

# A case-study of digitisation of land records in Maharashtra

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November 2, 2017

# Current challenges in the land market

- ▶ Uncertainty of information;
- ▶ Physical form;
- ▶ Not consolidated;
- ▶ No easy access;
- ▶ Revenue orientation;
- ▶ Registered documents give notice but not clarity of legality;
- ▶ Titling system;
- ▶ Large number of disputes;
- ▶ Lengthy processes on account of such uncertainty;
- ▶ High transaction costs.

# Overview of land records

- ▶ Textual records-*7/12 extract and Property Rights Card*;
- ▶ Spatial records-*cadastral maps*; and
- ▶ Registered title deeds.

# Digitisation of land records

- ▶ What is digitisation?
- ▶ Aspects of digitisation:
  - ▶ Digitisation of records-*textual, spatial*;
  - ▶ Digitisation of processes; and
  - ▶ Digitisation of retrieval of records;
  - ▶ Integration.

# Digitisation in India

- ▶ Digital India Land Record Modernisation Programme
- ▶ Aims:
  1. Modernize management of land records-*digitisation and integration*;
  2. Minimize scope of land/property disputes-*conclusive titling*;
  3. Enhance transparency in the land records maintenance system-*computerisation of processes*.

# A Case-study of Maharashtra

1. Aim-*Study the status of digitisation in Maharashtra*
2. Three levels of assessment:
  - 2.1 State level
  - 2.2 Taluka/Tehsil level
  - 2.3 Parcel level

## State-level Assessment

# Methodology

- ▶ Information from State officials-*questionnaires*;
- ▶ Information from the internet-*government websites, DILRMP website.*



## 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

## Status of digitisation of spatial records

Total number of Talukas for which a survey has been done using modern techniques	1 (12 pilot villages)
Number of Talukas 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%

# Initiatives on digitalisation of processes and integration

## 1. DILRMP:

- ▶ Records-*e-Mutation/e-Ferfar*
- ▶ Registration-*e-Payment, e-Stepin, e-Registration*

## 2. Independent initiatives-*e-Chavdi, e-Mojani*

## Taluka Level Assessment

# Components of the assessment

1. Parcel level (ground reality):
  - ▶ Ownership
  - ▶ Possession
  - ▶ Encumbrances
  - ▶ Land use
  - ▶ Area of the land
2. Taluka level
  - ▶ Digitisation of records;
  - ▶ Digitisation of processes;
  - ▶ Digitisation of retrieval; and
  - ▶ Integration.

# Sample and methods

## 1. Sample:

- ▶ Mulshi (Pune District) and Palghar (Palghar District)
- ▶ 5 villages of 158 (50 parcels) in Mulshi; 8 villages of 228 (52 parcels) in Palghar
- ▶ Mix of different villages-*tribal, high builder activity, agricultural, proximate to district headquarters/towns, etc.*

## 2. Methods:

- ▶ Structured interviews (102), ETS/e-Trex Measurement (100) for verification of textual and spatial information-*Parcel level*
- ▶ Test checks at the revenue, survey and registration offices-*Taluka level*
- ▶ Online desk research test checks-*Taluka level*
- ▶ FGD/stakeholder interviews.

# Challenges during the parcel-level assessment

- ▶ Difficulty in locating owners of the land.
- ▶ Owners of several selected parcels, especially under dispute, declined to participate.
- ▶ Measurement was a sensitive issue.
- ▶ Had to depart from recommended number of villages due to low transaction activity.
- ▶ Some villages (e.g., Veur) dropped due to risks.

## Respondent and parcel profiles for parcel-level

<b>Details</b>	<b>Value</b>
<b>Percentage of respondents who</b>	
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
<b>Percentage of samples which</b>	
Are agricultural land	93
Are encumbered	28
Have multiple owners	61



# Parcel level ground reality findings-RORs

<b>Attribute</b>	<b>Mulshi</b>	<b>Palghar</b>	<b>All</b>
Total number of parcels	50	52	102
Ownership	49	52	101
Possession	48	48	96
Encumbrance	27	17	54
<b>Land use classification</b>			
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

## Parcel level ground reality findings-CMs

- ▶ About half of the parcels showed deviation of above 20% of area of the land records.
- ▶ Most of the large deviation was because markers were absent and owners were unable to identify the extent of their parcel correctly.

# Parcel measurement (Palghar example)

- ▶ ETS and e-Trex (perimeter walk)
- ▶ Mapped on to Google Earth



# Taluka level digitalisation of existing records

	<b>Mulshi</b>	<b>Palghar</b>
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

# Taluka level digitalisation of processes for recording interests

Stage	Mulshi	Palghar
Determination of stamp duty	Digitalised	Digitalised
Payment of stamp duty and registration fees	Digitalised	Digitalised.
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	Digitalised in the Hinjewadi SRO.	Digitalised.

Table: Digitalisation of the registration process.

# Taluka level digitalisation of processes for recording interests

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: Digitalisation of the registration process (contd.)

## Taluka level digitalisation of processes for recording interests (contd.)

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

**Table:** Digitalisation of the mutation process.

## Time taken for recording interests in land

	Min.(in days)	Max.(in days)	Avg.(in days)
<b>Mulshi</b>	Same day	Same day	NA
<b>Palghar</b>	Same day	Same day	NA

Table: Time taken for registration of land transfers

Transaction type	Min.(in days)	Max.(in days)	Avg.(in days)
<b>Mulshi</b>			
For sale	48	170	85.2
For succession	37	287	110.4
<b>Palghar</b>			
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
<b>Mulshi</b>	33		311		137.25	
<b>Palghar</b>	109		535		269.6	

**Table:** Time taken for correction of entries in land records

# Time taken for boundary demarcation

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

**Table:** Time taken to dispose applications for boundary demarcation

<sup>1</sup>one pending from Sept 2016 till date of survey

<sup>2</sup>two pending from Sept and Nov 2016 till date of survey

# Digitalisation of retrieval of copies

	<b>Online</b>	<b>Kiosk</b>	<b>Office retrieval</b>
Index II	Facility available, but we could not retrieve copies. <sup>3</sup>	No.	Yes.
RORs	Yes	Yes	Yes
CMs	No	No	Yes.

Note: Certified copies can be retrieved from the office.

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

<sup>3</sup>This 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)
<b>Mulshi</b>			
If original document is not digitised	10	68	29.4
If original document is digitised	2	2	2.5
<b>Palghar</b>	Same day	Same day	NA

Table: Time for retrieval of certified copies of RORs

	Min.(in days)	Max.(in days)	Avg.(in days)
<b>Mulshi</b>	Same day	Same day	Same day
<b>Palghar</b>	Same day	Same day	Same day

Table: Time for retrieval of certified copies of CMs

# Taluka level digitalisation 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 digitalised

# Takeaways

1. Digitalisation has been *partially* achieved in respect of:
  - ▶ RORs retrieval and updation;
  - ▶ some aspects of registration process.
2. Digitalisation has not been achieved for surveying, drawing up and retrieval of CMs.
3. Interconnectivity between land administration offices partially achieved.
4. Other aspects of interconnectivity must be explored.

## Takeaways (contd.)

1. Several interests on land not recorded.
2. Absence of a single window system for citizens.
3. Infrastructure remains a problem:
  - ▶ IT infrastructure
  - ▶ Working conditions
  - ▶ Connectivity
  - ▶ Surveying equipment
4. Training and IT support services.
5. Ambiguities in basic data

Thank you