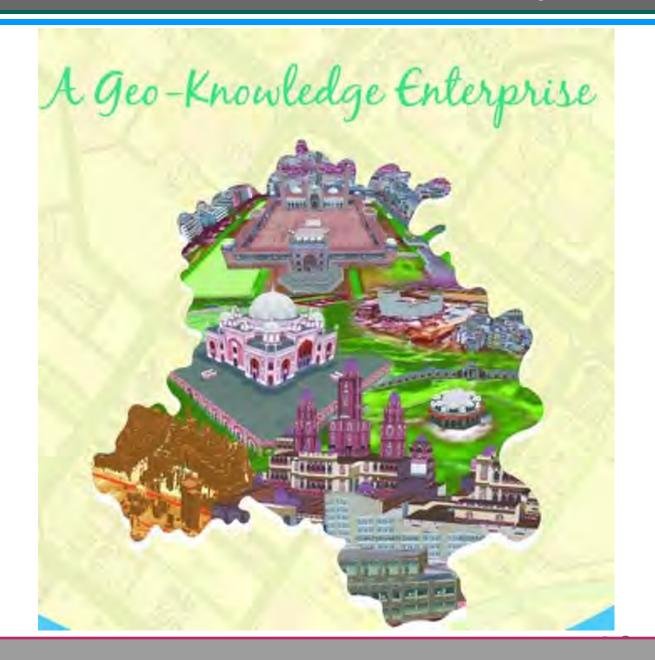
Land Administration: A Delhi Perspective



Overview

- About GSDL & Delhi Land Administration
- **2** Scenario Couples of Year Back
- **3** GIS Workflow & Requirement
- 4 Geospatial Data Requirement for Land Administration
- **5** Geospatial Application Requirement
- 6 Implementation of C-LIS
- **7** Summary



Objective

About the Geospatial Delhi Limited

The Delhi Geospatial Limited is a Government of NCT of Delhi Company, Set up under the Delhi Geospatial Act 20 November 2011, with the aim to provide solution & implementation of G-Governance

Domain Expertise in Cluster

Land & Property -DDA, Revenue, MCD, Urban Development & Forest & Wild Life

Utility Management-DJB,IGL,NDPL etc

Transport & Navigation: DTC, DMITS & Delhi Metro

Social Sector: Health, Education, Women & Child Development Board

Environment: DPCB, Env. & Forest

Demography: Election Commission, Census etc

Infrastructure: PWD, DUSIB & UTTIPEC etc

Introduction

- Land in Delhi can be generally categorized as-
- Urban Land: Under Urban Local Body i.e., MCD/NDMC, Land & Development Office of Govt. of India and Cantonment Board
- Land under non-urban or agricultural land generally referred to as revenue land. Most of the agricultural land in Delhi is governed by Delhi Land Reforms Act 1954 and the East Punjab Holdings (of Consolidation and Prevention of Fragmentation) Act, 1948

Delhi Land Administration Agency:

Delhi Development Authority

It was created in 1957 under the provisions of the Delhi Development Act "to promote and secure the development of Delhi". It is responsible for the planning, land development and building agency for Delhi

Land & Building Department

Responsible for large-scale acquisition of land for planned Development of Delhi and placing it at the disposal of DDA

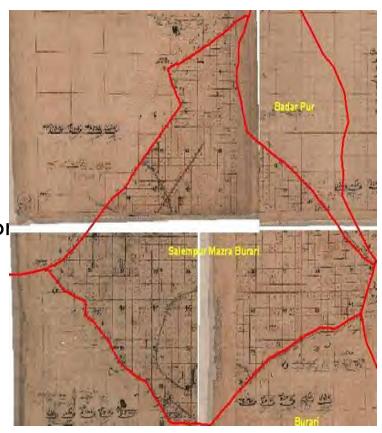
Urban Local Bodies i.e., MCD, NDMC, Delhi Cant. etc)

Service, maintenance and collection of Property tax for all land under its jurisdiction



Scenario Couples of Year Back

- No digitization of Textual data
- No integration between textual and spatial data
- No Geo-referencing of data
- Lack of permanent storage system
- Manual area calculations introduced human error
- Obsolete Legal frameworks not addressing current issues and challenges



GIS Workflow & Requirement

Revenue

Administered the Land Record Registration Mutation Verification Store the Land records securely

Delhi Development Authority

Development Planning and Project
Initiation
Land Acquisition Planning
Actual Acquisition
Infrastructure Development
Asset Management
Preparation of Zonal Plan & Master Plan



Geospatial Data Requirement for Land Administration

MCD

- Base Map
- Buildings & BuildingUnits Data
- Ownership Details
- Floor & Height Information
- Use Factor
- Tax Details
- High Resolution
 Satellite Image

Revenue

- Base Map
- Masavi Khasra & Khatauni
- Masavi Village Boundary
- Village Tri Pillar Junction
- Village Boundary Pillars
- Scan Masavi
- High Resolution Satellite
 Image
- High Precision Ground
 Control Points etc

DDA

- Land Ownership Data
- Socio & EconomicData
- Base Map
- High Resolution
 Satellite Image etc



Geospatial Application Requirement

Revenue

- Query Base Analysis
- Land Mutation
- Registration
- Land Titling

DDA

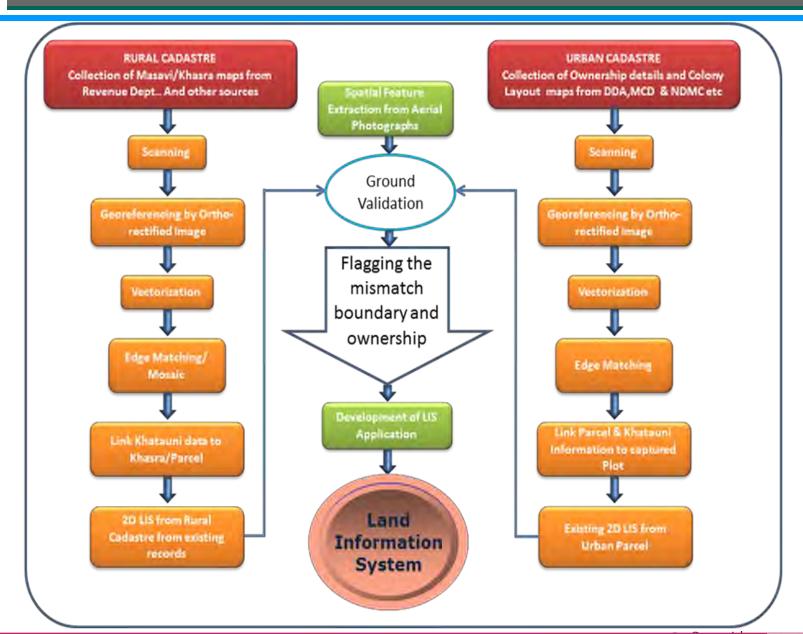
- Land Acquisition with Ownership
- Socio & Economic for Planning
- Online Requisition System
- Approval Mechanism based on Various
 Parameters
- Integration of MIS & GIS

MCD

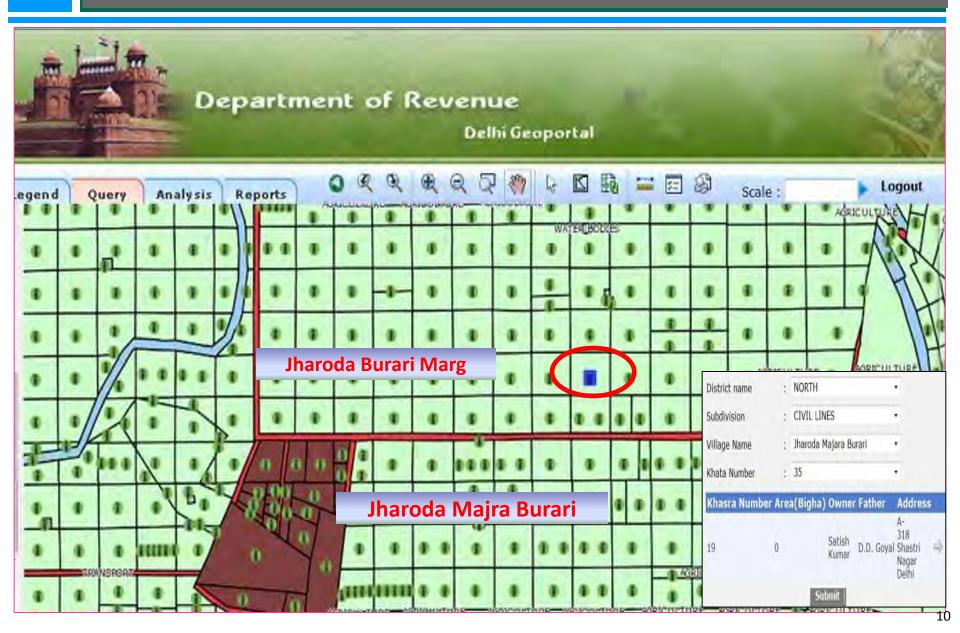
- Property Tax
- Waste DisposalSystem
- Building Permission
- GPS Based GarbageCollection
- Permit Tracking System
- Citizen Service etc



Implementation of Comprehensive Land Information System



Delhi Geoportal-Revenue Department



Set of Query available in Delhi Geoportal (Revenue)

District Name : SOUTH WEST

Subdivision: NAJAFGARH

3 . Village: SURKHAPUR

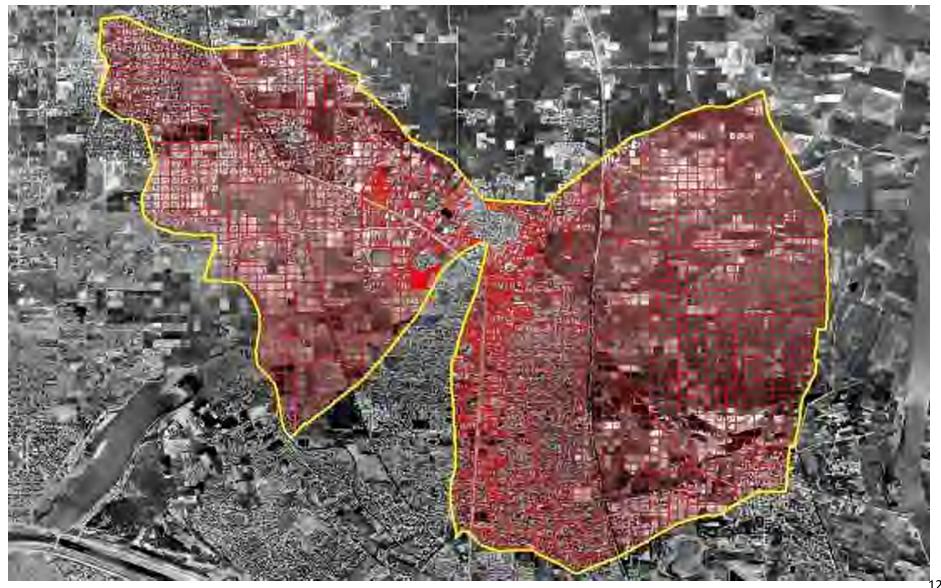
4. Khata No: 3

5 . Khasra No : 145/1

6 . Application zooms to the selected Khasra



Vector Overlay on Ortho Image



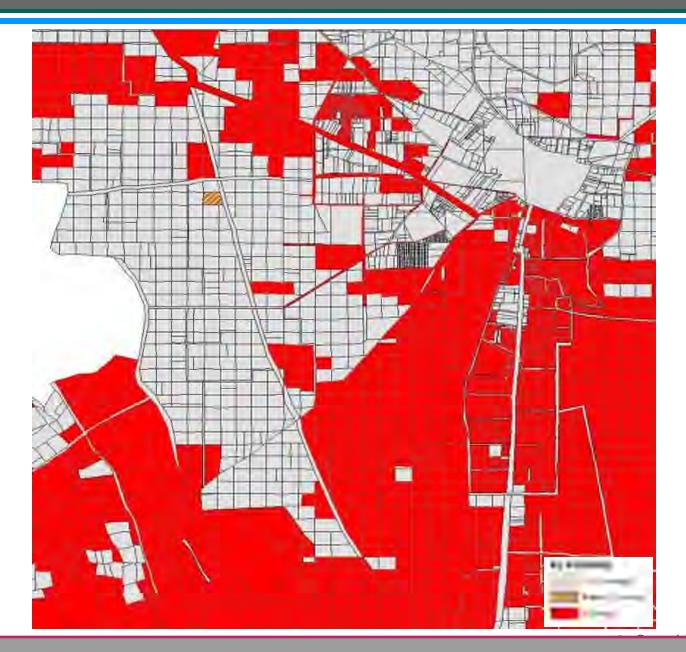
Khatauni Details of Burari Village



Mismatching of Rectangle no, Khasra No in Masavi and Khatauni

Perfectly Match	ed					
	Rectangle Number	Khasra Number	Min Number			
In Khatauni	2	15	0	48/8/0• 48/8/0		
In Masavi	2	15	0			
Arbitrarily Matc	hed		I			
	Rectangle Number	Khasra Number	Min Number			
In Khatauni	2	15	1	40/7/1/1/0 40/7/1		
	2	15	2	40/7/1/10 40/7/1		
In Masavi	2	15	0			
	40	7/2	3			
Not Matched						
	Rectangle Number	Khasra Number	Min Number			
In Khatauni	2	15	1			
In Masavi	Not match at all					

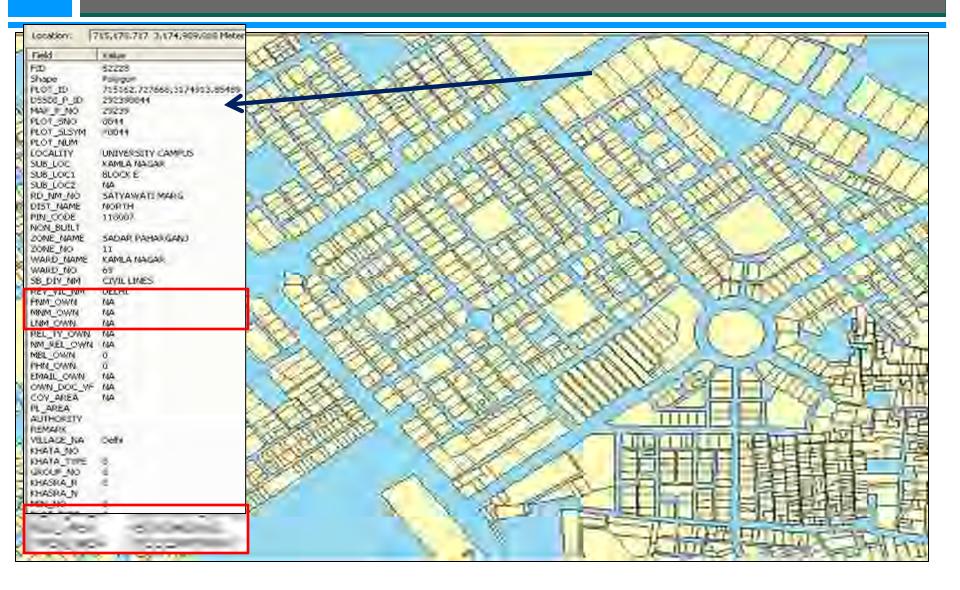
Flagging of Masavi vector with Satellite Imagery for Change Detection



Plot Information Overlaid With Satellite Image



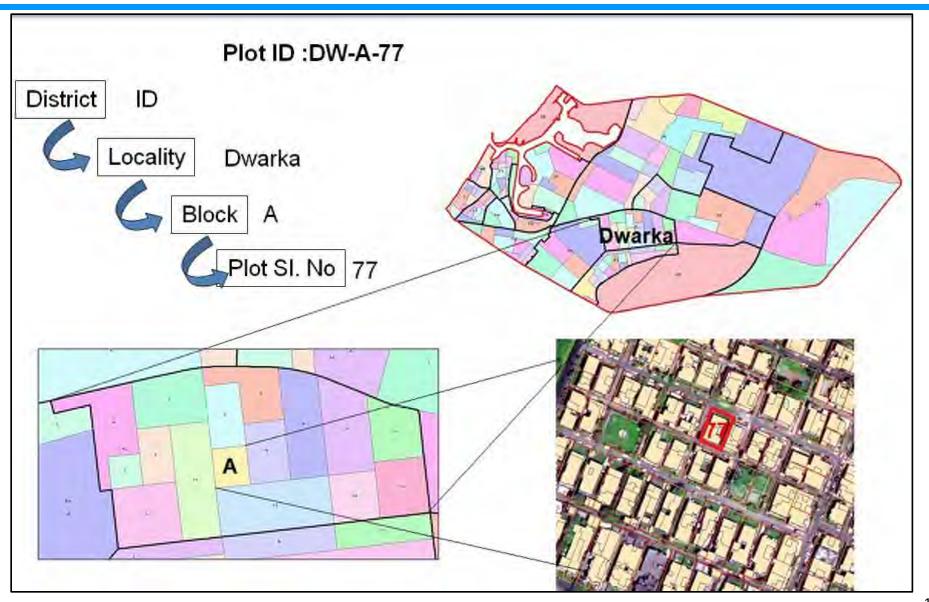
Plot Information-Urban



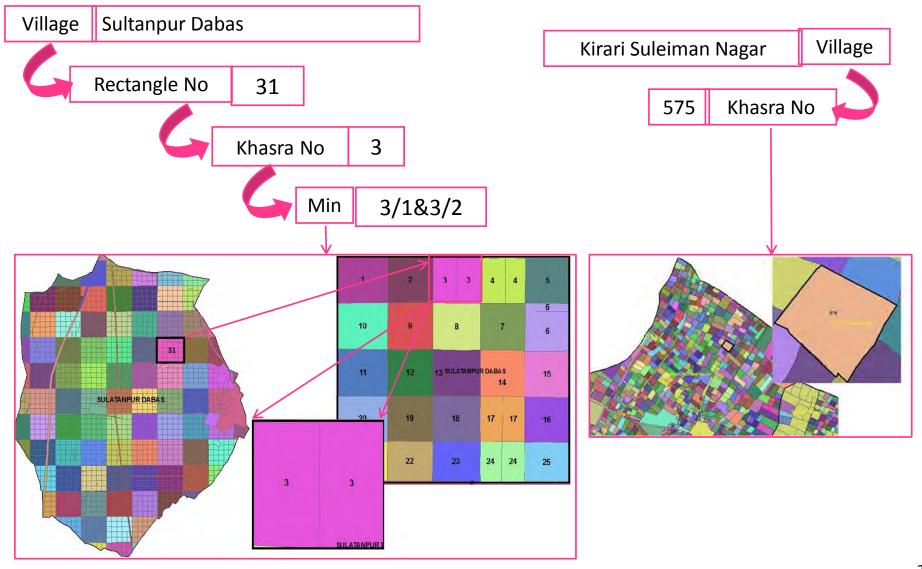
GSDL Approach-Integrated Land Information System



Plot Numbering System in Urban

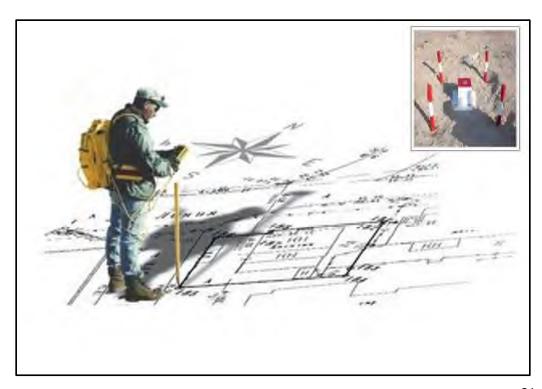


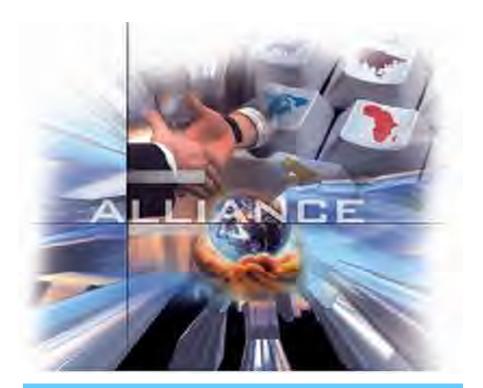
Khasra retrieval system(Consolidated / Unconsolidation)



Summary

- Resurvey and Updation of land shall be carried out using GPS assisted Tablet PC or PDI
- User can see real time spatial data in the assisted system that shall connected to District
 / Tehsil / Block Data centre
- User can plot the desired location that will stored in the system as well as in the data centre too
- Capacity Building of Patwaris





Thank you!



Status of Distribution of Computerized ROR - year wise

State Name: NCT of Delhi

Sr No District Name		Tehsil Name	No of Computerized RoR distributed			Money Collected
			Year			
			2006	2007	2008 (till date)	
1	South-West	Vasant Vihar	1800	2500	825	
2	North-West	Saraswati Vihar	1400	1500	450	
		Narela	100	170	40	
		Model Town	15	18	5	
3	North	Civil Line		265	110	
4	South	Defence Colony	168			
5	West	Punjabi Bagh	375	546	160	

Source: http://dolr.nic.in/nlrmp/lr.asp

Implementation of National Land Records Modernization Programme (NLRMP).MRD Govt of India

