Report on the Implementation of the DI-LRMP in the State of Maharashtra

A study by the Finance Research Group, Indira Gandhi Institute of Development Research

Report on the implementation of the Digital India Land Records Modernization Programme (DILRMP) in the state of Maharashtra

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2nd November, 2017

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1 — Executive Summary

The objectives of land record modernisation are two-fold. Firstly, to clarify property rights, by ensuring that land records maintained by the State mirror the reality on the ground. A discordance between the two, i.e., records and reality, implies that it is difficult to ascertain and assert rights over land. Secondly, land record modernisation aims to reduce the costs involved for the citizen to access and correct records easily in order to ensure that the records are updated in a timely manner.

This report aims to map, on a pilot basis, the progress of the DILRMP, a Centrally Sponsored Scheme, in the State of Maharashtra. It traces the status of implementation of the DILRMP at three levels, namely, the State level, at the level of the talukas (which are revenue administrative sub-divisions of the State) and at the level of the individual parcels. At the State-level, we study the extent to which the land record management has been digitalised, by obtaining data from the State government officials. Part I of the report contains our findings with respect to the State-level study.

To understand the extent of implementation at the ground level, we also study two selected talukas and capture the extent to which services delivered by the land administration, have been digitised, and whether such digitisation has increased the efficiency with which such services are delivered to the public. For this purpose, we observe the end-to-end performance of these services by the survey office, the revenue offices and the Sub-Registrars' Offices (SROs) in the two selected talukas. We then select fifty parcels in each of the selected talukas, and attempt to ascertain whether the land records maintained by the -State, are updated, by checking the information in the records against the ground situation. Part II of the report contains our findings with respect to the study conducted at the level of the two tehsils and the land parcels.

At the outset, for the purpose of this report, we classify land records into three (3) categories, namely, the revenue records (or records maintained by the revenue administration), registered documents (or documents pertaining to land transactions registered by the parties) and cadastral maps (prepared by the State Government on

the basis of a survey of land). Also, for the purpose of our study, we classify the components of "digitisation" as follows: (a) digitisation of existing land records; (b) digitisation of the process for recording the creation of or a change of interests in land; (c) digitisation of the process for retrieval of copies of land records; and (d) digitising the interconnectivity between offices of the State administration which maintain land records.[1] This sytem of classification has been used throughout the report.

Overview of findings at the State-level:

We find that although Maharashtra is an amalgamation of different territories that had different land record keeping systems before the merger, the laws of the State governing the form and manner of maintaining land records and the processes for updating them, have been largely harmonised across the State (see Section 4.2). The organisational structure of the land administrative machinery has also been harmonised across all sub-divisions of the State (see Fig. 4.1).

We find that 'land records' are spread across three offices of the State Government. Deeds recording a transfer of interest in land, which are registered, are maintained with the SROs, which are at the level of the district or sub-districts. Revenue records, commonly called record of rights (RORs), are maintained at the revenue records offices, which are the tehsil-level or the village level. Cadastral Maps (CMs) are maintained by the Survey and Settlement offices at the tehsil-level. Please see Section 4.3.

Other findings, especially in terms of the four classifications mentioned above, are as follows:

Digitisation of existing land records

The State has informed us that they have digitised the land revenue records (namely, the RORs and the Property Cards (PCs)) for all Talukas in Maharashtra, except one. We, however, find numerous gaps and inconsistencies between the data reported to us orally and the data reported by the State Government on the Management Information System (MIS). For example, in the MIS, the State Government has reported that the RORs in respect of five hundred twenty-three (523) villages have not been digitised. However, officers of the Survey and Settlement Department orally informed us that the RORs in respect of about eighty-three (83) villages have not been digitised (see Box 13). While this difference in number does not make any difference to the property rights in the state or the functioning of digitisation initiatives in Maharashtra, we find that data updation has to be carried out on the National Land Records Modernization Programme (NLRMP) website.

Digitisation of the process for recording or effecting a change of interests in land

The State Government has undertaken three initiatives that digitise different stages of the process for registering documents relating to land transactions as well as updation of the ROR. In relation to registration, one of these initiatives allows the payment of stamp duty electronically (see para. 2, sub-section 5.1.1). The other initiatives allow

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[1]The DILRMP does not contemplate the digitalisation of the entire process for recording the transfer of interests in land. However, we have included examining the status of digitalisation of these processes for the sake of completeness.

parties to submit documents required for the registration process online and to schedule appointments with the offices of the sub-registrar for admitting the execution of the document sought to be registered (see paragraph 3, section 5.1.1). However, as required under the *Registration Act, 1908*, 1908, the process of admitting the execution of land transaction documents, can only be completed by physically attending the SROs. Thus, while different steps of the registration process have been digitised to some extent, one cannot complete the entire process of registering a document electronically. However, the Maharashtra Government has, on a pilot basis, digitalised the entire process of registration for leave and license agreements.

As regards updation of the ROR, we find that the State Government has introduced certain initiates such as e-Mutation to digitise the process of updation of the ROR. We also find that, for most districts, while copies of RORs and PCs can be retrieved online, such copies are neither digitally signed nor certified to be true copies (see Table 6.1). This reduces the utility of such documents, especially before courts and other authorities which may not accept them as *prima facie* proof of ownership.

Digitisation of cadastral maps

The digitalisation of CMs may or may not be preceded by a survey or re-survey of the land. A survey of agricultural land in Maharashtra was conducted during the pre-independence era. The Maharashtra Government has not conducted a State-wide re-survey of agricultural land since independence.

The State Government has initiated a State-wide survey of agricultural land using modern survey techniques. A pilot re-survey has already been conducted in twelve (12) villages in the Mulshi Taluka of the Pune district. We have been informed that the State Government has proceeded to digitise maps of these re-surveyed villages (Section 6.2.1).

Non-agricultural land located in a village, town or city with a population exceeding two thousand (2000) persons, is commonly referred to as 'Gaothan land' (abadi areas). The State Government has informed us that a State-wide survey of gaothan areas has never been conducted. We are not aware if the State Government proposes to survey Gaothan areas in the near future.

Further, the State Government has reported that 3.79% of its cadastral maps, drawn up using old survey techniques, have been digitised . For a district-wise distribution of the digitised maps, please see Fig. 6.1.

Digitising the interconnectivity between departments

Under the current structure, land records are spread across three different departments of the Revenue Ministry, namely (a) the Survey and Settlement Department which is in charge of preparing cadastral maps and preparing, maintaining and updating the PCs and preparing the ROR; (b) the Revenue Department, which is in charge of maintaining and updating the RORs; and (c) the Department of Registration and Stamps which is in charge of registration of documents pertaining to land transactions.

The law requires the Department of Registration and Stamps to co-ordinate with the Revenue Department so that details of land transactions are regularly intimated to the

Talathi who maintains the ROR at the village-level (see Fig. 6.3). We find that while there is digital connectivity between these two departments, the connectivity is poor on account of server breakdowns and power shortages.

We find that the Survey and Settlement Department is not digitally connected with the other two departments to ensure that any revision in the boundaries of parcels is seamlessly communicated to the other two departments which maintain land records.

Other observations

Responsiveness to citizens: The ultimate aim of a good land record management system should be to increase the ease of access of land records for the citizen. Like several other States, Maharashtra has also enacted the *Maharashtra Right to Public Services, 2015* which allows citizens easy access to certain notified public services. Several services in relation to land records have been notified under the *Maharashtra Right to Public Services, 2015* and the State has informed us that all the notified services can be accessed online. However, out of all the public services notified under the *Maharashtra Right to Public Services, 2015*, we find that the State Government has received one hundred sixteen (116) applications for services relating to land records and more than 50% of these applications have not yet been disposed off (see Table 6.5). It is unclear how many of the pending applications are within the time stipulated under the law for the delivery of the service to which they pertain.

Gaps in information: Finally, we find that overall, there are several gaps and inconsistencies between the information reported by the State Government on the MIS and the information given to us orally by officers of the State Government. This is true even of fundamental and fairly basic information. For instance, we were orally initially informed that there are five hundred five (505) SROs in Maharashtra. We were subsequently informed that while the State Government had sanctioned five hunder and sixteen SROs, five hundred nine (509) were actually functioning SROs. The MIS, on the other hand, shows that the State Government has five hundred twenty-nine (529) SROs. We have listed out other such inconsistencies and gaps in the relevant part of the report (see Box 14). The reasons for these inconsistencies and gaps are unclear.

Overview of findings at the level of the Talukas and parcels

The talukas selected for this study are Mulshi Taluka of the Pune District and Palghar Taluka of the Palghar District of Maharashtra.

This part of the study aimed at assessing - (a) the level of digitisation of records and service delivery in the two talukas and (b) whether the digitised land records reflect the position on the ground. The former assessment was conducted at the taluka-level while the latter assessment was conducted at the level of individual parcels. To carry out these two assessments, various sampling methods have been adopted. The details of the methodology for the two assessments have been provided in the relevant section of the report (see Chapter 8).

We find that the existing records of registered deeds, RORs and CMs are at different stages of digitisation for both the Tehsils. While 100% of the RORs for both the Tehsils have been digitalised, both the Tehsils are lagging behind with respect to digitalisation

of CMs (see Table 6.2 and section 9.1).

With regard to the processes for recording a change of interests in land, we find that the process of determination and payment of stamp duty and registration fees, has been largely digitalised for both tehsils. However, the process of registering a transfer deed or any other document recording a change of interest in land, has not been digitalised. That is, persons wishing to record a change of rights in land must physically approach the registration office (relevant SRO) for this purpose. In addition, once a change of interests in land has been registered (or even where not registered), citizens have to approach the revenue offices for recording the same change in the revenue records. At both the registration and the revenue offices, the process of data-entry have been completely digitalised (see Tables 9.3 and 9.2).

With regard to the processes for retrieving copies of land records, we find that copies of revenue records can be retrieved from the web. However, we find that copies of revenue records for most districts, which may be retrieved from the web, have limited legal utility, as they are neither digitally signed nor certified copies.[2] We find that unlike copies of revenue records, copies of registered deeds and CMs cannot be retrieved from the web. These two sets of land records can be retrieved by making a paper-based application at the registration offices and the survey and settlement offices respectively (see Table 9.4).

As regards the interconnectivity between the land records offices, we find that while the SROs and the revenue records offices are largely digitally connected, the survey and settlement offices are not so connected with the former two offices. Also, there is no connectivity between courts, which often pass orders affecting interests in land and the land records offices.

We also studied the time taken for delivery of the following services to the citizens, namely: time taken for registration and updation of land records, including boundary demarcation by the survey and settlement officers; and the time taken for retrieval of certified copies of land records from the various land record offices. Our findings are contained in Chapter 9.

With respect to the parcel level surveys, we found a high degree of accordance between the land records and the ground reality, with respect to ownership and possession. In other words, the persons who we found on the ground, as the owners or holders of land, were reflected as owners and holders respectively in the land records. However, we found lesser accordance between the land records and the ground reality, with respect to recording encumbrances. We also measured the land parcels and compared the findings of our measurement with the area recorded in the land records. We found that for over 50% of the parcels in our sample, the variation between the area on the ground and the area recorded in the land records was 20% or more (see Table 3 of Chapter 10).

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[2]We have been informed that certified copies of RORs for a few talukas within a few districts may be applied for through the 'Aaple Sarkar' portal of the Mahaonline website of the State Government. This portal may be accessed at `https://aaplesarkar.mahaonline.gov.in/en/Login/Certificate_Documents?ServiceId=2336`.

Problems and recommendations

Finally, on the basis of the study, we identify problems with respect to the three components of digitalisation used throughout the report, namely *digitisation of existing records*, *digitisation of processes for land transfer* and *digitisation of the process for retrieval of land records*. We also propose some immediate to near-term solutions for digitisation of land records administration, to be effective.

Digitisation of existing records

In respect of digitisation of existing records, we observe the following issues:

- Digitisation of CMs has not seen much progress in the state. Interactions with state officials point out that conducting a re-survey and then digitising the maps drawn post such re-survey is extremely problematic and time consuming. We suggest that alternative techniques not involving re-survey be explored by the State Government.
- The first step in the digitisation of the ROR requires data entry. Data entry is presently being carried out by operators who have no prior knowledge of land records. We find that owing to this lack of basic knowledge coupled with inadequate training, the probability of errors in the digitised records increases. The burden of correcting these errors then falls upon the right holder(s). We suggest that technical training be imparted to data entry operators to increase efficiency and reduce unnecessary burdens imposed upon the right holder(s).

Digitisation of processes for land transfer

With respect to the digitisation of processes for land transfers and updation of records, our observations are as follows:

- The process for applying for registration, mutation entries or boundary demarcation, has still not been digitised. This inability to make online applications, coupled with the fact that land records pertaining to the same land parcel are available at different offices, adds to the costs and inconvenience of the citizens. In addition to the above, the process for tracking such applications has also not been digitised. Due to this, the citizens are constrained to undertake multiple visits to the various offices to monitor the progress of their application. We suggest that a single window system be established for these processes, as an interface between the various offices and the citizens. This will effectively reduce the costs borne by the citizens and will also lead to increased efficiency in the process for updation of land records.
- Infrastructure issues such as server breakdown problems, storage of record problems, shortage of survey equipment and office infrastructure issues are major contributors to delays in the delivery of services to the citizens. These issues require immediate attention and may be cured easily with appropriate allocation of resources. We suggest that the State Government deploy appropriate resources for upgradation of the present infrastructure and the installation of basic infrastructure which meets certain common standards in all land record offices.

Digitisation of the process for retrieval of land records

We observe the following problems in respect of digitisation of the process for retrieval of land records:

- Presently, the copies of land records, such as the ROR, which are available online, are not certified copies. However, we have been informed that this process is underway and certified copies of RORs for a few talukas within a few districts may be retireived online. The absence of certified copies implies that there is no legal sanctity to these online records and the citizen has to visit the appropriate office to make them legally usable. This not only adds to the cost of the citizens but also renders the availability of the online record futile, because, there is no legal value to the record so obtained. We suggest that certified copies of all land records be made available online to address this problem.
- Land records such as the ROR, CM and registered documents, are all maintained by different offices. Therefore, in order to obtain a complete picture of the rights and interests appurtenant to a land parcel, a citizen is required to obtain individual records from each of these offices, thereby adding to his/her costs. We suggest that a single window system be established for retrieval of all land records pertaining to a single parcel of land, to address this problem.
- Easy access to land records is a critical service delivery function of the State. However, the present state of affairs in service delivery does not provide this ease of access. Website breakdowns and language barriers are a few of the interface problems which hamper easy access to records. We suggest that a task force be established for periodic review and assessment of efficiency and performance of the State-citizen interface. Consequently, the State must develop capacity for adopting recommendations made by such task force.

These problems and recommendations as well as general recommendations in terms of inconsistency of information about the DILRMP, training and technical support for staff members and interconnectivity with other institutions such as courts, have been dealt with in detail in Chapter 11 of the report.

2 — Acknowledgements

3 — Introduction

Well defined property rights are the foundation of economic development in any society. Accurate land records are crucial for effective enforcement of property rights as they reduce the scope of disputes and aid in dispute resolution.

Land records also contain important data points about the geological aspects of land (such as land shape, size, forms, and soils); economic data related to crops, irrigation, and land use; and information about legal rights, liabilities, and taxation ("Online Delivery of Land Titles to Rural Farmers"). Well maintained land records are, therefore, essential for urban and rural planning.

Under the Seventh Schedule to the *Constitution of India*, which allocates the fields of legislation to the Union and State legislatures, the subject of land has been divided between the States and the Union as under:

Allocation	Text of entry
State list (Entry 18)	Land, that is, rights in or over land, land tenures including the relation of landlord and tenant, and the collection of rents; transfer and alienation of agricultural land; land improvement and agricultural loans; colonisation.
State list (Entry 45)	Land revenue, including the assessment and collection of revenue, the maintenance of land records, survey for revenue purposes and records of rights, and alienation of revenues.
Concurrent list (Entry 6)	Transfer of property other than agricultural land; registration of deeds and documents.

Thus, the function of maintaining land records is primarily with the States. Typically,

land records are spread across three offices of the State administration: the SROs established by the State under the *Registration Act, 1908*, the revenue records offices established under the revenue codes enacted by different States and the survey offices which are responsible for measuring the land and maintaining maps. Currently, these records are largely maintained in physical form and the offices are not interconnected. This often leads to discrepancies in the records and increases the costs of transacting in land.

Motivation for the report

In 2008, the Central Government merged two centrally sponsored schemes to implement an initiative known as the NLRMP, under which funds were allocated to States to enable them to move towards digitisation of land records and land record management systems.[1] The main objective of the NLRMP is to develop a modern, comprehensive and transparent land records management system in the country with the aim to implement the conclusive land-titling system with title guarantee.[2] For implementation of the NLRMP, the Central Government has sanctioned a sum of Rs. 190,745 lakhs to the States. The NLRMP was later re-named as the DILRMP.

This Report constitutes the result of a pilot study conducted in the State of Maharashtra in 2017 to evaluate the status of implementation of the DILRMP in Maharashtra. The objectives of the study were as follows:

1. to understand the organisational and legal framework of land record management in Maharashtra;
2. to evaluate the performance of Maharashtra in implementing the DILRMP;
3. to analyse how the state records provide a real time mirror into the state of land record management in Maharashtra.

Structure of the report

We have studied the implementation of the DILRMP in Maharashtra at three levels, as under:

1. First, we map the progress of DILRMP at the State-level in Maharashtra. This exercise uses the official data provided by the State with respect to its progress on different aspects of the DILRMP.
2. Second, to identify whether the title records maintained by the State reflect the actual ownership or possession of the land, we conduct a pilot assessment of two pre-selected talukas (sub-divisions of a State) for a focused study of the land records maintained by these talukas. For this purpose, we have selected the Mulshi Taluka located in Pune District and the Palghar Taluka located in Palghar District.
3. Third, we identify fifty (50) parcels in each of the two talukas to assess the discrepancies, if any, between the actual ownership and possession of the land

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[1]The NLRMP merges the Centrally-Sponsored Schemes of Computerisation of Land Records (CLR) and Strengthening of Revenue Administration and Updating of Land Records (SRA&ULR) in the Department of Land Resources (DoLR), Ministry of Rural Development.

[2]Department of Land Resources, *The National Land Records Modernisation Programme (NLRMP) Guidelines, Technical Manuals and MIS*, 2008-2009.

and the land records in respect of these parcels.

At each level, we administered detailed questionnaires to officers of the State administration. The questionnaires with the answers are annexed at Appendix A.

Part I of the report deals with State-level progress of the DILRMP. Part I of the report is organised as follows. Chapter 4 of this Part gives an overview of the structural design of the land administration machinery in Maharashtra. It lists the different departments, the hierarchical structure of each department, the intra and inter-departmental interfaces and the functional roles of officers within each department. In Chapter 5 of Part I, we give an overview of all the initiatives taken by the Government of Maharashtra for computerisation of land records and the status of the funds sanctioned and released by the Central Government to the Maharashtra State Government. In Chapter 6, we set out the results of our study of the progress of DILRMP in the State of Maharashtra, which gives insights into the status of digitisation of land records and the integration of land records offices, at the State-level.

Part II of the report deals with our assessment of the DILRMP's progress at the ground level. We do this by studying the implementation of the DILRMP in two tehsils (revenue divisions) and across ten villages in the selected tehsils. This part of the project focuses on checking the updation and real-time status of textual and spatial records on the ground.

Part II of the report is structured as follows. Chapter 7 sets out the background for the chapters ahead, by giving an overview of the geographical and structural features of the selected districts and tehsils. We also shed light on some digitisation initiatives undertaken in Mulshi, which is one of the selected tehsils, which essentially differentiates it from the rest of the tehsils in Maharashtra. Chapter 8 describes the methodology used for conducting the tehsil and parcel level studies. A combination of research methods were used for this purpose. These include obtaining information from the district administration, in-person interviews, focused group discussions (FGDs) and sample test checks for certain stratas of information. In Chapter 9, we summarise our findings in on the level of computerisation of land records and land transfer processes in the two selected tehsils. Chapter 10 contains our findings on whether the computerised records reflect the actual position of ownership, possession and the actual status of the selected land parcels on the ground. For this leg of the study, we have used the data collected during the parcel-level in-person interviews and the FGDs. Chapter 11 concludes with our recommendations.

Part I

State level assessment

4 — Land administration in Maharashtra

This chapter gives an overview of the structural design of the land administration machinery in Maharashtra. It lists the different departments, the hierarchical structure of each department, the intra and inter-departmental interfaces and the functional roles of the officers within each department. It also gives an overview of the laws applicable to land administration in Maharashtra, and chalks out the step-by-step process for transferring or recording interests in land.

Our findings in the State-level have been assimilated from three sources: the information reported by the State Government in a MIS report periodically uploaded on the website of the DILRMP; answers given by officers of the Survey and Settlement Department and the Department of Registration and Stamps to questionnaires administered to them; and other information (such as laws and notifications issued by the State Government) available in public domain.

4.1 Land revenue divisions in Maharashtra

The State of Maharashtra, as it is known presently, came into existence in the year 1960 by an amalgamation of the erstwhile territories of Western Maharashtra, the Bombay Presidency, the Marathwada Region of Hyderabad State, the Deccan Region, and the Nagpur region of Central Provinces and the four Berar Districts of Madhya Pradesh.[1]

For the purpose of revenue administration, the State of Maharashtra has been divided into the following smaller divisions:

1. Revenue divisions;
2. Districts;
3. Sub-districts;
4. Sub-divisions;

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[1] *See Bombay Reorganisation Act, 1960* read with *States Reorganisation Act, 1956.*

Box 1: Revenue Divisions and Districts

At present, there are six (6) revenue divisions in Maharashtra:
1. **Amravati** comprises five (5) districts: Akola; Amravati; Buldhana; Yavatmal; and Washim.
2. **Aurangabad** comprises eight (8) districts: Osmanabad; Jalna; Aurangabad; Nanded; Parbhani; Beed; Latur; and Hingol.
3. **Konkan** comprises seven (7) districts: Thane; Palghar; Mumbai Suburban; Mumbai City (for a historical background to the inclusion of Mumbai City as a District, please see box 2); Ratnagiri; Raigad; and Sindhudurg.
4. **Nagpur** comprises six (6) districts: Gadchiroli; Gondia; Chandrapur; Nagpur; Bhandara; and Wardha.
5. **Nashik** comprises five (5) districts: Ahmednagar; Jalgaoin; Dhule; Nandurbar; and Nashik.
6. **Pune** comprises five (5) districts: Kolhapur; Pune; Sangli; Satara; and Solapur.

Box 2: Historical Background of Mumbai City

The earliest version of the *Maharashtra Land Revenue Code, 1966* divided Maharashtra, into revenue divisions and districts and excluded the City of Bombay from such classification. The City of Bombay was, thus, an independent unit, and was not included in any division. Bombay Suburban was a part of the Konkan division. For the sake of consistency in the administrative structure under the *Maharashtra Land Revenue Code (Amendment) Act, 1981*, Bombay (as it was then known) was constituted as a new division with effect from July 29, 1981. It consisted of two districts, City of Bombay and Bombay Suburban. However, on account of administrative difficulty, Bombay Division was ultimately dissolved and Bombay City and Bombay Suburban were included in the Konkan Division by virtue of the *Maharashtra Land Revenue Code (Amalgamation of Bombay and Konkan Divisions) Act, 1983*.

As a result of this, the Konkan Division now consists of seven (7) districts, including Mumbai City and Mumbai Suburban.

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5. Talukas; and
6. Villages.

At present, there are six (6) revenue divisions comprising of thirty-six (36) districts, one hundred eighty-one (181) sub-divisions, three hundred fifty-eight (358) talukas and forty-four thousand eight hundred and fifty-five (44,855) villages.[2] The six revenue divisions and the districts comprised in each of them are listed in Box 1.[3]

The department of the Maharashtra government which oversees revenue administration in Maharashtra, is the Revenue Department, which works in tandem with the Survey

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[2]Source: Department of Land Resources, Ministry of Rural Development, Government of India `http://nlrmp.nic.in/faces/rpt/rptCombined.xhtml` (visited on February 21, 2017)

[3]Other administrative divisions for the purpose of local governance are Zilla Parishads, Panchayat Samitis and Gram Panchayats and in urban areas, Municipal Corporations, Municipal Councils, Nagar Panchayats and in some places, Cantonment Boards.

and Settlement Department and the Department of Registration and Stamps. For a detailed hierarchical structure of these three departments, please see Fig. 4.1.

4.2 Overview of the legal framework

The legal framework for land and revenue matters comprises of a number of legislations, some of which were made before and others after independence. The primary law governing land revenue administration in Maharashtra is the *Maharashtra Land Revenue Code, 1966*. Maharashtra has enacted several other laws which affect the holding size, kinds of interests in different kinds of lands and the manner of transferring interests in land. A summary of the primary legal framework governing interests in land and land revenue administration in Maharashtra, is set out below:

1. ***Maharashtra Land Revenue Code, 1966***
   Prior to the enactment of the *Maharashtra Land Revenue Code, 1966*, each region of Maharashtra was governed by different land revenue laws and systems embodied in various codes like the Bombay Land Revenue Code, 1921, the Berar Land Revenue Code, 1928, the Central Provinces Land Revenue Code, 1959 and the Madhya Pradesh Land Revenue Code,1954.
   Maharashtra Land Revenue Code, 1966 was enacted to introduce a uniform code for revenue administration after the formation of the present day Maharashtra state. It applies to the whole of the state of Maharashtra with the exception of a few provisions which are not applicable to the city of Bombay, now Mumbai. The *Maharashtra Land Revenue Code, 1966* sets out the powers, duties and function of the revenue officers and provides a framework for maintenance of land records, cadastral maps, demarcation of boundaries and surveys.

2. ***Registration Act, 1908***
   The *Registration Act, 1908*, a central law, sets out the requirements and procedure for registration of documents in the state of Maharashtra.

3. ***Maharashtra Stamp Act, 1958***
   Documents and deeds recording transactions relating to immovable property or the rights attached to such property require to be stamped in accordance with the provisions of the *Maharashtra Stamp Act, 1958* which sets out the amount of stamp duty payable for different types of documents and the procedure for such payment.

4. **Laws applicable exclusively to agricultural land**:
   Like several other States, Maharashtra has enacted several laws which directly apply to land holdings and are intended to enhance agricultural productivity or provide security to the tiller of land. These laws are summarised below:
   (a) The *Bombay Prevention of Fragmentation and Consolidation of Holdings Act, 1947* was enacted with a view to prevent the fragmentation of agricultural holdings and to provide for the consolidation of agricultural holdings for the purpose of better cultivation of agricultural land. This law prohibits the fragmentation of agricultural land below government prescribed limits. It also imposes restrictions on the transfer of fragments of agricultural land.
   (b) The *Maharashtra Agricultural Lands (Ceiling on Holdings) Act, 1961* imposes

a maximum limit (or ceiling) on the extent of holding of agricultural land, by an individual entity or person in the State of Maharashtra (except in the Marathwada and Vidarbha regions). It provides for the acquisition and distribution of land held in excess of such ceiling. Similarly, the *Maharashtra Tenancy and Agricultural Lands (Vidarbha Region) Act, 1958* is applicable in the Vidarbha region (predominantly Nagpur division and Amravati division) of Maharashtra and the *Hyderabad Tenancy and Agricultural Lands Act, 1950* is applicable in the Marathwada region of Maharashtra (predominantly Aurangabad division). For a list of districts which fall within the Nagpur, Amravati and Aurangabad Divisions, respectively, please see Box 1.

(c) The *Bombay Tenancy and Agricultural Lands Act, 1948* primarily deals with the tenancies of agricultural lands and sets out the rights and obligations of landlords and tenants of agricultural land. It regulates and imposes restrictions on the transfer of agricultural land and structures on such land.

5. **Other miscellaneous legislations**

Other legislations, that affect rights in land include the *Transfer of Property Act, 1882*, the *Indian Easements Act, 1882* and the *Maharashtra Restoration of Lands to Schedule Tribes Act, 1974*.

Additionally, several other laws in Maharashtra affect the right to develop land and regulate the manner of transfer of rights or interests in built-up area on land such as the Maharashtra Gunthewari Development (Regulation, Upgradation and Control) Act, 2001, the Maharashtra Ownership Of Flats (Regulation of the Promotion Of Construction, Sale, Management and Transfer) Act, 1963, the Maharashtra Regional And Town Planning Act, 1966, the Maharashtra Apartment Ownership Act, 1970, the Maharashtra Housing and Area Development Act and 1976, the Maharashtra Project Affected Persons Rehabilitation Act, 1989 and the Development Control Regulations, 1991.

Finally, like most other States, Maharashtra had adopted the *Urban Land (Ceiling and Regulation) Act, 1976* which imposed a ceiling on the amount of vacant land that persons could hold in an urban area. The *Urban Land (Ceiling and Regulation) Act, 1976* was applicable to eight (8) cities in Maharashtra namely, Mumbai, Thane, Pune, Nasik, Nagpur, Sangli, Solapur and Kolhapur and stipulated the limits of vacant land that an individual could hold in these cities. This number was lower for vacant land in Mumbai than it was in other cities where the Act was applicable. Excess land would be acquired by the Land Ceiling Department of the Government of Maharashtra and used largely for the provision of mass housing. In 2007, Maharashtra repealed the *Urban Land (Ceiling and Regulation) Act, 1976*. However, even after its repeal, orders passed under the *Urban Land (Ceiling and Regulation) Act, 1976* have been held to have the same effect as if the law had not been repealed. Box 3 describes this anomaly in greater detail. This has implications for the title records of persons who have obtained exemption orders under *Urban Land (Ceiling and Regulation) Act, 1976*, as unless such land is developed or held in accordance with the conditions of the exemption order, it is vulnerable to enforcement action by the State.

In this Chapter, we give an overview of the administrative structure for the management of land records and the procedure for recording either the creation of or change in an

> **Box 3: The anomaly with respect to urban land ceilings**
>
> The *Urban Land (Ceiling and Regulation) Act, 1976* allowed persons to apply for exemptions from the applicability of the law. Under these exemptions, a person would be permitted to possess land in excess of the prescribed limits, subject to certain conditions which were mostly linked to the development or the use of such exempted land for public purposes.
>
> The law was repealed in Maharashtra in the year 2007. However, in a judgment of 2010, a full bench of the Bombay High Court has held that although the *Urban Land (Ceiling and Regulation) Act, 1976* has been repealed, the conditions specified in an exemption order issued under it, would survive. Consequently, the State Government can enforce the conditions in the exemption order and take action or pursue remedies to it under any other existing laws. The case has been appealed and is currently pending before the Supreme Court of India.

interest in land, in the revenue records. An understanding of these aspects is imperative before we proceed to assess the status of digitisation of land records.

4.3 Administrative structure for management of land records in Maharashtra

The administrative structure for the management of land records in Maharashtra consists of the following three departments/offices:

1. The Office of the Settlement Commissioner and Director of Land Records, which is in charge of preparation of maps and ROR;
2. The Office of the Divisional Commissioner, which is in charge of the maintenance and updation of ROR; and
3. The Office of the Inspector General of Registration and Controller of Stamps, Department of Registration and Stamps, which is in charge of the registration of documents under the *Registration Act, 1908*.

Fig. 4.1 shows the hierarchical structure of these three departments.

REVENUE MINISTRY

SURVEY AND SETTELEMENT DEPARTMENT HEADED BY SETTLEMENT COMMISSIONER & DIRECTOR OF LAND RECORDS

REVENUE DEPARTMENT HEADED BY REVENUE SECRETARY

DEPARTMENT OF REGISTRATION AND STAMPS HEADED BY INSPECTOR GENERAL OF REGISTRATION AND STAMPS

DEPUTY DIRECTOR OF LAND RECORDS

DIVISIONAL COMMISSIONER

DEPUTY INSPECTOR GENERAL OF REGISTRATION AND STAMPS

DISTRICT SUPERINTENDENT OF LAND RECORDS

DISTRICT COLLECTOR

JOINT DISTRICT REGISTRAR

DEPUTY SUPERINTENDENT OF LAND RECORDS

MAMLATDAR / TEHSILDAR

SUB-REGISTRARS

CITY SURVEY OFFICER

CIRCLE OFFICER

MAINTENANCE SURVEYOR

TALATHI

Figure 4.1: Hierarchical structure within the land record management system in Maharashtra

The Office of the Settlement Commissioner and the Director of Land Records and the office of the Divisional Commissioner perform such functions as are assigned to them under the *Maharashtra Land Revenue Code, 1966*. The Department of Registration and Stamps derives its powers and functions from the *Registration Act, 1908* and the *Maharashtra Stamp Act, 1958*. A brief outline of their functions is provided below:

4.3.1 Office of the Settlement Commissioner and Director of Land Records

This office deals with all matters connected with the survey, settlement and the ROR. The purpose of the survey and settlement activities is to divide the land within a territory into different groups, to identify the boundaries of land parcels and to prepare maps to assess the land revenue.

4.3.2   Office of the Divisional Commissioner

The Office of the Divisional Commissioner and the officials working under him are responsible for the collection of land revenue and the updation of the ROR prepared by the Office of the Settlement Commissioner and Director of Land Records.

4.3.3   Department of Registration and Stamps

The Inspector General of Registration and the Controller of Stamps Inspector General of Registration and Controller of Stamps (IGR) is the head of this department. Unlike the above mentioned departments, this department is governed by a central law, namely, the *Registration Act, 1908*. As mentioned above, India follows the deed registration system of land titling. The IGR is responsible for the functioning of offices of the Sub-registrar (which is where persons submit their documents for registration).

Every Sub-registrar's office maintains registers containing details of persons who submit documents for registration, and the property that forms the subject-matter of registration. It also maintains other records relevant to the regisration of documents and creation / transfer of interests. A list of all records maintained by an SRO has been provided in Box 4.

4.3.4   Interaction between departments

Although the three departments/offices handle different aspects of land records management, there is some interaction between the three on a few occasions.

For instance, when a Sub-registrar (under the Office of the Inspector General of Registration and Stamps) registers a document, the Sub-registrar intimates the (a) relevant officer within the Survey Department; or (b) the Tehsildar within the Revenue Department, for initiating the process of revising the ROR with respect to the parcel of land that is the subject matter of the registered document.

Similarly, the interaction between the Revenue Department and the Survey Department takes place in the following instances:

- Change in the Kami Jasta Patrak with respect to change in area and assessment due to land acquisition measurement, non-agricultural use measurements, etc.;
- Change in the Akar Phod Patrak which shows details of sub divisions like area, assessment etc.;
- Land acquisition cases;
- Non-agricultural use cases;
- Cases in which a correction in the area of land parcels is required and
- Cases of court watap, i.e. sub-division of land upon directions of a court of law.

As can be seen, interaction between the departments/offices is sporadic and limited.

Box 4: Records maintained at the offices of Sub-registrars

- Books
    - **Book 1: Register of non-testamentary documents relating to immovable property:** This Book contains all documents or memoranda required to be compulsorily registered under section 17 of the *Registration Act, 1908*, which relate to immovable property but are not Wills.
    - **Book 2: Record of reasons for refusal to register:** This Book contains details of such documents which were refused to be registered, along with reasons for refusing such registration.
    - **Book 3: Register of wills and authorities to adopt:** This Book contains a record of all registered Wills and of all registered Authorities to Adopt a son post the death of the donor;
    - **Book 4: Miscellaneous register:** This Book contains all documents registered under section 18(1)(d) of the *Registration Act, 1908* with respect to documents other than Wills, which deal with right, title or interest to or in movable property;
    - **Book 5: Register of deposit of Wills:** This Book contains a record of all original Wills which have been deposited with the Registrar in a sealed envelope..
- Indexes
    - **Index No. I**: This index contains the names including the father's name, or the mother's name, and the places of residence, of all persons executing and of all persons claiming under every document entered or memorandum filed in Book No. 1;
    - **Index No. I-A**: This index contains the names including the father's name, or the mother's name, and the places of residence of all persons executing, and of all persons claiming under documents with respect to loans under the Land Improvement Loans Act 1883 or the Agriculturist's Loans Act, 1884 respectively, of which copies are filed under sub - section (1) or (3) of section 89 of the *Registration Act, 1908.*;
    - **Index No. II**: This index contains such particulars with respect to description of property and maps or plans for the property, relating to every document and memorandum as the Inspector - General from time to time directs in that behalf;
    - **Index No. III**: This index contains the names including the father's name or the mother's name, and the places of residence, of all persons executing every Will and Authority entered in Book No. 3. It also includes names of the executors and persons respectively appointed in a Will. Further, after the death of the testator or the donor, it must also contain the names, including the father's name, or, mother's name, and the places of residence of all persons claiming under the Will;
    - **Index No. IV**: This index contains the names, including the father's name, or the mother's name, and the places of residence of all persons executing and of all persons claiming under every document entered in Book No. 4.

> **Box 5: Description of ROR in Maharashtra**
>
> A ROR is maintained by the Talathi (see Fig. 4.1) at the village level in Maharashtra. It is maintained in a form called the "7/12 extract" and contains the following particulars:
> 1. The names of all persons who are holders, occupants, owners or mortgages of the land or assignees of the rent or revenue in relation to the land, except tenants;
> 2. The names of all persons who are holders of the land as Government lessees or tenants, including tenants within the meaning of the relevant tenancy law;
> 3. The nature and extent of the respective interests of such persons and the conditions or liabilities, if any, attaching thereto;
> 4. The rent or revenue, if any, payable by or to any of such persons;
> 5. other particulars as the State Government may prescribe by rules, either generally or for any area specified therein.
>
> The above-mentioned list prescribed by the *Maharashtra Land Revenue Code, 1966* is inclusive and other details such as crop details are generally added.

4.4 Updation of land revenue records in Maharashtra

The legal framework for updating the ROR, in Maharashtra is largely embodied in the *Maharashtra Land Revenue Code, 1966*, the *Maharashtra Land Revenue Record of Rights and Registers (Preparation and Maintainace) Rules, 1971* and the *Maharashtra Land Revenue (Village, Town and City Survey) Rules, 1969*.

4.4.1 Record of Rights and Property Cards

Record of Rights

In Maharashtra, for areas largely falling under the rural belt, the Revenue Department (see Fig. 4.1) maintains a ROR.[4] While the *Maharashtra Land Revenue Code, 1966* does not define a record of rights, it mandates that a ROR be maintained in every village and specifies the particulars which are to be included in the ROR.[5].

As explained in greater detail in Chapter 6, citizens can retrieve their ROR from the web. Fig. 4.2 contains an image of a copy of a ROR that can be retrieved from the internet and Box 6, contains an explanation of important terms that are used in a ROR.

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[4]These are land parcels in respect of which no survey under the *Maharashtra Land Revenue Code, 1966* has been done.

[5]Section 148 of the *Maharashtra Land Revenue Code, 1966* Box 5 describes the particulars which are to be included in a ROR in Maharashtra

Figure 4.2: Extract of a ROR

Box 6: Terms used in a ROR

The following are some terms used in a ROR to record various details:

1. **Village Form 7**:
   (a) "Gav Namuna Saath"- This is the title of form referring to the village form number (Village Form-VII);
   (b) "Gaav"- The name of the village;
   (c) "Tahshil"- The name of the tehsil/taluka;
   (d) "Bhuman Kramank"- Survey number;
   (e) "Bhogvatacharache Naav"- Name of the holder/occupant;
   (f) "Kurdanche Naav"- Name of the Tenant;
   (g) "Itar Adhikar"-Other Rights;
   (h) "Seemani Bhumapan Chinhe"-Boundaries and Survey Remarks;
   (i) "Lagvadi Yogya Shetra"-Cultivable Area;
   (j) "Pot Kharaba"-Uncultivable Area;
   (k) "Varg"- Class(A or B) denoting holding with or without restrictions o n transfer;
   (l) "Aakarni"-Assessment tax; and
   (m) "Judi"-Special assessment.
2. **Village Form 12**:
   (a) "Gaav Namuna 12" - This is the title of the form referring to the village form number (Village Form 12);
   (b) "Pika Khali Shetra"- Area under crops;
   (c) "Varsh"- Year;
   (d) "Hangaam"-Season;
   (e) "Misr Pikanche Ekun Shetra"-Area having mixed crops;
   (f) "Nirbhar Pikanche Shetra" -Refined crop area;
   (g) "Jameen Kasnaryache Naav"- Name of cultivator;
   (h) "Shera"-Observation;
   (i) "Swaroop"-Phase;
   (j) "Jal Sinchan"- Water irrigated;
   (k) "Pikanche Naav"-Name of the crop;and
   (l) "Padit Va Pikas Nirupogi Asa Jaminicha Tapshil"- Wasteland and unusable land.

Box 7: Description of a PC in Maharashtra

The PC is maintained by the City Survey Office (see Fig. 4.1) and contains the following particulars:

1. The survey number of the plot of land;
2. The area;
3. The tenure of the land;
4. The particulars of assessment or rent paid to the Government and the when it is due for revision;
5. Easements;
6. Holder in origin of the title (as far as it is traced);
7. Lessee;
8. Other encumbrances in respect of the land;
9. Other remarks;
10. The date;
11. The transaction volume number;
12. The new holders name; and s
13. The attestation of lessee or encumbrances.

Property Card

In urban areas, the equivalent of a record of rights is called the PC and is maintained by the Survey and Settlement Department (see Fig. 4.1).[6] The requirement of maintaining a PC is set out in the *Maharashtra Land Revenue (Village, Town and City Survey) Rules, 1969*, which requires that the final results of an enquiry conducted in pursuance of Section 126 of the *Maharashtra Land Revenue Code, 1966*, be recorded for each parcel of land in a card known as the PC. Box 7 describes the particulars which can be found in a PC in Maharashtra.

As explained in greater detail in Chapter 6, citizens can retrieve their PC from the web. Fig. 4.3 contains an image of a copy of a PC that can be retrieved from the internet.

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[6]These are lands in areas where a survey under S. 126 of the *Maharashtra Land Revenue Code, 1966* has been conducted.

Figure 4.3: Image of a PC in Maharashtra

4.4.2 Process for updating land records

The *Maharashtra Land Revenue Code, 1966* sets out a uniform procedure for updation of the ROR or PC for different types of transfers. However, the documents required to be submitted for the purpose of effecting a change in the ROR or PC, differ based on the type of transfers. For example, the supporting documents for updating a ROR or PC due to a change in interest by succession, will differ from the supporting documents required for updation due to a sale.

Process for updating the ROR

The *Maharashtra Land Revenue Code, 1966* and the *Maharashtra Land Revenue Record of Rights and Registers (Preparation and Maintainace) Rules, 1971* provide the procedure for updation of RORs. The following is a detailed description of the procedure:

1. Intimation of the acquisition of rights: A person who acquires any interest in land, is required to intimate the Talathi, within whose jurisdiction the land is situated, of such acquisition. This intimation is to be given either orally or in writing, within three (3) months from the date of the acquisition of such rights. There are two exceptions to this requirement of intimation:

   (a) A person who acquires the rights to a property by virtue of a registered document is not required to intimate the Talathi. This is because, S.154 of the *Maharashtra Land Revenue Code, 1966* read with Rule 33 of the *Maharashtra Land Revenue Record of Rights and Registers (Preparation and Maintainace) Rules, 1971* mandates the SRO to intimate the fact of registration to the Talathi and the office of the Tahsildar; and

   (b) A person who acquires the rights with the permission of the Collector. However, the person maybe called upon to supply documents proving the fact of receipt of such permission.

2. Confirmation of Receipt of Intimation: The Talathi is required to send a written acknowledgment of the receipt of intimation to the person making the intimation. The *Maharashtra Land Revenue Code, 1966* does not quantify the time within which this must be done. However, it provides that the acknowledgement must be given "at once", which implies an immediate response from the Talathi.

3. Entry in the Register of Mutations: The Talathi, is then required to make an entry recording the details of the transfer, in the register of mutations.

4. Issue of Notice: The Talathi, is required to post a complete copy of the entry in a conspicuous place in the Chavdi (a place ordinarily used by a village officer for the transaction of village business) and give written intimation to all persons appearing, in the ROR or register of mutations, to be interested in the mutation. The Talathi has also been conferred with residuary powers to issue such notices to any other person whom he has reason to believe is interested in the mutation. In a recent amendment to the *Maharashtra Land Revenue Code, 1966* introduced in the year 2014, this procedure was nuanced to provide that as soon as the Tahsildar's Office received intimation from the registration officer, sthe Talathi in that office, shall send an intimation of this by a SMS or an e-mail to interested persons. The concerned Talathi must immediately make an entry in the mutation register. The persons who have executed the document do not require to be intimated.

5. Objections to the Mutation: In the event that objections are received to any entry either orally or in a written form, the Talathi must enter the details of the objection in the register of disputed cases and given a written acknowledgement of such intimation.

6. Disputes and Enquiry: The *Maharashtra Land Revenue Code, 1966* stipulates a time period of one (1) year for disposal of a dispute to an entry in the mutation register. It further requires that a revenue officer or a survey officer, not below the rank of Aval Karkun, is to dispose off such a case. Orders recording such disposal of objections will have be recorded in the register of mutations.
   Rule 17 of the *Maharashtra Land Revenue Record of Rights and Registers (Preparation and Maintainace) Rules, 1971* sets out the procedure for deciding disputes. It provides that the certifying officer shall inform the fact of such dispute to the

Talathi, who is to then issue notices to the interested parties, atleast fifteen (15) days prior to the date of the hearing.

On the date of the hearing, the certifying officer is to read out the mutation entries. If the correctness of such entries is admitted by all the persons present, the certifying officer shall record such admission and add an endorsement under his signature (or authentication) that the entries have been certified. If any error is admitted by the interested persons who are present, the certifying officer may correct that entry and certify the corrected entry.

The certifying officer shall then hold a summary enquiry and decide each dispute on the basis of possession. If there is doubt about actual possession, the person with the strongest title shall be recorded in the ROR.

The officer shall then make an order,which is to contain a brief summary of the evidence produced by either side along with the findings and the names of the parties and witnesses.He is also requires to record such order in the register of mutations and make an endorsement under his signature to the effect that the modified mutation is certified by him.

7. Appeal and Revision:

An appeal maybe preferred against the order made by the certifying officer, within a period of sixty (60) days (for appeals from orders passed by an officer below the rank of the Collector). In case of updation of entries, the officer in-charge is either the Aval Karkun or the Tahsildar. Ordinarily, an appeal from such an order will lie to the sub-divisional officer.

Further, the *Maharashtra Land Revenue Code, 1966* also gives the State Government and any revenue or survey officer (not below the rank of an Assistant or Deputy Collector or a Superintendent of Land Records), in the relevant department, to call for and examine the record of any enquiry or proceedings of any subordinate revenue or survey officer on the basis of "legality" or "propriety" of such order or decision or the "regularity" of the proceedings.

The process of updating the ROR in Maharashtra is pictorially shown in Fig. 4.4.
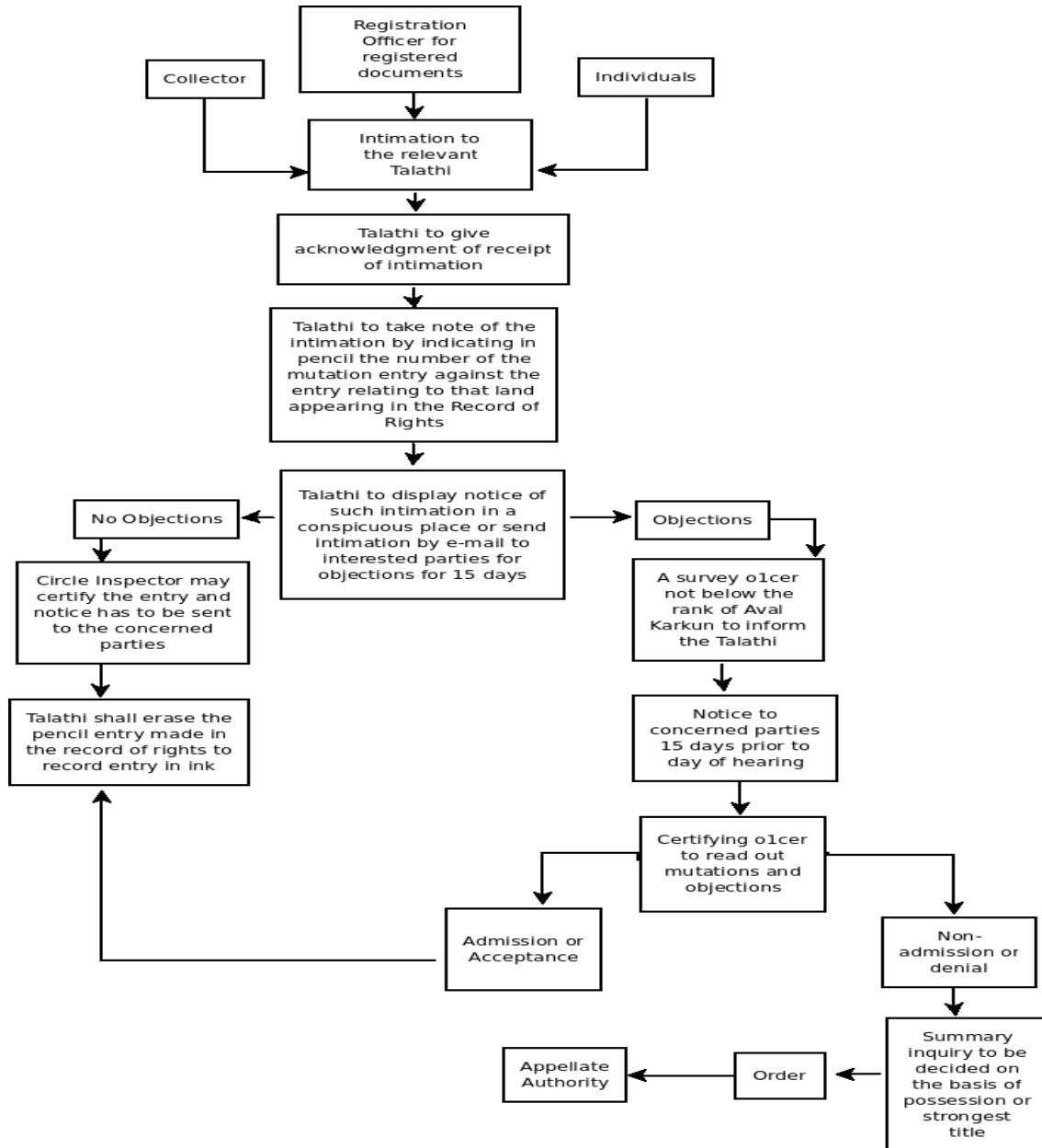
Figure 4.4: Process for updating the ROR in Maharashtra

Process for updating the PC

The *Maharashtra Land Revenue Record of Rights and Registers (Preparation and Maintainace) Rules, 1971* provide the procedure for updation of a PC. It is to be read in conjunction with the *Maharashtra Land Revenue Code, 1966*. The procedure for updating is set out below:

1. Intimation of Acquisition of Rights: A person who acquires rights to a property, is required to intimate the Talathi or the City Survey office, within whose jurisdiction the property is situated, of such acquisition. This intimation is to be given either orally or in writing within three (3) months from the date of the acquisition of such rights.

2. Confirmation of Receipt of Intimation: The Talathi or City Survey office is required to issue an acknowledgment to the intimation at once.

3. Entry in the Register of Mutations: Rule 23 of the *Maharashtra Land Revenue Record of Rights and Registers (Preparation and Maintainace) Rules, 1971* provides that the reports and intimations of acquisitions, shall be entered in the PC.

4. Issue of Notice: Once the mutation is entered in the PC, the officer is required to post a complete copy of the entry in the village, town or city. Further, a notice is to be issued to all persons who appear, from the PC, to be interested in the mutation and to any other person whom he has reason to believe is interested, requiring them to send their objections either orally or in writing within fifteen (15) days from the date of receipt of such notice.

5. Objections to Mutation: Any objections to the mutations are be acknowledged and registered in the form specified and disputes are to be noted in each case.

6. Disputes and Enquiry: The disputes entered shall be decided in accordance with the same procedure that is applicable for resolving disputes in relation to mutation entries in the ROR. (See Fig. 4.4)

7. Appeals and Revision: The provisions for appeal and revision are the same as are applicable to the updation of ROR.

It is relevant to note that while the *Maharashtra Land Revenue Code, 1966* requires the SRO to intimate the Talathi directly on registration of a document, there is no corresponding requirement in the *Maharashtra Land Revenue Code, 1966* for automatic intimation to the City Survey Office, to update a property card.

The process of updating the PC in Maharashtra is pictorially shown in Fig. 4.5.
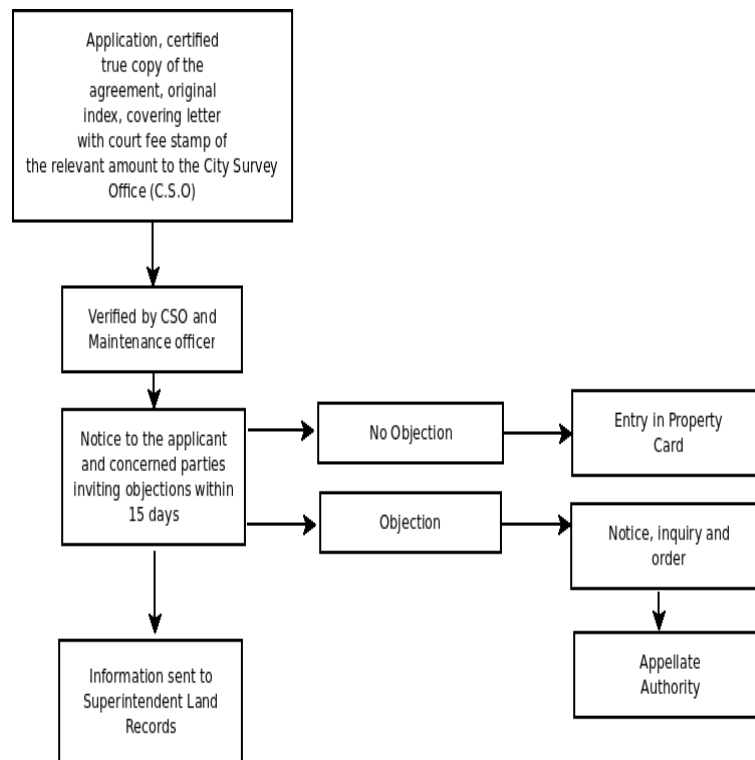
Figure 4.5: Process for updating the PC in Maharashtra

> ### Box 8: Transfer by Wills
>
> In Mumbai (being an erstwhile Presidency Town), to give effect to a Will, the *Indian Succession Act, 1925* requires a probate to be obtained from the High Court.[a] A copy of the probate must be submitted along with the death certificate of the testator and other relevant documents at the time of updation of the PC.
>
> There is no framework for the automatic intimation of grant of a probate by the High Court to the Talathi's office or the city survey office, as is the case with registered transactions. An automatic update like this will increase administrative efficiency and reduce the cost for the new owner.
>
> ---
>
> [a]See Section 213 of the *Indian Succession Act, 1925*.

In July 2007, the State Government made a push towards the preparation and storage of all land records, including the ROR, in electronic form, by issuing delegated legislation to that effect.

Case-studies

This section gives an overview of the process for updating the ROR and the PC, in different situations and for recording different kinds of interests in land.

Process for updating records in succession cases : A change in the ownership of land may occur on account of the death of the existing owner. On the death of an owner, the dead owner's interest in land may devolve on the erstwhile owner's legal heirs under a Will made by the owner; or under the relevant personal laws relating to succession (otherwise known as intestate succession). Another possibility is that the land is jointly owned by two persons. In case of such joint ownership, the land will devolve on the surviving joint owner (known as survivorship) and the ROR will have to be updated to reflect this change.

The *Maharashtra Land Revenue Code, 1966* does not contain a section dedicated exclusively to the updation of the ROR on account of death of an owner. However, Section 149 of the *Maharashtra Land Revenue Code, 1966* which deals with the reporting of acquisition of rights in relation to land, applies universally to all transfers. It mandates a person acquiring land *inter alia* by way of succession, survivorship or inheritance, to report the fact, to the Talathi within three (3) months from the date of such acquisition. This intimation may be given orally or in writing. In either case, the Talathi is required to give a written acknowledgment of the receipt of such intimation. After this stage, the same procedure as described in section 4.4.2 is followed.

The procedure will vary slightly in Mumbai, where obtaining a probate for a Will is necessary. The variation is explained in greater detail in Box 8.

Process for updating records in cases of sale : Voluntary transactions of immovable property, such as sale, purchase, mortgage,lease or gift require to be reg-

istered at the SRO.[7] As mentioned above, when the document transferring an interest in land is registered at the SRO, the SRO sends intimates the Talathi, and the Talathi initiates the process as described in section 4.4.2.

Processes for updating records in cases of partition of land parcels :

When a property is owned by a single owner, possession is with that owner (unless the property is leased to another or a licence to enter has been granted in respect of the property). However, in case of joint-owners or co-owners, one or more owners may be in possession of a single property. In the case of co-owners of a property (such as coparceners in a Hindu undivided family), even though the shares of each coparcener are determined, the property may not be physically divided among such corparceners. It is only notionally divided amongst them. A partition in the Hindu undivided family, may result in the physical division of property.[8] Alternatively, a co-owner may sell her/his share of the property.

In such cases, Section 85 of the *Maharashtra Land Revenue Code, 1966* provides that a land parcel may be partitioned in one of the following two ways:

1. on the decree of a civil court or on an application of the co-owners; or
2. on the order of the Collector, on the application of the co-owners.

However, in the latter case, in the event that a question pertaining to the title of the property is raised, the Collector cannot pass an order of partition until such question is settled under a civil suit. The procedure for applying to the Collector for an order of partition of a parcel of agricultural land is described in greater detail in Box 9.

Once the Collector passes an order partitioning or sub-dividing a parcel of land, then as required under the *Maharashtra Land Revenue Code, 1966*, the Collector intimates the fact of such partition or sub-division to the Talathi of the village in which the land is located.[9]

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[7]See Section 17 of the *Registration Act, 1908.*

[8]A partition of land cannot be made in contravention of the *Maharashtra Prevention of Fragmentation and Consolidation of Holdings Rules, 1959*, which prevents fragmentation of land parcels beyond a particular limit.

[9]See section 4.4.2 of this Chapter.

Box 9: Process for obtaining a partition order from the Collector

The procedure for partition of agricultural land is contained in the *Maharashtra Land Revenue (Partition of Holdings) Rules, 1967.* An application for partition made to the Collector must contain the following particulars:

1. The area of each field constituting the holding and its survey number and Hissa number recorded in the record of rights;
2. The tenure of the holding, whether/alienated or un-alienated, and in case of an un-alienated holding, whether held as occupant Class I (no restrictions on transfer), Class II (restrictions on transfer) or government lessee;
3. the land revenue of holding;
4. The names and addresses of the co-holder and the extent of their shares; and
5. a copy of the ROR.

On receipt of an application for partition, the Collector gives the applicant an opportunity to be heard and serves a notice, of not less than thirty (30) and not more than sixty (60) days to all other co-holders to appear before her/him. Further, a copy of the notice is to be published and a copy of such proclamation will have to be posted at the headquarters of the taluka and in office of the Talathi of the village in which the parcel is situated.

The Collector may reject the application if it violates the *Maharashtra Prevention of Fragmentation and Consolidation of Holdings Rules, 1959* or if any person disputes the title of the applicant to the parcel sought to be partitioned.

Where the Collector admits the partition application, he may proceed to effect the partition either personally or through such agency as he may appoint. As far as practicable, whole survey numbers or sub-division of survey numbers are allotted to the sub-divided portions of the parcel. The law also requires that care is taken to ensure that the productivity of the area allotted to each party is in proportion to her share in the holding.

After the partition is completed, the Collector will hear any objections which the parties may make, and shall either amend or confirm the partition. The partition takes effect from the commencement of the agricultural year next following the date of such amendment or confirmation of the partition.

Box 10: Land Grants and Land Acquisitions

When the changes in ownership occur on account for a grant or acquisition of land by the Government, there is no requirement of the individual to make an application to make changes in the ROR.

Land grants maybe made by the State Government for recreation (e.g. as playgrounds), as temporary or permanent leases (5 years or temporary leases and 99 years for permanent leases) to institutions and individuals.

In 2016,all government bodies in Pune, Satara, Sangli, Kolhapur and Solapur under Pune division were issued circulars to get their acquired land records verified from the revenue authorities as entries in a lot of cases, were not updated. The relevant land acquisition officer, the circle officer and Talathi are responsible for carrying out this process.

Process for updation in cases of sub-division of land parcels : The *Maharashtra Land Revenue Code, 1966* defines the sub-division of a survey number to mean a portion of the survey number of which the area and assessment are separately entered in the land records, under an indicative number subordinate to that of the the survey number of which it is a portion.

The concept and procedure for sub-division is provided in the *Maharashtra Land Revenue Code, 1966* and the *Maharashtra Land Revenue (Revenue Surveys and Sub-divisions of Survey Number) Rules, 1969.*

Section 87 of the *Maharashtra Land Revenue Code, 1966*, 1966 provides that survey numbers may from time to time and at any time be divided into so many sub-divisions as may be required in view of the acquisition of rights in land or for any other reason. The division of survey numbers into sub-divisions and the fixing of the assessment of the sub-divisions shall be carried out and from time to time revised in accordance with the rules made by the State Government in this behalf. However,the total amount of the assessment of any survey number or sub-division shall not be enhanced during any term for which such assessment may have been fixed.The area and assessment of such sub-divisions shall be entered in such land records as the State Government may prescribe in this behalf. Where a holding consists of several Khasra numbers in any area in the State, the settlement officer shall assess the land revenue payable for each Khasra number and record them as separate survey numbers.

Thus, the point of registration or taking approval from the Collector for transfer of certain categories of land, initiates the process for updating the ROR. However, Box 10 describes one peculiar case of land transfers which do not get automatically intimated to the Talathi, thereby delaying the process for updating revenue records for transfers falling in this category.

4.5   Updation of boundaries and cadastral maps

The *Maharashtra Land Revenue (Boundaries and Boundary Marks) Rules, 1969* contain
the provisions governing the marking of boundaries, survey marks and straightening
crooked boundary lines. These rules are to be read with the relevant sections of the
Maharashtra Land Revenue Code, 1966. In the absence of a survey and the preparation
of CMs that integrate geo-spatial data, the law currently recognises the following types
of boundary marks:

1. Continuous boundary marks - Such as a boundary strip, hedges or permanent
   structures like walls; and
2. Discontinuous boundary marks - Such as roughed dressed long stones and pillars
   of cut stones.

The Survey and Settlement Department is in charge of drawing up CMs with land
boundaries, except when (a) a person makes a request for demarcation of boundaries for
a parcel of land held by her; or (b) there is a dispute regarding land boundaries between
private parties, in which case such dispute gets adjudicated by the Collector, under
the Revenue Department (see Fig. 4.1). The procedures for boundary demarcation are
described in Box 11.

4.6   Updation of crop details in land records

The Talathi of every village is required to maintain a register of crops showing the
crops grown in the land and the area in which they are grown.[10]

The details of the crops are maintained as a separate form in the ROR in respect of
each survey number or sub-division of a survey number. The crop details in each ROR
are required to be updated every year.[11] The second page of the ROR, as shown in Fig.
4.2 contains details of the crop cultivated in respect of the survey number to which the
ROR pertains.

4.6.1   Procedure for updation of crop details

Rule 30 of the *Maharashtra Land Revenue Record of Rights and Registers (Preparation
and Maintainace) Rules, 1971* sets out the procedure to make entries in the register of
crops. It requires the Talathi to visit the village for inspecting the crops. This is to
be done every year at a time when the crops grown in a village are standing. He is
required to intimate the villagers of this visit so that they may be present at the field at
the time of inspection with the Khate Pustika. Further, intimation is to be given to the
village Sarpanch as well.

On the date fixed for his visit to the village, the Talathi is to visit the site, the villagers,
the members of the Village Panchayat and the Sarpanch, if any, as may be present and

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[10]See Rule 29 of the *Maharashtra Land Revenue Record of Rights and Registers (Preparation and Main-
tainace) Rules, 1971.*

[11]See Rule 30 of the *Maharashtra Land Revenue Record of Rights and Registers (Preparation and Main-
tainace) Rules, 1971.*

Box 11: Process for boundary demarcation

1. **Boundary Demarcation upon Survey**

   Section 134 of the *Maharashtra Land Revenue Code, 1966* provides that at the time of a survey, if the boundary of a field or holding is undisputed and its correctness is affirmed by the village officers then, it maybe laid down as pointed out by the holder or person in occupation of the land. If the holder or occupant is not present, it shall be fixed by the survey officer according to the land records and according to occupation as ascertained from the village officers and the holders of adjoining lands or such other evidence or information as the survey officer may be able to procure.

2. **Boundary Demarcation by Request**

   Section 136 of the *Maharashtra Land Revenue Code, 1966* provides that a holder or any person interested in a survey number or a sub-division, may apply in writing to the Collector to have a boundary demarcated.[a]

3. **Disputes regarding Boundaries**

   In the event of any dispute concerning the boundary of a village, or a field or a parcel which has not been surveyed or if at any time after the completion of a survey, a dispute arises concerning the boundary of any parcel of land, it is to be decided by the Collector after holding a formal inquiry at which the village officers and all persons interested will be given the opportunity of appearing and producing evidence.[b] When the boundary of a parcel is fixed after holding such an inquiry, the holder in wrong possession, is liable to be summarily evicted by the Collector. [c]

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   [a]See also Rule 13 of the *Maharashtra Land Revenue (Boundaries and Boundary Marks) Rules, 1969*.

   [b]See Section 135 of the *Maharashtra Land Revenue Code, 1966*.

   [c]See Section 138 of the *Maharashtra Land Revenue Code, 1966*.

make entries in the register of crops in respect of each survey number or sub-division of a survey number after actual inspection. He must then allow the persons interested in the land to see the entries made by him in respect of each land. He must simultaneously copy out the relevant entries in the Khate Pustika also. As soon as may be practicable after the Talathi has made entries in the register of crops, any revenue or survey officer (not below the rank of a Circle Inspector) must, for the purpose of verification of the said entries, visit the village of which advance intimation must be given to the villagers. The survey officer after due enquiry, may require the Talathi to rectify entries which are found to be incorrect.

4.6.2   Verification of possession with crop inspections

Rule 31 of the *Maharashtra Land Revenue Record of Rights and Registers (Preparation and Maintainace) Rules, 1971* requires that the Talathi must, during the course of inspecting the crops, verify whether the person in actual possession of a survey number or sub-division of a survey number, is the one whose name is recorded in the record of rights. If the Talathi finds that the person in actual possession is other than the person, who according to the entries in the ROR, is entitled to cultivate the land, he must enter his name in the register of persons in possession, other than the persons who should have been in possession of the land according to the ROR. The register of possession is to be maintained in the prescribed from (Form XIV). As soon as may be practicable after any entries are made in the register, the Talathi shall forward the relevant extract thereof to the Tahsildar.

On receipt of the register containing the details of possession, the Tahsildar must visit the village for making necessary enquiries about the possession of the land by the persons mentioned in the said register. He must give prior intimation of the date and time of his visit to the Talathi and the Sarpanch of the village panchayat, if any, at least seven days in advance. The Talathi must arrange to inform all the interested persons of the Tahsildar's visit and must call upon them to remain present in the village Chavdi along with their Khate Pustika at the appointed date and time.

On the appointed date and time, the Tahsildar is to hear persons interested and after holding such further enquiry as he deems necessary decide the matter. After the resultant entries are made in the record, he must cause necessary entries to be made in the relevant Khate Pustika.

Rule 17 of the *Maharashtra Land Revenue Circle Officers and Circle Inspectors, (Duties and Functions) Rules, 1970* provides that the Circle Officer and the Circle Inspector shall detect all encroachments and unauthorised occupation of any land, which is the property of the State Government. They are also mandated inspect all waste lands disposed off in accordance with the rules governing the disposal of waste land, to verify whether they are brought under cultivation and whether the conditions subject to which they were granted, have been fulfilled by the grantee. Where the Circle Officer or the Circle Inspector detects encroachment on any lands which are the property of the State Government or detects unauthorised cultivation, he shall forthwith report those cases to the Tahsildar for necessary action.

4.7   Updation of encumbrances

The *Maharashtra Land Revenue Code, 1966* requires a person acquiring any right in immovable property to intimate the fact of such acquisition to the Talathi, either orally or in writing, within a period of 3 (three) months from the date of such acquisition. Rights under a mortgage, with and without possession, have specifically been included in Section 149. The provision also clarifies that a person in whose favour a mortgage is discharged or extinguished, or lease determined, acquires a right within the meaning of Section 149. However, the following interests are not required to be intimated to the Talathi:

1. easements;
2. charge of the kind specified in section of the *Transfer of Property Act, 1882*, not amounting to a mortgage;
3. interests created under a document registered with the SRO or with the permission of the Collector.

4.8   Correction Of Errors In Record

The *Maharashtra Land Revenue Code, 1966* does not define the word 'error'. However, it specifies the types of errors which can be corrected and provides a framework for correction of these errors. The framework for correction of these errors as provided in the *Maharashtra Land Revenue Code, 1966* is set out below:

Arithmetical errors during settlement : An error may occur due to a mistake in the survey exercise or as a result of an arithmetical miscalculation. The Collector is empowered to correct errors in the area or assessment of a holding, after giving notice to the holder to the relevant Collector.[12] The Collector may delegate this power to a Survey Officer not below the rank of the Superintendent of Land Records by a notification in the Official Gazette.

Clerical errors in the ROR : The Collector may correct clerical errors which the interested parties admit to have been made in the ROR or registers maintained. When any error is noticed by a revenue officer during the course of his inspection, no such error shall be corrected unless a notice has been given to the parties and objections if any have been disposed of finally in accordance with the procedure relating to disputed entries.[13]

Correction as a result of orders : When, in consequence of an order passed by an appellate or revision authority under the *Maharashtra Land Revenue Code, 1966*, an entry in the ROR or register of mutations requires to be corrected, the Talathi may do so and specifically indicate the same in the record. He is further required to register the number and date of the order passed by the appellate or revision authority and indicate the designation of such authority. Such corrections do not require the Talathi to serve notices on the persons affected by the order.[14]

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[12] Section 106 of *Maharashtra Land Revenue Code, 1966.*
[13] Section 106 and 155 of the *Maharashtra Land Revenue Code, 1966.*
[14] Rule 36 of the *Maharashtra Land Revenue Record of Rights and Registers (Preparation and Main-*

tainace) Rules, 1971.

5 — Digitalisation initiatives in Maharashtra

This chapter gives an overview of the initiatives that the Government of Maharashtra has undertaken in connection with 'computerisation' or 'digitisation' of land records or the land record management systems. The DILRMP does not define the term 'computerisation' or 'digitisation'. However, it includes within its scope elements such as conversion of existing records into digital records, interconnectivity among offices of the State administration that maintain land records, setting up modern record rooms and conducting a survey/ re-survey and digitisation of cadastral maps. In our assessment, end-to-end delivery of land records services entails several components in the 'digitisation or computerisation of land records'. These components can be classified into the following five buckets:

1. *Digitising the land records*: Computerising the land records will entail scanning and uploading a record on a database in a machine readable format.
2. *Digitising the mode of accessing the record*: Allowing the land records to be retrieved from (a) a stand-alone computer; or (b) a series of computers connected to a networked server; or (c) the web.
3. *Digitising the process of recording the transfer of interests in land*: Digitising the whole or a part of the process for (a) registration of documents creating or transferring interests in immovable property; and (b) updating revenue records.[1]
4. *Digitisation of maps*: Surveying land through modern survey techniques and preparing digital maps with geospatial data.
5. *Interconnectivity of land record offices*: Connecting land record offices which makes real-time updation of land records possible.

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[1]The DILRMP does not contemplate the digitalisation of the entire process for recording the transfer of interests in land. However, we have included examining the status of digitalisation of these processes for the sake of completeness.

5.1   e-Mahabhoomi Programme

Maharashtra has undertaken a digitisation initiative titled the *e-Mahabhoomi* program which comprises several initiatives that touch upon one or more aspects of digitisation listed above. While some of these initiatives have been undertaken under the aegis of the DILRMP, two initiatives (e-Chavdi and e-Mojani) have been taken up independently of the DILRMP.

5.1.1   Initiatives under the DILRMP

The initiatives which form part of DILRMP are as follows:

E-records : This project entails the scanning of old textual records, such as old ROR, old mutations, etc. which span across 1880 to 2011. These old records will be preserved at the taluka level as well as the State level. The State has reported that the software development for the search and retrieval of scanned documents, is already complete and a pilot project has started in Mulshi and Haveli talukas in Pune district. By the financial year 2012-13, the e-Records project was proposed to be rolled out in the entire state.[2] We have been informed that the RORs of three hundred fifty-seven (357) Talukas out of a total of three hundred fifty-eight (358) Talukas, have been digitised.[3]

As this initiative deals with scanning and preserving land records, it touches upon the aspect of digitisation specified in item 1 of the opening paragraphs of this chapter.

e-Mutation / e-Ferfar project : This project provides for online mutation of land records. Mutation is the process by which an interest in land is created or transferred, in the revenue records of the State. There are thirty-six (36) types of mutations which may be carried out with respect to land records in Maharashtra. E-Mutation aims at enabling mutations to take place online / through an Application Software.

Since the mutation application and process is specific to each State, the application for an online mutation has been developed by the National Informatics Centre (NIC) under the guidance of the Settlement Commissioner & Director of Land Records (Maharashtra State), Pune. The process begins at the registration department where the citizen gets his documents registered at the SRO. Once the registration is complete, the details of registration are uploaded on the State Data Centre (SDC) from the SRO. The department officials at the Tehsildar's office view such mutation request and the mutation number automatically given by application. A digitally signed notice is generated in the Tehsildar's office, which is then sent to the SRO immediately for serving to all interested parties present at the SRO. At the same time, a text message is sent to the parties registering the document at the SRO and the village officer for taking note in the register. A fifteen (15) days notice is given to the citizens to raise objections, if any, to the proposed changes in the revenue records. In case no objection is received within

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[2]Source:`https://it.maharashtra.gov.in/1067/1194/` `Brief-Details-or-Summary` (last visited: February 22, 2017)

[3]See Table 6.1 in Chapter 6.

the prescribed time period, the mutation is certified and the name of the new person is entered in the ROR automatically with this application.

Where the mutation process is to be initiated otherwise than through registration (such as in cases of succession or the creation of bank encumbrances), the E-mutation process can be initiated at the village level through this application. The mutation number for such cases is obtained by village officers from the Tehsildar's office with push/pull SMS technology from the central server.

A pilot project has been initiated in Mulshi Taluka of Pune District since October 2010. Mutations in concurrent jurisdiction area (jurisdiction of many SROs in one Taluka or jurisdiction of one SRO for many Talukas) are also performed by this application. A pilot project in Haveli Taluka of Pune District was initiated in March 2002. If the pilot projects succeeded, it was proposed to implement the e-mutation project in the entire state by the end of 2013.[4] The State Government has reported that they have discontinued hand written land records for all Talukas, except Jivati.[5]

As this initiative deals with the process for creation or change of interests in land and the interconnectivity of offices, it touches upon the aspects of digitisation specified in items 3 and 5 of the opening paragraphs of this chapter.

e-Resurvey Project : The Maharashtra Government has not conducted a State-wide land survey since independence. This project aims at carrying out a re-survey using modern survey techniques such as High Resolution Satellite Imagery (HRSI), Electronic Total Station (ETS) and Differential Global Positioning System (DGPS). A pilot project under this project has already been conducted in twelve(12) villages in the Mulshi Taluka of the Pune District.

It was proposed to conduct a re-survey in pilot twelve (12) villages of Mulshi Taluka in Pune District before rolling out the re-survey throughout the State. In the pilot, the land is being re-surveyed by two methods: (1) the pure ETS methodology with Global Positioning System (GPS) co-ordinates integrated in it; and (2) high resolution satellite imagery with ETS and GPS co-ordinates integrated in it.[6] Both these methodologies use will use the Ground Control Network (GCN), which is established in the villages selected for the conducting the pilot, in consultation with Survey of India. The Government of Maharashtra has decided to appoint Maharashtra Remote Sensing Application Center, Nagpur as a nodal agency for resurvey. On completion of the pilot project, the Government was to decide the further course of action. The actual re-survey work was to be out sourced.

Conducting a re-survey using these modern techniques requires amendments to the *Maharashtra Land Revenue Code, 1966*, which sets out the procedure for conducting re-surveys. The State Government has constituted a committee under the leadership of the Settlement Commissioner & Director of Land Records (Maharashtra State), Pune to suggest amendments and recommending the procedure

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[4]Source: https://it.maharashtra.gov.in/1067/1194/Brief-Details-or-Summary (last visited: February 22, 2017)

[5]See Section 6.1 of Chapter 6.

[6]The total station is an electronic theodolite (transit) integrated with an electronic distance meter (EDM) to read slope distances from the instrument to a particular point

for conducting a re-survey in the State of Maharashtra.[7] We have been informed that State Government has conducted a pilot re-survey in twelve (12) villages of the Mulshi Taluka of the Pune District.[8]

As this initiative deals with re-surveying the land using modern techniques and digitising cadastral maps, it touches upon the aspects of digitisation specified in item 4 of the opening paragraphs of this chapter.

e-Maps : This project involves digitisation of existing maps for archival. The archived maps can be used during the resurvey and assisting land records department officials in the day-to-day functions. The pilot project is started in Mulshi Taluka in September 2012. On successful implementation of the eMaps project in Mulshi Taluka of Pune district, it was proposed to be rolled out in other talukas of the state in the year 2013-14.

We have been informed that State Government has re-surveyed land in twelve (12) villages of the Mulshi Taluka of Pune District and proceeded to digitise maps of the re-surveyed villages.[9]

As this initiative deals with digitising existing maps, it touches upon the aspects of digitisation specified in item 1 of the opening paragraphs of this chapter.

Initiatives for digitisation of the registration process :

The process for registering a document involves a series of steps. Initiatives have been taken to digitise each of these steps.

1. Computing the stamp duty payable on the instrument on the basis of the market value of the property: E-ASR application permits users to obtain the Annual Schedule of Rates (ASR) of properties in Maharashtra. This ASR is prepared by the Department of Registration and Stamps for assessing the market value of properties for the purpose of stamp duty. The official rates may be found by selecting the relevant district, taluka and village. We have been informed that this initiative is fully operational and the ASR can be retrieved from the web.[10]

   Since this involves retrieval of information that facilitates the registration process, it touches upon the aspect of digitisation specified in item 3 in the opening paragraph of this chapter.

2. Payment of stamp duty and registration charges: The e-Payment initiative introduced by the Department of Registration and Stamps redirects a user to the Government Receipt Accounting System (GRAS) website for payment of the requisite stamp duty and registration fees. GRAS is an initiative of the Finance Department of the Government of Maharashtra for payment of taxes, duties and charges to the State Government electronically. With respect to payments required for registration of documents, GRAS permits a user to pay the above mentioned charges through a link on the website for 'Payments related to the Department of Registration and Stamp Duty'. The pay-

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[7]Source: `https://it.maharashtra.gov.in/1067/1194/` `Brief-Details-or-Summary` (last visited: February 22, 2017)

[8]See section 6.2 of Chapter 6.

[9]See section 6.2 of Chapter 6.

[10]For   more   details,   you   can   visit   `http://igrmaharashtra.gov.in/` `OnlineServices/eASRUserManual.pdf` to access the User Guide for the e-ASR Application.

ment may be made either by creating a User Account on GRAS or without such registration. It further allows a user the option to either pay stamp duty and registration fees together or individually. For more details regarding payment of stamp duty and registration fees without registering on GRAS, you may visit `https://gras.mahakosh.gov.in/echallan/Common/gras_manuals/Unregistered_Users.pdf` to access the User Guide for the same.

3. Scheduling an appointment with the SRO for admitting execution of the instrument: Two initiatives have been undertaken to digitise the scheduling of an appointment with SRO:

   - PDE for Registration: The Department of Registration and Stamps has also introduced a web application for Public Data Entry (PDE) for data entry about a document to be registered. Every application for data entry is allotted a Data Entry Number (DEN) which may be used for modifying an entry and for easy access to the entry by the SRO. We have been informed that the PDE system is now operational for registration of all kinds of documents throughout the State.[11]

   - e-Stepin is a web application used for obtaining a token to book an appointment with the SRO to admit execution of the document proposed to be registered. The user is required to use the PDE number generated through the PDE and is provided a receipt upon completion of booking. This receipt is to be presented at the SRO for carrying out the registration of the required document.[12]

4. e-Registration aims at digitising the process of registration of documents without the requirement of physically being present at the SRO. The Department of Registration and Stamps has already implemented this project with respect to registration of Leave and License Agreements. The functioning of the e-Registration Application for registering Leave and License Agreements have been provided in Box 12 below.

e-PCIS : Apart from the above, the State also aims at developing an e-PCIS or e-Property Card Information System. This initiative would provide the users access to Property Cards maintained by the Survey and Settlement Department in urban areas.

5.1.2 Initiatives which do not fall under the DILRMP

Government of Maharashtra has undertaken two more initiatives, namely, e-Chavdi and e-Mojani are projects which do not fall under the DILRMP. A brief outline of these projects has been provided below.

1. **e-Chavdi:** This is a village level project. It aims at creating an Application which will contain all land revenue related forms (at the village level) which are

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[11]For more details on this web application, the User Guide for the same may be accessed at `http://igrmaharashtra.gov.in/OnlineServices/iSaritaPublicDataEntryUserManual.pdf`.

[12]The User Guide for this web application may be accessed at `http://igrmaharashtra.gov.in/OnlineServices/eStepinUserManual.pdf`.

Box 12: Case Study: eRegistration for and License Agreements

The Department of Registration and Stamps has initiated complete online registration of Leave and License Agreements under its eRegistration scheme.[a] This module permits a user to carry out the following steps online:

1. Prepare the Leave and License Agreement;
2. View the draft;
3. Modify the draft, if required;
4. Execute the Agreement;
5. Submit the Agreement for registration;
6. Get the Agreement registered

For the payment of the requisite stamp duty and registration fees, the user is directed to the website of GRAS.

Other pre-requisites for using this service are as follows:

- Aadhar Numbers of the parties and witnesses;
- A biometric device for scanning the thumb of the executing parties and witnesses;
- Digital Signature tool;
- A Webcam for recording the images of the parties and the witnesses and
- Internet Explorer 9 or later versions.

The portal for this module further provides a user, tools to calculate stamp duty and registration fees, locate Sub-Registrar Offices for registration and to check Aadhar details.

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[a]The User Manual for the module may be accessed at `https://efilingigr.maharashtra.gov.in/ereg/downloadstuff/eRegistration_UserManual.pdf`.

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maintained by the Talathi.

2. **e-Mojani:** This project aims at facilitating the department officials in managing survey requests, generating challans for such cases and for tracking monthly survey fees collection.

6 — DILRMP implementation in Maharashtra

In this Chapter, we set out the results of our State-level survey on the status of digitisation of land records. As described in Chapter 5, we examine the status of the following aspects of 'digitisation' or 'computerisation' of land records: digitisation of the land records; digitisation of the mode of accessing the land records; digitisation of cadastral maps; digitisation of the process for recording the creation or transfer of interests in land (that is, digitisation of the processes for registration of documents and updation of mutation records); and interconnectivity of offices maintaining the land records.

The description of the status of digitisation of land records, in this Chapter, is a summary of the responses given by officials of the Revenue Ministry of the Government of Maharashtra, to the questionnaires we administered on them. The questionnaires, together with their responses, are annexed as Appendix A. All State Governments are required to report the progress of the DILRMP in their respective States to the Central Government. This reporting takes places in a MIS format which is available on the website of the DILRMP. We have compared the responses given to the questionnaires with the details reported by the Government of Maharashtra to the Central Government on the MIS. The discrepancies, if any, between (a) the information reported by the State Government on the MIS and (b) the information given to us orally, have been noted in the relevant part of the chapter.

6.1 Status of computerisation of ROR:

The ROR, as defined earlier, is essentially a record of all rights and interests in a parcel of land. The status of computerisation of the ROR, as informed to us orally by the State officials in Maharashtra, is summarised in Table 6.1.

Box 13: Inconsistency on the status of computerisation of ROR

As mentioned in Table 6.1, we have been orally informed that the ROR of all Talukas, except Jivati have been digitised. As per a census conducted in 2012, Jivati Taluka has eighty-three (83) villages. This means that the ROR of eighty three (83) villages must be reported as not having been digitised. However, in the MIS on the DILRMP website, the State Government has reported as under:

- Number of villages for which the land records have not been digitised: 523.

This number is inconsistent with the number orally reported to us.

Table 6.1: Status of digitisation of ROR

Total Number of Talukas	358
Number of Talukas in which the ROR have been digitised	357
Number of Talukas for which the ROR is stored digitally	357
Number of Talukas for which the certified copies of the ROR can be retrieved from the web	0

Table 6.1 shows that Maharashtra has made significant progress on the computerisation of ROR, with the ROR of three hundred fifty-seven (357) out of the total three hundred fifty-eight (358) talukas being computerised and available 24/7 on state level servers housed in secure facilities. The eighty-three (83) villages of Jivati Taluka in the Chandrapur District is the only taluka where such computerisation of the ROR has not taken place. However, this is inconsistent with the information reported by the State Government in the MIS on the website of the DILRMP. The inconsistency is explained in Box 13.

Certified copies of the ROR are not as yet available online for the entire state. The State has informed us that the process of affixing digital signatures to the computerised ROR has been initiated for allowing citizens to easily access certified copies of the RORapilot has been initiated. As of now, plain copies of the ROR may be obtained from (a) the Common Service Centres formed under the aegis of the National e-Governance Plan funded by the Government of India; and (b) the website of E-Mahabhulekh. Further, certified copies of RORs for a few districts may be applied for through the 'Aaple Sarkar' portal of the Mahaonline website of the State Government.

We have compared the information provided to us by the State Government and the information reported by it in the MIS on the NLRMP website. In the MIS on the NLRMP website, the State Government has reported that hand written records have been discontinued. However, we were informed by the Land Records Department that the records of one village, namely, Jivati, have not been digitised. Hence, it is unclear how hand written records have been discontinued in Jivati.

6.2   Status of computerisation of the Cadastral Maps

CMs are maps prepared by the Office of the Settlement Commissioner and Director of Land Records, based on the information obtained from a state level survey that measures land parcels and allots specific identification numbers to them which may be called Survey Numbers or Cadastral Survey Numbers. These maps provide specificity to land parcels, their boundaries and areas. They facilitate collection of land revenue, land planning initiatives and land acquisition activities of the government and provide certainty of area and boundaries for land transactions.

The digitalisation of CMs may or may not be preceded by a survey or re-survey of the land. A survey of agricultural land in Maharashtra was conducted during the preindependence era. The Maharashtra Government has not conducted a State-wide resurvey of agricultural land since independence.

The State Government has initiated a State-wide survey of agricultural land using modern survey techniques. A pilot re-survey has already been conducted in twelve (12) villages in the Mulshi Taluka of the Pune district. We have been informed that the State Government has proceeded to digitise maps of these re-surveyed villages.

While the *Maharashtra Land Revenue Code, 1966* enables the State Government to conduct a State-wide survey of non-agricultural land located in a village, town or city with a population exceeding two thousand (2000) persons, commonly referred to as 'Gaothan land' (abadi areas), the State Government has informed us that the State Government has not conducted a State-wide survey of gaothan areas. We are not aware if the State Government proposes to survey Gaothan areas in the near future.

Table 6.2 contains the information which the State officials have informed us orally, with respect to the progress on re-survey of agricultural land in Maharashtra:

<div align="center">Table 6.2: Status of computerisation of CMs</div>

Total Number of Talukas	358
Number of Talukas for which a survey has been done using modern techniques	0
Number of villages for which maps have been digitised on the basis of new survey techniques	0
Number of Talukas for which the maps are not in usable form and are torn, disfigured, mutilated	30%

Table 6.2 shows that Maharashtra has not made much progress with respect to conducting a survey with modern techniques or the digitisation of CMs. The CMs of all three hundred fifty-eight (358) talukas in the State have been drawn up on the basis

of traditional survey techniques. Out of these maps, approximately 30% of the maps are not in usable form and are torn, disfigured, mutilated, etc. We find this number inconsistent with the number reported by the State Government on the MIS, where the State Government has reported that 86% of its maps are in good condition.

In the MIS on the DILRMP website, the State Government has reported that 3.79% of its maps have been digitised. Here, we presume that digitisation would mean the act of digitising cadastral maps drawn up as per the old survey techniques. The district-wise distribution of the digitised maps is represented in Fig. 6.1.
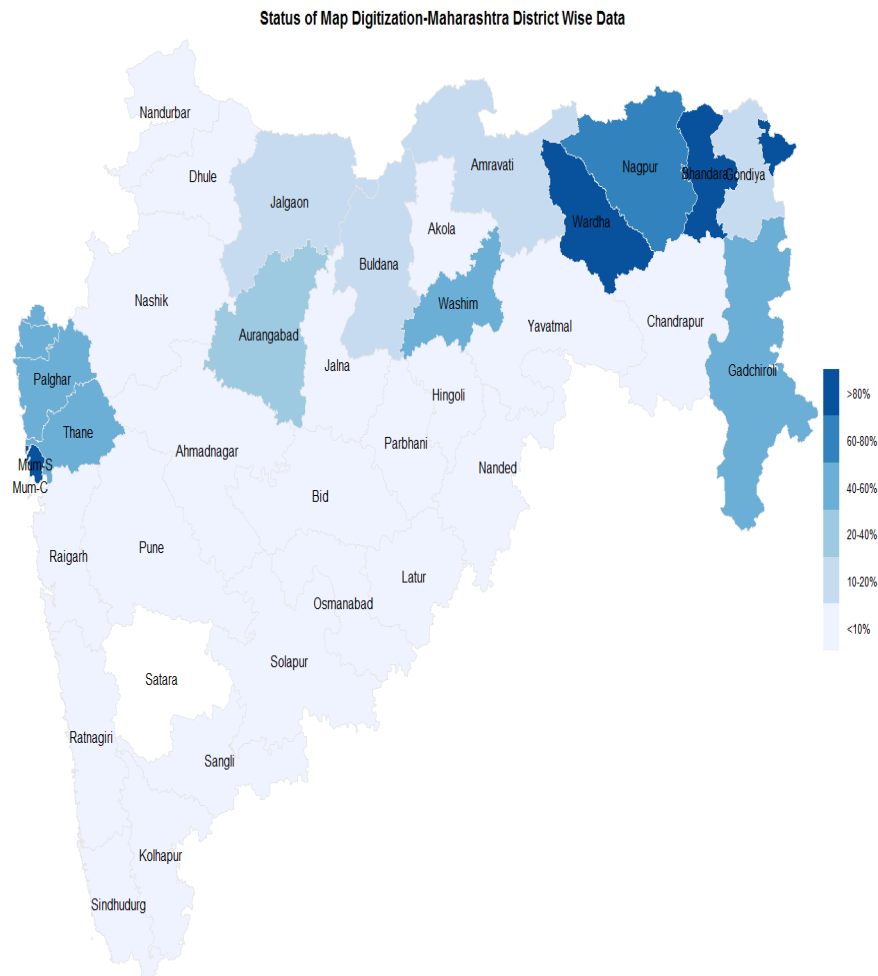
Figure 6.1: District-wise distribution of digitised maps in Maharashtra

A State level survey, with modern techniques, has not been conducted in the State since independence despite a mandate in the *Maharashtra Land Revenue Code, 1966* to conduct a survey every 30 years. The need for carrying out a resurvey at the state level has been identified by the State and a pilot project was conducted in 12 villages of the Mulshi Taluka of the Pune District. Details of the project in Mulshi have been provided below. In addition to this pilot project, we have been informed that a project involving a re-survey with modern techniques and digitisation of CMs has been proposed by the State for 6 districts: Pune, Nashik, Aurangabad, Amravati, Nagpur and Raigad. The proposal is to then roll out the programme for a complete resurvey in the State using

modern techniques of HRSI with ETS or DGPS.

Again, we find that there is an inconsistency between the progress on map digitisation as informed to us orally, and

6.2.1 Pilot involving a re-survey and digitisation of CMs at Mulshi Taluka

The State of Maharashtra has conducted a pilot project in 12 villages of the Mulshi Taluka of the Pune District for conducting a resurvey and digitising CMs. The villages covered in the pilot were: Pirangut Mukhaiwadi, Ambadvet, Kasaramboli, Bhare, Botarwadi, Urawade, Ghotawade, Bhegdewadi, Amlewadi, Godambewadi and Materwadi.

The aim of this project was to locate and identify the exact dimensions of a land parcel with latitudinal and longitudinal data based on the Ground Control Points (GCP), which would provide a satellite image of the land parcel. The image would then be integrated with the the mutation record (known as Form 7/12) extract so that the entire record with respect to a land parcel may be found in one document. In addition to the above, this integrated information of the Form 7/12 extract and the CM has also been made accessible through QR Codes. A sample of such an integrated record is reproduced in Fig. 6.2.

The techniques used for resurvey under the pilot project are the (a) Pure Ground Method, which uses ETS and DGPS and (b) the Hybrid Approach which uses either the ETS or the DGPS along with HRSI. Further, the GCP established by the Survey of India under the National Grid Program were used for this project. These GCP provide reference points for mapping by establishing permanent markings on the surface of the earth so that locations of surveyed lands may be identified definitively. The images obtained from such resurvey were then superimposed upon scanned copies of existing records. The Maharashtra Government has reported that the number of villages where a re-survey has taken place is four (4). It appears that the information available online is not updated.

6.3 Status of digitisation of registration process

The area of computerisation of registration in the State has seen significant progress with the initiatives mentioned in chapter 5. The process of registering a document involves the following steps:

1. Verification of stamp duty by the SRO;
2. Scheduling an appointment to physically attend the SRO and admit execution as required under the *Registration Act, 1908*;
3. Submission of details of the document sought to be registered and supporting documents as required by the SRO.

Table 6.3 summarises our findings on the progress of digitisation of the registration process.

Figure 6.2: Snapshot of a ROR with a digitised Cadastral Map

Table 6.3: Status of digitisation of the registration process

Total number of SROs in Maharashtra	505
Number of SROs at which appointments can be scheduled electronically	505
Number of SROs at which documents can be submitted electronically	505

Table 6.3 shows that Maharashtra has made good progress with respect to the steps preceding the actual registration of a document. All 505 SROs are verifying the stamp duty, accepting online applications for scheduling an appointment and accept electronic submission of documents supporting the registration process. These three features have been enabled through the web applications GRAS, PDE and e-Stepin, described

> **Box 14: Discrepancies in Information**
>
> The Registration Department informed us that the total number of SROs in Maharashtra is five hundred and five (505). We were subsequently informed that while the State Government had sanctioned five hunder and sixteen SROs, five hundred nine (509) were actually functioning SROs. However, the State Government has reported five hundred and twenty-nine (529) SROs on the MIS.
>
> In the MIS, the State has reported that five hundred and twelve (512) out of the five hundred twenty-nine (529) SROs are operated with some form of computer support. However, the Registration Department has informed us that all the SROs have some form of computer support.

in Chapter 5.

6.3.1 Digitisation of the process for retrieval of information from the SROs

The State officials informed us that the legacy records maintained at these SROs are available online for the last thirty (30) years through the e-Search portal of the website of the IGR. However, when we tried retrieving information from the said website on a sample basis, we found numerous gaps in the information. Table 6.4 contains details of the legacy records that can be retrieved electronically from various SROs.

Table 6.4: Details of legacy records available for retrieval electronically

Number of SROs with online records from 1985-2012	Number of SROs with online records from 2002-2012	Number of SROs with manual records
232	239	54

In addition, we have noted some discrepancies between the information received from the Registration Department with the information reported by the State Government on the NLRMP website. Box 14 lists these discrepancies.

6.4 Status of integration of the land record offices

The last aspect of digitisation is the integration of the three offices where land records are maintained, namely, the Talathi's offices where RORs are maintained, the SROs where the documents are registered and the Survey Office which maintains the CMs and the PCs.

The office of the Director of Land Records has informed us that the process of registration at all SROs checks the centralised database containing revenue records for details of ownership, parcel size, etc. for three hundred fifty-seven (357) talukas, Jivati Taluka

being the exception. However, the office of the IGR has informed us that the SROs do not make such checks before registering the document.

Further, we were informed that once a document is registered, the details of registration are entered in the centralised database which is accessible to all the Tehsildars' offices which maintain RORs and the offices at the Survey and Settlement Department which maintain the PCs. This allows the Tehsildar or the officer at the Survey and Settlement Department to initiate the procedure for updating the RORs or the PCs respectively. for the parcel in respect of which the document is registered. We have been informed that this process has also been enabled for three hundred fifty-seven (357) talukas. Fig. 6.3 shows the process of registration and the corresponding interaction between the three departments as it stands today.
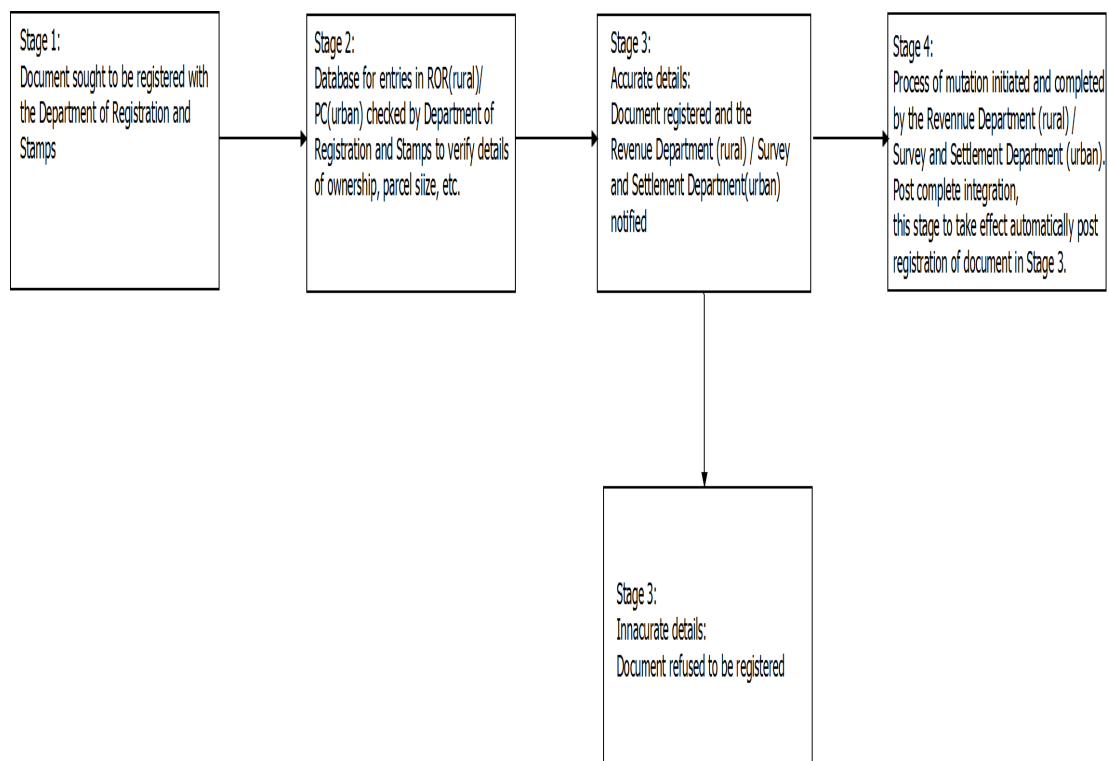
Figure 6.3: Process of registration showing interaction between departments

It may be noted that while the *Maharashtra Land Revenue Code, 1966* requires the SROs to intimate the fact of registration to the Talathi of the village where the land is located, the information given by the State indicates that the SROs merely enter the details of registration in a centralised database that is accessible to the Tehsildars (who are at the taluka level).[1] There is no clarity on how this information is then transmitted to the Talathi who is the officer in charge for initiating the process for updating the ROR.

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[1] See section 4.4.2 of Chapter 4.

6.5   Status of responsiveness in client services

In the year 2015, an ordinance was issued (by the then Governor) which provided for delivery of transparent, efficient and timely public services to eligible people in the state of Maharashtra. There was also need for transparency and accountability.This ordinance was repealed and replaced with the *Maharashtra Right to Public Services, 2015.*

Maharashtra Right to Public Services, 2015 defines the "right to service" as the right of an eligible person to obtain public services within the stipulated period of time.

Meaning of Public Services

The *Maharashtra Right to Public Services, 2015* defines a public service as a service which has been notified by a public authority under the act. Public authorities include the State Government as well as co-operative societies, government companies and non-governmental organisations receiving financial assistance from the State Government.

The *Maharashtra Right to Public Services, 2015* mandates public authorities to notify services from time to time by publishing them on the notice board of the office and also on its website or portal, if any. An example of a service in relation to land records notified by under the *Maharashtra Right to Public Services, 2015* is the provision of certified copies of RORs within seven (7) days from the Talathi and obtaining a property register card. Several services are similarly notified by the IGR department as well, such as the grant of a certified copy of the index within three days and the grant of a valuation report for assessment of stamp duty within three (3) days.[2]

The notification of public services, includes the following:

1. Time line for delivery of the public service (there are different timelines for each service which depends upon the process involved
2. to provide such service);
3. The designated officer in-charge of provision of such service;
4. The first appellate officer; and
5. The second appellate officer.

It is relevant to note that while Section 3 (2) of the *Maharashtra Right to Public Services, 2015* requires the fees, if any, payable for each service to be notified as well, some notifications well as the list of services online do not provide the details of fees to be paid for each service. It is unclear whether these services are provided free of charge.

We have been informed that the services were notified on August 4, 2016 and that the online provision of services had commenced from October 2, 2016.

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[2]See Section 3(1) of the *Maharashtra Right to Public Services, 2015.* Also see `http://aaplesarkar.mahaonline.gov.in/en/CommonForm/CitizenServices`, which lists out the public services notified under different departments of the State Government. (last visited: February 23, 2017) The list available on this website, however, is incomplete. For instance, it does not include the list of services provided by the Land Records Department.The tab titled "Land Records" contains the notified services provided by the IGR (`https://aaplesarkar.mahaonline.gov.in/pdf/LRDept.pdf`).

For a list of the department-wise land related public services which have been notified, please see Appendix C.

Authorities under the *Maharashtra Right to Public Services, 2015*

The *Maharashtra Right to Public Services, 2015* provides for the appointment of officers who are in charge of providing the service (Designated Officers), First and Second Appellate Authorities respectively,(to hear grievances and appeals). Alongwith each notified public service, the relevant Designated Officer and appellate officers are also required to be notified. A detailed note on the redressal and accountability structure are provided in the sections below.

Redressal

Section 9 the *Maharashtra Right to Public Services, 2015* provides that any eligible person, whose application for availing a public service is rejected or who is not provided the public service within the stipulated time limit, may file an appeal before the First Appellate Authority within a period of thirty (30) days from the date of receipt of, order of rejection of the application or, the expiry of the stipulated time limit. After hearing the applicant and the Designated Officer, the First Appellate Authority may either reject the appeal (after recording reasons for the same) or direct the Designated Officer to provide such service.

A second appeal against the order of the First Appellate Authority lies to the Second Appellate Authority,within a period of thirty (30) days from the date on which the order of the First Appellate Authority is received or after forty-five (45) days from the date of filing of the first appeal where the appellant does not receive any order from the First Appellate Authority.

An applicant or the Designated Officer being aggrieved by an order of the Second Appellate Authority may file an appeal before the Maharashtra State Commission for Right to Services(Commission), within a period of sixty (60) days from the date of receipt of such order.

Please see 6.4 with the pictorial representation of the redressal mechanism with relevant time-lines, under the *Maharashtra Right to Public Services, 2015.*
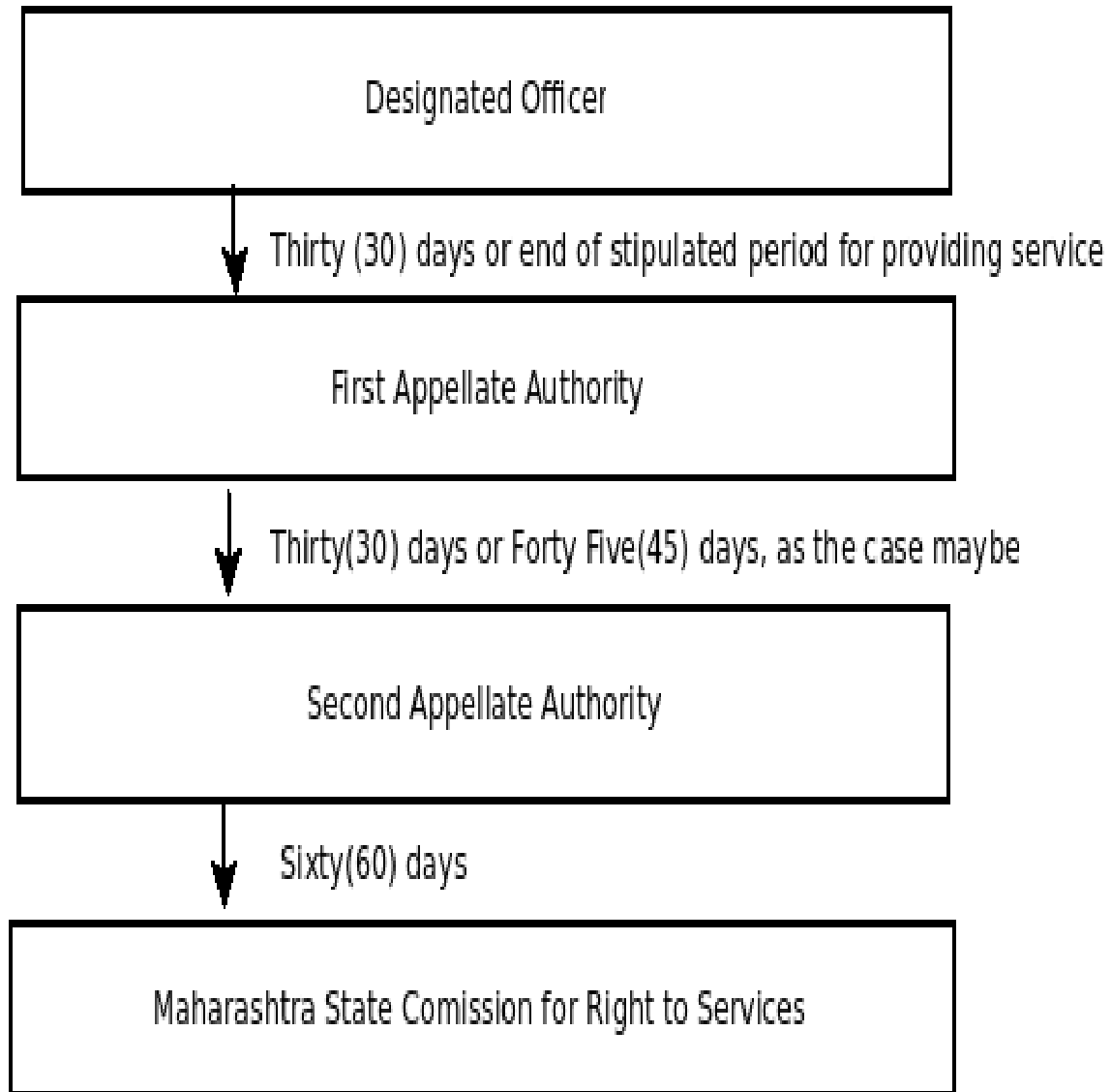
Figure 6.4: Redressal Mechanism under the *Maharashtra Right to Public Services, 2015*

Accountability

Section 3 of the *Maharashtra Right to Public Services, 2015,*mandates assigning specific officers with the duty to provide these services and notifying the specific officer who is so assigned to the public. Further, Section 13 of the *Maharashtra Right to Public Services, 2015* requires the constitution of the Maharashtra State Commission for Right to Services consisting of:

1. A State Chief Commissioner for Right to Services for the Mumbai City District and Mumbai Suburban District;
2. A State Commissioner for Right to Services for every Revenue Division, excluding Mumbai City District and Mumbai Suburban District; and
3. The Chief Commissioner and the Commissioners who will be appointed by the Governor, on the recommendation of a Committee consisting of (i) the Chief Minister, who shall be the Chairman of the Committee; (ii) the Leader

of Opposition in the Legislative Assembly; and (iii) a Cabinet Minister to be nominated by the Chief Minister.

The general superintendence, direction and management of the affairs of the Commission shall vest in the Chief Commissioner who shall be assisted by the Commissioners.

The power of the Commission are provided in the *Maharashtra Right to Public Services, 2015*. The Commission is empowered to take action against any failure to deliver public services under the *Maharashtra Right to Public Services, 2015*, including undertaking inspections of offices entrusted with the delivery of public services and the offices of the First Appellate Authority and the Second Appellate Authority; recommend Departmental inquiry against any Designated Officer or appellate authorities who have failed to discharge their responsibilities; recommend changes in procedures for delivery of public services and monitor delivery of the public services by public authorities.

Time-lines

As mentioned above, the notifications notifying public services must provide specific timelines for delivery of the notified public services. Further, while the *Maharashtra Right to Public Services, 2015* provides timelines for redressal, the First and Second Appellate Authorities have been granted the power to extend the stipulated period in exceptional cases. Whether or not a case qualifies as exceptional, it appears, has to be determined on a case to case basis as the *Maharashtra Right to Public Services, 2015* itself does not set out any conditions or parameters to classify or determine whether or not a case is exceptional.

Online Access

We have been informed that the services were notified on August 4, 2016 and that the online provision of services had commenced from October 2, 2016.

We have further been informed that all the notified services are available online. According to Section 6 of the *Maharashtra Right to Public Services, 2015*, every eligible person having applied for any public services shall be provided with unique application number by the concerned Public Authority so that s/he can monitor status of the application online, where such system is in operation.[3]

Further, the department providing the service can also access a district-wise list of the number of applications made, the number disposed off and the number pending. It does not appear that the software makes a distinction between the number of applications admitted and number rejected. Please see Table 6.5, for data on applications for land record related services in Maharashtra from October 2, 2016 upto February 14, 2017.

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[3]`https://aaplesarkar.mahaonline.gov.in/en`. (last visited: February 23, 2017)

Table 6.5: Status of applications received under *Maharashtra Right to Public Services, 2015*

Applications received	Approved	Rejected	Pending
116	39	18	59[a]

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[a]It is not clear if these applications are within the time-limit stipulated under the law, for their disposal.

The information collected for the purpose of this report, was obtained from two primary sources. The first being the relevant departments of the Maharashtra Revenue Department and the second is the information available from the NLRMP website.[4] For the legal framework, the relevant acts and rules were referred to

The following is a summary our observations and suggestions with respect of specific aspects of the systems concerning land records in Maharashtra.

1. **Implementation of the the legal framework**
   A perusal of the legal framework applicable to land in Maharashtra, reveals that largely, it provides for an effective administrative structure. This is evident even in recent legislations such as the *Maharashtra Right to Public Services, 2015.*
   However, the apparent deficiencies are not in the framework of the law itself but in the effective implementation of the provisions of the law. For instance, the *Maharashtra Right to Public Services, 2015* is designed to ensure that there is a redressal hierarchy.

2. **Progress of digitisation and databases**
   While the task of digitisation has commenced with gusto, we observe deficiencies in the process and corresponding records, which take away from the effectiveness of the objectives of digitisation. For instance, the copies of RORs and PCs are readily available online. However, the copies available are not certified by the relevant authorities and therefore, have no effective legal use.[5] A citizen has to apply for certified copies in order to make these admissible in court. Obtaining copies of appropriate records and then getting the same certified adds to the costs of the public.
   There further appears to be information asymmetry a)among the various departments that are part of the revenue administration system; and b)between the information available with various departments and the information available on the NLRMP information system.[6] Discrepancies in information,raise questions about the accuracy and credibility of the information available.
   Further, the NLRMP website,[7] does not have a section for archiving previous

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[4]http://nlrmp.nic.in

[5]As mentioned earlier, we have been informed that the process of making digitally signed RORs available online is underway.

[6]This information maybe accessed athttp://nlrmp.nic.in/

[7]http://nlrmp.nic.in/

information. The effect of this is that there is no provision for citizens to assess the progress by different states and even within a specified state or even to generally monitor whether or not information is being regularly updated.

3. **Amendments in the Law**

   Currently, the *Maharashtra Land Revenue Code, 1966* provides the procedure for updation of land records in Maharashtra. However, the language in the sections use the words 'record of rights' which essentially means the 7/12 extract. Since the use of property cards are now becoming prevalent, it might be useful to either specifically define the words 'record of rights' to include a property card or insert the words 'property card' in all sections which make reference to updation. This will clarify the position of the same for lawyers and citizens who may not be well versed with the practical application of the provisions.

4. **Government Website**

   Government websites in some cases may be made more user friendly. For an example of the type of error when viewing property cards online for Mumbai Suburban, please see Box 15.

6.6 Status of utilisation of funds sanctioned under the DILRMP

As per the official records of the Department of Land Records, Ministry of Rural Development, Government of India, since the inception of the DILRMP in 2008-09, Rs.6536.16 lakhs have been released to Maharashtra for implementation of the DILRMP in thirty-four (34) districts as of December 31, 2015.[8] The State Government had reported utilisation of Rs.1673.67 lakhs, just over a quarter of the funds released, covering six (6) districts first, and then ten (10) districts and then covering thirty-four (34) districts existing at that time in 2013. Fig. 6.5 plots the funds sanctioned, released and spent by the State Government, as reported by it in the MIS on the DILRMP website.[9]

Of Rs.6536.16 lakhs released by the Central Government to the State Government under the DILRMP, the State Government has reported releasing a sum of Rs.1657.9 lakhs to two (2) districts designated as Model districts in Maharashtra, namely Pune and Nagpur (see Fig.6.6).[10]

A bulk of the funds sanctioned (51%) is for the survey/resurvey activities while 35% is for the establishment of modern record rooms, with 5% for the computerisation of land records. A component-wise distribution of sanctioned funds is shown in Fig. 6.7.

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[8]Source:http://dolr.nic.in/dolr/downloads/pdfs/Outcome%20Budget%202016-17.pdf (last visited: February 28, 2017)

[9]There are discrepancies between the data reported in the MIS on the DILRMP website and that reported in the Annual Budget document 2016-17 released by the Central Government, that require further examination.

[10]As per the data reported in the MIS on the website of the DILRMP.

Box 15: Mumbai Suburban Property Card Website
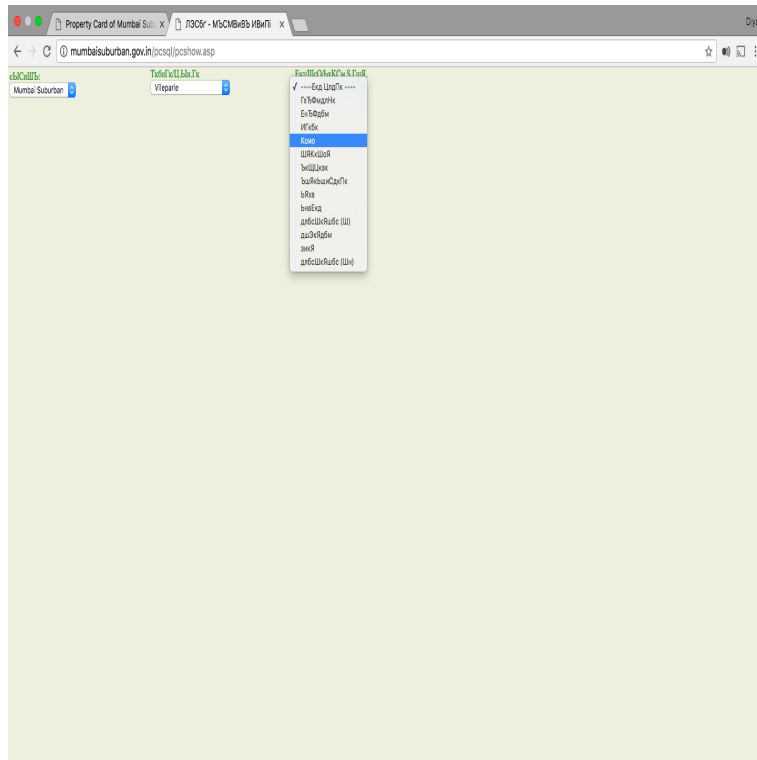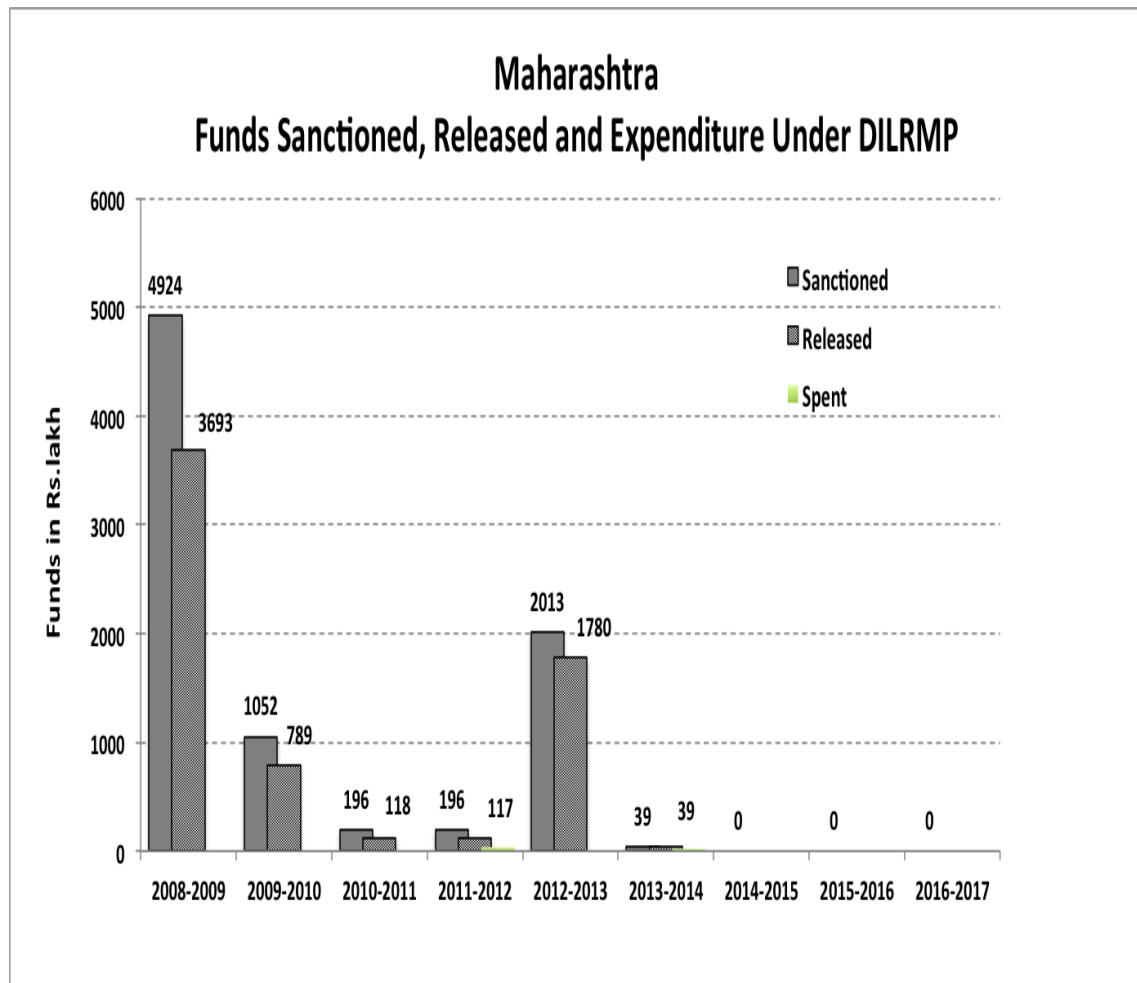
Figure 6.5: Yearwise sanction, release and utilisation of funds by Maharashtra under DILRMP

Sanctioned Amount under DILRMP for Model Districts
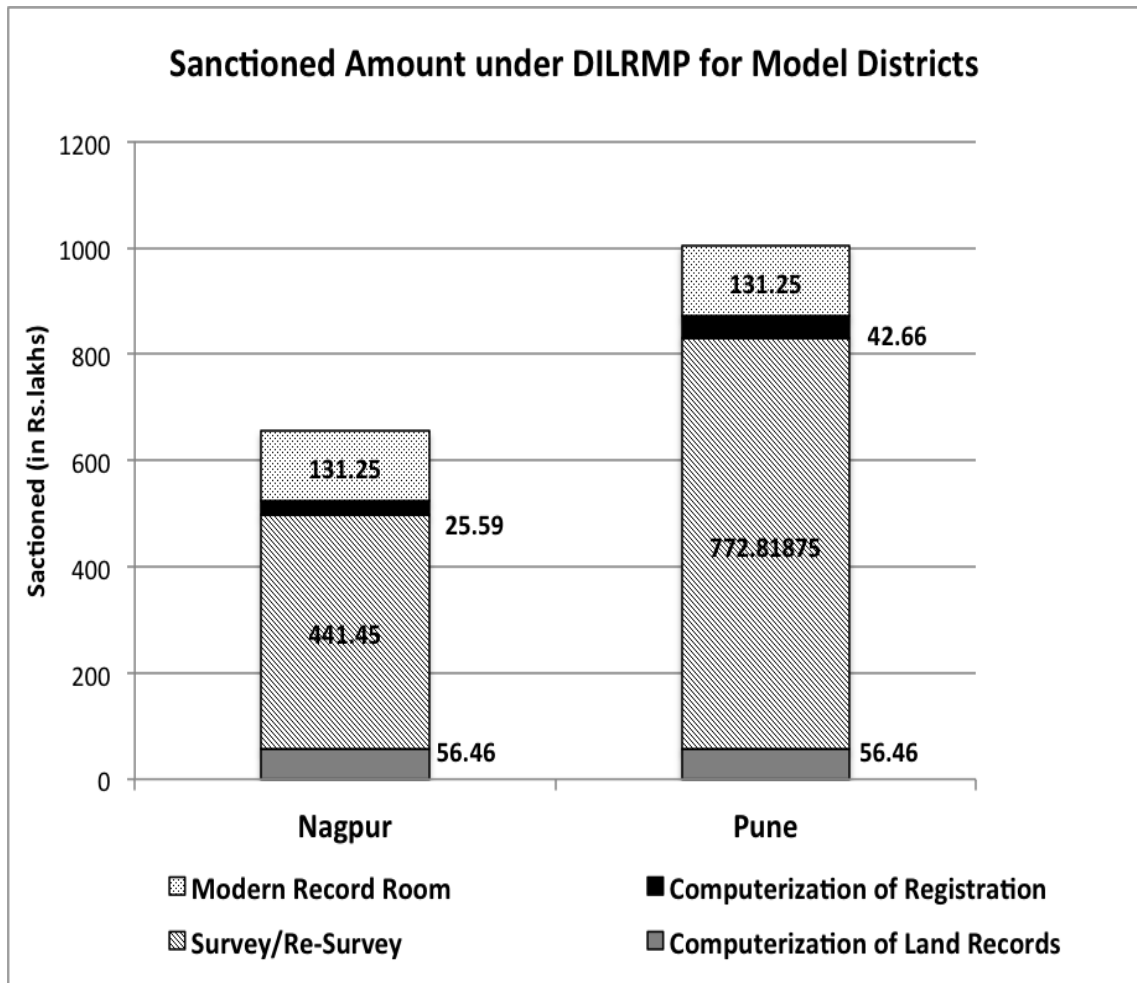
Figure 6.6: Funds released to Pune and Nashik
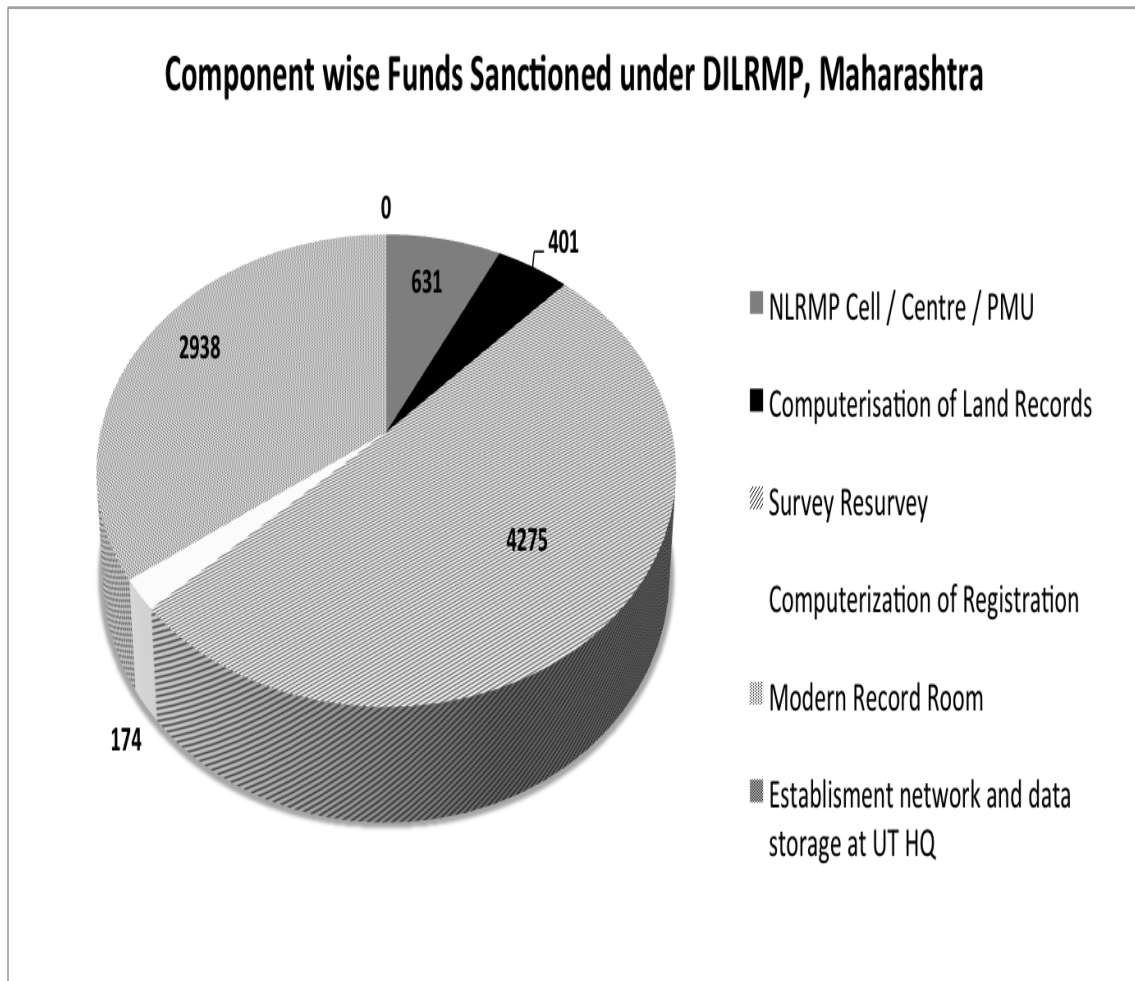
Figure 6.7: Component wise fund allocation under DILRMP in Maharashtra

Part II

Tehsil and parcel level assessment

7 — Mulshi, Palghar and the parcels

The goal of conducting a Tehsil and parcel level exercise is two-fold. First, we ascertain whether the spatial and textual records are updated by checking the information in the records against the ground situation. We do this with respect to five issues: ownership, possession rights and encumbrances associated with the land parcel, land classification, and extent of area of the parcel. This also involves assessing the citizens' experience in interfacing with the government and their perspectives on how the processes can be improved. Specifically, we ask about the process of record updation - including time taken and costs involved and general access to records.

We conduct this exercise for hundred (100) parcels, fifty (50) from each of the two selected tehsils, combining interviews and local inquiry for verification of textual records. We undertake actual measurement of these hundred parcels for the verification of spatial information.[1]

Second, we study the two selected Tehsils to understand the extent to which services delivered by the land administration, have been digitised, and whether such digitisation has increased the efficiency with which such services are delivered to the public. For this purpose, we observe the end-to-end performance of these services by the survey office, the revenue offices and the SROs in these two Tehsils.

7.1 Tehsils in the scope of our study

For the purpose of our study, we selected two Tehsils, namely, Mulshi and Palghar.[2] Mulshi tehsil is located in the Pune district in the Pune revenue division of Maharashtra.

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[1]Our survey includes one hundred and two interviews, but two owners did not provide their consent to measure their land. We include their survey responses but exclude them from our discussion on measurement of land parcels.

[2]A unit of a district is referred to as a Taluka in Maharashtra, and it is synonymous with the term "Tehsil". Accordingly, we use the words "Tehsil" and "Taluka" interchangeably in this report.
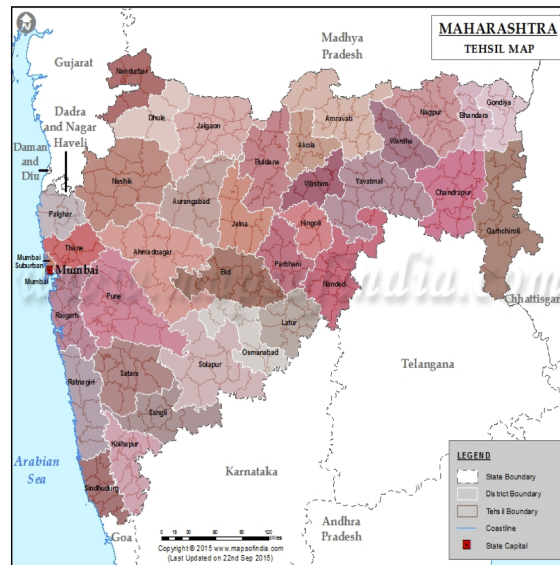
Figure 7.1: District Level Map of Maharashtra

Palghar tehsil is located in the relatively newly formed Palghar district in the Konkan division of Maharashtra. Figure 7.1 contains a district level map of Maharashtra, showing the locations of Pune and Palghar districts respectively. The reasons and methodology used for selection of Mulshi and Palghar are set out in chapter 8 of this report.

7.1.1 Mulshi Tehsil

Pune district, located in the western part of Maharashtra, is geographically the second largest district in the state. The geographical area of Pune district is 15.642 Sq.km, and it accounts for 5.10% of the total area of Maharashtra. It lies between 17 degrees 54' and 10 degrees 24' North latitude and 73 degrees 19' and 75 degrees 10' East longitude. For administrative purposes, the district is divided into five (5) sub-divisions of Pune, Mawal, Baramati, Junnar, and Bhor and fifteen (15) Tehsils.[3] Mulshi is one of the tehsils, located in the Mawal sub-division. Figure 7.2 containing a map of the Pune district, shows the fifteen (15) Tehsils in Pune district.

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[3]These are Pune city, Haveli, Pimpri Chinchwad, Maval, Mulshi, Shirur, Bhor, Purandar, Velha, Ambegaon, Daud, Baramati, Indapur,Junnar and Khed.

Table 7.1: Land classification in Mulshi

Urban	17.99 sq.kms	1.7%
Rural	1,009.66 sq.kms	82.3%
Total	1,027.65 sq.kms	100%

Figure 7.2: Taluka Map of Pune

The area of Mulshi is 1,027.65 Sq.Kms, accounting for about seven (7) percent of the total area of Pune district. It comprises one hundred and fifty-eight (158) villages.While the census data of 2011 shows that Mulshi Tehsil has one hundred and forty-three (143) villages, we have been informed that it now comprises of one hundred and forty-eight villages. However, the Tehsildar's office in Mulshi informed us that Mulshi Tehsil comprises of one hundred and forty-eight (148) villages. For the purpose of this report, we have taken into account the data reported by the State on the DILRMP website for all calculations. Mulshi Tehsil comprises of largely rural areas, the details of which are summarised in Table 7.1.[4]

Topographically, Mulshi Tehsil is made up of hills and undulating terrain that ranges between one hundred (100) and five hundred (500) meters above Mean Sea Level (MSL).[5] Mulshi Tehsil falls within the highest rainfall intensity zone in the District of Pune.[6] The hilly terrain ensures that rain water flows from the high altitude hilly areas to the other comparatively low lying areas. The total population of Mulshi is 25,633[7]. The organisational architecture of the revenue system is the same as in other parts of the

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[4]This classification is as per the 2011 census data.

[5]The soil found in this region is known as 'paddy soil' and is highly conducive for agriculture in rice, which is also dependent on the presence of adequate irrigation facilities or natural water resources.

[6]Rainfall intensity zones are those areas that receive above one thousand (1000) millimeters of rain

[7]As per 2011 census data.

state of Maharashtra.[8]

A pilot project for digitisation of maps and conducting a re-survey in Mulshi

The district of Pune was one of the six (6) districts selected to undertake pilot initiative involving e-mapping and a re-survey using modern surveying technique. Twelve (12) villages in the Mulshi Taluka were selected for a pilot exercise of certain programmes as part of the DILRMP project in Maharashtra. These villages comprised of a mix of commercial, industrial and agricultural land.[9]

Owing to the pilot, Mulshi was a natural choice for the study as it allowed us the opportunity of selecting at least one village in which a pilot had been conducted. Studying a village in which a pilot has been conducted offers the advantage of assessing the problems that the State Government faced in implementing the different components of the DILRMP. Moreover, Mulshi has a diverse topography comprising of land parcels in both hilly and plain areas. This topography would be typical of many regions in Maharashtra.

The two initiatives comprised in the pilot are described below:

e-Maps : The eMaps project focuses on the digitisation of maps in Maharashtra. In the year 2012, a pilot project for the digitisation of maps began in twelve (12) villages in Mulshi Taluka.

e-Resurvey : This programme was initiated to conduct a re-survey of the land in Maharashtra, using modern surveying techniques. Under this programme, twelve (12) villages of Mulshi were resurveyed, using two methods:

  1. Pure Ground Method (PGM): The PGM involved the use of two devices, namely the ETS and the DGPS. The ETS is designed to integrate an electronic theolodite (which measures angles in horizontal and vertical planes) and an electronic distance meter. This was used as against the traditional plain table method, as it among other advantages, eliminates manual errors.DGPS is a satellite based navigation system which uses corrections of positions for greater accuracy in recording.This system is considered to be more accurate than the traditional GPS system. A resurvey using the PGM was done in seven (7) pilot villages.
  2. Hybrid Method (HM): The HM is a method that uses the HRSI obtained through satellite imaging systems. These systems are generally able to capture images with a ground resolution of upto sixteen (16) inches. This method also uses the ETS and DGPS methods. The HM was used in five (5) pilot villages.

The rationale of using two separate methods for re-survey, was to choose the best method of re-survey, which could then be replicated across Maharashtra. Further, for the purpose of the re-survey, a total of one hundred seventy-six (176) GCPs were

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[8]Please see Part I of the report for a detailed description of the organisation architecture of the land revenue system in Maharashtra.

[9]The selected villages are:Pirangut; Mukhaiwadi; Ambadvet; Kasarambodi; Bhare; Botarwadi; Urawade; Ghotawade; Bhegdewadi; Amlewadi; Godambewadi; and Materewadi.

Box 16: Types of Cadastral Maps in Maharashtra

1. Tippan- Individual parcel maps
2. Khate Phalni/Phodi Tippan- Division of survey number(in the Tippan format);
3. Phalni Map-Division of survey number;
4. Pot Phalni - Sub-division of the Phalni, also known as Pot Hissa Phalni in the Vidarbha region;
5. Savistrar Bhumapan Mojini maps-Map of an old survey number, also known as Bandobast maps in the Vidarbha region;
6. Triangulation sheets-Boundary confirmation maps in Inam villages;
7. City survey maps-Maps of properties with a city survey number;
8. Land Acquisition maps-Maps of lands acquired;
9. Non-agricultural maps-Maps showing non-agricultural areas; and
10. Village Map- Mosaic Tippans of a village.

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established.[10]

The digitisation process for maps has been completed in the twelve pilot villages. For the rest of the Taluka, the process is ongoing. The DILRMP programme guidelines require *Tippan* and Village Maps to be digitised. However, in Maharashtra, we have been informed that the State Government intends to digitise the other maps, in addition to the Tippan and Village Maps. By the end of the exercise of digitisation of *Tippan* and Village maps with an accuracy of thirty (30) centimeters on ground will be generated. For a list of the types of cadastral maps used in Maharashtra, please see Box 16.

7.1.2 Palghar Tehsil

Palghar Tehsil is located in the district of Palghar. Palghar district is the most recently constituted district in Maharashtra.[11] It has been carved out of the erstwhile Thane District and has brought the count of total number of districts in Maharashtra, to thirty-six (36). It is situated between 19" 41' to 49.3" North and 72"46' to 16.49" East, and has a total area of 5,17,634 sq. kms which makes up 3.87 per cent of the Maharashtra state. Palghar Tehsil is one of eight (8) Tehsils in the District of Palghar. [12]Out of these eight (8) Tehsils, six (6) Tehsils are tribal areas.

We have been informed that Palghar Tehsil consists of 208 (two hundred and eight) villages.[13]Topographically Palghar Tehsil consists largely of plains and table land.However, there are some exceptions to this, such as the villages of Veur (which has mountains and forests) and Shirgaon (which is a coastal village).Another characteristic of land in

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[10]The nodal agency for resurvey in Maharashtra is the Maharashtra Remote Sensing Application Center(MRSAC), located in Nagpur. While the supervision of the re-survey work lies with the Maharashtra Remote Sensing Application Center (MRSAC), the physical work of carrying out the resurvey, is to outsourced.

[11]Constituted in the year 2014

[12]These are Mokhada,Talasari, Vasai, Vikramgad, Palghar, Dahanu and Wada

[13]As per the 2011 Census data, the total number of villages in Palghar Tehsil was two hundred twelve (212). However, the survey office in Palghar has informed us that the number of villages is two hundred and twenty-three (223).

Figure 7.3: Palghar District and Tehsil Map

Palghar Tehsil is fragmentation.[14]About fifty five (55) per cent of the District of Palghar comprises of forest land. The land in Palghar District is both agricultural land and non-agricultural land but only about nine(9) per cent of the total area under cultivation is irrigated. Palghar receives erratic rainfall which averages at approximately two thousand five hundred thirty seven (2,537) millimeters during the year. Palghar Tehsil, has a total population of 68,930.[15].

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[14]Unlike the land parcels observed in Mulshi, the land parcels in Palghar are asymmetrical, narrow and difficult to identify from a plain view.

[15]As per the 2011 census data

8 — Methodology for ground level assessments

In keeping with the methodology of the larger project, we used a combination of test checking the land records and household parcel-level surveys in two selected Tehsils.

8.0.1 Assessing digitisation of service delivery

To assess the extent to which the land record management systems and service delivery to citizens has been digitised, we studied all aspects of the land records systems in the two selected Tehsils. First, we identified the different touch points between the State and a citizen whose rights in relation to land are contractually altered. We identified three touch-points, namely, registration of land transfers, updation of revenue records and the process of demarcation of land boundaries. We studied how these processes worked in the Mulshi and Palghar, focusing on the stages which were digitised and those that were not digitised.

We then studied a sample set of applications made by citizens for services in relation to land titling. To ascertain the level of efficiency in service delivery, we randomly selected 5 (five) applications made to each of the land administration offices in each of these two Tehsils for the following services:

1. **Revenue Department:**
   - Obtaining certified copies of revenue records;
   - Mutation of records on account of sale and succession;
   - Correction of revenue entries.
2. **Survey and Settlement Department:**
   - Obtaining certified copies of CMs;
   - Demarcation of boundaries;
   - Partition proceedings.
3. **Department of Registration and Stamps:**
   - Registration of documents
   - Obtaining certified copies of records.

Studying these applications gave us an overview of the different aspects of these services, which had been digitised and those that had not, and the time taken to deliver these services.

8.0.2   Assessing whether digitised land records reflect the position on the ground

The two selected tehsils of Mulshi and Palghar were mainly peri-urban locations with relatively high land transaction intensity and some prevalence of land litigation. Given our focus on the DILRMP, the sample tehsils are those where the programme had been implemented, in part, if not in full. While both Mulshi and Palghar fit these criteria broadly, they also differ in significant ways. As discussed in Chapter 8 of this report, Mulshi has been the focus of intensive effort by the department, designated as a model tehsil where twelve (12) villages were selected for pilot implementation of the entire bouquet of interventions relating to digitisation. In contrast, Palghar tehsil represents a somewhat typical tehsil in terms of implementation attention.

Within these tehsils, we first randomly selected five villages from the roster of census villages. Within each village, the goal was to pick ten (10) parcels that were not located in *abadi*, industrial areas, forest or wastelands. The parcels would be at least 0.3 hectares in size in rural areas, and at least 500 sq m in urban or peri-urban areas. Our goal was to ensure that some of these parcels were transacted in the past two (2) years. In reality, not all the villages we picked had a transaction intensity desirable for the project. We, therefore, selected five (5) villages each in Mulshi and Palghar, which, according to the department, had seen a lot of transactions in the past twelve (12) months. Where we did not get enough parcels per village, we included more villages. Table 8.1 contains a list of the villages selected by us and the number of parcels surveyed in each village.

Table 8.1: Sample villages and parcels

Sr. No.	Village	No. of parcels surveyed
Mulshi Tehsil		
1.	Bhare[a]	10
2.	Kasar Sai	10
3.	Nive	10
4.	Nere	10
5.	Male	10
Palghar Tehsil		
6.	Aliyali	1
7.	Ambhan	4
8.	Devkhop[b]	7
9.	Karvale	3
10.	Kandarvan	7
11.	Shirgaon	12
12.	Tandulwadi	10
13.	Vadhiv	8
	Total	102

[a]Pilot village for DILRMP
[b]Tribal area

Often, parcels of the desired size were not available. Nor was it the case that the owners of all the parcels we picked were willing respondents. This meant that the final selection of parcels for the survey departed from our original stratified random sampling methodology. Given that the purpose of the survey is to garner insights into the implementation of the land record modernisation programme, the sample parcels offer adequate material for the purpose, with the above caveats. The final sample distribution of villages and parcels are in Table 8.1.

8.0.3 Methods

For all parcels, we recorded information about the parcel from the 7/12 extracts on the following five aspects:

1. ownership;
2. possession;
3. encumbrances;
4. area; and
5. land use.

Four of these five parameters were verified on the ground via personal interviews through a structured questionnaire and local inquiries. The verification of the fifth parameter, area, was done by measuring the parcel using e-Trex GPS devices as well as ETS by trained staff. The e-Trex involves a perimeter walk around the parcel, the ETS uses laser technology to mark corners of the polygon representing the parcel.

The ETS is regarded as the current gold standard for measuring parcel areas and has been used by the Government of Maharashtra in Mulshi's pilot villages. While for the other sample villages, this has not been done as yet, this is the method that the state government expects will be used for resurveys in the near future. We deployed both ETS and e-Trex in order to get a consistency check on the margin of error with different instruments. As such, we do not expect that the area in the ROR and the ETS or e-Trex measurement would match, given the different instruments used by the government, except of course, where the government too uses the ETS. Rather, the effort is to get a ballpark estimate for the differences and to understand the challenges in measuring land.

For those parcels which had been transacted in the last 5 years, we use detailed surveys of respondents about their experience with interfacing with the department and their own perceptions of the current system and how citizen experience can be improved. We supplement this with FGDs in the premises of the SROs in both Mulshi and Palghar. We conducted FGDs with a fairly wide variety of stakeholders, including:

Residents : Residents of both Mulshi and Palghar Talukas were interviewed to gain a practical understanding of how processes work in the relevant Taluka, inefficiencies in these processes and the effect of digitisation, in their interaction with various sections of the revenue and land administration.

Revenue Officers : Revenue officers were interviewed to understand the status, good practices and deficiencies in the system, before and after digitisation initiatives.

Other Stakeholders : In addition to the above cohorts, we also interviewed lawyers,

brokers and agents, and land surveyors. While lawyers were asked specific questions with respect to the effect of digitisation on legal processes associated with land transactions, the questions to brokers and agents focused on the efficiency of land transaction processes, before and after digitisation. The questions to surveyors focused on the efficiency, accuracy and hardships involved in measurement, re-survey and drawing up of maps.

Challenges in surveying

We faced several challenges in the implementation of the survey. A major constraint in the survey of parcels was with respect to those that were disputed. In these cases, parcel owners refused to entertain any survey team, forcing us to exclude disputed lands. This meant that we had to choose other parcels to survey resulting in a sample biased in favour of dispute-free parcels. Another problem was absentee landowners, where the sample parcels were owned by persons who lived in the city. In these cases, tracking the owner to be able to interview him/her was time-consuming and effort intensive. Further, since land is a very sensitive issue, several respondents were reluctant to permit us to measure their land. For example, one respondent insisted that his lawyer be consulted and present in all interactions. It was also often the case that the respondents themselves were unaware of the extent of their parcel and where marker stones of the department of land resources did not exist, we settled for the respondents best estimate of the parcel they possessed/owned. Measurement was challenging where the terrain was uneven or swampy.

As mentioned in Part 1 of the report, initiatives undertaken by the Maharashtra government under the DILRMP can be classified into the following heads:

- digitisation of existing records;
- digitisation of the process for recording the creation or change of interest in land;
- digitisation of the process for retrieval of copies of land records and
- digitisation of the inter connectivity between the various offices.

9 — Tehsil-level findings

This chapter contains our findings on the status of digitisation of land records in Mulshi and Palghar.

9.1 Digitisation of existing records

We find that the existing records of registered deeds, RORs and CMs are at different stages of digitisation for both the Tehsils.

In Mulshi Tehsil, we have been informed that the RORs of one hundred forty-four (144) out of one hundred forty-eight (148) villages have been digitised and are maintained in digital form.[1] Also, RORs made prior to September 30, 2014 have been scanned. The CMs for all villages and parcels in Mulshi Tehsil have been scanned. The village and parcel level maps of the twelve (12) villages comprised in the pilot described in Chapter 7 have been digitised as well.

In Palghar Tehsil, we have been informed that all existing RORs have been scanned. Further, we noticed that Palghar Tehsil has village level maps showing the parcels comprised in each village. We have been informed that all the maps that the survey office has, have been scanned. Ninety seven (97) CMs across three (3) villages have been scanned and also digitised.

Table 9.1 contains a summary of our findings with respect to the computerisation of records.

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[1]The NLRMP website indicates that Mulshi has one hundred and fifty-eight (158) villages. However, the state officials orally informed us that the number of villages in Mulshi is one hundred and forty-eight (148). The number of census villages in Mulshi is 143.

Table 9.1: Computerisation of the existing records

	Mulshi	Palghar
RORs	100% scanned	100% scanned
	100% digitised	92% digitised
CMs	100% scanned	100% scanned
	CMs for 7.59% of the villages have been digitised	CMs for 1.44% villages have been digitised.

9.2   Digitisation of processes

9.2.1   Digitisation of the registration process

Mulshi Tehsil has two (2) registration offices, namely, the SRO at Paud (hereafter, the Paud SRO) and the SRO at Hinjewadi (hereafter, the Hinjewadi SRO). We find that the registration process in Maharashtra comprises of eight (8) different stages, and some level of digitisation has been achieved in some of these stages. Table 9.2 summarises our findings on the status of digitisation of the different stages of registration in Mulshi and Palghar Tehsils.

Table 9.2: Status of digitisation of the registration process.

Stage	Mulshi	Palghar
Title search	Not digitised	Not digitised
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.
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 9.2 shows that while the payment of stamp duty and registration fees can now be entirely done online for registration of all kinds of documents, the preparation of the deed and verification of the identity of the parties is possible online only for leave and license agreements. With respect to the payment of stamp duty and registration fees, we noticed that the GRAS system provides users the facility to determine the amounts payable and also enables them to easily make the requisite payments.

In a nutshell, the digitisation of the registration process has seen some progress and the digitisation of most processes for registration of Leave and License Agreements is a first step towards setting up a framework for complete digitisation of the process for registration of all types of documents.

Interconnectivity between the SROs and other departments for the purpose of registration

We find that in the process of registration of documents, there are two touch points where the SROs interact with the revenue office. Firstly, before registering a document, the SRO verifies the particulars of the subject-matter of the document and the parties with the ROR, by connecting with the revenue office. Secondly, after the registration process is complete, the SRO intimates the details of the transfer to the Tehsildar's office. Such reporting is undertaken at periodic intervals.

We observed the registration process at the Mulshi and Palghar SROs. At both these offices, we noticed that the SRO officials were able to verify the ROR pertaining to the transacted land parcel, with some time-lag. We also found that due to a slow network interconnection, often this verification process worked with significant time-lags, thereby causing inconvenience to persons seeking registration. For instance, on one of the days that we attended the Paud SRO, we found that due to the lack of power supply, no document could be registered for an entire day. Consistent with our experience, we were orally informed by the officers working at these SROs that the server connectivity is often slow and the digital interface with the revenue office is inefficient. Moreover, the servers and the interface are susceptible to technical breakdowns and the technical support services to assist the officials are lacking. This input has been elaborated upon in section 9.4.2 of this chapter.

9.2.2   Digitisation of the mutation process

We find that no mutation entries are made in hand in Maharashtra. A mutation updation process may be initiated by the Talathi, upon receipt of an intimation from the SRO or the Collector's office. Additionally, we were informed that where an encumbrance is created in favour of a bank, the Talathi of the village in which the land is located generally gets an intimation from the bank about such encumbrance. However, we are unclear whether a separate application is, thereafter, made for updation of the ROR to reflect the encumbrance.

To ascertain the level of digitisation of the process of mutation within the revenue department itself, we observed a few mutation entries being made by a Talathi at the Talathi Training Centre located at Bavdhan in Mulshi Taluka, Pune. We noticed that while the application for updation of a ROR cannot be made online, the entire process of updation by the Talathi, upto the preparation of the notice, is done on an electronic platform. However, between Mulshi and Palghar, there are some differences in the extent of digitisation of the process for updation and correction of RORs. Table 9.3 summarises our findings on the status of computerisation of the mutation process in Mulshi and Palghar Tehsils.

Table 9.3: Status of computerisation of the mutation process.

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 *Maharashtra Land Revenue Code, 1966*	Digitised	Not digitised.
Certification by the circle officer	Not digitised	Not digitised.

9.2.3 Digitisation of the process for updation of CMs

We have been informed that an application for updation of CMs cannot be made online.

9.2.4 Digitisation of the process for retrieval of copies of land records

While copies of registered documents is not available for retrieval online, an e-Search portal has been established by the state government to allow the retrieval of the details of the Index II for a land parcel, online. To test whether the same is available for the chosen Tehsils, we carried out test checks for three (3) villages each from of the two (2) talukas, and attempted to retrieve copies of the Index II for six (6) parcels in these Tehsils.[2] We were unable to retrieve copies of the Index II of any of these parcels. The notification message displayed, post conducting the search, stated that the information was not available on the database on the date of the search.

We also found that the IGR has provided a facility called *'Registration Verification'* which provides the public the facility of verifying whether a document is registered or not, by sending a Short Service Messaging (SMS) message to the number provided.[3]

With respect to retrieval of revenue records, we accessed the Mahabhulekh website to retrieve RORs for sixty-four (64) parcels selected from forty-four (44) villages spread across all six divisions of the State.[4] We were able to successfully retrieve the RORs in respect of such parcels fairly easily online. All the RORs could be retrieved within a minute of initiating the search. However, we have noted some additional observations with respect to the retrieval process below:

Website inefficiency: The Mahabhulekh website is not accessible at all times and is accessible only through a few web browsers. A number of times, we were unable to retrieve the RORs because of some technical glitch in the website.

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[2]We attempted to retrieve copies of the Index II for parcels located in Bhare, Kasarsai and Nive in Mulshi, and parcels located in Shirgaon, Devkhop and Alyali in Palghar.

[3]The User Guide for this service may be found at `http://igrmaharashtra.gov.in/OnlineServices/IGR_DOC_USER_MANUAL.pdf`.

[4]`https://mahabhulekh.maharashtra.gov.in/`

Information required for retrieval: We find that to retrieve the ROR, the user has to key in atleast the survey number or the name of at least one owner of the property.

Language: Copies of the RORs are only available in Marathi.

Legal utility: The copies of the RORs are not legally usable because they are not certified copies. The user is still required to physically visit the Talathi Office to get the same certified to make them legally usable.[5]

In addition to the web interface for retrieval of copies of the RORs, we noticed that the Manor talathi office at Palghar and the Haveli talathi office at Mulshi have kiosk machines for retrieving copies of the RORs. The users may access this machine to retrieve copies of the RORs. However, once again, such copies are not certified copies. So, the user has to visit the talathi office to get the same certified. The kiosk information and user options are available only in Marathi language. So, the user is expected to know the language to be able to retrieve copies. The charge for a copy obtained from the kiosk is Rs.23 while getting a copy from the talathi costs Rs. 15. It was observed during interactions at the talathi offices that owing to the absence of certified copies, and the difference in cost of retrieving copies from the kiosk, and obtaining certified copies directly from the talathi office, members of the public prefer obtaining certified copies directly from the talathis.

As observed in section 9.1 of this chapter, the CMs for large parts of the two Tehsils have not yet been digitised. Hence, copies of the CMs cannot be retrieved from the internet.

Our findings on the extent of digitisation of the processes for retrieval of land records are summarised in Table 9.4.

Table 9.4: Digitisation of the process for retrieval of copies of land records.

	Online	Kiosk	Office retrieval
Index II	Facility available, but we could not retrieve copies.[a]	No.	Yes.
ROR	Yes	Yes	Yes
CMs	No	No	Yes.

[a]This facility is available for documents registered in specific times.

9.3 Digitisation of the interconnectivity between the offices

As discussed in section 9.2.1 of this chapter, there is one-way digital interconnectivity between the SRO and the revenue office. When a document is registered, there is interface between the SRO and the revenue office.

[5]We have been informed that certified copies of RORs are available for a few districts in the State but test checks could not be conducted for the same.

We are not aware of such interconnectivity between the survey office and the revenue office. It appears that the Survey and Settlement Department continues to function without digital inter-connectivity with the other two departments. In keeping with the fact that identification of a land parcel and its area are important aspects in ensuring accuracy of land records, it is essential that this department is not left out in the process of integration with the other departments.

9.4 Delivery of services from the relevant offices

As is evident from earlier observations, not all land records are accessible online. However, owing to the availability of land records in electronic/scanned/digital form, the process of delivery of services by the three departments/offices has seen positive change, especially with respect to time taken for delivery of services.

We conducted test checks at both Mulshi and Palghar talukas to observe the time taken between the date of application by a member of the public till the date of delivery of various services offered by the three departments/offices.

9.4.1 Observations:

Time taken for obtaining certified copies

Table 9.5 summarises our findings on the time taken to obtain certified copies of RORs in Mulshi and Palghar Tehsils.

Table 9.5: Time for retrieval of certified copies of RORs and CMs

	Minimum (in days)	Maximum (in days)	Average (in days)
RORs[a]			
Mulshi	10^b	68^d	29.4^f
	2^c	2^e	2.5 days^g
Palghar	Same day	Same day	NA
CMs[h]			
Mulshi	Same day	Same day	Same day
Palghar	Same day	Same day	Same day

[a]The applications we perused were in respect of certified copies of mutation entries and the RORs.
[b]If original is not digitised.
[c]If original is digitised
[d]If original is not digitised.
[e]If original is digitised.
[f]If original is not digitised.
[g]If original is digitised.
[h]The applications we perused were made in respect of maps showing multiple parcels of land which were part of a consolidation scheme.

The findings summarised in Table 9.5 are elaborated below:

- **Certified copy of revenue records:**
  1. **Mulshi Taluka** In the Mulshi Taluka, a centre has been established which has access to revenue records. Members of the public may visit such centre and apply for certified copies of the same. For RORs which have not been scanned, namely those pertaining to transactions that took place prior to 1940, the average time taken between receipt of an application at the relevant office and the preparation of a copy is 29.4 days.[6]

     For revenue records which are available in electronic format, the average time taken between receipt of an application and the preparation of a copy is 2.5 days. The applicant may or may not collect the copy on the date that it is prepared. Further, in the sample that we observed, the revenue record for one application was not available and the applicant had been informed about the same within two (2) days from the date of application.
  2. **Palghar Taluka**
     Unlike the situation in Mulshi where a centre for providing services to the public has been built, in the Palghar Taluka, an applicant must visit the relevant talathi office in the village for making an application for a certified copy of a record. We visited one such talathi office and observed that copies

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[6]Please note that from the sample observed by us, there was an instance when the copy of the revenue record had been prepared within 7 days but the applicant did not collect the same from the office.

of RORs could be collected on the day on which the application is made. The only exception to this being days on which the talathi is not available in the office for certifying the printed copies.

- **Certified copy of CMs:**
  1. **Mulshi Taluka**
     CMs in the Mulshi Taluka have been scanned. This has significantly reduced the time lag between receipt of an application and the preparation of copies because the officials are merely required to print the scanned maps and certify the same. From the five (5) sample applications observed by us, the average time taken between the receipt of an application and the collection of the copy by the applicant is 2.34 days.[7]
  2. **Palghar Taluka**
     The CMs have been completely scanned in the Palghar Taluka as well. From the sample that we observed, due to the ease of operation arising out of the availability of scanned records, the copies for CMs were provided to the applicants on the same day.

Time taken for transfer or correction related processes

Table 9.6 summarises our findings on the time taken to register land transactions and update or correct RORs.

Table 9.6: Time taken for registration and updation of land records

	Minimum (in days)	Maximum (in days)	Average (in days)
Registration of land transfers			
Mulshi	Same day	Same day	NA
Palghar	Same day	Same day	NA
Updation of RORs			
Mulshi	48 (sale)	170 (sale)	85.2 (sale)
	37 (succession)	287 (succession)	110.4 (succession)
Palghar	38 (sale)	111 (sale)	52.6 (sale)
	26 (succession)	67 (succession)	47.8 (succession)
Correction of entries in the ROR			
Mulshi	33	311	137.25
Palghar	109	535	269.6

Our findings in Table 9.6 are elaborated below:

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[7]From the sample observed by us, copies for 2 (two) applications were prepared but the applicant had not collected the same.

- **Registration of documents:** The registration of documents in the SROs of both talukas takes place on the same date as the date of application for registration. In terms of receipt of copies of records maintained at the SROs, the average time taken, as observed from the Paud SRO, is 5 days.
- **Mutation process:** To assess the average time taken for mutation processes, we considered two instances which require updating the RORs, being sale and succession. Post receipt of an application for updation of the RORs, the RORs with respect to identity, area and disputes associated with the parcel in question are verified. If the verification process is successful, the application information is fed into the digitised platform / server of the Revenue Department. Notice under section 150(2) of the *Maharashtra Land Revenue Code, 1966* is issued and then the mutation process is completed within fifteen (15) days from such publication of the notice, unless objections are received with respect to the same. The following are our observations with respect to the average time actually taken for the completion of this process:
    1. **Mulshi Taluka**
        - With respect to mutations arising out of succession proceedings, the average time taken from the date of receipt of an application to the date of updation of the RORs is 110.4 days. In terms of the sample considered, this process could take as few as 37 days to as many as 287 days.
        - With respect to applications for mutation of records on account of sale transactions, the average time taken from the date of receipt of an application to the updation of the RORs is 85.2 days. In terms of the sample considered by us, this process may take as few as 48 days to as many as 170 days.
    2. **Palghar Taluka**
        - With respect to applications made for mutation on account of the death of the original right holder, the average time taken from the receipt of an application to the date of online feeding of information is 21.4 days. In terms of our selected sample, this process could take as few as 7 days to as many as 43 days. In terms of average time taken for the entire process of mutation to be completed, the average time taken from receipt of an application till the date of mutation is 47.8 days. This process may take as few as 26 days to as many as 67 days.
        - With respect to applications for mutation on account of sale transactions, the average time taken from the receipt of an application to the date of online feeding of information is 25.8 days. In terms of the selected sample, the time taken may vary between 17 days to 59 days. The average time taken for the completion of the entire process of mutation is 52.6 days. In terms of the selected sample, the time taken may vary from 38 to 111 days.
- **Correction of revenue entries:**[8]
    1. **Mulshi Taluka**

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[8]We have considered correction proceedings initiated through proceedings held before an appellate or revisional authority under the *Maharashtra Land Revenue Code, 1966.*

The average time taken from the receipt of an application for the correction of a revenue entry to the successful correction of the record is 137.25 days[9]. In terms of the sample observed by us, this process may take as few as 33 days to as many as 311 days.

2. **Palghar Taluka**
   The average time taken from the receipt of an application to the correction of the record is 269.6 days. This time frame may vary from 109 days to 535 days.

- **Demarcation of boundaries**
  There are 3 (three) types of applications that are received by the Survey and Settlement Office with respect to demarcation of boundaries, namely, *regular applications*, *urgent applications* and *most urgent applications*. The following are our observations with respect to the time taken for disposing off such applications.

  1. **Mulshi Taluka**
     From the sample observed by us, there were three (3) most urgent cases, one regular case and two urgent cases.
     - The regular application was disposed off in 243 days.
     - Of the two urgent applications, one was completed in 146 days while one had been pending since September 2016 until the test check which was conducted by us in January 2017.
     - Of the three most urgent applications, one was disposed off in 81 days while the other two had been pending since September and November 2016 respectively.

  2. **Palghar Taluka**
     The applications considered in the sample were all *most urgent* applications. The average time taken between such an application made for demarcation of boundaries and the measurement of the land parcel is 21 days, while the average time taken between the date of application and the completion of the demarcation proceedings is 38.4 days.

- **Partition proceedings** The applications for partition proceedings are also divided into *regular applications*, *urgent applications* and *most urgent applications*.

- **Mulshi Taluka**
  The sample considered by us included most urgent applications. The process for two out of the five applications considered had been completed within 103 and 243 days respectively. With respect to the other applications, the Survey and Settlement Office had sent the requisite documents and the application to the tehsildar's office for changes to be made in the revenue records. The average time between the date of application for partition and the date on which the same was sent to the tehsildar's office is 251.7 days.

- **Palghar Taluka**
  Based on our observations with respect to the 5(five) applications, the average time taken for disposal of such applications in the Palghar taluka is 56.8 days.

The digitisation efforts in the Mulshi Taluka have been more prominent as compared to

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[9]The order in one application had not been passed and the same has been excluded for the purpose of calculating the average time.

the Palghar Taluka especially with reference to the Pilot conducted in the 12 villages at Mulshi. Further, the volume of transactions and service requests in Mulshi are higher than that at Palghar. We also observe that:

- With respect to the process of obtaining certified copies from the three offices, digitisation has significantly reduced the time of delivery of certified copies since the records are available in digitised form. This availability in digitised form has led to ease of search of records and preparation of copies, which then just need to be certified by the relevant official.
- Mutation of records continues to be a time consuming procedure despite digitisation of the process upto the stage of issue of notice under section 150(2) of the *Maharashtra Land Revenue Code, 1966.* Further, mutations on account of succession take longer than mutations on account of sale proceedings because in a sale transaction, the SRO directly sends an intimation to the Talathi office upon sale. On the other hand, proof of succession, whether testamentary or intestate, adds an additional step to the process of mutation of records.
- As is evident from the above, the correction of revenue records is a time consuming process when the same is initiated through proceedings held before an appellate or revisional authority under the *Maharashtra Land Revenue Code, 1966.*
- In terms of demarcation of boundaries and partition proceedings, the time lines for applications vary on the basis of their urgency as expressed at the time of application. Further, owing to a limited number of skilled man power and high intensity of applications, the time taken for completion of the proceedings is further delayed.

9.4.2 Cause for delay in delivery of service

In the course of holding stakeholder interviews with officials at the three offices and conducting FGDs at the two talukas with members of the public and from our observation of the interactions between the citizens and the officials of the land record administration, we observed the following major causes for delay in delivery of service by the offices:

- **Infrastructure concerns:**
  We find that the infrastructure in terms of connectivity and uninterrupted operation of the servers and software is a major obstacle in the timely delivery of services relating to land. Significant delay is caused due to a breakdown of servers which is known to take place frequently. This observation was reinforced in our interviews with stakeholders, officials and members of the public. In addition to the above, the speed of the servers and softwares also causes delay. Paucity of computers in offices is also a cause for concern. We observed that in several offices, especially talathi offices, the talathis were using their personal computers and laptops for delivery of land record management services.
  In respect of the Survey and Settlement Office, not all CMs are of the same size and often require big photocopying machines for preparation of copies. It is essential that the offices be well equipped with such machines for timely delivery of certified copies. Further, in respect of storage of the physical record,

especially CMs, equipment such as Compactors would lead to better preservation of records.

The efficient delivery of services is also affected by the job satisfaction of officials and the environment, which they work in. We observed that a number of offices lacked basic sanitation amenities and office infrastructure. Such absence of basic infrastructure may act as a demotivating factor in the efficient performance of services by officials.

- **Software concerns:**

  In terms of the software used by the officials at the three offices, especially the talathi offices, we observed that the online ROR is not identical to the physical record even in terms of fields recorded. For example, the name of the cultivator of the land is not shown as a field in the online ROR while the same is a field captured in the physical ROR. Further, ideally, the software must be updated in accordance with regular feedback received from the officials in terms of the issues they face while using the software.

- **Inadequate training:**

  It was observed that the officials have not received regular training but were learning how to use the digitised platforms and software on the job. It is essential that the officials be trained well in order to expedite delivery of service.

- **Additional charges and sundry official work:**

  From a discussion with officials and members of the public, we observed that a day or two of delay in delivery of service may be attributed to one official holding charge of more than one office as well as due to other official work beyond the scope of mere delivery of service.

- **Corruption:**

  A common cause for distress in timely delivery of services by officials as observed during the FGDs was the prevalence of corruption in the offices. We were informed that often services would be delivered in a timely manner only subject to bribes being paid to clerks or officials at the offices. On account of such priority being given to bribe-givers, general applications of applicants who do not bribe the officials, are delayed. However, this is likely to be exterminated when digitally signed online records are made available under the programme, thereby removing the human element from the delivery of copies of land record.

9.5 Crop inspection

In Maharashtra, crop details are recorded in Form 12 of the Form 7/12 for each land parcel.

9.5.1 Mulshi Taluka

Upon enquiry with the Naib Tehsildar at the Mulshi office and with the Talathi of one of the villages in Mulshi, we were informed that the talathi is responsible for conducting crop inspections in the village and he carries out such inspection between the months of August to December. Post completion of such inspection, the relevant

Forms 12 of the Form 7/12 are updated.

9.5.2 Palghar Taluka

Upon enquiry in two villages, we were informed that crop inspection for changes in the Form 12 are usually carried out on receiving applications from parcel holders. The talathi also conducts and annual crop inspection between the months of September to December. The kind of changes observed on crop inspections include change in the place of cultivation of a crop or no crops being cultivated on land which was earlier under cultivation.

9.6 Aadhar seeding

Upon enquiry in the talathi's office at both talukas, we were informed that Aadhar seeding with land records has not yet been started in the talukas.

10 — Findings at the parcel level

Overall, we interviewed 102 parcel owners, of which two declined to permit land measurement. Of these over 92 were owners and the rest were mostly relatives (Table 2 of this chapter). Close to a quarter of the respondents were women. Reflecting the recent dynamism in land markets, 62% of our respondents reported acquiring the land formally in their name over the last three years (since 2014). Almost a similar proportion had multiple owners. Although a bulk of the sample parcels had two owners, close to a quarter, i.e., 24% had more than 5 owners as per the Record of Rights. Virtually all the parcels saw some registration activity in the past five years and the owners had therefore some experience interacting with the SRO in the recent past. Most of the parcels were classified as agricultural land and around 28% reflected encumbrances, virtually all of them pertaining to loans from local cooperative societies and banks.

10.1 Assessment of Real time Mirror Status

Ownership

There was a high degree of accordance between records and reality in terms of ownership. In all except one case, we were able to identify an owner who was mentioned in the ROR and in 92% of the cases we interviewed the owner. It is also apparent that the ones with multiple owners as per the ROR were indeed parcels with multiple owners although a detailed matching of the list of all owners was not feasible in the survey. As mentioned earlier a quarter of the sample parcels had more than five owners.

Despite this significant consonance between records and reality in the sample parcels, in several villages local discussions suggest that this may not always be the case. In tribal Palghar for example, it seemed that although several people had a 7/12 for a specific parcel, in reality, these lands/parcels had other occupants who had put the land to uses of their choice. Also, because our sample selection excluded many parcels that were disputed and where owners were unwilling to participate in the survey, the

findings on ownership comes with serious caveats.[1]

Possession

As with ownership, for the sample parcels, the land records by and large were an accurate reflection of actual possession . All the parcels were listed as possessed and occupied by the owner. In general, with respect to shared ownership, possession of specific areas are not reflected in the ROR in ways that we were able to check on ground. Only in six out of the 102 cases did we find discrepancies. In three of them, descendants and family members (brother in two cases) were in possession of the land although the ownership was not in their names. In one parcel, the caretaker possessed the land and was paid a salary to maintain it. One parcel had a tenant and in another a clan law governed its sale apparently and was occupied by a "member of the clan". [2]

Land parcel classification

Overall, 95% of the land conformed to the land classification and use as in the ROR. Only six parcels were not - three were designated as agricultural land in the ROR but were either non-agricultural or mixed use in reality and three others were deemed non-agricultural in the ROR but were being cultivated in reality.[3] We went beyond this classification to ascertain precisely how the land was used. Table 4 of this chapter shows the distribution of parcels based on primary land use. A fifth of the parcels were not currently cultivated, and were reported as either fallow, waste or non-agricultural. In the field surveys, it was apparent that several of them were plots where some construction had begun, perhaps reflecting an ongoing transition to other uses. While the broad classification of land use seem to match the on-ground status, we find significant differences in precise land use in terms of cropping patterns (Table 4 of this chapter). For example, several lands that according to the 7/12 are under paddy are in fact either left fallow or were under plantations and orchards. Discussions with local functionaries suggest that while the best efforts had been made to keep these updated, sometimes because talathis are given multiple charge of several areas, it is sometimes difficult to do crop surveys each season.

In general, the ROR format did not capture non-agricultural land uses in detail, nor the structures on what was agricultural land. For example, even where the ETS survey captured wells and farm buildings and sheds, both currently used and abandoned, these were not reflected in the ROR. The question of updating these did not seem to be a concern among land owners, likely due to the effort involved.

Location and extent of land parcel

This is perhaps the area where there was most discord between the records and reality. For the purpose of our survey, we obtained the 7/12 records and identified it on the cadastral maps from the authorities and with the consent of the owners visited the

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[1]In an extreme example, in Aliyali village, of the ten parcels selected as part of the sample only one owner consented to be part of the study with the others citing disputes.In many other villages, however, this was not a major issue.

[2]The findings on possession like that of ownership is likely to suffer from a sampling bias.

[3]In general, the 7/12 records areas that categorize total area into cultivable and uncultivable land. We did not attempt to verify if this proportion was correct.

location in order to measure the extent. In terms of location, in virtually all cases the parcel was where it was as per records. In only one case, in Palghar, the owner claimed that the parcel was in fact located on one side of the railway track whereas the records placed it on the opposite side, half a kilometer away.

We found significant discrepancies in the area recorded in the 7/12 and the ETS /e-Trex measures (Table 3 of this chapter; Figures 10.1 and 10.2 show examples of the parcel measurement using e-Trex). Although the ETS is deemed to have greater accuracy than the e-Trex, for both measures, about half of all parcels measured showed a deviation of more than 20% of the area mentioned in the ROR. With the ETS, 21 of the 50 plots in Mulshi were within 10% of the ROR area whereas for Palghar this was the case for only 11%. This difference is to be expected given that in Mulshi some of the villages included had been resurveyed using ETS recently and one would therefore expect a closer match there. Indeed, the median absolute difference in measurement is consistently lower for Mulshi compared to Palghar, whether with the ETS or e-Trex (Table 3 of this chapter). Even if one allows for instrument bias that comes with measurement using different techniques, it is worth examining the reasons for mismatch where the deviation is greater than 20%. In our experience, this is driven predominantly by the lack of awareness of the parcel owners of the true extent of the parcel. There were several cases where the white stone markers, typically installed on the ground to demarcate boundaries were missing. In other cases, whereas the parcel was a part of a larger parcel earlier, the owner mentally treated the larger parcel as the relevant one. Demarcation was not done in most cases - with multiple owners, those who were cultivators used mutual understanding of extent to cultivate their piece of the larger parcel. The same understanding seemed to prevail between neighbours in most cases. Most did not feel the need to measure and demarcate the plot. Unless there was an impending sale, it seemed that *demarcation and subdivision* was routinely avoided. In essence, this issue emerges as a deep concern. Several people also brought up the issue of measurement. In Mulshi where resurveying and measurement often led to conflicts because the measure did not match the records - they resolved it informally amongst themselves.

Encumbrances

This is another area where there were significant differences between on- ground status and land records status, in terms of encumbrances on parcel. In the ROR virtually all the encumbrances mentioned pertained to loans While only a small portion of those with encumbrances reported . While one reason could be a general reluctance to share financial information (28% did not respond) and 1% explicitly stated he/she did not want to share this information), it was significant that around 8% did not seem aware of any encumbrance. We found few cases where other encumbrances were mentioned (e.g. litigations, court orders, acquisition proceedings) on the land parcel, but this could well be an artefact of our sample, given that several owners of disputed parcels declined to participate in the survey.

10.2   Interfacing with the Government

The NLRMP / DILRMP has been implemented since 2008, albeit at a somewhat slow pace. Through both the survey and stakeholder discussions we wanted to understand citizen experience in transacting with the government, specifically with a view to gauging their experience post-implementation. An overwhelming proportion of the respondents felt there was a significant improvement (44%) or some improvement (33%) in the services provided by the department relative to before the modernisation programme in 2008. Around 18% felt there was no change. Those who report improvements mention significant time savings.

Of those who mentioned that things had not improved, most reported that they had to spend more to get the documents - travel to an internet kiosk, pay for the print out and further pay once more to get the ROR updated. Some talathis had even taken an initiative to issue the 7/12 free of cost although they were supposed to charge Rs. 15 for it, to assist people in the community. Several users demanded that given the modernisation programme, documents should be made available in the village itself.

A chief complaint seemed to problems with the server, connection speed, connectivity and other technical glitches that forced people to visit the SRO multiple times for a single task. For example, during our field visit we met people who had been coming for the past three days in order to get their land transaction registered, having taken leave of absence from work for a task that ought to have taken just half a day. In some cases, local functionaries, contract staff in charge of disbursing copies of the 7/12, had taken the initiative to call applicants informing them about server issues for the convenience of the citizens. Elsewhere however, this was not the case. Even where people were generally happy with the services, the results of the FGDs too suggest that technical problems especially with the server, remain huge challenges. Another source of discontent was the errors that had been introduced in the digitized 7/12 because of data entry in the conversion of hard copies to soft copies. Many felt that it imposed an unfair cost on owners who now had to spend money, time and effort to get it rectified. In general, although a majority report that they would access their records online, an overwhelming majority of those who had the ROR, cadastral maps and title deeds still sourced these from the talathi's office, SRO, Only a few had used the Sethu kendras or sources it online (Table 5 of this chapter).

In our survey and discussions, we find that even as there have been improvements on several fronts and with several local functionaries going beyond what was expected of them,several respondents in the survey reported making some unofficial payments (Table 5 of this chapter). It is not clear whether if the users had refused to pay, things would not have got done or whether everyone generally pays and this is under-reported in our survey. These payments seemed to be to clerks, the occasional talathi and the amounts ranged from anywhere between Rs.1000 and Rs.30,000 depending on the nature of the task.

Our discussions with the local functionaries yielded a different set of concerns. While all were enthusiastic about the time savings on account of digitisation, several talathis mentioned several challenges in daily functioning. A common sentiment was that

there should be better quality training to work with the system. One official said "We were taught how to eat after we had finished the meal." Another sentiment voiced about the content of the training was : "It was like teaching LKG students 10th standard syllabus ... we needed more hands-on training". One talathi mentioned that the systems were not developed consultatively and securing their inputs before the system was devised would have helped smoothen the transition and implementation. At the same time, all local functionaries noted that the support of individuals at the state level in backstopping technical support was very good. It seemed apparent that the commitment and dedication of the state level staff was crucial to the successful implementation of this.

Table 1: **Sample villages**

	Village	Parcels	Recently transacted	Remarks
Mulshi tehsil, Pune district (N=50)				
1	Bhare	10		Pilot village for NL-RMP/DILRMP
2	Kasar Sai	10		Close to Pune, absentee land owners, builder activity
3	Nive	10		
4	Nere	10		
5	Male	10		
Palghar tehsil, Palghar district (N=52)				
6	Aliyali	1	1	
7	Amban	4	4	
8	Devkhop	7	7	Builder activity; tribal
9	Karvale	3	3	
10	Kandarvan	7	7	
11	Shirgaon	12	8	Active land markets, some parts are green zone
12	Tandulwadi	10	10	
13	Vadhiv	8	8	

[1]

Table 2: **Respondent and Parcel Profile**

Details	Value
Percentage of respondents who	
- are females	24%
- were the owners themselves	92 %
- were the relatives	4 %
- acquired (purchased/inherited) the sample parcel in the past 3 years	62%
Proportion of respondents	
- who have interacted with the SRO in the past 5 yeas for registration of land?	98%
- who have undertaken any of the 8 activities mentioned in	97%
Proportion of sample parcels	
- agricultural land	93%
- with encumbrances	28%
- with multiple owners	61%

[1] Compiled from survey

Table 3: Real time mirror test

Attribute	Parcels with accordance		
	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
Margin of difference with e-Trex			
Number of parcels	50	50	100
Median absolute difference from RoR (%)	11.69%	26.43 %	21.02%
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
Median absolute difference from RoR (%)	14.24%	21.14 %	17.28%
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

[1] Based on comparisons between Record of Rights (RoR) and field survey
[2] Margin of difference is computed as the absolute difference between RoR and measured area, expressed as a percentage of RoR estimate.
[3] One parcel is listed as Gharpadtari for landuse. No idea what this is

Table 4: **Distribution of Sample Parcels based on Primary Land Use (%)**

Use	Mulshi	Palghar	All
Crop area-irrigated	74	12	42
Crop area unirrigated	6	50	28
Orchards and plantations	-	17	9
Fallow	8	12	10
Uncultivable waste	2	-	1
Cultivable waste	2	6	4
Other non-agriculture	8	4	6
Total parcels	50	52	102

[1] All figures except total parcels are reported in terms of percentage. Data based on field survey
[2] Classification based on primary use; secondary use is disregarded here but taken into consideration in 3
[3] Percentages may not add up to 100 due to rounding off.

Table 5: **Mode of transacting**

S No	Variable	Mode and source				
	Task	**Online**	**Office**	**Both**	**N.A.**	
1.	Checking for encumbrances / title search	2	18		82	
2.	Collecting requisite documents	6	44	1	51	
3.	Finding out applicable stamp duty and fee payable	1	16		85	
4.	Getting the conveyance document prepared	1	26		75	
5.	Making the payment (purchasing paper, depositing fees)	3	6		93	
6.	Applying for registration	2	22		78	
7.	Getting documents verified/ checked / establishing identity	1	4		97	
8.	Getting photographed					
9	Getting a copy of the registered document	1	4		97	
	Other Services	**Online**	**Setu**	**Talati**	**N.A.**	**Had to pay**
1	Availing services like securing a copy of the record	3	7	4	61	19
2	Getting a certificate relating to entries in the record	3	9		65	3
3	Getting the record updated on succession or sale	9	2	6	66	27
4	Partition proceeding		2	1	80	0
5	Exchange, tenancy		1	2	88	86
6	Getting the record updated in any other context	2	3	1	90	0
7	Securing a correction in the record		1		97	13
8	Securing a boundary demarcation, or any other matter	1			91	

[1] All figures except total parcels are reported in terms whole numbers
[2] N.A. means Not Applicable
[3] Percentages may not add up to 100 due to rounding off.
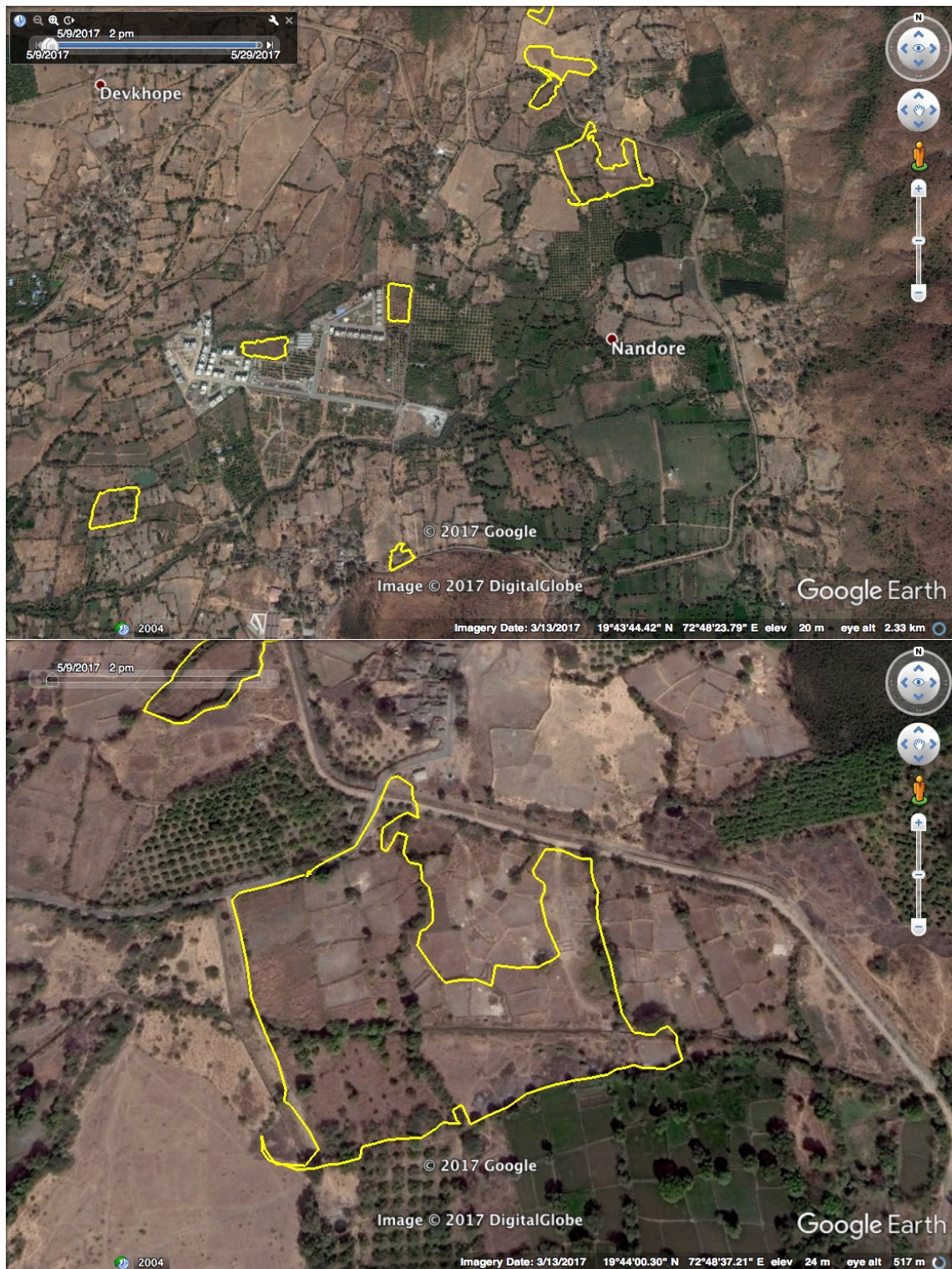
Figure 10.1: Parcel measurement: A few images
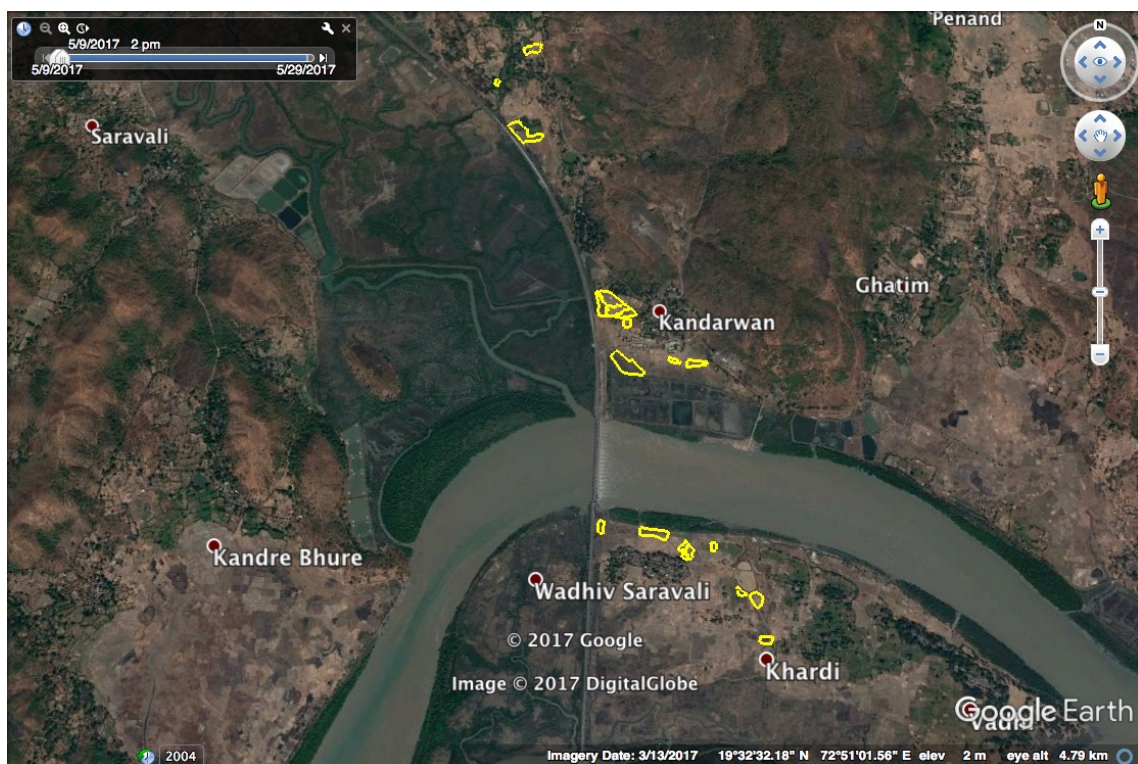
Figure 10.2: Parcel measurement: A few images (continued

Part III

Conclusion

11 — Problems and recommendations

In this chapter, we summarise the problems identified by us in the course of our research and our recommendations to address them. Section summarises our takeaways on the problems arising in the implementation of the DILRMP. Like the rest of the report, we articulate the problems observed across the different components of digitalisation, namely, digitalisation of existing records, digitalisation of the processes for recording a change of interests in land, digitalisation of the process for retrieval of title records and interconnectivity between the different land record offices. Section 11.2 contains this articulation. Section11.3 articulates problems that are visible across all four components. Each section also envisages possible solutions to the identified problem.

11.1 Summary of takeaways

In this section, we briefly summarise the takeaways from our specific findings recorded in this report:

1. Digitalisation has been *partially* achieved in respect of:
   - the processes for the retrieval and updation of RORs;
   - two aspects of the registration process, namely, ascertainment and payment of stamp duty and the registration fees and scheduling an appointment to attend the offices of the SROs and admit execution of the deed before the SROs.
2. The process of surveying, drawing up and retrieval of CMs has largely remain un-digitalised.
3. Interconnectivity between land administration offices has been partially achieved.
4. Several interests on land are not recorded in any of the land records.
5. Citizens do not have the benefit of a single window system for retrieval of copies of land records.
6. The IT infrastructure remains a problem, the connectivity is slow and is suscep-

tible to breakdown.

7. Working conditions are not uniform at all land records offices. While some land record offices offer comfortable working conditions, many others do not offer basic amenities such as washrooms or photo-copy machines.

8. The survey equipment is not adequate, which results in delays in processing applications for boundary demarcation and hampers survey and re-survey exercises.

9. Finally, we find that data dissemination continues to remain a big challenge. We find inconsistencies and ambiguities in basic data provided by the State Government.

11.2   Thematic problems and recommendations

11.2.1   Digitalisation of existing records:

Inadequate training of data entry operators : Presently, the scanning and data entry work for digitisation of existing records is being carried out by persons lacking prior knowledge of land records. This causes delays and inefficiencies and requires an additional level of supervision over the data entry process. Further, it increases the possibility of errors in data entry. Any error in the land records arising out of data entry errors would have to be corrected by the rightholder(s) by making an application for correction of entries.
Recommendation: It is recommended that the State Government deploy resources to impart technical training to the data entry operators to address this problem.

Digitalisation of existing CMs : The digitalisation of CMs has made little progress in Maharashtra. Presently, the State Government has taken up digitalisation of CMs in twelve (12) villages of the Mulshi Tehsil on a pilot basis. We have been informed that the process is time consuming as it is preceded by a re-survey of these villages. Resultantly, the State, as a whole, is lagging behind on digitalisation of CMs.
Recommendation: The State Government could consider an approach of dispensing with the re-survey process as a condition precedent to map digitalisation. While the re-survey process is time consuming and can be pursued simultaneously, existing CMs could be digitalised and made available to the citizens for retrieval.

11.2.2   Digitalisation of processes for land transfers

Digitalising the process of applying for changes in land records : As mentioned in 9, the process for applying for registration, mutation entries or boundary demarcation, is still not digitalised. These processes continue to rely on physical applications. Where land transaction deeds are registered with a SRO, an intimation is sent to the office of the relevant Talathi for intiating the process for updating the ROR in line with the registered deed, due to the digital interconnectivity between these offices. However, this is not the case where a

ROR needs to be updated, otherwise than through a registered deed, such as in succession cases. Moreover, tracking the status of the application can also be done only physically. Further, applications for updating land records in respect of a given parcel, must be made to three different offices, adding to the costs and inconvenience of citizens.

Recommendation: It is recommended that the State Government set up a single window platform which citizens can interface with for applying for changes in land records. The platform design should factor in considerations such as the ability to track applications remotely and regular updates. To a limited extent, this has been done for the registration process, where it is not possible to schedule appointments with the SRO through an online interface platform. However, similar technology has not yet been deployed for the revenue offices and the survey and settlement offices.

Infrastructure issues : Section 9.4.2 provides a detailed account of infrastructure issues which contribute to delays in processes carried out for creation / change of interests in land. In a nutshell, server breakdown problems, storage of record problems, shortage of survey equipment and office infrastructure issues are major infrastructure problems observed during the course of study.

Recommendation: We recommend that the State Government deploy resources for upgradation of IT infrastructure, such as high-speed servers that are less vulnerable to breakdown, installation of generators at the land record offices to avoid delays caused due to power cuts, the use of equipments such as compactors, provision of more survey equipment for dealing with applications for boundary demarcation and installation of infrastructure meeting certain common standards in all land record offices.

11.2.3   Digitalisation of the process for retrieval of land records

Certified copies of land records : Certified copies of documentary evidence have legal sanctity[1]. At present, the copies of RORs and property cards for most talukas, which are available online, are not certified copies. Therefore, despite obtaining a copy online, any person retrieving these records will have to get the same certified by the relevant official for all practical purposes. During the course of our discussions with officials as well as members of the public, we observed that owing to this, people preferred directly obtaining certified copies from the talathi, thereby making online availability of the record futile.

Recommendation: Certified copies of all land records be made available for online retrieval.

Absence of a single window system: Presently, different land records may be obtained at separate offices or websites of the relevant offices. In order to get a complete picture of the records with respect to a land parcel, multiple searches and retrieval activities need to be conducted. This adds to the time and costs of the users.

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[1]Section 79 of the *Indian Evidence Act, 1872*

Recommendation: Alike the unified interface for applying for updation of land records recommended above, we recommend that a centralised platform be created for retrieval of all land records with respect to a land parcel.

Improving the quality of State-citizen interface : Section 9.2.4 illustrates the difficulties we encountered when conduting test checks to retrieve records from the relevant websites. In a nutshell, inefficient working of the relevant websites and language barriers are a few problems encountered while retrieving digitised land records. We also attempting to retrieve details of documents purporting to be registered by using the SMS verification service referred to in section 9.2.4, but found the service to be non-functional.
Recommendation: Easy access to land records is a critical service delivery function of the State, which is the sole repository of land title records. To monitor the efficiency and quality of this service, we recommend setting up an IT task force that will periodically review and assess the efficiency and performance of the State-citizen interface for retrieval of information pertaining to land records. Separately, the State Government must build capacity to implement the recommendations for improving such interfaces on a regular basis.

11.3   General recommendations

- **Inconsistent information about the DILRMP:**
  During the course of study, we observed that there are various inconsistencies in the information concerning efforts under the DILRMP between the various offices. Further, there are also discrepancies between information provided by the various offices and the information reported on the NLRMP information system[2].
  Further, it is unclear as to when and at what time intervals the information available on the NLRMP website is updated by the officials. Also, since the NLRMP website is not designed to archive information, it is difficult to access historical data for assessing the progress made under the DILRMP.
  In view of the above, it is recommended that the data gaps and inconsistencies be removed to facilitate analysis of the progress in implementation of the DILRMP.
- **Training and technical support for officials:** Owing to the operational changes brought about by digitisation of processes, it is essential that officials and staff at the three offices receive regular training, especially when there is any change in the softwares to be used by them.
  In addition to such training, it is imperative that technical support be provided to the officials to address difficulties faced by them while using the softwares developed for their use. It would be even better if inputs are taken from them while devising updates to the softwares.
  We were informed that at present,there is only one technical support team for the offices in the State. It is advisable that more such teams be appointed for assisting the various offices.

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[2]This information may be accessed at `http://nlrmp.nic.in`

- **Inter-connectivity with courts:**

  At present, efforts are being made for integration of the various land record offices. However, we recommend that another focus area should be the integration of these offices with courts and judicial forums. This is because, various judicial and quasi-judicial orders affect rights and interests in land which require updation of land records. Further, although pendency of court proceedings affects rights to alienate or encumber property, the same is not even recorded in the various land records. Without a record of such proceedings or orders, land records stand incomplete for the purpose of ascertaining the title of a right holder and do not 'mirror' the true position with respect to ALL rights and interests appurtenant to land.

  It is, therefore, recommended that not only should such information form part of the existing record but there must be a mechanism for intimations to be sent from courts and judicial forums to be sent to the relevant land record offices.

A — Questionnaire and responses

DI-LRMP Impact Assessment Study

QUESTIONNAIRE : STATE

2016
National Council of Applied Economic Research
ParisilaBhawan, 11, IndraPrastha Estate
New Delhi-110002

S.No.	Particular	Details
1.	Name of the State	Maharashtra
2.	Name of the Respondent(s), if any	-
3.	Name of the Department (s)	Land Records Department, Department of Registration and Stamps
4.	Contact Details:	
	Designation	
	Telephone	
	E-mail	
	Website (if any)	
5.	Date of Interview	From January 2017 onwards

1. Status of Computerization of Record of Rights (RoR)

S.No	Question	Number of Tehsils	Number of Revenue Estates/ Villages
1	In the State, for how many Tehsils/Revenue Estates/ Villages, RoR is available only in paper form and copy is made available only from relevant office maintaining the record?	1(one)(Jivati)	83(as per information on the web)
2	In the State, for how many Tehsils/Revenue Estates/ Villages, Computerized RoR is available on standalone computer and copy made available only from relevant office?	NIL	-
3	In the State, for how many Tehsils/Revenue Estates/ Villages, Computerized RoR is available on networked servers kept at different locations (real time availability could be disrupted by shutdowns, power supply breakdowns etc.)?	NIL	-
4	In the State, for how many Tehsils/Revenue Estates /Villages, record available 24/7 on state level servers housed in a secure facility not susceptible to shutdown/breakdown?	357(all talukas other than Jivati)	-
5	Specify at which level Computerized RoR is available as a copy?		-
i)	*Only from designated offices*	NIL	
ii)	*From a network of service centres*	357(but not certified copies)	
iii)	*On the web but not in a legal usable form*	NIL	
iv)	*On the web with a digitized signature of the relevant authority*	NIL(activity initiated)	
v)	*Any other manner (Specify)*	-	

Status of Digitization of Cadastral Maps (CM)

S.No	Question	Number of Tehsils	Number of Revenue Estates / Villages
1	No. of Tehsils/Revenue Estates with Cadastral Maps drawn up on the basis of traditional survey techniques but now not usable (torn, disfigured, mutilated, etc.)	-358 -30% not usable but being used	-
2	No. of Tehsils / Revenue estates with Cadastral maps drawn up on the basis of traditional survey techniques and still in use. (Hand drawn copies made available from designated offices).	358	-
3	No. of Tehsils/Revenue Estates with Cadastral maps drawn up on the basis of traditional survey techniques and now scanned, digitized and hosted on:	-	12 Villages in Mulshi Taluka, being Pirangut, Makhaiwadi, Ambadvet, Kasaramboli, Bhare,Botarwadi, Urawade, Ghotawade,Bhegdewadi,Amlewadi,Godambewadi,Materewdi
i)	*Standalone servers for supply of copies from designated offices*	-	
ii)	*On networked servers at different locations with copies available from:*	-	
A	*Designated offices*	-	
B	*Service centers*	-	
C	*On the web but without authentication*	-	
D	*On the web with authorized digital signature*	-	

iii)	*On state level servers with copies available from:*	-	
A	*Designated offices*	-	
B	*Service centers*	-	
C	*On the web but without authentication*	-	
D	*On the web with authorized digital signature*	-	
4	No. of Tehsils / Revenue estates with Cadastral maps drawn up on the basis of modern survey techniques, geo referenced and digitized and available on:	-	12 (Geo-referencing with modern techniques has been done in the 12 villages at Mulshi)
i)	*Standalone servers for supply of copies from designated offices*	-	
ii)	*On networked servers at different locations with copies available from:*	-	
A	*Designated offices*	-	
B	*Service centers*	-	
C	*On the web but without authentication*	-	
D	*On the web with authorized digital signature*	-	
iii)	*On state level servers with copies available from:*	-	
A	*Designated offices*	-	
B	*Service centers*	-	
C	*On the web but without authentication*	-	
D	*On the web with authorized digital signature*	-	

3.Status of Computerization of Registration

S.No	Question	Response	Code
1	Total Sub-registrar offices (SROs) in the State in 2015-16	505 (Please see discrepancy at Section 4.3 (Status of Computerisation of Registration) and Box 14 (Discrepancies in Information))	
2	Total number of transactions handled by all SROs	23,08,809	
3	Number of SROs in the State operated manually without any computerized support and transactions handled by them in 2015-16.	NIL	
4	Number of SROs with standalone computerized registration and transactions handled by them in 2015-16.	NIL (Please see discrepancy comment at Section 4.3 (Status of Computerisation of Registration) and Box 14 (Discrepancies in Information))	

5	Number of SRO offices that accept on line applications and (transactions handled by them in 2015-16 to be noted in each case)	-505 (Please see Section 6.3 (Status of Digitisation of Registration Process) and Box 14 (Discrepancies in Information)) - We have not received an answer for the second part of the question.	
i)	*Carry out all further processing manually*	NIL	
ii)	*Check/verify accuracy of stamp duty fee payment electronically*	505 (Please see Section 6.3 (Status of Digitisation of Registration Process) and Box 14 (Discrepancies in Information))	
iii)	*Check/verify some/all other documentation electronically but not stamp duty / fee payment*	505 (Please see Section 6.3 (Status of Digitisation of Registration Process) and Box 14(Discrepancies in Information))	

iv)	*Verify all required documentation electronically including stamp duty / fee payment*	505 (Please see Section 6.3 (Status of Digitisation of Registration Process) and Box 14 (Discrepancies in Information))	
6	Number of SRO offices where circle rates available on line with open access provided to the public at large and (transactions handled by them in 2015-16 in each case)	512 (as per the website http://nl-rmp.nic.in/)	
i)	*Annual updating undertaken on fixed date*	1st April	
ii)	*Annual updating but variable dates*	-	
iii)	*No fixed updating schedule*	-	
7	Number of SRO offices with legacy record available online to the public at large and number of preceding years for which record available (transactions handled by them in the last financial year in each case)	-	
i)	*One year*	-	
ii)	*Between one to five years*	-	
iii)	*Between five to ten years*	-	

iv)	*More than ten years*	We have been informed that this number is 505 (available for the last 30 years on e-search) (Please see Section 6.3.1 (Digitalisation of the process for retrieval of information from the SROs) and Table No.6.4 (Details of legacy records available for retrieval electronically) for discrepancy in the information.)	
v)	*Entire record since first registration in the area.*	-	

4. **Status of Integration of RoR, CM, and Registration**

S.No	Question	Number of Tehsils	Number of Revenue Estates / Villages
1	Number of Tehsils/Talukas or revenue estates in which the process of registration checks the revenue records data base for details of ownership, parcel size, etc.	357	-
2	Number of Tehsils / talukas or revenue estates in which the process of registration automatically alerts the revenue records database by:		
i)	*Noting the fact of registration in some form*	357	-
ii)	*Initiating the mutation process which then is completed after a certain period of time*	357	-
iii)	*Initiates a mutation process that is completed instantly (auto mutation)*	NIL	-
3	Number of Tehsils / talukas or revenue estates in which digitized record of CM is integrated with RoR and copies of CM can be made available along with corresponding RoR details	NIL	-
4	Number of Tehsils / talukas or revenue estates in which digitized record of CM is integrated with RoR and registration process and this also enables updating CM with any parcel sub division or amalgamation when mutation is affected	NIL	-

5. **Status of wider delivery of Land Record Related Services**

S.No	Question	Response	Code
1	Is a Right to Public Services Act applicable in the state? (Please write a brief note-,attach Act / Rules).	Yes-1; No-2	1
2	If yes, since when it is applicable?	Give Year	2015
3	If there is no Right to Public Services Act, are there administrative guidelines in relation to provision of services?	Yes -1, No - 2	-
4	What type of services related to land records and registration are covered by the Act/guidelines? For specified services, tick number and for any other also give details in a note.	RoR copy/attested mutation copy-1 Spatial record copy-2 Registration document copy-3 Registration legacy record check-4 Any other – 5.	1,2,3,5 For a list of notified services please see Annexe C Department-wise list of notified public services)
5	Which services are not included in the Act/Guidelines?	Attach a note.	Grant of certified copies of ROR online which have been digitally signed.
6	What are the time lines for delivery of land related services in the Act/guidelines? (*Number of Days)*	Attach a note	For a detailed note please refer to the State Report tat Section 6.5 (Status of Responsiveness in Client Services) and Annexe C (Department-wise list of notified public services)
7	Is there a system for monitoring performance with regard to delivery of services? (Give a note).	Yes-1; No-2	1

8	Is there a state level data base of applications and delivery of services or is it available only at lower levels (for different services, applications, delivery time, complaints, etc.)?	State level data base-1 Data base only at lower levels-2	1 (at https:// a a p l e-sarkar.mahaonline.gov.in/en)
10	Total No. of Citizen Service Centers (CSCs) in the State.		10,518(at https://it.maharashtra.gov.in/1112/Common-Service-Centre-(CSC))
11	What type of services CSCs offer?	Land Records-1 Registration related services-2 Any Other Service (specify)-3	1,3(Agriculture related services, Certified copies from sub-divisional officers and Tahsildar's offices)
12	How many CSCs offer the following services?	RoR copy/attested mutation copy: Spatial record copy: Registration document copy: Registration legacy record check: Any Other Service (specify):	We have not ben provided with this number
13	Total number of copies of various parts of the land record/last registration related record obtained in the state in one year. Of these:		11,90,209
i)	*Number obtained manually*		5,21,887
ii)	*Number obtained from computerized record*		116

iii)	*Number obtained from government offices*		We have not ben provided with this number
iv)	*Number obtained from CSCs*		We have not ben provided with this number
v)	*How many applications (under the above) received under the Public Services Act?*		116

6. **Details of Physical and Financial progress under NLRMP and DI-LRMP: 2008-2016**

S.No	Question	Physical Progress	Financial Progress			
		No. of Tehsils/ revenue estates or SROs covered (absolute number and as as proportion of the whole)	Funds Sanctioned by Centre	Funds Released by Centre	Expenditure (as entered by State)	Unspent Balance
1	**Computerization of land record**					
i)	*Fresh Survey Work done*	A pilot survey was done in 12 villages of the Mulshi Taluka of the Pune District, being, Pirangut, Makhaiwadi, Ambadvet, Kasaram boli, Bhare,Botarwadi, Urawade, Ghotawade,Bhegdewadi,Amlewadi, Godambewadi,Materewdi.	406.6506 lakhs	406.6506 lakhs	NIL	NIL

ii)	*Digitized Cadastral Maps produced*	1 pilot study has been conducted in the Mulshi Taluka of the Pune District. Further, tenders for 6 districts being Nashik, Amravati, Aurangabad, Nagpur and Raigad are pending for approval for this.	84.3600 lakhs	84.3600 lakhs	11.2598 lakhs	73.100 2 lakhs
iii)	*RoRs Completed in digital form*	357 Talukas	170 lakhs	170 lakhs	164.473 9 lakhs	5.5261 lakhs
iv)	*Placed RoR data on website*	357 Talukas	Included in the budget for (iii) above.			

v)	*Stopped issue of manual copy of RoRs*	We have been informed that 357 Talukas have been allowed to use manual copies up to February 2017.	Included in the budget for (iii) above.			
vi)	*Accorded legal sanctity to computerized copy of RoR*	In process				
vii)	*Issuance of Digitally Signed copy of RoRs*	357 Talukas	Included in the budget for (iii) above.			
viii)	*Issuance of RoR copy through Kiosks/Common Service*	Kiosk facility available only in the Ramtek Taluka of Pune District.	Included in the budget for (iii) above.			
ix)	*No. of Centres at Town/Village level*	-	-	-	-	-
x)	*Started mutation process using computers*	Proportionate allocation across 357 Talukas	1253 lakhs	1253 lakhs	865.3876 lakhs	387.6124 lakhs
xi)	*Automatic Mutation on registration*	357 Talukas	392.8788 lakhs	392.8788 lakhs	216.8679 lakhs	176.0109 lakhs

xii)	*Computer Centre set up*	358 Talukas	21.53 crores	21.53 crores	21.53 crores	-
xiii)	*Computerization of Registration*	505 SROs	141.566 3 lakhs	125.200 6 lakhs	125.200 6 lakhs	
xiv)	*E-Stamps accepted*	Included in (xiii) above.				
xv)	*Modern Record Rooms con-structed*	The process has start-ed. Digi-tisation has taken place in the Haveli and Mul-shi Talukas but the Room itself has not come up. 740 rooms have been sanc-tioned.	3626.68 10 lakhs	3626.68 10 lakhs	11.7978 lakhs	3614.8 832 lakhs
xvi)	*Integration of Registration with Land Records exists*	357 Talukas	We have bene in-formed that no separate funds were sanc-tioned or allotted for this.	-	-	-
xvii)	*Formation of Project Manage-ment Unit at state level*	1 Taluka	39.20 lakhs	39.20 lakhs	28.06 lakhs	11.13 lakhs

xviii)	*Training at NLRMP Cell (no. of man-days)*	From the year 2013, 1471 people have been trained as master trainers.	234.64 lakhs	234.64 lakhs	153.2950 lakhs	81.3450 lakhs
2.	The geographical spread of program intervention in terms of allocation / expenditure	Attach table with names of districts and tehsils.	We have been informed that this information is not available with the State.	-	-	-

7. **Revenue Administration Structure**

S.No	Question	Response	Code
1	Which Department/s are responsible for maintaining land/property records?		Department of Land Records
i)	*In rural areas*	1. 2. 3.	
ii)	*In urban areas*	1. 2. 3.	
2	Specify hierarchical structure of the relevant departments (**along with their functions**) from the lowest level of public interface to the Minister level.	Attach sheet.	Please see Figure 4.1 (Hierarchical structure within the land record management system in Maharashtra)

3	Is land record maintenance, survey and registration handled by different departments?	Yes-1; No-2 (specify details if partial)	1 The registration process is undertaken by the Department of Registration and Stamps.
4	Are the departmental structures entirely separate at all levels?	Yes-1; No-2 (specify details if partial)	1

5	Are the same functionaries in the field discharging duties in relation to more than one department?	Yes-1; No-2 (specify details if partial)	2
6	What is the level of formal or informal interaction between the relevant departments?	Attach a Note.	For a detailed note please refer to the State Level Report at Section 2.1.4(Interaction between Departments)

7	Total number of staff sanctioned in all Departments dealing with land record maintenance, survey and registration in 2015-16.	Give details in tabular form category wise along with next question.	
8	Total number of staff in-position in all Departments dealing with land record maintenance, survey and registration in 2015-16.		The Registration Department provides thisnumber is 2310. The Department of Land Resources gives this number as 7660. Total=9,970

9	Is there a Training policy in the Department?	Attach a detailed note focusing on the following issues: What kind of trainings are provided? Different training programmes for different staff? Number of staff participated in the training. Number of days training was imparted. When was last training imparted. Need for refresher training, etc.	We have been informed that there is no training policy.

State Level Provisions relating to Real Time Mirror (RTM)

S.No	Question	Response	Code
	Updating of record:		
A	**Ownership details**		
1	What are the provisions relating to updating of RoR on occurrence of events/transactions? (Give a note for each category)	On Death: (Succession by Will and Intestate) On Sale: Any Other (Specify):	For a detailed note on each of these, please see Section 4.4 (Updating of land revenue records in Maharashtra) and Figure 4.4 (Process for updating ROR) and Figure 4.5 (Process for updating PC in Maharashtra.)

| 2 | What are the steps followed with respect to this updation? | 1.a) Intimation to Talati / Patwari
b) Intimation to Kanungo / Revenue Inspector.
c) Intimation to Revenue officer

2. a) Initial entry by Talati / Patwari
b) Initial entry by Kanungo / Revenue Inspector
c) Initial entry by Revenue Officer.

3. a) Inviting objections by Talati / Patwari
b) Inviting objections by Patwari by Kanungo / Revenue Inspector.
c) Inviting objections by Revenue Officer

4. a) Presence of parties before Talati / Patwari
b) Presence of parties before Kanungo / Revenue Inspector
c) Presence of parties before Revenue Officer

5. a) Final attestation by Talati/Patwari
b) Final attestation by Kanungo / Revenue Inspector
c) Final attestation by Revenue Office

6. a) Actual incorporation in the record by Talati / Patwari
b) Actual incorporation in record by Kanungo / Revenue Inspector
c) Actual incorporation in record by Revenue officer

7. Any Other (specify) | For a detailed note on each of these, please see State-Level Report at Section 2.2 (Updating of land revenue records in Maharashtra) and Figure 2.4 (Process for updating ROR) and Figure 2.5 (Process for updating PC in Maharashtra) |

3	What is the mode of conveying information of such event/transaction to the custodian of the record, talati / patwari, kanungo/ revenue inspector or revenue officer?	Through Application-1 Verbal communication-2 Auto intimation by software-3 Any Other (specify)-4	1,2 and 3
4	Is there a time period specified for various steps?	Yes-1; No-2	1

| 5 | If yes, specify the time period (in days) for the following: | 1.a) Intimation to Talati / Patwari
b) Intimation to Kanungo / Revenue Inspector.
c) Intimation to Revenue officer

2. a) Initial entry by Talati / Patwari
b) Initial entry by Kanungo / Revenue Inspector
c) Initial entry by Revenue Officer.

3. a) Inviting objections by Talati / Patwari
b) Inviting objections by Patwari by Kanungo / Revenue Inspector.
c) Inviting objections by Revenue Officer

4. a) Presence of parties before Talati / Patwari
b) Presence of parties before Kanungo / Revenue Inspector
c) Presence of parties before Revenue Officer

5. a) Final attestation by Talati/Patwari
b) Final attestation by Kanungo / Revenue Inspector
c) Final attestation by Revenue Office

6. a) Actual incorporation in the record by Talati / Patwari
b) Actual incorporation in record by Kanungo / Revenue Inspector
c) Actual incorporation in record by Revenue officer

7. Any Other (specify) | For a detailed note on each of these, please see Section 4.4 (Updating of land revenue records in Maharashtra) and Figure 4.4 (Process for updating ROR) and Figure 4.5 (Process for updating PC in Maharashtra) |

B	**Possession details**		
1	What are the provisions regarding transfer of share of a joint holding through sale/gift, etc.?	1. Transfer of share and introduction of new owner as another joint holder allowed in ownership column of RoR-1 2. Registration allowed only of a specific parcel / plot / built up property after: (a) partition or (b) sub division of plot / parcel / built up property on securing consent of all joint holders	For a detailed note please refer to the section on Case-studies at in Chapter 2(Land Record Management System in Maharashtra)
2	Are the provisions different for different types of events / transactions?	Attach a Note.	For a detailed note please refer to Chapter 2(Land Record Management System in Maharashtra)
3	Are there any instructions to expedite partitions and reduce joint holdings?	Attach a Note	No

4	What are the provisions on reflection of actual possession by tenants, share croppers, part owners of built up property and the land on which such property is located?	Attach a Note	For a detailed note please refer to the the section on Case-studies at in Chapter 2(Land Record Management System in Maharashtra)
C	**Extent / boundary / built up area details**	Attach a note focusing on provision of updating details; frequency of updation for changes in land area, boundaries, and area of built up property; process and frequency of updating for changes in CM; policy on methods for updating.	For a detailed note please refer to the State Level Report at Section 2.3(Updating of boundaries and cadastral maps) and Box 12(Process for boundary demarcation)

D	**Land use / classification details**	Attach a Note focusing on: Frequency of updation; details recorded in crop season, girdwari, etc.	For a detailed note please refer to the State Level Report at Section 2.4(Updating of crops in land records).
E	**Encumbrance details**		
1	What are the encumbrances that are entered in the RoR? Mortgage-1 Ongoing acquisition proceedings-2 Land use restrictions through statute-3 Disputes pending in revenue courts - 4 Disputes pending in civil courts-5 Any other (specify)	Yes-1; No-2 Yes-1; No-2 Yes-1; No-2 Yes-1; No-2 Yes-1; No-2 Yes-1; No-2	1-1 2-1 3-1 4-1 5-2
	Attach a Note focusing on the following: process of entering various encumbrances; intimation of various encumbrances; frequency of their updation, and who can make the entries?		For a detailed note please refer the State Level Report at Section 2.5(Updating of encumbrances)
F	**Correction of error in the record:**		

1	What are the types of errors (specified in Acts/Rules) categorized as technical and not open to dispute?	Spelling mistakes in various columns-1 Totaling errors in the extent/ area of parcel column-2 Any Other error (specify)-3	1,2 For a detailed note, please refer to the State Level Report at Section 2.6(Correction of Errors in Record)
	Attach a Note focusing on the following; Type of errors; process of correcting these errors; frequency of correction; level of backlog, etc.		For a detailed note please refer to the State Level Report at Section 2.6(Correction of Errors in Record)
2	What are the number of transactions requiring mutations registered in last three financial years (year wise)?		We have been informed that this information is not available.

3	What are the number of mutations in relation to registered documents attested in last three financial years (year wise)?		We have been informed that this information is not available.

B — Laws governing land-related matters in Mal

S.No.	Title	Description
1	The Transfer of Property Act, 1882	A central law governing the transfer of property *inter vivos*,also applicable to the state of Maharashtra
2	The Indian Easements Act, 1882	A central law governing and regulating the creation,acquisition and transfer of easements,also applicable to the state of Maharashtra
3	The Land Acquisition Act, 1894	A law governing the acquisition of land by the government and related procedures thereto.
4	The Mamlatdar's Courts Act, 1906	A law which relates to the powers and procedure of the Mamlatdar's Courts
5	Registration Act, 1908	An central law which governs the registration of documents and all matters connected to registration such as, the duties of the registration officer and the form of maintenance of registration records,applicable to the state of Maharashtra
6	Indian Forest Act, 1927	This a law relating to forest land
7	The Bombay Prevention of Fragmentation and Consolidation of Holding Act,1947	Enacted by legislature at the initial stages of Independent India to prevent the fragmentation of agricultural land holdings and to provide for the consolidation of agricultural land holdings for the purpose of better cultivation
8	Maharashtra Tenancy and Agricultural Lands Act,1948	A law governing tenancies and agricultural land in the Bombay region.
9	The Bombay Provincial Municipal Corporations Act,1949	An Act which provides for the establishment of Municipal Corporations for certain cities in the Province of Bombay. It allows for declaration of local areas to be cities.
10	The Hyderabad Tenancy and Agricultural Lands Act, 1950	An act governing tenancies in the Marathwada Region(Aurangabad) of Maharashtra.
11	The Bombay Highway Act, 1955	An act to provide for the restriction of ribbon development along highways, for the prevention and removal of encroachment thereon, for the construction, maintenance and development of highways, for the levy of betterment charges.
12	The Bombay Village Panchayat Act,1958	An act to amend and consolidate the law relating to the constitution and administration of village panchayats in the State of Bombay
13	Maharashtra Stamp Act, 1958	An act which governs stamps and stamp duty and the payments thereof in Maharashtra
14	Maharashtra Tenancy and Agricultural Land (Vidharbha region) Act, 1958	An Act governing tenancy laws in the Vidharbha region of Maharashtra.

15	The Maharashtra Co-Operatives Societies Act,1960	An Act to consolidate and amend the law relating to co-operative societies in the State of Maharashtra
16	The Maharashtra Agricultural Land (Ceiling on Holdings) Act,1961	Imposition of ceiling on landholdings
17	Maharashtra Regional and Town Planning Act,1966	An act to make provision for planning the development and use of land, to make better provisions for the preperation of development plans with a view to ensuring town planning schemes are made in a proper manner and their execution is made effective.
18	Maharashtra Land Revenue Code,1966	A code to unify law relating to land and land revenue in Maharashtra.
19	Maharashtra Regional and Town Planning Act, 1966	An act governing development and use of land, planning and building operation in the state of Maharashtra. This Act also constituted regional planning board.
20	The Bombay City (Inami and Special Tenures) Abolition Act, 1969	This Act abolished inami and certain other special tenures in the City of Bombay.
21	The Maharashtra Restoration of Lands to Scheduled Tribes Act,1974	An Act to provide for the restoration of certain lands to persons belonging to the Scheduled Tribes
22	Maharashtra Groundwater (Regulation for Drinking Water Purposes) Act, 1993	An Act to regulate the exploitation of growndwater for the protection of public drinking water sources and to provide for matters connected or incidental to it.
23	Maharashtra Project Affected Persons Rehabilitation Act,1999	An act to consolidate and amend the law relating to the rehabilitation of persons affected by irrigation and other projects in Maharashtra
24	Maharashtra Gunthewari Development (Regularisation, Upgradation and Control)Act,2001	An act to provide for the regularisation and upgradation of certain Guntherwari(traditional method used for measuring land)developments and for the control of Gunthewari development and related matters.
25	The Maharashtra Right to Public Services Act, 2015	An act to ensure transparent, efficient and timely delivery of notified public services

C − List of notified public services

List of department-wise land-related public services notified in Maharashtra

	Revenue Department				
Sr. No	Public Service	Time limit for Service (days)	Designated Officer	First Appellate Officer	Second Appellate Officer
1	Certified Copy of Record of Rights	7	CIerk/Talathi	Nayab Tahsildar	Tahsildar
2	Small Land Holder Certificate	15	Tahsildar	Sub-Divisional Officer	Additional Collector
3	Agriculturist Certificate	15	Tahsildar	Sub-Divisional Officer	Additional Collector
4	Project Affected Persons Certificate/ Transfer of Project Certificate to eligible heris	30	District Rehabilitation & Resettlement Officer	Additional Collector	District Collector
	Forest Department				
Sr. No.	Public Service	Time limit to provide services(Days)	Designated officer by whom services will be provided	First Appellate Authority	Second Appellate
1.	Copensation to be Sactioned for Crop Damage caused by Wildlife.	30 days	Assistant Convervator of Forests in change of the concerened Range (Territorial/ Wildlife).	Concerned Deputy conservator of Forests /Divisional Forest Officer (Territorial/ /Wildlife). Conservator of	Concerned Chief Conservator of forest (Territorial/ Wildlife)/Fiels Director, Tiger Reserve. Additional Principle Chief

				Forest (Wildlife)	Conservator of Forests (Wildlife)
IGR Department					
Sr.	Public Service	Stipulated Time limit to provide to service(Days)	Designated officer Designated officer	First Appellate Authority	Second Authority
1	Registration of Document	1	Concerned Sub-Registrar	Concerned Joint District Registrar.	Concerned Deputy Inspector General of Registration.
2	Certified copy of Index	3	Concerned Sub-Registrar	Concerned Joint District Registrar.	Concerned Deputy Inspector General of Registration.
3	Certified copy documents	5	Concerned Sub-Registrar.	Concerned Joint District Registrar.	Concerned Deputy Inspector General of Registration.
4	Search	1	Concerned Sub-Registrar.	Concerned Joint District Registrar.	Concerned Deputy Inspector General of Registration.
5	Filling of Notice of Intimation	1	Concerned Sub-Registrar.	Concerned Joint District Registrar.	Concerned Deputy Inspector General of Registration.
6	Valuation Report for assessment of stamp duty	3	Concerned Sub-Registrar.	Concerned Joint District Registrar.	Concerned Deputy Inspector General of Registration.
7	Visit outside office regarding Registration	3	Concerned Sub-Registrar.	Concerned Joint District Registrar.	Concerned Deputy Inspector General of Registration.
8	Authentication of Special power of Attorney	1	Concerned Sub-Registrar.	Concerned Joint District Registrar.	Concerned Deputy Inspector General of Registartion.
9	Certified copy of Document/Index registered in joint District	15	Concerned Sub-Registrar.	Concerned Joint District Registrar.	Concerned Deputy Inspector General of Registration.

	Registrar Office				
10	Refund of Registration Fee paid by E-Payment System, in case of Non-Registration of Document	22	Concerned Sub-Registrar.	Concerned Joint District Registrar.	Concerned Deputy Inspector General of Registration.
11	Deposits, withdrawl and Opening of sealed cover of will.	1	Concerned Sub-Registrar.	Concerned Joint District Registrar.	Concerned Deputy Inspector General of Registration.

Agriculture Department

Sr. No.	Public Service	Time limit for Service (Days)	Designated Officer	First Appellate Authority	Second Appellate Authority
1.	soil and water Sample Testing	1.General soil sample testing -30 2.Special Soil sample Testing -45 3.Soil Sample for Micronutrient Elements testing -30 4. Water Sample Testing - 15	District soil Survey oil Agriculture Officer	District Superintending Agriculture	Divisional Joint Director of

Land Records

S.No.	Public Service	Time limit for providing service (days)	Designated Officer	First Appellate Officer	Second Appeliate Officer
1	Supply of copies				
	A) Property Card	3	1. Head Quarter Assistant/ Maintenance Surveyor (Gaothan), Deputy Superintendent	1. Deputy Superintendent of Land Records 2. City Surveyor Officer	District superintendent of Land Records

			of Land Record office 2. Shirastedar/Head Clerk, City Survey Office		
	B) Property Card Mumbai Suburban District after area	30	City Survey Officer	District Superintendent of Land Records	Dy. Director of Land Records
	C) Tippan, Area Book, Field Book, Statement, Phalni, Katephalni, Sub-division Form No. 4, Akarphod, Scheme copy, Akarband, Gut Map, Measurement map, K.J.P., Enquiry Register, & other records.	5	1. Head Quarter Assistant, Deputy Superintendent of Land Record office 2. Head Quarter Assistant, Head Clerk/ Shirastedar, City Survey Office, 3. Shirastedar, Special Dy. Superintendent of Land Records (Gaothan & City Survey) 4. Special Dy. Superintendent of Land Records or Enquiry Officer	1. Deputy Superintendent of Land Records 2. City Survey Officer 3. Special Dy. Superintendent of Land Records (Gaothan & City Survey) 4. District Superintendent of Land Records	For 1,2 & 3 District Superintendent of Land Records For 4 Dy. Director of Land Records
	D) Copies of appeal decision	3	1. Head Quarter Assistant, Deputy Superintendent of Land Record Office 2. Head Quarter Assistant, head Clerk/ Shirastedar,	1. Dy. Superintendent of Land Records ofice 2. City Survey Office 3. District	For 1 & 2 District Superintendent of Land of Records

			City Survey Office	Superintendent of	3. Dy.
			3. Head Clerk, District Superintendent of Land Records Office	Land Records office	Director of
					Land
				4. Office	Records
				Superintendent, Dy.	
				Director of Land	4. District
			4. Senior Clerk, Dy.		
2			Director of Land Records office	Records Office	Superintendent of Land Records attached to DDLR office

2   Measurement Cases

A)Completition of Measurement work

	i) Very Urgent Cases	60	Deputy Superintendent of Land Records / City Survey Officer	District Superintendent of Land Records	Dy. Director of Land Records
	ii) Urgent Cases	90	Deputy Superintendent of Land Records / City Survey Officer	District Superintendent of Land Records	Dy. Director of Land Records
	iii) Ordinary Cases	180	Deputy Superintendent of Land Records / City Survey Officer	District Superintendent of Land Records	Dy. Director of Land Records
	B) Supply of 'C'	15	Deputy Superintendent of	District Superintendent	Dy. Director
	copy after completion of measurement		Land Records / City Survey Officer	of Land Records	of Land Records
3	Preparation of Akarphod / K.J.P.				
	A) Sanction of Akarphod in ripe pot-hissa measurement cases	30	1. Deputy Superintendent of Land Records 2. City Survey Officer	District Superintendent of Land Records	Dy. Director of Land Records
	B) Sanction of K.J.P. in ripe Non-agriculture	30	1. Deputy Superintendent of Land Records	District Superintendent of Land Records	Dy. Director of Land

	measurement cases		2. City Survey Officer		Records
4	Mutation Entry				
	A) Mutation Entry (un-disputed)	30	1. Deputy Superintendent of Land Records 2. City Survey Officer	District Superintendent of Land Records	Dy. Director of Land Records
	B) Take decision on Mutation in missing link cases	90	1. Deputy Superintendent of Land Records 2. City Survey Officer	District Superintendent of Land Records	Dy. Director of Land Records
	C) To incorporate the names of agency /authority, in the case of road, road setback and reservation (if Corporation / competent authority submits all relevant documents alongwith possession receipt)	30	1. Deputy Superintendent of Land Records 2. City Survey Officer	District Superintendent of Land Records	Dy. Director of Land Records
	D) Disputed Mutation Entry	1 Year	1. Deputy Superintendent of Land Records 2. City Survey Officer	District Superintendent of Land Records	Dy. Director of Land Records
5	Separate Property Card after sub-division of property after completion of sub-division measurement A) Preparation of Separate property Card, if there is no area difference as per the order by the Collector	30	1. Deputy Superintendent of Land Records 2. City Survey Officer	District Superintendent of Land Records	Dy. Director of Land Records
	B) If there is	15	1. Deputy Superintendent	District Superintendent	Dy. Director

	difference in the area of sub-division as per			of Land Records 2. City Survey Officer	of Land Records	of Land Records
	Collector's Order, but there is no difference in the original city survey area. In such cases, preparation of Separate Property Card will be made only after Collector's re-approval					
6	To prepare Separate Property Card in the name of Govt./ Authority in case of land acquisition for Road, Road setback, Reservation A) To prepare Separate Property Card after the order of the competent authority in case of no area difference in	30		1. Deputy Superintendent of Land Records 2. City Survey Officer	District Superintendent of Land Records	Dy. Director of Land Records
	original City Survey					
	B) If there is difference in the area,	30		1. Deputy Superintendent of Land Records	District Superintendent of Land Records	Dy. Director of Land
	then after the order of the competent authority			2. City Survey Officer		Records