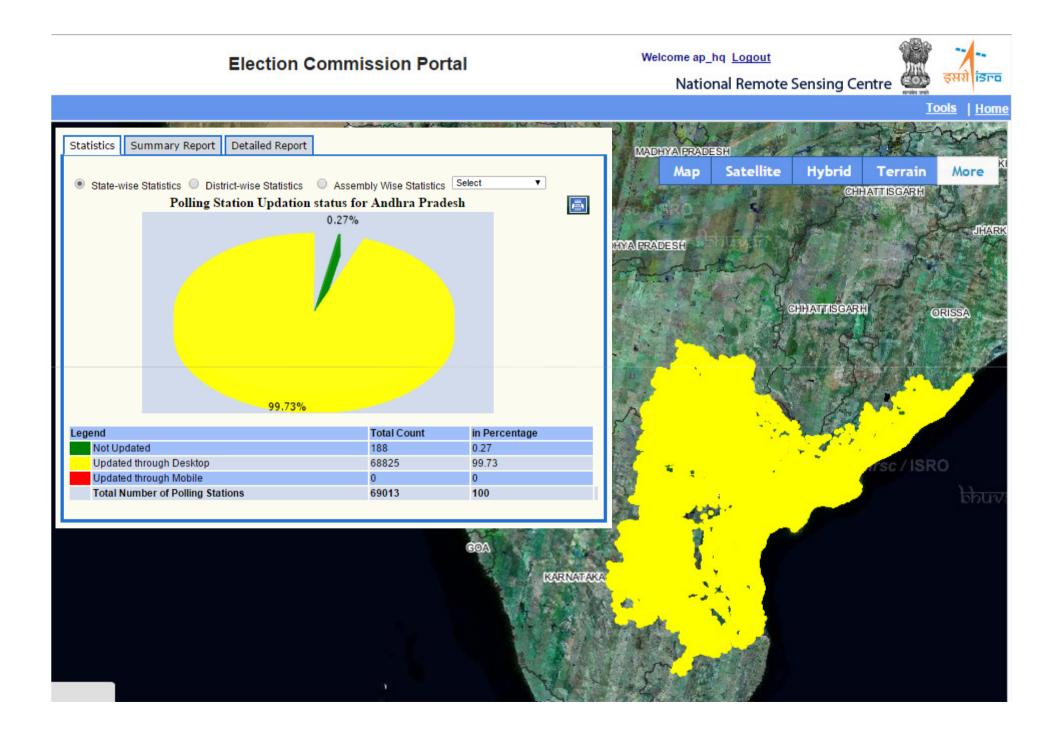


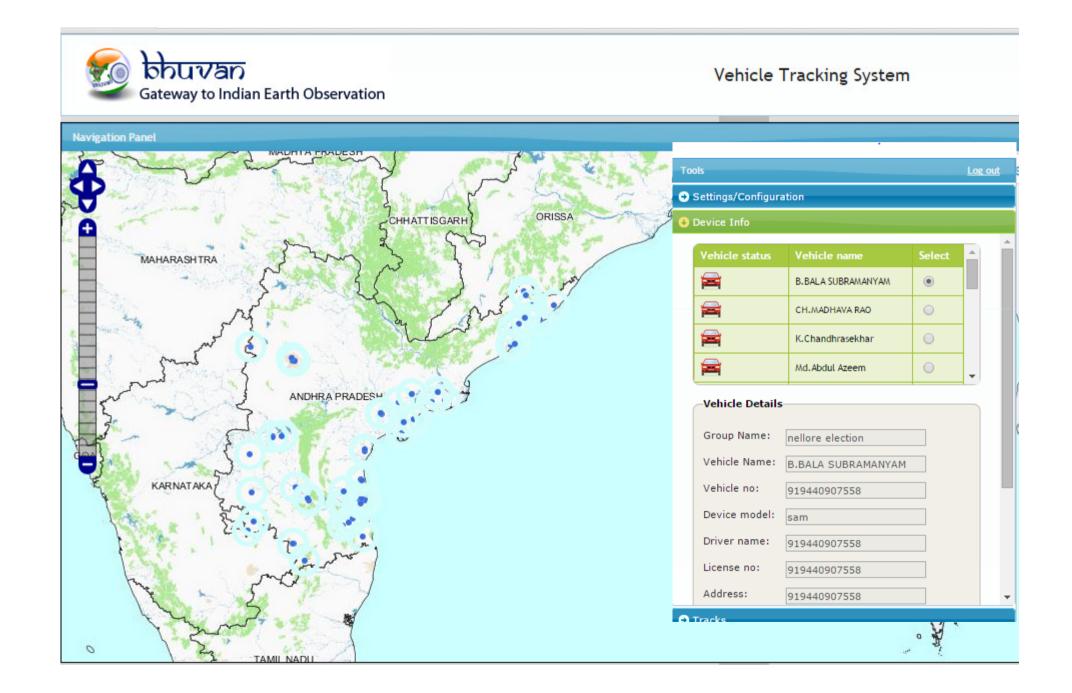
#### Total No Of Locations Collected ~ 19,799 (11 Oct 2013 - 18 Feb 2014) **Bridges or Culverts** - 0185 LandCover and **NaturalResources** - 1442 Roads - 1160 OtherInfrastructure - 1118 LandSlides - 3097 RiverBankErosion - 1022 - 2609 **Buildings BhuvanPOI** - 9146



Moderation : Accept, Reject, Edit, Review & Accept – 15 moderators

Gateway to Indian Earth Observatio	Welcome ap_hq Logout n National Remot nventory of Basic Minimum Facilities at Polling Station You have Logined as CEO,Andhra Pradesh	e Sensing Centre	Election Commission AP				
District Name & No of Assembly	Anantapur		"Role Based Access – HQ, District (23 Nos), Assembly (294 Nos) login"				
Name of the Mandal	Tadimarri •		Total No of Polling Stations 69014				
Name of the Polling station Location ( Building in Which PS is Located)	Zilla Parishat High School	.8179	Updated Polling Stations 67502 http://bhuvan.nrsc.gov.in/election.html				
PS room dimensions ( Length & width in Feet)	23 Feet 24 Feet	Ramp Facility	Yes No				
Entry & Exit Ventilation	Seperate Common Yes No	Drinking Water Fac	Facility Yes No.Staff Arranged				
	Toilets(		Available To be arranged				
Statistics Summary Report	Detailed Report	Electric Facility	Yes No				
Select District Select Assembly	Anantapur 🔹	Facility Available	<ul> <li>✓ 5AMP Sockets</li> <li>✓ Electric Points</li> <li>✓ Fans</li> <li>✓ Lights</li> </ul>				
Status	Updated O Not Updated	Compound wall to building	PS Yes No				
Facility List Data Need	Electricity   Availability Not Availability	Shed/varandaw fo	or Queue Yes No				
Dua nee	View Report Download Report Polling Station						
		Polling Station Pho (Max size:2MB .jpg,.gif,.png)	Choose file No file chosen				

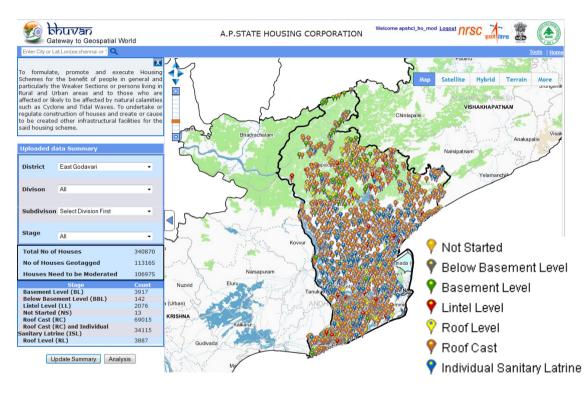




## **AP State Housing Corporation**

### "Role Based Access – HQ, District (13 Nos), Divison (43 Nos), Subdivison(179 Nos) login"

### Visualization of Geo-tagged houses through Mobile



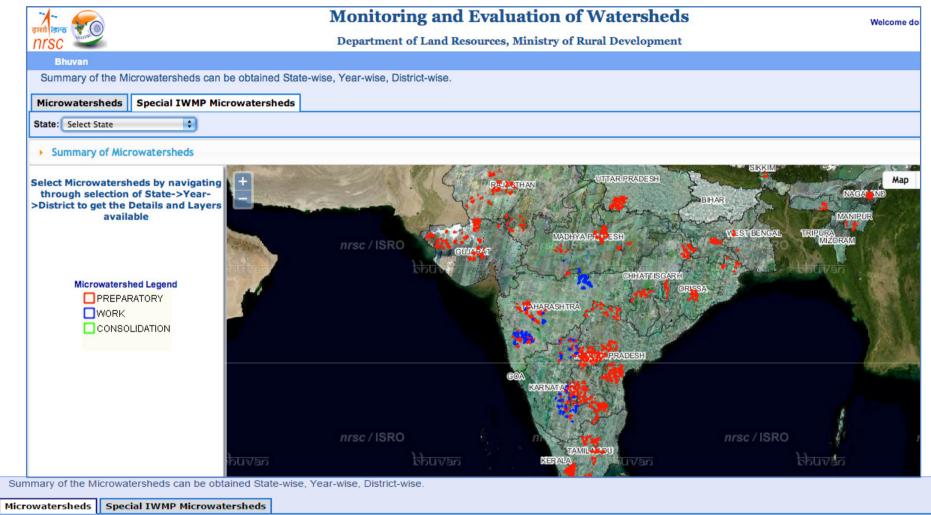
#### **Geo-tagged Photo Details**



- Geo-tagging of houses through Mobile apk with customized attributes.
- Spatial View of Geo-tagged Photos
- Stage Wise Filter of Houses
- · Report generation for Collected and moderated Points
- Moderation Visual Verification for DEE logins

#### Statistics as on 20-01-2015

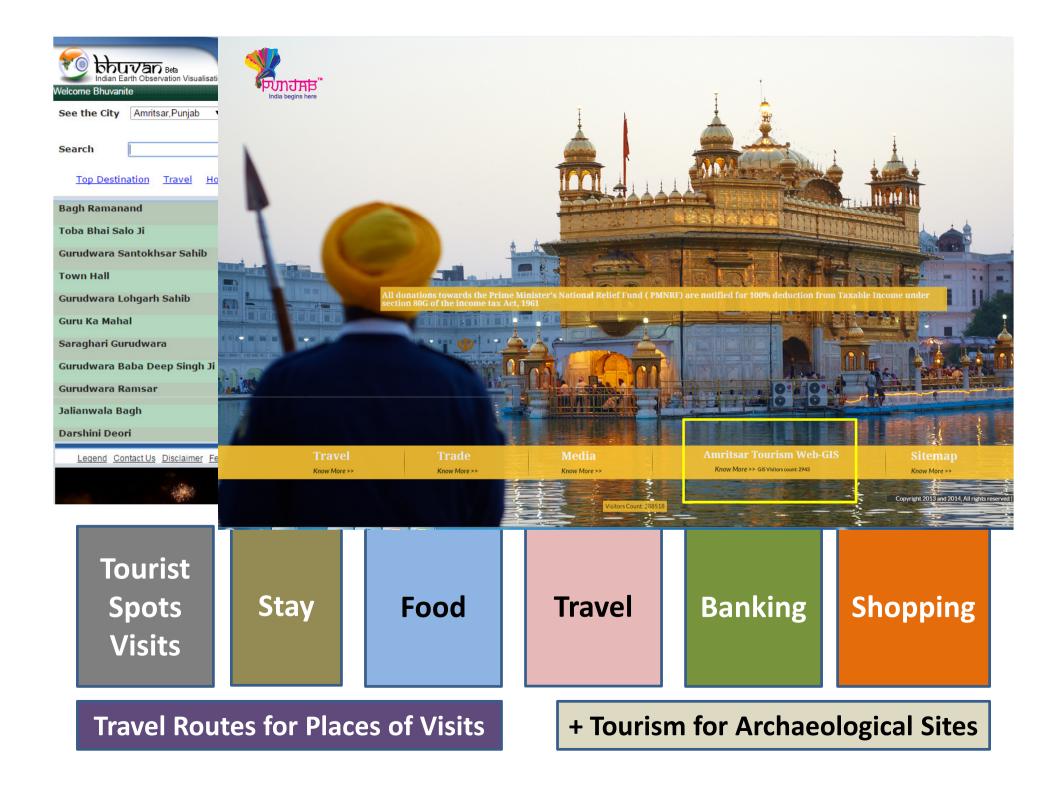
Total No of Houses	3682255
No of Houses Geotagged	2002731
No of Houses Moderated	115448

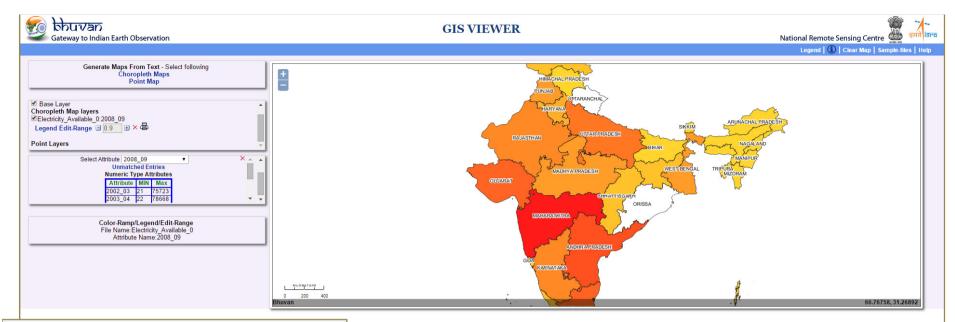


I						
	State:	MAHARASHTRA	•	Year:	Select Year	•
l						

#### Summary of Microwatersheds

Year-wise Summary State: MAHARASHTRA									
SNo.	Year	Total Microwatersheds	Area (Ha)	Preparatory	Ongoing	Consolidated			
1	2009-10	15	0	15	0	0			
2	2010-11	467	0	467	0	0			
3	2011-12	285	0	285	0	0			
4	2012-13	167	1	167	0	0			
5	2013-14	149	0	149	0	0			
6	null	7	0	7	0	0			
	Total	1090	1	1090	0	0			

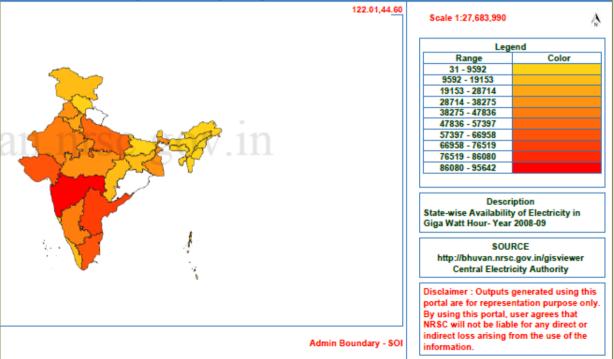




#### File Edit Format View Help

State, 2002-03, 2003-04, 2004-05, 2005-06, 2006-07, 2007-08, 2008-09 Andaman & Nicobar Islands, 135, 153, 126, 154, 178, 205, 212 Andhra Pradesh, 45006, 47279, 51309, 49822, 56390, 63048, 67428 Arunachal Pradesh, 130, 238, 406, 321, 328, 517, 511 Assam, 3178, 3164, 3862, 3692, 3884, 4144, 4483 Bihar, 5990, 5921, 6494, 7179, 7756, 8580, 9294 Chandigarh, 1059, 1367, 1319, 1438, 1421, 1518, 1473 Chhattisgarh, 11214, 10881, 11770, 12747, 13829, 15116, 16330 Dadra & Nagar Haveli, 1504, 1821, 2105, 2657, 3061, 3572, 3636 Daman & Diu,966,1104,1186,1387,1497,1675,1658 Delhi,20591,23862,23526,26120,21907,22884,22456 Goa, 3195, 2761, 2877, 2666, 2938, 3233, 3158 Gujarat,48162,50097,53411,51452,54270,60302,60540 Harvana, 18800, 19014, 20403, 22199, 24969, 27185, 27854 Himachal Pradesh, 4402, 5620, 5738, 4668, 5360, 6046, 6463 Jammu & Kashmir,6465,6967,6696,7606,8394,9101,9603 Jharkhand, 8976, 10706, 11154, 12774, 14705, 14820, 16615 Karnataka, 29383, 30171, 33524, 36597, 41426, 41716, 43437 Kerala, 12300, 11635, 12285, 13321, 13983, 14348, 14035 Lakshadweep, 21, 22, 22, 25, 28, 29, 31 Madhya Pradesh, 26820, 27178, 29321, 32322, 33079, 36689, 35224 Maharashtra,75723,78668,82075,85870,91092,97389,95642 Manipur,491,504,604,510,467,542,538 Meghalaya,935,966,1290,1213,1204,1432,1512 Mizoram, 278, 292, 386, 221, 235, 324, 350 Nagaland, 292, 303, 354, 353, 346, 412, 463 Odisha,12528,16955,18483,14885,16036,18663,20459 Puducherry, 1961, 2030, 2222, 2291, 2493, 2202, 2125 Punjab, 28676, 30627, 30564, 33493, 35956, 38721, 37995 Rajasthan, 26690, 27157, 30159, 29982, 31110, 36290, 38875 Sikkim, 162, 405, 528, 234, 290, 412, 453 Tamil Nadu, 45015, 47703, 51487, 54730, 62064, 64403, 65420 Tripura,674,835,1129,629,605,696,702

#### State-wise Availability of Electricity in GigaWattHour- 2008-09



### A place without meaning is no place to be

- Wayne Gerard Trotman, Veterans of Phychic Wars

# Thanks

www.bhuvan.nrsc.gov.in

vinod.bothale@gmail.com