



## Mapping for an accessible world



**Master Planning to counter urban sprawl  
using geo spatial data base**

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### Introduction



#### **Geomatics Solutions**

**GIS Solutions**  
**Photogrammetry and Remote Sensing**  
**CAD Solutions**  
**GIS Application Development**



#### **Software Solutions**

**Custom Software Development**  
**Hospitality Solutions**  
**Embedded Solutions**  
**Networking Solutions**



#### **Graphics Solutions**

**Graphics Design**  
**Panorama and Virtual Tools**  
**Multimedia and Animation**  
**Digital Image Editing**



#### **Business Process Outsourcing**

**Financial & Accounting Solutions**  
**Genealogy Solutions**  
**Document Management Solutions**  
**KPO and Research**

## Input & Study area

### ☐ Input

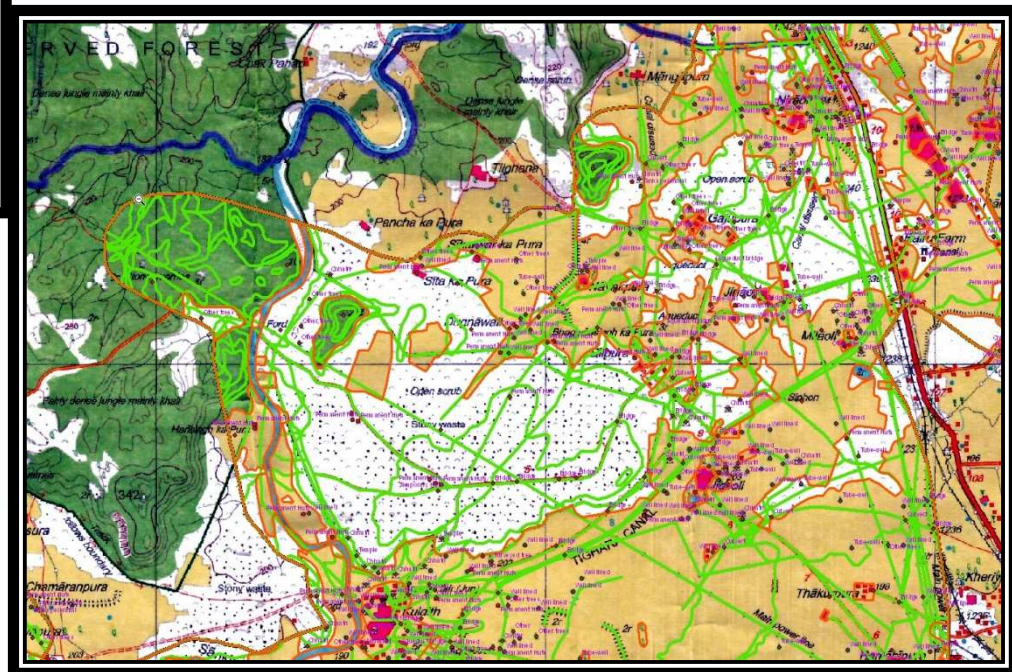
SOI toposheets on 1:50,000 scale

Geo Eye Satellite images with 0.5m resolutions

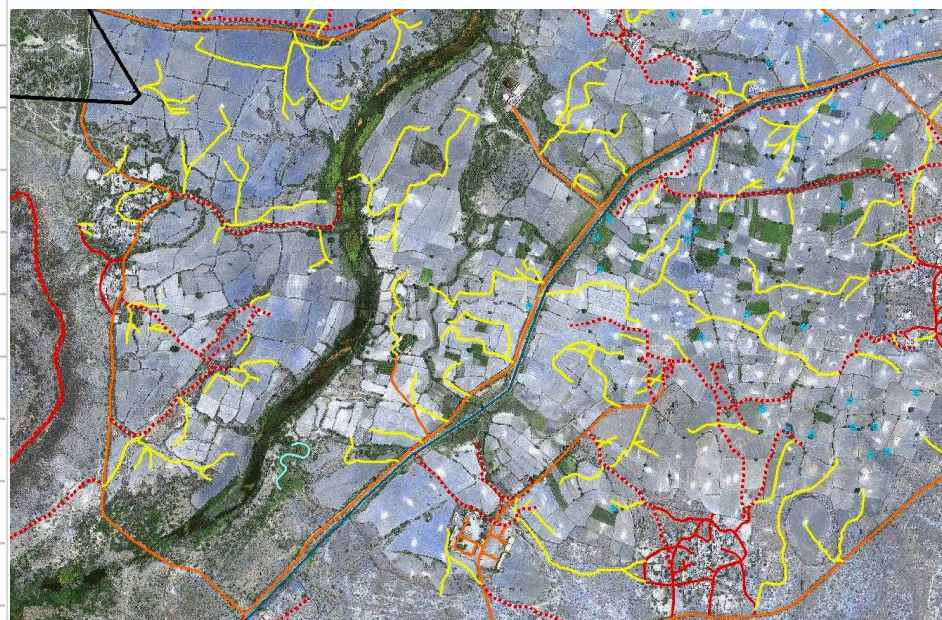
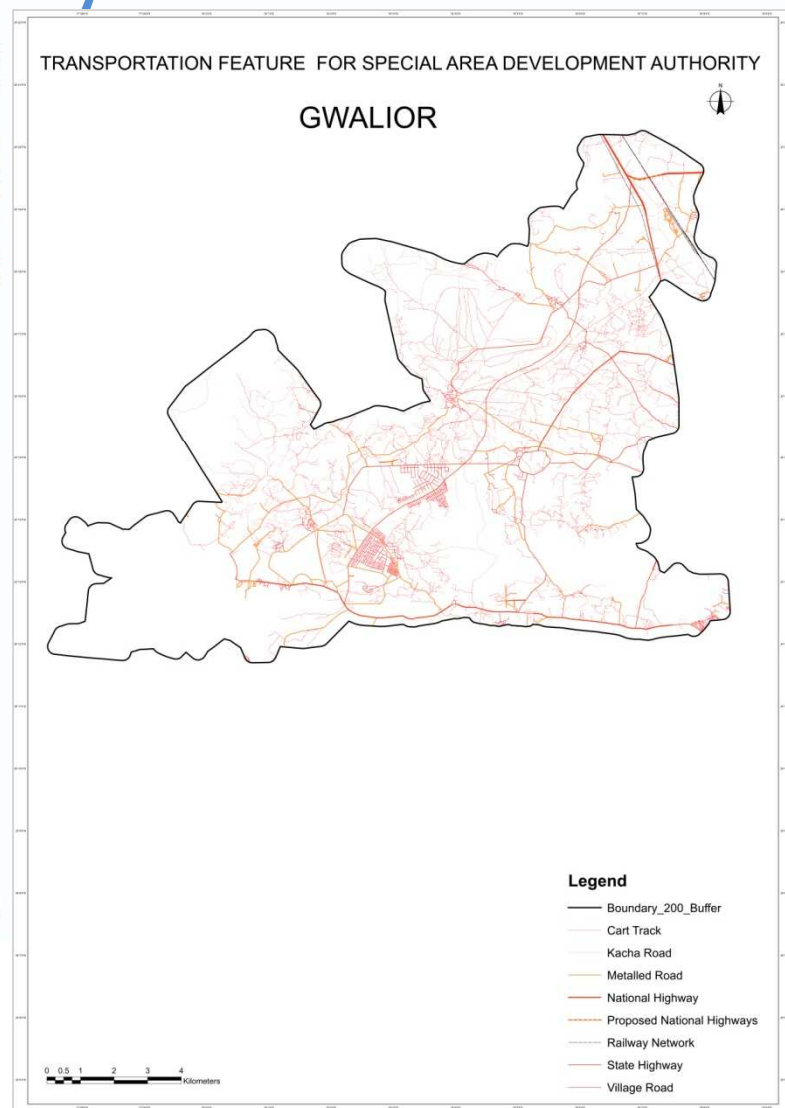
### ☐ Study area

30,000 ha and expandable to 75,000 ha adjacent to  
Gwalior

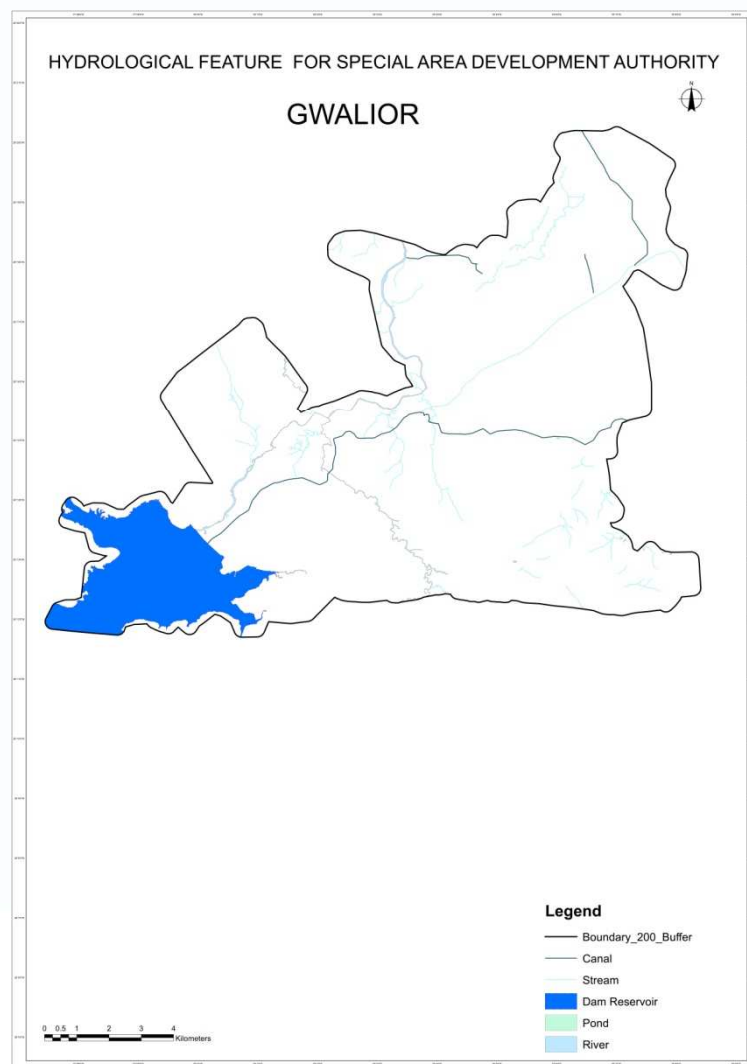
## Layers extracted from Survey of India toposheets



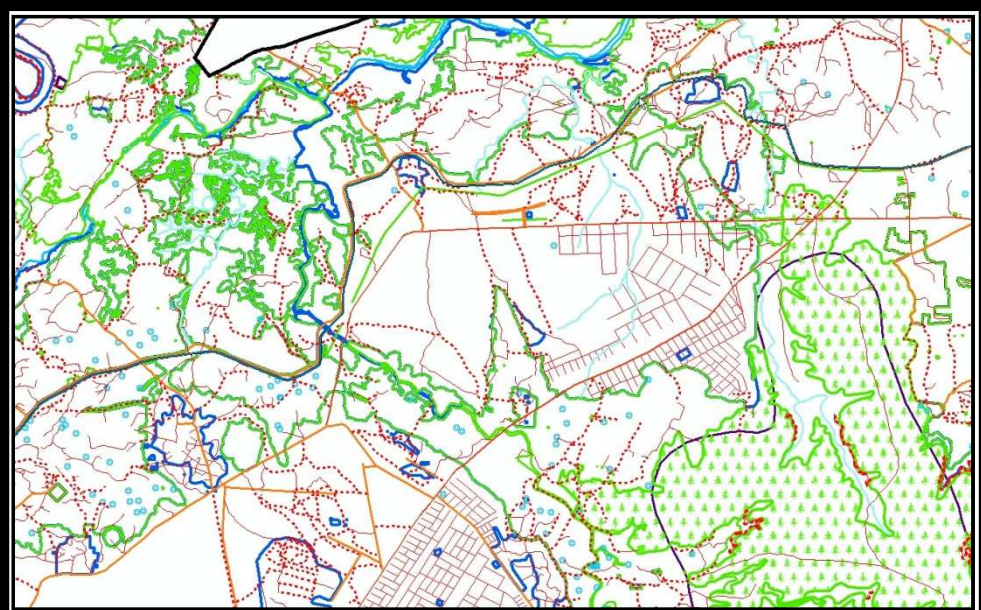
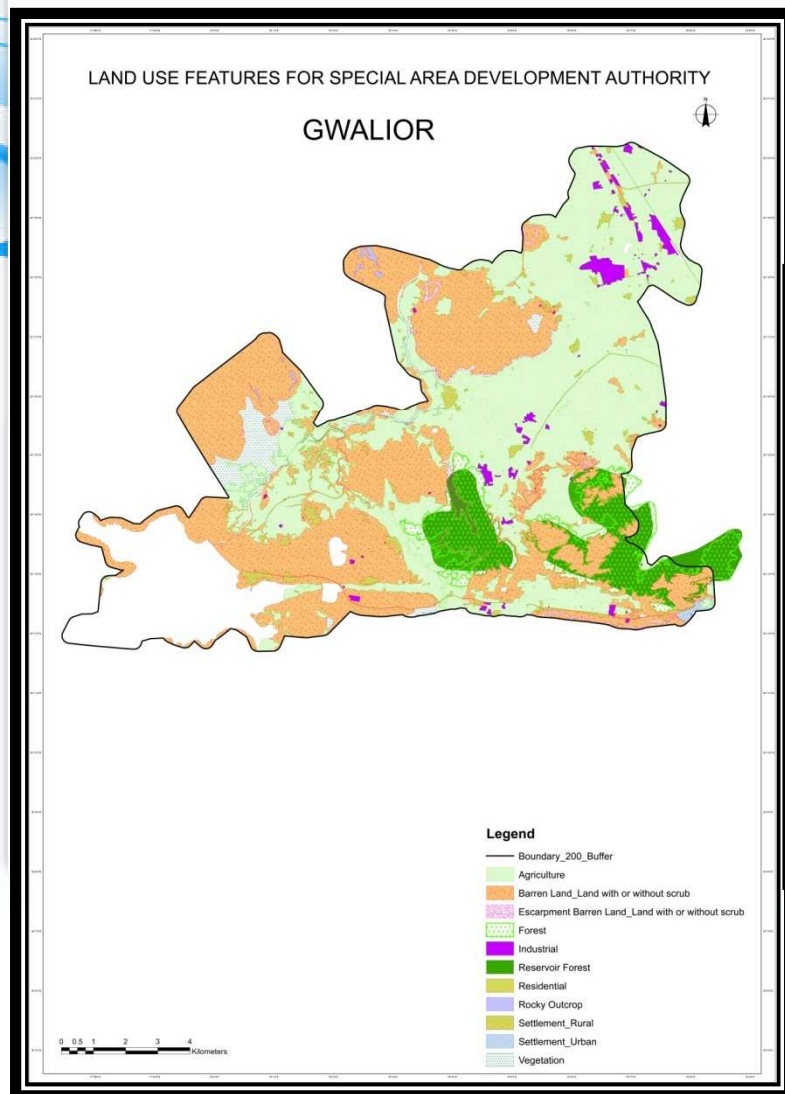
## Layers extracted from Satellite Images-Transportation



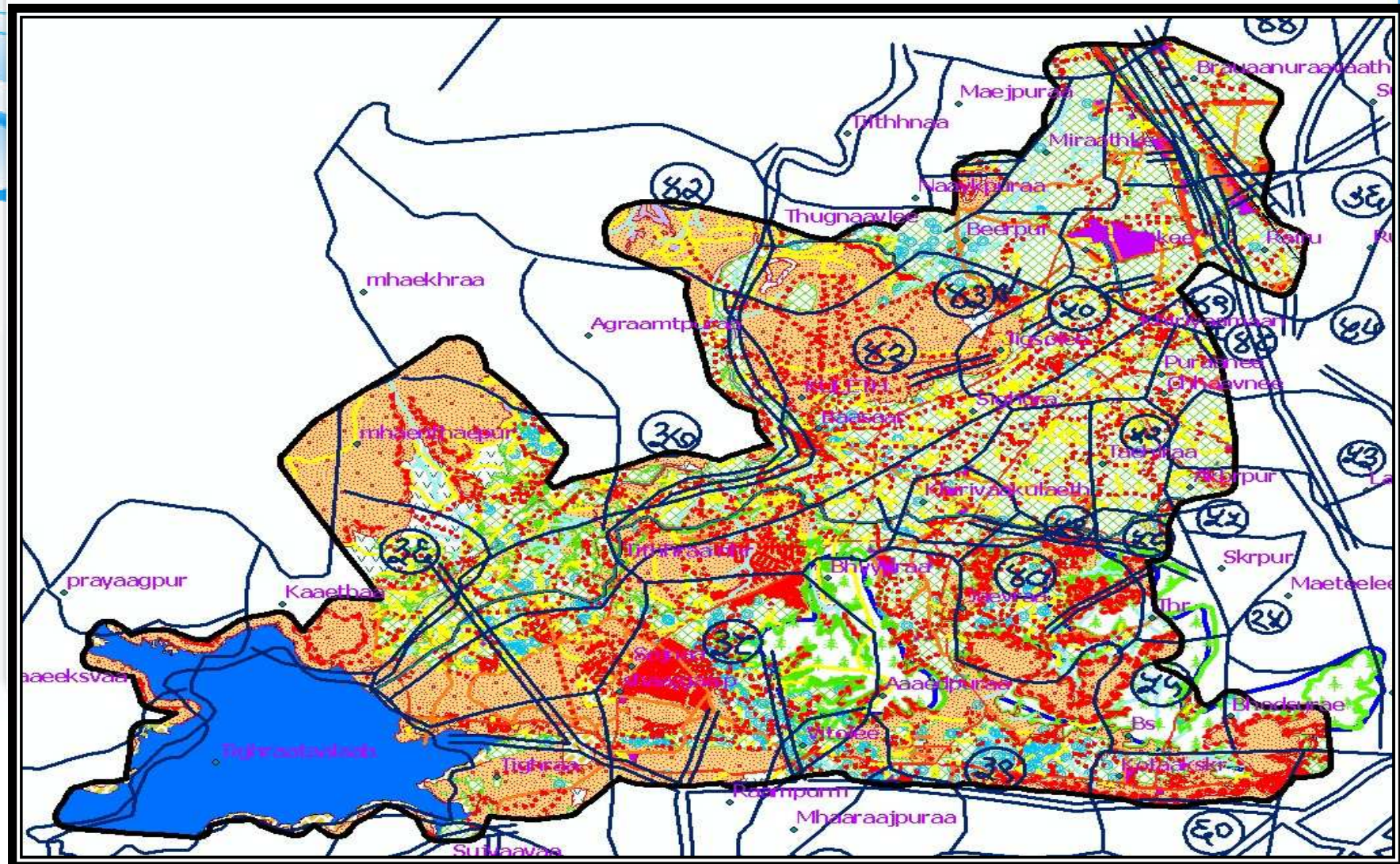
## Layers extracted from Satellite Images-Hydrological Layers



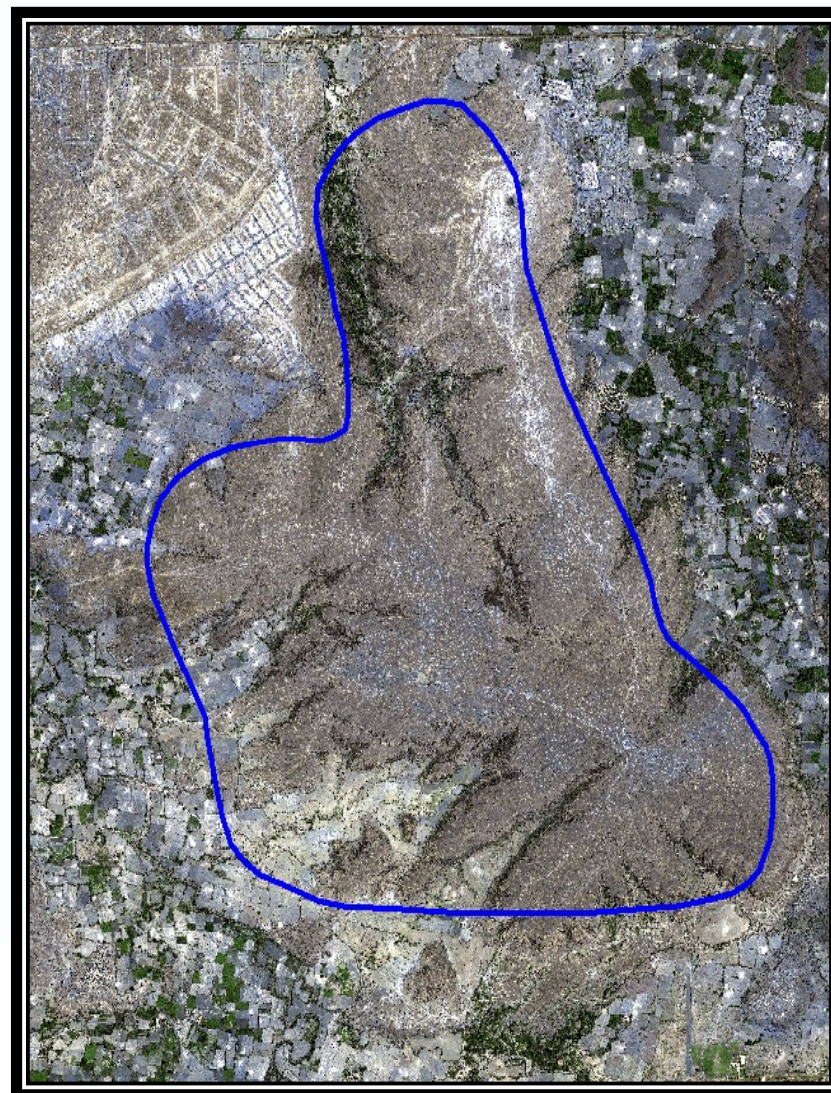
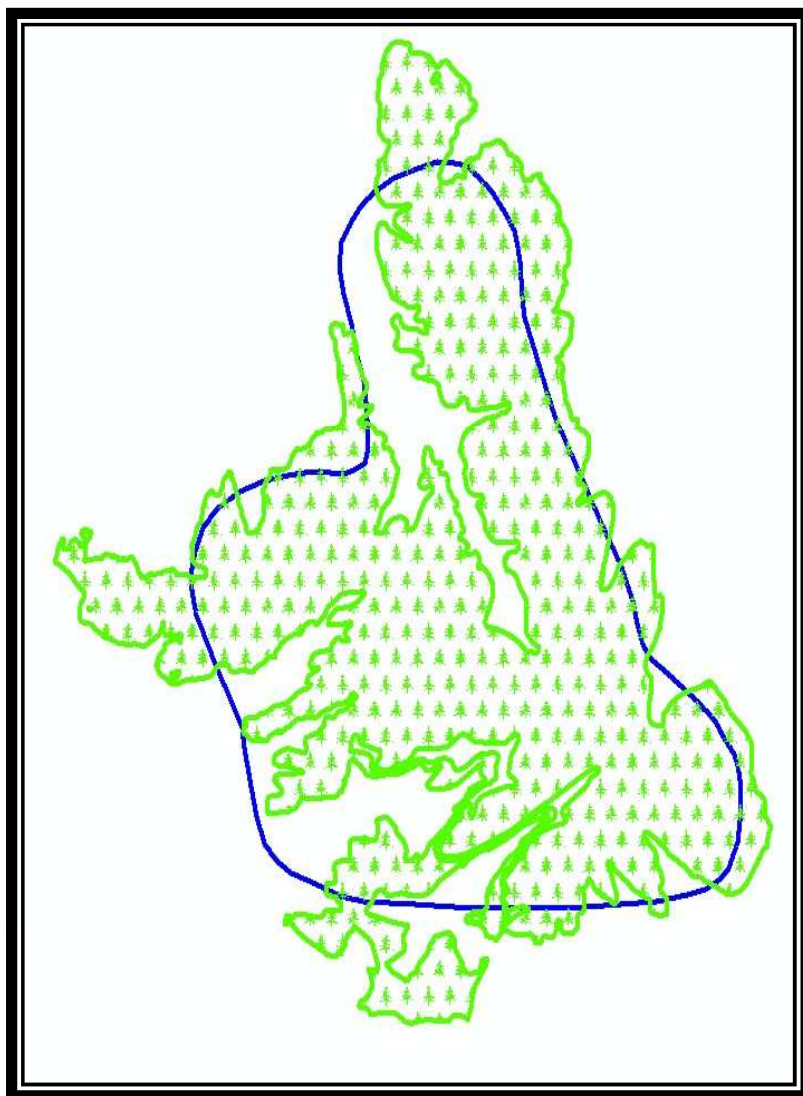
## Layers extracted from Satellite Images-Land Use layers



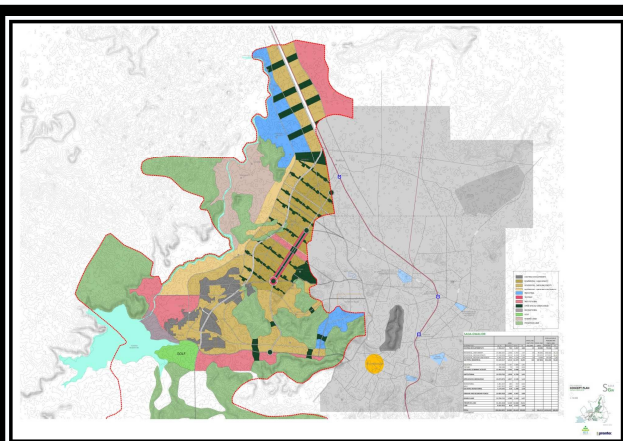
## Land parcel boundary incorporation



### Challenges faced



## Concept Master Plan



## **Salient Results**

- Largest Master Planning exercise in India with 30,000ha of land and expanding to 75,000ha
- Large amount of available barren land
- A robust geo data base of existing land use
- Master plan zoning for residential, recreational, industrial, utilities etc
- New transportation logistics (road, rail, airport) and ICD planned
- Data base for a 20 year master plan
- Intended to de-magnet polulation from major urban centers

# Thank You