

Land markets: A case-study of digitisation of land records administration in Maharashtra

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Current challenges in the land market

- ▶ Barriers to transferability

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- ▶ Barriers to transferability
- ▶ Lack of market infrastructure
 1. Facilitate price discovery
 2. Liquidity
 3. Secure property rights.

Overview of land records

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- ▶ Spatial records (cadastral maps): Maintained by tehsil-level survey and settlement offices.

Studying digitisation of land records

Aspects of digitisation:

- ▶ Digitisation of records;
- ▶ Digitisation of processes;
- ▶ Digitisation of retrieval of records;
- ▶ Integration.

Digital India-Land Record Modernisation Program covered some parts of it.

A case study of Maharashtra

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- ▶ Methodology: Three levels of assessment:
 1. State level
 2. Taluka/Tehsil level
 3. Parcel level
- ▶ Data sources: data published in public domain, interviews with government officers and households.

Findings: State level

Status of digitisation of textual records

Total No. of Talukas	358
No. of Talukas in which the RORs have been digitised	357
No. of Talukas for which the RORs is stored digitally	357
No. of Talukas for which the certified copies of the RORs can be retrieved from the web	0 ¹

¹Information was subsequently updated.

Status of digitisation of spatial records

Total number of Tehsils for which a survey has been done using modern techniques	1 (12 pilot villages)
Number of Tehsils with geo-reference and digitised CM	1 (12 pilot villages)
Overall percentage of maps that are not in usable form and are torn, disfigured, mutilated, etc.	30%

Tehsil and parcel level assessment

Methodology

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3. Household surveys
 - ▶ Focused on verification of textual and spatial information with ground reality.

Methodology

Sample description

- ▶ Tehsils: Mulshi (Pune District) and Palghar (Palghar District)
- ▶ No. of parcels:

	No. of villages	No. of parcels surveyed
Mulshi	5/158	50
Palghar	8/228	52

- ▶ Mix of different villages-*tribal, high builder activity, agricultural, proximate to district headquarters/towns, etc.*

Methodology

Respondent and parcel profiles for parcel-level survey

Details	Value
Percentage of respondents who	
Are females	24
Are the owners themselves	92
Are the relatives of the parcel owners	4
Acquired (purchased/inherited) the sample parcel in the past 3 years	62
Percentage of samples which	
Are agricultural land	93
Are encumbered	28
Have multiple owners	61

Parcel level findings

Attribute	Mulshi	Palghar	All
Total number of parcels	50	52	102
Ownership	49	52	101
Possession	48	48	96
Encumbrance	27	17	54
Land use classification			
Agricultural land in both RoR and on-ground	44	47	91
Agricultural land in RoR but nonagricultural or mixed on-ground	2	1	3
Non-agricultural land in both RoR and on-ground	2	2	4
Non-agricultural uses but agricultural in RoR	1	2	3

Table: Extent of concordance between records and reality

Parcel level findings

Margin of difference with handheld device			
Number of parcels	50	50	100
within 1%	1	2	3
within 3%	8	6	14
within 5%	12	9	21
within 10%	21	11	32
within 20%	28	21	49
Margin of difference with ETS			
Number of parcels	46	50	96
within 1% 8	2	10	
within 3%	12	5	17
within 5%	18	7	25
within 10%	20	14	34
within 20%	27	25	52

Table: Difference between on-ground measurement and area recorded in land records

Tehsil level digitisation of existing records

	Mulshi	Palghar
RORs	100% digitised	92% digitised
CMs	100% scanned	100% scanned
	CMs for 7.59% of the vil- lages digitised	CMs for 1.44% villages digi- tised.

Table: Digitisation of the existing records

Tehsil level digitisation of processes for recording interests

Stage	Mulshi	Palghar
Determination of stamp duty	Digitised	Digitised
Payment of stamp duty and registration fees	Digitised	Digitised
Preparation of the transfer document	Digital facility available only for leave and license agreements in the Hinjewadi SRO.	Digital facility available for leave and license agreements only.
Application for registration	Digitised in the Hinjewadi SRO.	Digitised.

Table: Digitisation of the registration process.

Tehsil level digitisation of processes for recording interests (contd.)

Stage	Mulshi	Palghar
Verification of identity and documents	Digital verification of identity is done for leave and license agreements in the Hinjewadi SRO.	Digital verification of identity is done for leave and license agreements.
Getting photographed	Digital facility available for leave and license agreements in the Hinjewadi SRO	Digital facility available for leave and license agreements.

Table: Digitisation of the registration process (contd.)

Tehsil level digitisation of processes for recording interests (contd.)

Task	Mulshi	Palghar
Application for updation or correction of ROR	Not digitised	Not digitised.
Data entry by the Talathi's office	Digitised	Digitised
Generation of notice as required <i>MLRC</i>	Digitised	Not digitised.
Certification by the circle officer	Not digitised	Not digitised.

Table: Digitisation of the mutation process.

Time taken for recording interests in land

	Min.(in days)	Max.(in days)	Avg.(in days)
Mulshi	Same day	Same day	NA
Palghar	Same day	Same day	NA

Table: Time taken for registration

Transaction type	Min.(in days)	Max.(in days)	Avg.(in days)
Mulshi			
For sale	48	170	85.2
For succession	37	287	110.4
Palghar			
For sale	38	111	52.6
For succession	26	67	47.8

Table: Time taken for updation of RORs

Time taken for correction of entries in land records

	Minimum (in days)	(in	Maximum (in days)	(in	Average (in days)	(in
Mulshi	33		311		137.25	
Palghar	109		535		269.6	

Table: Time taken for correction of entries in land records

Time taken for boundary demarcation

Mulshi			
Type of application	No. of observations	Time taken	Average
Regular	1	243	NA
Urgent	2	146 ²	NA
Most urgent	3	81 ³	NA
Palghar			
Type of application	No. of observations	Time taken	Average
Most urgent	5	NA	38.4

Table: Time taken to dispose applications for boundary demarcation

²one pending from Sept 2016 till date of survey

³two pending from Sept and Nov 2016 till date of survey

Digitisation of retrieval of copies

	Online	Kiosk	Office retrieval
Index II	Facility available, but we could not retrieve copies. ⁴	No.	Yes.
RORs	Yes	Yes	Yes
CMs	No	No	Yes.

Note: Certified copies can be retrieved from the office.

Table: Digitisation of retrieval of copies of land records for Mulshi and Palghar.

⁴This facility is available for documents registered in specific times.

Time taken for retrieval of certified copies

	Min.(in days)	Max.(in days)	Avg.(in days)
Mulshi			
If original document is not digitised	10	68	29.4
If original document is digitised	2	2	2.5
Palghar	Same day	Same day	NA

Table: Time for retrieval of certified copies of RORs

	Min.(in days)	Max.(in days)	Avg.(in days)
Mulshi	Same day	Same day	Same day
Palghar	Same day	Same day	Same day

Table: Time for retrieval of certified copies of CMs

Taluka level digitisation of inter-connectivity between offices

- ▶ SRO and Revenue Department
 - ▶ Verification of ROR by SRO, prior to registration
 - ▶ Intimation of registration from SRO to Talathi office
- ▶ Survey and Settlement Department with the other two departments - Not digitised

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2. Records spread across three different offices of the revenue administration.
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3. Digitisation has been *partially* achieved in respect of:
 - ▶ retrieval and updation of RORs;
 - ▶ some aspects of registration process.

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4. Digitisation has not been achieved for surveying, drawing up and retrieval of CMs.

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4. Digitisation has not been achieved for surveying, drawing up and retrieval of CMs.
5. Interconnectivity between land administration offices partially achieved.
 - ▶ Other aspects of interconnectivity must be explored.

Takeaways (contd.)

1. Infrastructure remains a problem:
 - ▶ IT infrastructure
 - ▶ Working conditions
 - ▶ Connectivity
 - ▶ Surveying equipment

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