

# A Thousand Leaves

Online Tool for City Level Slum-Free  
Planning



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# Le Mille-feuille...the thousand leaves and a Lefebvrian Paradox

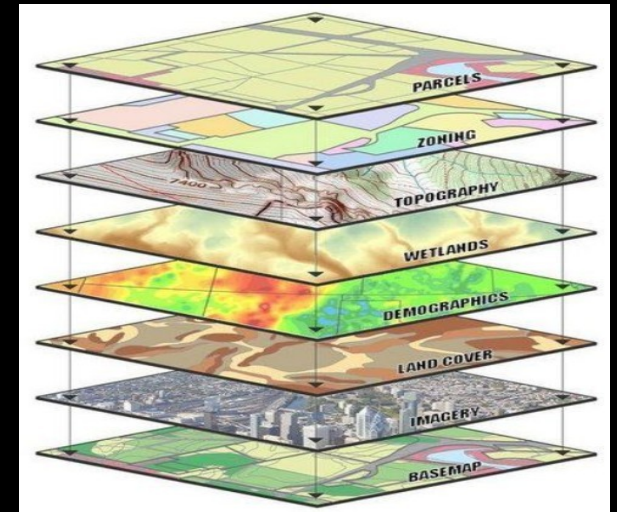


*“Thus social space, especially urban space, emerged in all its diversity – and with a structure far more reminiscent of flaky mille-feuille pastry than of the homogenous and isotropic space of classical (Euclidean/Cartesian) mathematics.”*

- Henri Lefebvre, 'The Production of Space', 1974

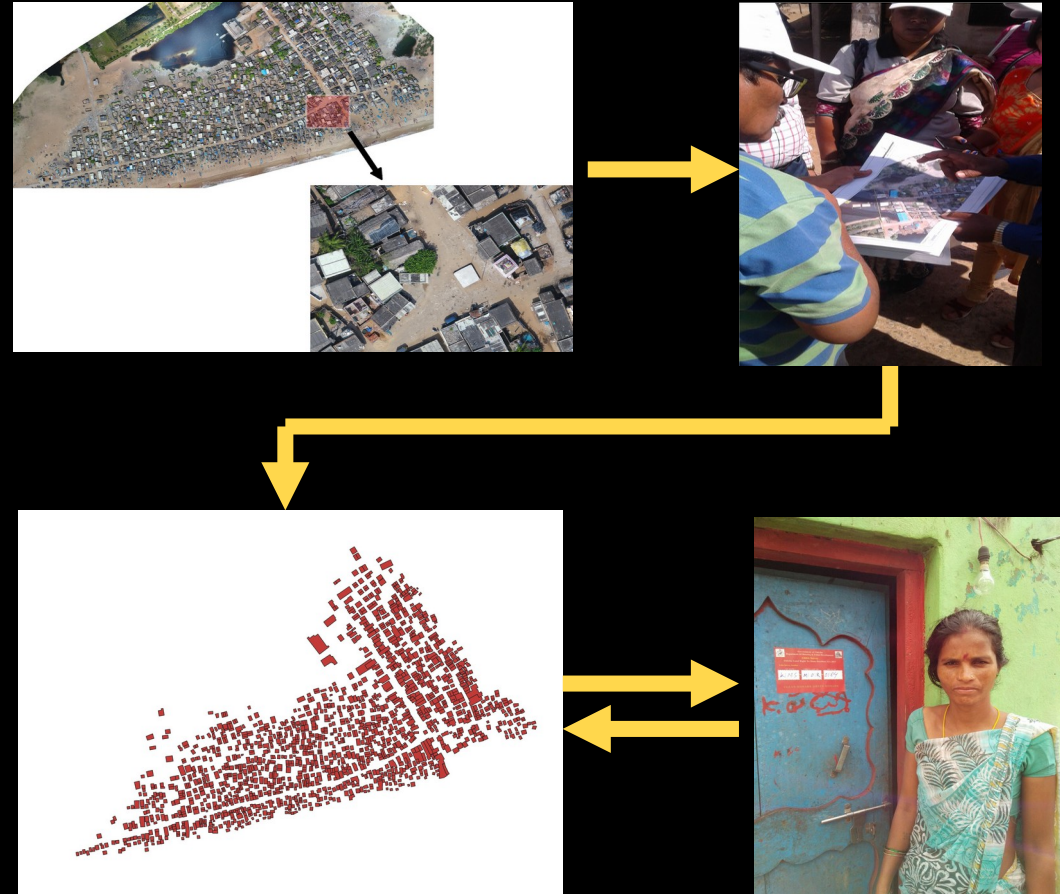


From a thousand  
leaves to a thousand  
layers

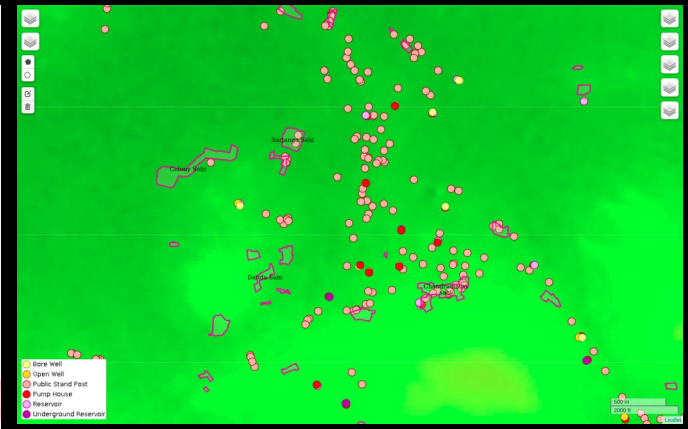
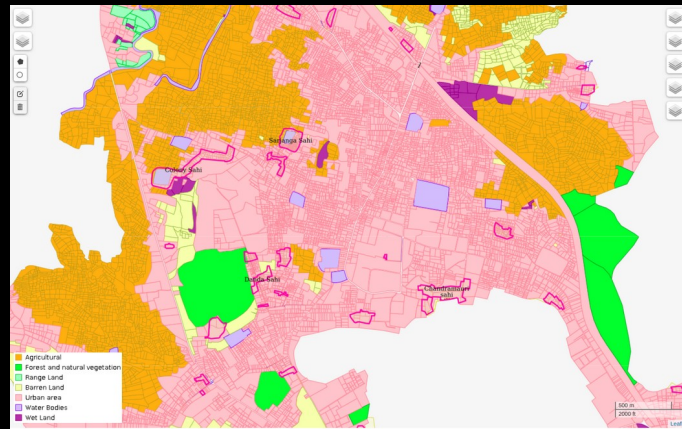


# JAGA Mission – Bringing Geo-spatial technologies and Community Participation together

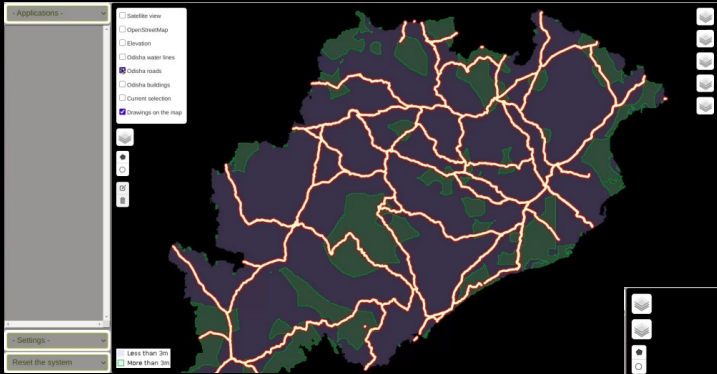
- Probably the only region in the world with a complete, high-resolution geo-spatial database of all its slums.
- Slum Dwellers Organisations created in each slum.
- The preparation and use of geo-spatial data and the community participation activities were locked in an iterative and mutually dependent relationship.
- Not just an altruistic system but also an extremely pragmatic and functional one



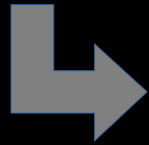
# From Data Collection and Storing to Spatial Analysis and Decision Making



# Operating at multiple scales



STATE LEVEL



CITY LEVEL



SLUM LEVEL

# Combining Spatial Analysis with Participatory Processes



With Municipal Executive Officers for City Level Decision making



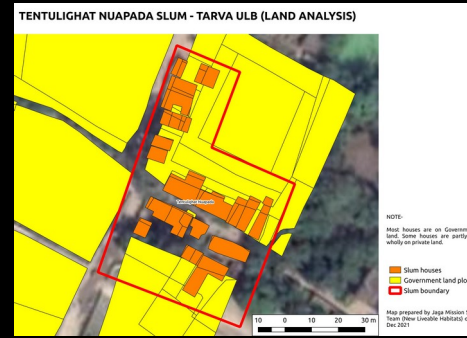
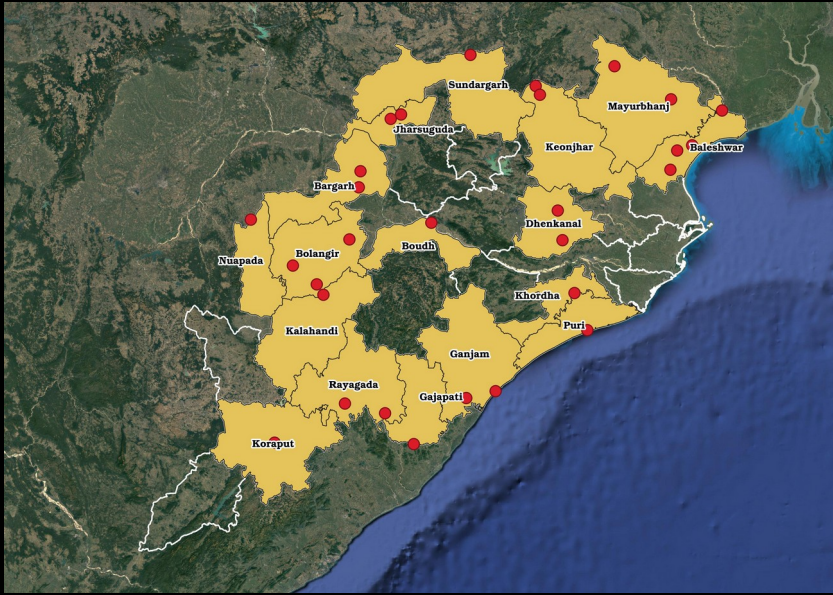
With Revenue Specialists for land re-classification;



With SDAs for tapping local knowledge



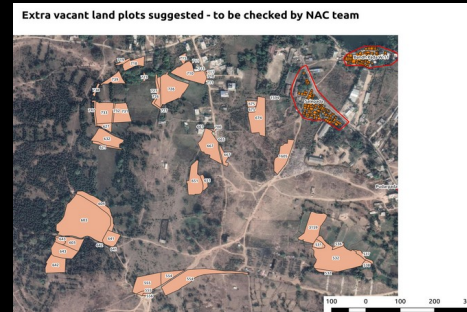
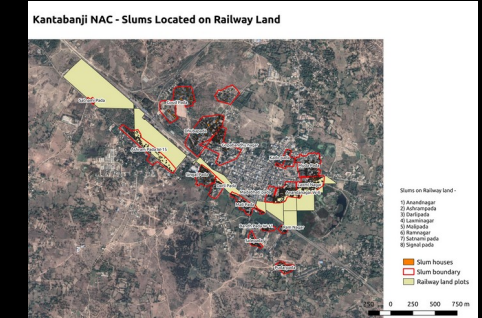
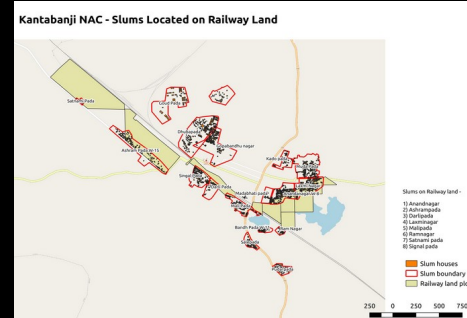
Identification of vacant land for New Habitats with Municipal Officials



## Critical Case – New Liveable Habitats

- Total quantity + vulnerability => **minimise**
- Overall quality + monitoring + participation => **maximise**

Reduced number of slums facing relocation possibilities to less than 5 % of total



***“Spatial analysis means...get your shoes dirty”***  
– Prof. Jorgen Andreassen

**And...Communicate ! The code is in the streets....not in the computer !**



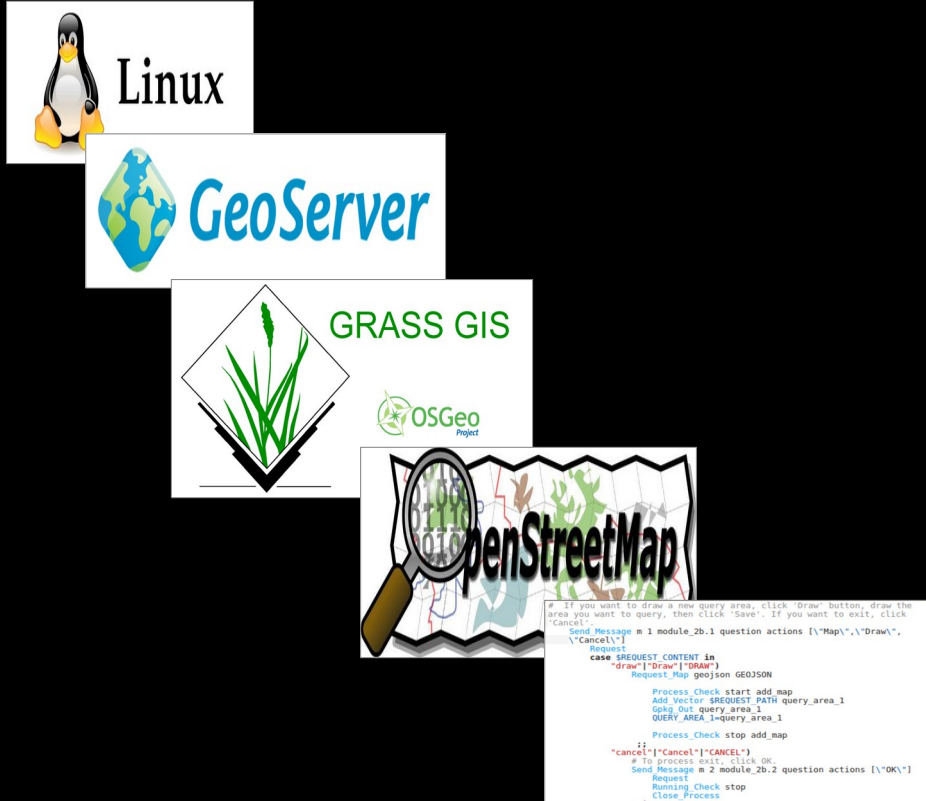
Shoes dirty,as in...Literally !



Communicate,as in...with **Everybody** !



# FOSS meets JAGA ... Open-source Computing as an ally of the “Right to the City”



Linux

GeoServer

GRASS GIS

OSGeo Project

OpenStreetMap

```
If you want to draw a new query area, click "Draw" button, draw the area you want to query, then click "Save". If you want to exit, click "Cancel".
Send_Message m 1 module_2b.1 question actions [{"Map"}, {"Draw"}, {"Cancel"}]
Request
case $REQUEST_CONTENT in
  "draw"|"Draw"|"FORM")
  Request_Map geojson GEOJSON
  Process_Check start add_map
  Add_Vector $REQUEST_PATH query_area_1
  Gpkg_Out query_area_1
  QUERY_AREA_1=query_area_1
  Process_Check stop add_map
  ;;
  "cancel"|"Cancel"|"CANCEL")
  # To process exit, click OK.
  Send_Message m 2 module_2b.2 question actions [{"OK"}]
  Request
  Running_Check stop
  Close_Process
```

