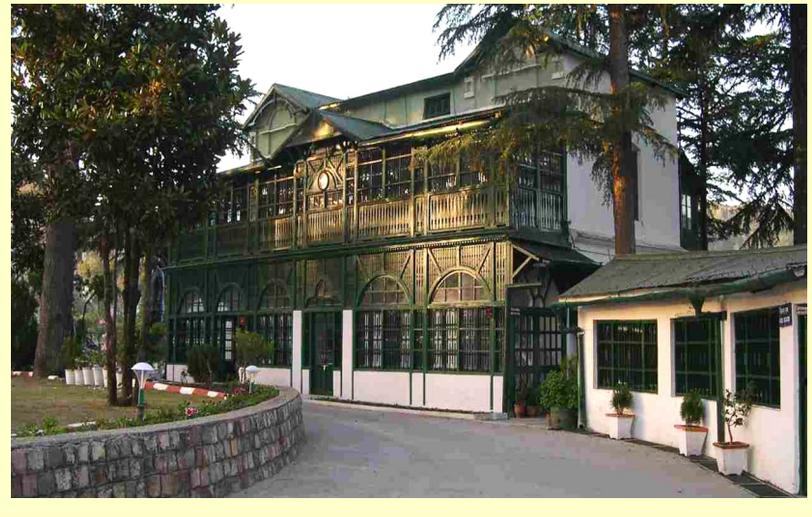
About the Centre for Rural Studies

The Centre for Rural Studies (CRS) is a Research Centre of Lal Bahadur Shastri National Academy of Administration, Mussoorie. It was set up in the year 1989 by the Ministry of Rural Development, Government of India, with a multifaceted agenda that included among others, the concurrent evaluation of the ever-unfolding ground realities pertaining to the implementation of the Land Reforms and Poverty Alleviation Programmes in India. Sensitizing of the officer trainees of the Indian Administrative Service in the process of evaluating of land reforms and poverty alleviation programmes by exposing them to the ground realities; setting up a forum for regular exchange of views on land reforms and poverty alleviation between academicians, administrators, activists and concerned citizens and creating awareness amongst the public about the various programmes initiated by the government of India through non-governmental organisations are also important objectives of the Centre for Rural Studies. A large number of books, reports related to land reforms, poverty alleviation programmes , rural socio-economic problems etc. published both externally and internally bear testimony to the excellent quality of the Centre.

LBSNAA

Identifying Existing Capacities to Execute the National Land Records Modernization Programme in Maharashtra : An Appraisal

Snehasis Mishra
A.A.A. Faizi



CENTRE FOR RURAL STUDIES
LAL BAHADUR SHASTRI NATIONAL ACADEMY OF ADMINISTRATION
MUSSOORIE- 248 179

IDENTIFYING EXISTING CAPACITIES TO EXECUTE THE NATIONAL LAND RECORDS MODERNIZATION PROGRAMME IN MAHARASHTRA: AN APPRAISAL

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CONTENTS

Determining effective way to relieve poverty is an essential mission to develop economics. To address this, different programmes or schemes and a wide range of policy alternatives have been implemented in India. Land reforms have been on the policy agenda since independence. In India land is a subject under State jurisdiction. Management of land becomes quite complex due to the fragmentation and number of sale and purchase of land and also due to the immense demand of land of every person ranging from the landless labor to the top corporate industries. Modernization of land records may lead India to a better future by the means of alleviation of poverty and non disputable economic growth. In this aspect, Ministry of Rural Development, Government of India introduced National Land Records Modernization Programme (2008) with multiple approaches in institutional and technological interventions. Effort came from Centre and respective states to tune land records management in a very prospective way.

The Department of Land Resources (DoLR), MoRD, facilitates all the states to execute the programme successfully in time bound manner. Every state has land policies which are very much distinct in nature from those of the others states. NLRMP is designed very scientifically and rolled out in all the states but the degree of its implementation and also the quantum of its progress vary widely across all the states. The DoLR had engaged the Centre for Rural Studies, LBSNAA to assess the progress of NLRMP in several states of the country.

I am very glad that the CRS has brought out a report on "Identifying Existing Capacities to Execute the National Land Records Modernization Program in Maharashtra: An Appraisal". Hope, this will help immensely to understand the ground realities with regard to the implementation of NLRMP in the State. Maharashtra has set an

example of its successful land administration and management. This volume covers not only the progress and execution of NLRMP and its components but also the discussion about the policy implementation, land reforms and status of enforcing different land related Act in Maharashtra.

Dr. Prem Singh, IAS
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PREFACE

Land reforms and agrarian changes in Maharashtra were taken up in two phases, the first phase comprising reforms measures during the period before 1965 and the second phase in the early seventies. Maharashtra land reforms policy focused mainly on consolidation of holdings, abolition of intermediaries and tenancy reforms. Maharashtra state proves to be exemplary for its successful land reforms, land re-distribution to the poor and landless but it received mixed success in tenancy reforms. Settlement Commissioner and Registration Department have worked dedicatedly for modernization of land records in Maharashtra. Maharashtra has a unique long tradition to keep all land related spatial data in different types of cadastral maps. In Maharashtra there is distinct plot sheet maintained by the administration which really helps to provide transparent data records to citizens. With the implementation of the National Land Record Modernization Program (NLRMP) in the State, Comprehensive land records modernization and management system are proposed under programme called "e MAHABHOOMI" by the state. Maharashtra decided to implement all the components of NLRMP simultaneously and also added a couple of extra components which were specific to the state requirements. However, the job is still unfinished. There is a lot of tasks like: - digitization of maps, resurvey, and integration of datas etc. need to be completed soon as per timely execution is concerned.

“Identifying existing capacities to execute the NLRMP in Maharashtra” is a genuine effort of the authors to depict the realities about concurrent progress with regard to implementation and execution in the state. I hope that the entire compilation may prove helpful for the nodal department and also for the other states for further facilitation for better implementation of the aspirational and challenging programme.

Snehasis Mishra
A.A.A. Faizi

Chapter-1

INTRODUCTION

Background

India has implemented so many successful policies regarding land administration and management and it gets that much momentum after having initiative taken place in the form of NLRMP in 2008. Govt. of India has initiated so many schemes for computerisation of land records to make land records more transparent and to reduce land litigation. Every state of India has started to tune land records management in a very prospective way. Maharashtra has set an example of its successful land reforms, started by the computerisation of land records, different e-governance scheme for land owners and farmers etc. Computerisation of land records aims to provide ground reality, and transparent land database. Up-date of land records by means of computerisation, which is easy to maintain, would really be beneficial for the citizens and the Government for planning and prospective by the mean of land bank generation. In Maharashtra, Department of Registration and Stamps looks after mainly registration of documents, preservations of documents and stamp duty. In Maharashtra, registration of documents is the biggest activity.

National Land Records Modernization Programme has been initiated by Ministry of Rural Development, Govt. of India in 2008. In this programme, Department has pointed out some components to execute the programme properly such as; computerization of records of rights, modernization of land records, connecting sub registrar offices with Tehsil for online updation, digitization of maps, creating advanced records division at Taluka level, scanning land records book, updation of cadastral maps, computerization off sub registrar office, creating state data centre, training and capacity building of department staff and

officers etc. by which every state would be able to provide title guarantee by conclusive land title to the citizens. There are many components where funds are sanctioned on sharing basis between central and state government, such as; 100% Central Sharing on Creation of NLRMP Cell in State, State LR Data Centre, Digitisation of Cadastral Maps, Creation of Sub-Division and Tehsil Data Centre and Training and Capacity Building, Central and State sharing 50% funds for Survey- Re-survey and Creation of Modern Record Rooms, for doing Computerisation of registration Centre provides 25% sharing of the approved unit cost and remaining have to provide by the States.

In India Land is a subject under State jurisdiction. Management of land becomes quite complex with respect to the fragmentation and number of sale and purchase of land and due to the immense demand of land for the every person from landless labour to the top corporate industries .The management or the administration of land records is herculean tasks. In Maharashtra and Gujarat have rayatwari system; mahalwari system found in the northern states such as Punjab, Haryana, Himachal Pradesh, and parts of Uttar Pradesh. Land administration and management requires two types of information textural and graphical, textural data provides all kinds of land related information like occupants, tenants, class of the land, area, revenue etc. While Karnataka has the record of crop grown; the record of share croppers and bargadar is the practice in West Bengal.

Before the independence land in India was owned by a few people. It was observed that social justice and development of the country could not be achieved unless land is distributed among the peasants. On the basis of this land-reforms were initiated after independence. A land reform policy is fundamentally a politico-economic issue. To fulfil objectives of land reform Government enacted number of land reforms legislations. In the Maharashtra Land Revenue Administration is

governed by Maharashtra Land Revenue Code, 1966 and development control is regulated under Maharashtra Regional Town Planning Act, 1966. Besides above laws and provisions of some other laws are also applicable in land transactions. Considering above we can conclude that land is complicated, tedious and vast subject.

1. B Perception of Land Reforms in Land Administration

Implementation of number of policies regarding land records management from both state and central would really help the land reforms in India. The two parameters which are helpful to understand the perspective of land reforms in land administration are poverty reduction and the economic growth that have induced reforms in land administration and management.

1. B. 1 The perception of Poverty Reduction

India is an important case study of land reform. It is both home to a significant fraction of the poor in the developing world and in the post-independence period was subjected to the largest body of land reform legislation ever to have been passed in so short a period in any country (**Thorner, 1976**). Land records management in India manage security of rights, decreases corruption, creates revenue, generates proper land bank, efficiency in land distribution to the landless, empowerment to land tillers etc. the processes related to land tenure (securing and transferring rights in land and natural resources); land value (valuation and taxation of land and properties); land use (planning and control of the use of land and natural resources) and more importantly land development (**Williamson, Enermark, Wallace, and A. Rajabifard, 2010**). Modern land records managements provide that every millimetre land has been mapped and surveyed by which the superior owners couldn’t control anyone’s land by force and secure ownership to the inferior land owners.

Empirical approach to measure poverty in state on time basis to run panel data regressions on the form:
Xst = αs + β1 + γyst + ψlst-4 + Σst where Xst is some measure of poverty in state **s** at time **t**, **αs** is the state fixed effect, **β1** is a year dummy variable, **yst** is a vector of variables, **lst-4** is the stock of past land reforms four periods previously because it seems reasonable to suppose that even effective legislation will take time to be implemented and to have an impact and **Σst** is an error term where degree of auto correlation is state specific.

States like Karnataka, Gujarat, Madhya Pradesh, Rajasthan, Maharashtra, Haryana, Tamil Nadu, Orissa and West Bengal have already made good progress in computerization of land records and computerization of registration, modern cadastral survey is taken up in some states with the application of ground survey methodology by using total station and GPS or by hybrid approach such as aerial survey, satellite imagery and use of ground survey methods.

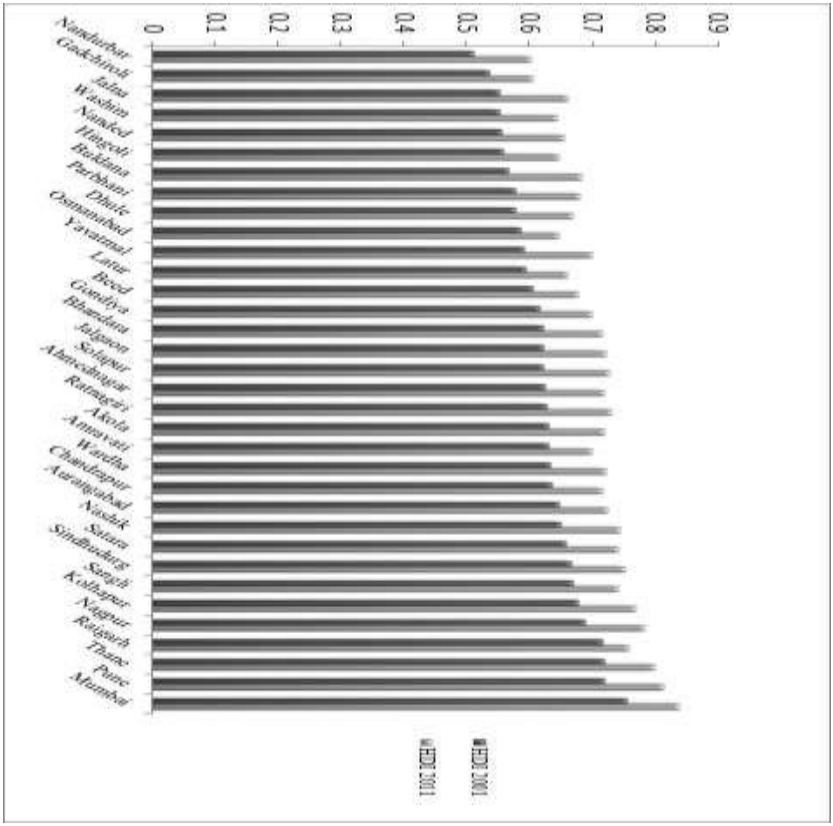
National Land Records Modernization Programme (NLRMP) aims to accumulate land database like class of lands, ownership, registration records, revenue of lands, plot information all have been kept in a single database domain. Various policy measures on land are taken to safeguard the interest of various social groups, for the purpose of food security; the interest of the state as a whole is to meet the aspiration of the Government.

1. B. 2 The perception of Economical growth

Even if land reform does help the poorer section of society, it could do so at a cost to economic performance. Robust land administration and management by means of proper land records management has facilitated economic growth of the nation. World Bank noted that India holds 94th position as far as efficiency or the time taken for property registration is concerned. The time taken for the property registration in the whole South Asia is the longest in the world. It is the third most corrupt sector in India and most corrupt sector in other South Asian

countries. On the contrary Thailand proves that better land records management accelerate economic growth. Agriculture has very limited capacity to add to the GDP, highest 4% in worldwide, In UK or U.S.A it add almost 2%, but the Agricultural population is also 2% in those Countries, but in India 62% of the population directly or indirectly is dependent on Agriculture. India loses 1.3 % potential growth rate due to poor governance in land administration (McKinsey Global Institute Report on India, 2001).

Relative Human Development Status of Districts of Maharashtra: 2001 and 2011



Modernization of land records strengthens land reforms policy. Updating of land records facilitates an effective land reforms; updated maps with proper survey helps significant tenancy in the country. Tribal land right protection has also been useful by the means of proper land records management.

1. C National Land Records Modernization Program (NLRMP): A Brief Outline

In 2008, Ministry of Rural Development started NLRMP which will make Conclusive Land Titling to ensure the property owner a transparent system. This NLRMP will easily maintain the changing dimension of land records and property ownership with a scientific way. Today and the day after we will have intense dialogue on contemporary trends and practices in land administration, the accomplishments under NLRMP, legal and structural challenges in conclusive land titling system. It's obvious that land administration will also have an impact in the Socio-Economic structure of our Society. Some believe that the National Land Records Modernization Program (NLRMP) is an outcome of a series of reforms in land administration. The National e-Governance Plan (NeGP) emphasizes its speedy implementation. In India, Land Titling was described earlier as a series of technical activities to distribute the title to the owner and maintain these records in a system of Registration, but land titling, the term is meant for creating a good land administration environment where land is treated as a powerful resource of the country which must be effectively managed; property rights of people would be secured, registration of documents would be done transparently, transaction of property should be recorded and social dispute over land would be minimised.

Success of Land titling needs a drastic change in policy cast in a legal framework. Land titling is more than a project, it follows continuous activities and procedures and should not be dependent on budget. In Developing countries like India land is a state subject, and land titling is a non-glamorous project. India is facing undoubtedly increasing scarcity over land, which is distributed unevenly; registration of rights is very expensive and bureaucratic.

The main objective of the NLRMP is to develop a modern, comprehensive and transparent land records management system in the country with the aim of implementing the conclusive titling system with title guarantee. The components of the program are computerization of land records that include the digitization of cadastral map and its integration with textual data, survey/resurvey and updates of all survey and settlement records, computerization of registration and its integration with the land records maintenance system. The programme emphasizes on technological upgradation, infrastructure development by establishment of modern record room, state and district level data centre, training and capacity building, etc. It is believed that the program has significant impacts on the revenue administration and on the landholders that can enhance quality service delivery.

The old schemes such as the computerization of land records and the strengthening revenue administration and updating of land records (SRA &ULR) are merged with the new program. In addition, the NLRMP emphasizes on the computerization of registration. The important departments namely, the Revenue Department and the Registration Department are now interconnected with the launch of NLRMP. This will help registration to follow automatic mutation. This programme, if executed properly by the state and other stakeholders, then the social and economic rejuvenation will surely take place. This programme is basically aimed to modernize land records, to

reduce land-related conflict, enhance transparency in land management systems and by doing so we will move towards guaranteed conclusive title. The programme is architect in a very scientific way; starting from computerization of all time of land records, digitization of maps, and creation of new cadastre by updating the old maps, introducing GIS to create real time land maps and boundary fixations and land database management systems with up-dates on a regular basis.

1. C. 1 Principles

A Conclusive Title may be defined as an unassailable and conclusive proof of ownership of property. In order to reach the stage of conferring Conclusive Titles, four fundamental principles need to be in place, namely, that:

- There should be a single agency to handle property records; therefore, a single agency can deal all the matters related to land records management such as survey and settlement records, updating and maintenance of land records, land related transactions and registration of documents, etc.
- The "Mirror" principle means the property records should depict ground reality, i.e., they should be "real-time records"; and updated all the time.
- The "Curtain" principle requires that the record of a title should depict the conclusive ownership status and examining its past transactions.
- There should be title guarantee and insurance for indemnifying the property holder against any loss arising due to inaccuracies.

1. C. 2 Components under the NLRMP

This programme has four major components – (i) computerization of property records; (ii) survey and preparation of maps using modern technologies; (iii) computerization of the Registration process and (iv)

training and capacity building. Each of the components has several sub-activities.

(i) Computerization of property records follows such action like data entry, entry into the National Code, conversion of textual data into the digitized format, digitization of cadastral maps, integration of textual and spatial data, setting up data centres at sub-divisional/tehsil, district levels, data centres at State level as part of data recovery and disaster management, modern record rooms at tehsil level and inter-connectivity among Revenue Offices.

(ii) The survey component consists of fresh cadastral surveys, re-surveys and update of survey and settlement records including ground control network and ground-truthing. The technologies identified for the survey are (a) pure ground truthing using total stations (TS) and Global Positioning System (GPS) (b) Hybrid technology using aerial photography along with ground truthing using TS and GPS (c) High resolution satellite imagery (HRSI) along with ground truthing using TS and GPS.

(iii) Computerization of Registration includes computerization of the Sub-Registrar's Office, data entry of property valuation, data entry of legacy encumbrance data, scanning and preservation of old documents and inter-connectivity between the Registration and Revenue Offices.

(iv) Training and capacity building and strengthening of training institutions are major activities under the NLRMP to build up officials as-well-as staff to intimate with the new technologies and new processes.

1. C. 3 Benefits of NLRMP

Successful stories from Computerisation of Land Records (CoLR) and Computerization of Registration (CoR) are already being noticed in

several states. After implementation of this programme benefits are reportedly improved. NLRMP aiming to provide conclusive land titling with title guarantee, used as a tool not only for governance and revenue generation but also for citizen service:

1) Computerization of records provides ease of access to the property owners, but in the present system where the property records are in the custody of a Revenue Department official, usually known as the "patwari", that problems would be reduced.
2) Presumptive titling will be no more, so that the litigation of land records will considerably be reduced. Conclusive title with tamper proof records would really be beneficial for the citizens.
3) Old land records are evaluate and updated into Real time records and entire operation may be executed by a single window, through which it reduce public time and money.
4) Time taken for registration and mutation will be greatly reduced.
5) From the programme of NLRMP, main beneficiaries are the citizens of this country. Real time land records with all type documents will help government to generate new and effective policies on the basis of disaster management, land acquisition, rehabilitation and resettlement, land use planning and consequential food security, management of barren land and watershed programmes by which revenue will also be generated largely due to the proper valuation of registration fees and stamp duty. The market value of property and the legacy of past transactions and titles will be available on the website; it will facilitate property transfers and electronic payment of stamp duty and registration fees. It will also help in the monitoring and the analyzing of market and rental values of land and property taxes.

6) Online Mutation and online registration process help citizens. Archive records are also available in the website. It prevents the unnecessary duplication of records.

1. D Objectives of the Study

Centre for Rural Studies has undertaken a study in Maharashtra under the direction of the Department of Land Resources, Ministry of Rural Development, Government of India with the following objectives.

1. Identifying existing capacities of the state based on the progress achieved and time frame developed to execute all the components.
2. To assess infrastructure support/supporting in the form of record rooms, data centres at various levels, kiosks, etc. for making available updated land records for general public and their locations district wise in each state.
3. Identification of the technological interventions is required not only to achieve the objective of having correct and up-to-date land records but also to give easy access to such records to the common man.
4. The steps are taken or to be taken by the state to provide citizen services under the NLRMP

1. E Methodology of the Study

Progress and time frame execution of land administration and management in Maharashtra are being studied in this volume. The main objective is to understand how the state implements and initiates all the components of NLRMP to facilitate the citizens. Infrastructural development such as Computerization, Kiosks, Modern Records Room and web connectivity with all the related departments along with the physical progress such as digitization of cadastral maps, online registration and mutation process, integration with spatial and textural

data and survey resurvey techniques and regeneration process of new maps are being accumulated in this book.

The study is based on mostly secondary data collected by the Nodal officers such as Settlement Commissioner and Directorate of Land Records, Department of Registration & Stamps, NIC-Pune and other associated Offices. Interaction with the Departmental officials and field officers were much helpful in understanding the program more circumstantially.

Chpater-2

AN APPRAISAL OF E-MAHABHUMI: LAND RECORDS MODERNIZATION & MANAGEMENT SYSTEM FOR MAHARASHTRA

2. A Brief History of Land Reforms and Land Administration in Maharashtra

The initial survey and settlement of the state were started around 1853, each and every field of agricultural land was measured using chain, and cross staff and Tippans (FMB) were prepared. The village maps have been generated from Field Measurement Books (FMBs). All FMBs were mosaiced with the help of close traversing to form a village map. After original survey there was Ist and IInd Revisions. From 1919 onwards plane table was introduced for land survey. Majority of spatial data in use today, consists of chain & cross staff related non-scale maps and plain table measurement sheets (scale drawn maps).

The agricultural lands have been subjected to consolidation from 1950 to 1993 and gat maps are prepared. Consolidation work has been completed for 31008 villages out of 44070 villages in Maharashtra State. During the implementation of the consolidation scheme the

Geographical Information of Maharashtra: At a glance

Area	3,07,713 sq.km.
Divisions	6
Districts	35
Talukas	358
Villages	44070
Sea shore length	720 km
Total population	11.23 Cr. (2011)
Urban population	42%
Rural Population	58%
Co-ordinates	North latitude 14.4 to 22.1 East longitude 72.6 to 80.9

existing record of survey number and hissa number were converted to gat number and the village map of gat number was prepared. These consolidation gat maps were prepared by reducing the scale of earlier survey number in village maps and incorporating the boundaries of newly formed hissa number in it and then forming gat number out of it. So the original survey number and hissa number maps prepared by plane table measurement will play key role for future activities of land records department.

Due to development activity over period of time, new set of cadastral records have been generated like Land Acquisition maps, Non-agriculture layout measurement maps etc. All such measurements were also carried out by using Plain Table and these maps are on A1 size paper sheets and are in scale.

During 1978-1994 the resurvey is carried out in Nagpur division and Melghat area of Amravati Division. The resurvey was carried out by theodolite machine and detailed measurement sheets were prepared. These sheets were used for boundary confirmation work.

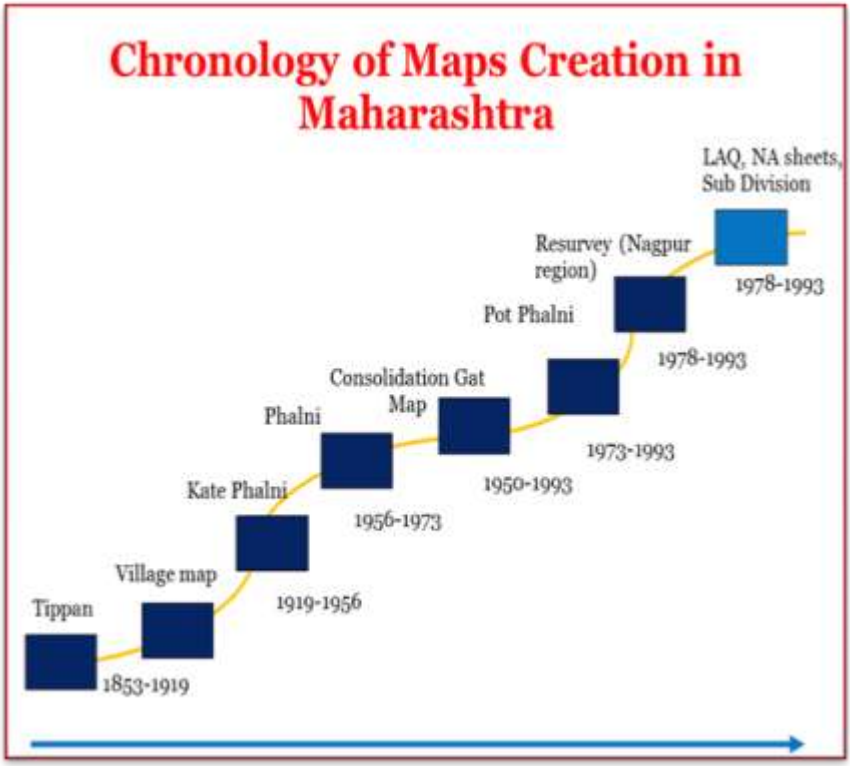
As far as land records are concerned, the State is divided into 4 regions/provinces which is mentioned below:

Period	REGIONS/PROVINCE			
	Bombay Province	Marathwada	Vidharbh	
			Berar	Central Province
1853-1919	Tippan, Village map, Kate Phalni			Bandobast village map
1919-1956	Phalni map			--
1956-1973	Pot Phalni map			
1950-1993	Consolidation gat map, Consolidation village map			Consolidation village map
1978-1994				Resurvey savistar bhumapan mojani sheet, Resurvey village map
1993 till date	Sub division map, Land acquisition map, Non agriculture layout measurement map			

It is evident from the above chart that in major portion of the state the cadastral survey was carried out by using cross staff and chain. And further sub-divisions in survey numbers were measured by using plan table. Also the scheme of consolidation of holdings was implemented in the state and survey numbers and hissa numbers were converted into gat numbers. It's viable to understand the history of land reforms and agrarian structure of the state of Maharashtra before proceeding to the modern instruments of land reforms and its implementation in the state. The present state of Maharashtra came into existence under the Bombay Reorganisation Act 1960. Territories of Gujarat State have been separated to Bombay State, province of Marathwada (outer of Hyderabad) and Vidarbha (from Central Provinces & Berar) were accumulated to form the today's shape of Maharashtra state. Maharashtra has witnessed so many agrarian reforms and different types of agrarian structure. Predominantly, Rayatwari System is mainly prevailed in most of the part of the State. In that system every field was

separately assessed and cultivators were asked to pay the revenue to the treasury. Marathwada and Konkan where different agrarian system other than Rayatwari or Jagirdari prevailed. Land reforms in Maharashtra have taken place in two stages; before 1965 the first phase took place in the state. In short, the chronology of the map creation in the state is as below.

Land is the limited resource and it is being strained by the increasing population. Hence the management of land-related records is the most essential thing for the state/ country. The original land surveys in India were mostly prepared in the pre-independence period and hence the land records are more than 100 years old and there is a variety in them



according to the system of the administration prevalent at that time. The legal importance of this record is extraordinary and the management/ storage and conservation are a challenging matter. Maharashtra has carrying out well in implementing all components of NLRMP for the entire state.

2. B Major Components of e-Mahabhumi

Many projects have been successfully implemented in pilot locations and now are on the verge of state wide rollout. Comprehensive land records modernization and management system are proposed under programme called **"e MAHABHOOMI"** by the state. Maharashtra has been a leading state in implementation of land records related schemes launched by Government of India, whether it were CLR and SRA&ULR or NLRMP. Maharashtra state decided to implement all the components of NLRMP simultaneously and also added a couple of extra components which were specific to the state requirements. The major components of e-Mahabhumi are as follows:-

Computerization of Process of current Measurement Cases	**-e-Mojni**
Computerization of Village revenue officers	-e-Chawdi
Online Mutations-	-e-Mutation
Scanning of Land Records (Modern Record Room)	-e-Records
Digitization of Cadastral Maps	-e-Maps
Resurvey of the state	-e-Resurvey
Computerization of registration process	-e-Registration
Land records Geographical Information System (GIS)	-e-Bhulekh

8 Components of e Mahabhumi

State has given the name of e-Mahabhumi for the implementation of all above projects; to create a better connection between citizens and the department officials. Different components of e Mahabhoomi are elaborated.

2. B. 1 e-Mojni (Computerization of the survey process)

This program is a state initiative program. e-Mojni programme has been implemented since 1 Jan 2012 throughout State. Up to May 2014, more than 2.5 lakhs measurements cases are processed through this. The survey is done by the ward office of the land record section. Survey matters are being increased day by day and the pending cases are also increasing. The arising

survey cases and hence under the guidance of the revenue collector and the Director of Land Records, (Maharashtra state) and with the technical help of the national Informatics centre, Pune; the e-Mojni software has been developed for the management of the work, available land revenue assessor and the employees. e-Mojini application is used for doing all survey related applications and disposal of survey cases through online. In this software, as soon as the applicant files his application, the fee is charged and the challan of the survey charges is prepared and given. The applicant is immediately given acknowledgement with the planned date and the name of the surveyor employee and mobile no. etc. It has become possible by this software to take a review of survey cases at the taluka level, zilla level and the state level.

This software is successfully implemented in most of the districts and it has several benefits like the date of survey, the surveyor name, mobile numbers etc. is given automatically to the citizens who wants their land to be surveyed against a fee paid by him. The present status of the survey can be available to the citizens since the entire process from the receipt of the application to the finalization has been totally computerized. In future, linkages with GRAS (Government Receipt & Accounting System) for online payment facility is proposed in Version-2 release facility for online tracking of measurement application will be provided to Citizens.

2. B. 2 e-Chawdi (computerization of the talathi record)

This program is a State initiative program. Village officers dafter will be maintained digitally. RoR data at State data Centre will be accessed by village officer (Talathi) for e-Chawadi

functioning. Talathi is the backbone of the village revenue and records. The revenue Collector, Pune, has developed the software named "e-Chavdi" for the computerization of the talathi records with the help of the National Informatics Centre, Pune. This is a web based application for which village officers laptop will be connected to State Data Center through data card. All the forms are interlinked to each other and any change in one form will lead to concurrent changes in related forms. This software can be used by the talathis through their laptops by the data cards connected securely to the state data centre. The daily information of the revenue collection is going to be prepared by this software. This will save the time of the talathis spent in this kind of work and their work will become more organized and regular and since their efforts will be reduced, they will be able to concentrate better and have the more time for the other revenue work.

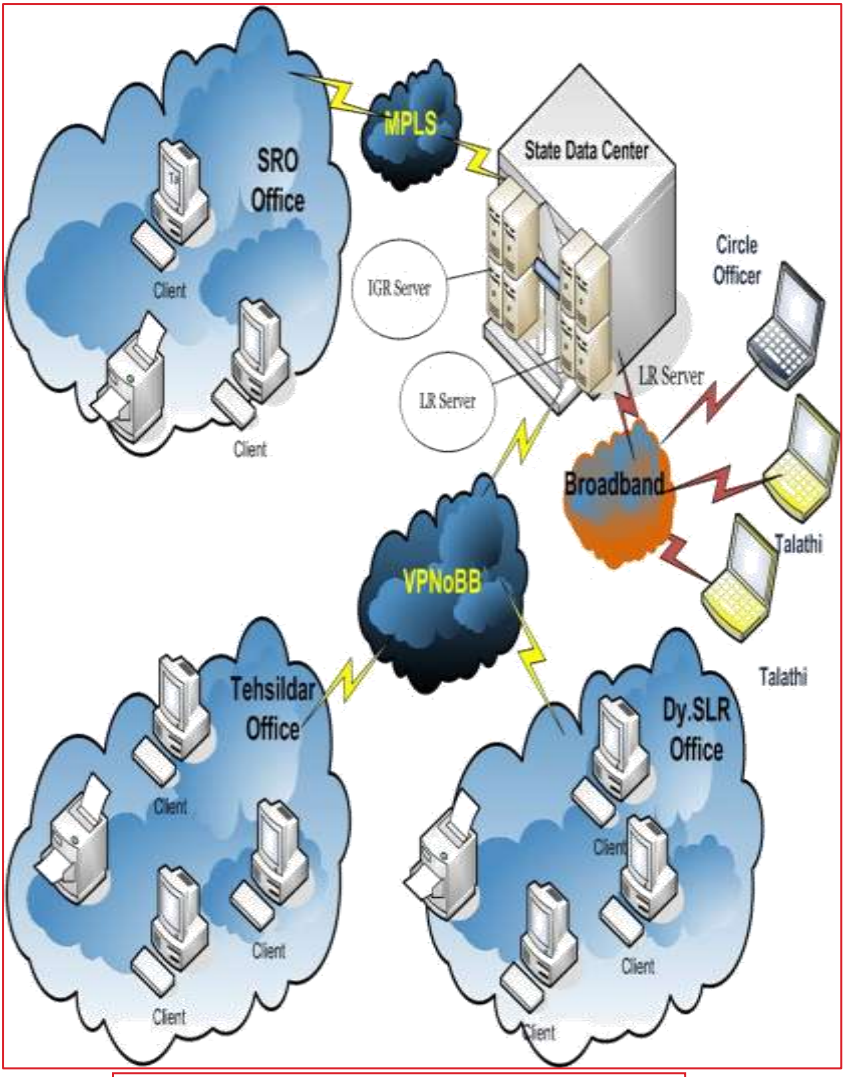
Till February 2014, 9152 Village Officers and 1515 Circle Officers have procured Laptops and among them 8493 Village Officers and 1425 Circle Officers have been provided data cards by the Govt. for online connectivity. Pilot project for that module has been completed in 100 villages and state wise initiations will start and will fully be operational from 2014-15.

2. B. 3 e-Mutation (Online Mutation process)

In case of Mutations of Registered documents, mutation process in Tehsildar office/City Survey Office will be initiated immediately after registration of document. In case of non-registered document, mutation process will be initiated by Talathi using laptop and data card. Mutation is the process of changing the ownership details in RoR. Generally after

completion of registration, the latest information needs to be updated in RoR mentioning the name of the new owner or as the case may be. Over a period of time, it was observed that there is a huge mismatch between number of registration cases and the number of mutation cases. Citizens are concerned only for the registration of their property so that mutation is mostly skipped by the owner and for that reason online mutation was introduced. This means as soon as there is the registration of document dealing with change of ownership in land, process of mutation is initiated.

358 Tahasildar offices, 358 Dy. SLR offices, 429 SRO offices in the state are furnished with hardware i.e. computers and its peripherals. Digital signature provided to talathis and circle officers for authentication of digitally maintained RoRs. 741 offices (Tahasildar/Dy. SLR/ CTSO) in the state are linked through VPNoBB and MPLS connectivity by BSNAL/MTNL. Integration of e-Mutation and i-sarita (Department of Registrtaion) have been completed and the project has been rolled out in August-2014 for the entire state.



CONNECTIVITY ARCHITECTURE

The application for online mutation i.e. e-Mutation has been developed by NIC under the guidance of Settlement Commissioner & Director of Land Records (Maharashtra State), Pune. The entire process starts at the registration department where the citizen gets his documents registered at SRO. Once that is over, the details of registration are uploaded on the State Data Centre (SDC) from the SRO office. Department officials at Tehasildar office view such mutation request and the mutation number has automatically been given by application. Digital signed notice is generated from the office of Tehsil, and it's being sent to all the parties; at the same time Short Messaging Service (SMS) is sent to the concerned citizen and village officers. Within 15 days if there is no objection coming from any side regarding that property, the new owner is being certified automatically in RoR.

Benefits to Citizen:

1. Online Updated Land Records will be made available 24x7 for display in Public Domain.
2. Status of Mutation will be made available to know the progress / actions being taken on each transaction.
3. Public utility documents such as Mutation Register Extract, Record of Rights, Khata Register Extract etc. will be made available on Internet / Village Kiosk for end delivery to citizens at village level itself.
4. Automatic Change of Ownership will be achieved due to Linkage between Tehsil and SRO Offices and many more.

Benefits to Government:

1. Tracking of Mutation Pendency at Tehsil, District, Division and State Level.
2. Classification of Transactions on mutation types,
3. Consolidated data available at a central location,
4. Data Warehousing/ Data Mining/ Various Reports of data can be generated on ad-hoc for Planning, Allocation of Budget, and Forecasting etc.
5. Crop data will be available for analysis, planning, Loan Waiving and advice etc.

2. B. 4 e-Records (Scanning of land records)

Land Records Department maintains huge volume of textual records related to land as a custodian of Land Records. These records are old mutations, old RoR, old Khata Register, Tippan, Akarband, Akarphod Patrak, Gunakar Book, KJP, consolidation scheme, etc. from year 1880 to 2011. Pilot project in Mulshi and Haveli Taluka of Pune district has been completed. Scanning activity is outsourced and carried out under supervision of Tehsildar / Dy.SLR. Document Management System (DMS) software is developed by M/s. Vidya online (vendor) and will be taken over by NIC Pune, till 40 lakhs documents have been scanned. The reason behind the introduction of E-records is that records have deteriorated over a period of time, under e-records project all the spatial and non spatial data are being scanned and stored in modern record room, software has been developed to find and retrieve data. The project will be rolled out in 2014 and approximately 2.5 Cr. documents will be scanned throughout the state.

Information available in record of rights in Maharashtra

1. Names of all persons who acquire some rights in the land, nature and limits of their rights and conditions under which the rights are acquired by them. Rent or revenue required to pay by them.
2. Details of charges of attachment and decrees under the order of civil court or revenue authorities.
3. Details of loan taken by the occupant.
4. If land is classified as a "fragment" under the section 6 of the Bombay prevention of fragmentation and consolidation of holding Act 1947, the same is noted in this record.
5. Easement, such as right of way is entered in this record.

2. B. 5 e-Maps (Digitization of Maps)

Land Records department is the custodian of valuable spatial Records i.e. cadastral map. Maharashtra poses a unique combination of cadastral map sheets which range from year 1880 to till date. There are numerous types of cadastral map sheets like tippans, phalni sheets, pot phalni sheets, gat book, village map sheets, Land Acquisition Measurement Sheets, Non Agricultural measurement sheets etc. The cadastral maps are in different sizes ranging from A4 to A0. State has decided to scan and digitize these map sheets for archival, to be used during resurvey and assisting land records department officials in day to day functions under e-Maps project. The pilot project has been started in Mulshi Taluka in September 2012. Software for retrieval, printing and management of digitized images is being developed by NIC Pune. The pilot project has been completed in May 2014. 11855 sheets and 2, 02, 426 polygons are been digitized in the pilot project. The cadastral maps will be usefull

for finalization of LPM in Re-survey process. State will undertake digitization work for the entire state in phase wise manner after availability of funds.

2. B. 6 e-Resurvey (Resurvey with modern technology)

State has decided to undertake huge task of resurvey of entire Maharashtra. Under this project called "e Resurvey" entire state will be surveyed again by using modern survey technologies. Resurvey in pilot project is being carried out using two methods i.e. ETS/GPS and HRSI with ETS/GPS to understand the merits, demerits and its practical usability for the state of Maharashtra. 176 GCP has been established in the pilot area. Proposal for cabinet approval for resurvey of the state is in process at Government level. A committee has been appointed to suggest amendments in Maharashtra Land Revenue Code 1966 and other related land laws along with detailed process of resurvey. Proposal for amendment to MLRC 1966 and Consolidation Act is in progress. After the approval from Government, Resurvey will be done in a phased manner and required staff setup will be created for monitoring, validation, verification, enquiry and promulgation of resurvey records.

2. B. 7 e-Registration (computerization of Registration Process)

Registration, Revenue and Land Records dept. integration with software is in progress. For this, Pilot Project is completed successfully at Mulshi taluka, Pune district. In Maharashtra, all SRO offices are computerized and iSARITA application is being used. Considering Land Records and Registration department as two separate departments in the state, it is planned that e-Mutation and iSARITA application servers will

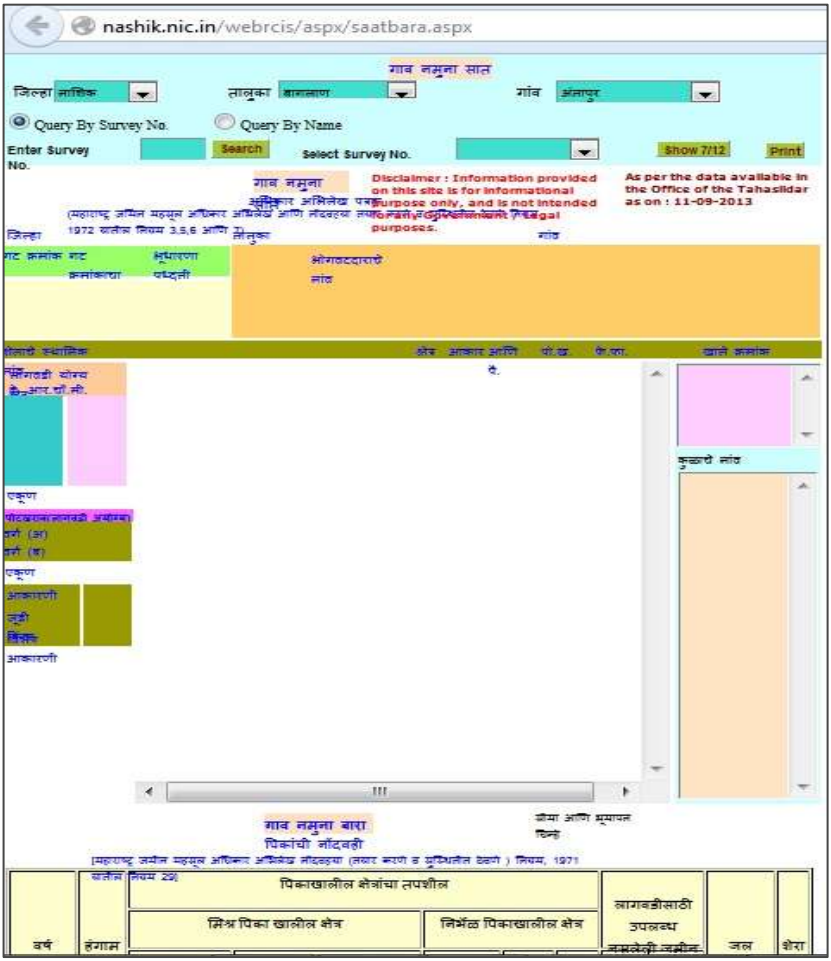
talk to each other and necessary information for registration and mutation will be shared. This took place in August 2014.

2. B. 8 e-Bhulekh (Core GIS on Land Records)

Computerized RoR, Digitized map, scanned old document and newly created records from resurvey will be made available to public through GIS portal called e-Bhulekh. e-Bhulekh is one of the unique application developed by NIC under the guidance of Settlement Commissioner & Director of Land Records (Maharashtra State), Pune for archival of textual and spatial data from 1930. It combines the power of technology and domain knowledge of department officials to create a holistic land records data dissemination application for citizens. e-Bhulekh will provide citizens with all old and current land records like Form No. 7/12, Form no 8A, Mutation Register and other textual records for their land parcels. The application will also provide spatial records like tippans, phalni sheets, village maps etc along with RoR. All relevant historical data of a land parcel will be available through this application. Software development of e-Bhulekh is in progress with help of NIC Pune.

Department of Land Resources, Ministry of Rural Development Government of India has initiated Computerization of Land Records (CLR), Strengthening of Revenue Administration and Updation of Land Records (SRA & ULR) and National Land Records Modernization Programme (NLRMP). Under the scheme of **Computerization of Land Records (CLR)**, establishment of computer center at all over 358 Tehsil 110 Sub Division and 34 District Data Center, 1 State Level Monitoring Cell is completed. All over state 100% Data entry, verification and Validation of 211 lakh Records of Rights (RoR) have been

completed. Computerized RoR are distributed on demand from Setu Kendra at District and Tehsil level, from Maha e-Seva Kendra located in rural area. Manual Distribution of 7/12 is stopped in Talathi offices located at Tehsil HQ vide GR dtd. 27/05/2009. All over state 100% Data entry, Verification and Validation of 55 lakh Property Cards (RoR) have been completed. RoR data put on internet to public access and URL is **http://mahabhulekh.maharashtra.gov.in**



This scheme is withdrawn from 2008. **Strengthening of Revenue Administration and Updation of Land Records (SRA & ULR)** programme were initiated, under this scheme, in 258 location construction of Record Room is completed. At 1025 location construction of Talathi office cum residence is completed. At 155 locations indexing of Land Records is completed. (CODISS) This scheme is withdrawn from 2008. For implementation of **NLRMP**, State has received Rs. 6536.1752 lakhs. Out of these Rs.1510.0595 lakhs have been utilized. And Rs.5026.1158 lakhs is the balance granted till today. Web portal of e-Mahabhumi has been started and developed within 6 months from September 2014 for the citizens.

Chpater-3

STATUS OF NLRMP IN MAHARASHTRA

The MoRD and the States have a vast and vivid experience of 20 years in Land Records Modernization programme, but in a fragmented and not all-inclusive formats of CLR & SRA&ULR centrally sponsored schemes. Fortunately, the MoRD invested efforts in massive/ marathon exercise for envisioning, conceptualising and designing a revamped programme named NLRMP, which the States could hardly bring to bear on their own. In Maharashtra whatever they have done and experienced have been uploaded to the new programme of NLRMP. So, to understand the status of NLRMP in Maharashtra we must follow the cycle which starts from Computerization of Land Records (CLR) to NLRMP.

3. A Achievements of Computerization of Land Records (CLR) Programme

Government of India (GOI) initiated (1988-89) a scheme for the 'Computerisation of Land Records' (CLR) to overcome the problems inherent in the manual system of maintenance and updating of land records. CLR (Computerisation of Land Records), developed by NIC, is implemented in all tehsils of Maharashtra. LMIS is used for taking mutations and distribution of 7/12 extracts to Khatedars and PCIS (Property Card Information System) is used for taking mutation distribution of Property Cards through the City Survey Offices(CTSOs) and Taluka Inspector of Land Records(TILR). Records of Settlement Commissioner and Director of Land Records, and seven districts (Ahmednagar, Aurangabad, Kolhapur, Mumbai Suburban, Pune, Raigad and Wardha.) out of 35 (14 Taluka Offices out of 356, seven City Survey Offices out of 29 and 10 Taluka Inspector of Land Records

Offices out of 319) were test-checked during May to July 2004 covering the period 1994-95 to 2003-04. The scheme of CLR was started on pilot basis in 1989-90 and full-fledged scheme from 1994-95. However, no physical and financial targets were fixed by GOM. There was no proper monitoring of the progress of the scheme and the Government did not fix periodical targets for various milestones of the project like physical completion of the infrastructure, electrical components and installation of computers. Finally, at the State level, the time schedule for completion of the project of CLR was fixed from 15 November 2003 to 31 December 2003. The department subsequently revised the target for data entry (March 2004), validation (July 2004) and issue of RoR (July 2004). Under this scheme establishment of computer centre at all over 358 Tehsil, 110 sub division and 34 District data Centre and 1 State level monitoring Centre are completed. All over State 100% data entry, verification and validation of 211 lakh RoRs have also been completed. This scheme is withdrawn from 2008.

3.B. Achievements of SRA&ULR Programme

Under this scheme, in 258 location construction of Record Room is completed. At 1025 location construction of Talathi office cum residence is completed. At 155 location indexing of land records is completed. This scheme is withdrawn from 2008.

3. C. Component wise status of NLRMP

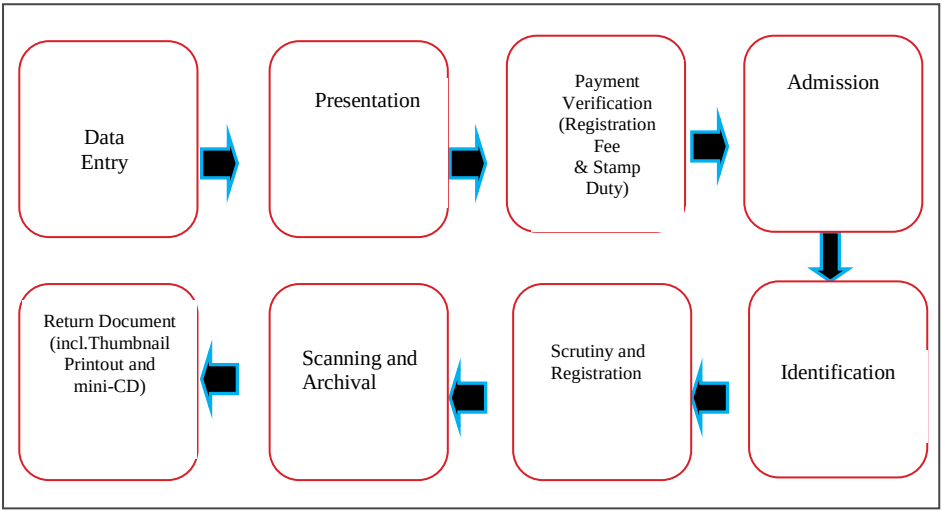
3. C. 1 Computerization of Registration Process

Registration process and computerization of registration are two vital components of the NLRMP. They will make the property registration system efficient and hassle-free. The process of title changes by the SRO is to be integrated with the process of updating of RoRs (Automatic initiation of mutation notices). To bring more efficiency, transparency & effectiveness in registration process, department started

'Computerisation of Registration' project (popularly known as SARITA) in 2002 on Build-Operate-Transfer (BOT) basis.Computerization of registration process follows:

i. Computerization of SROs
ii. Data entry of valuation details
iii. Data entry of legacy encumbrance data for determined period
iv. Scanning and preservation of old documents
v. Connectivity of SROs with Revenue Offices

The Department of Registration & Controller of Stamps look after registration of documents, preservation of documents, and recovery of stamp duty. Registration is the biggest activity. The department provides services through more than 460 offices and registers more than 22 lakhs documents annually. For the purpose of understanding the registration process, it has been depicted below.



To bring more efficiency and to serve citizen in an improved manner, the web based integrated and centralized computerization of registration process was launched in 2012. The ultimate vision of any computerization is to serve the citizen anytime anywhere; with this vision the e-Registration of certain type of articles shall be permitted.

Computerization of Registration Phase – I (From 2002 to 2012)

For the first time in the country, the registration process was computerized in the 2002 using an application known as SARITA developed by CDAC, to overcome all the challenges mentioned above. The department decided to automate the registration process though the implementation of this application. At the time of development of SARITA application, department after a clear cut understanding of the problems and constraints in the registration process and its transformation into computerized registration process, kept following the objective of change strategy:

1. Develop a simple, speedy & reliable registration process.
2. Build consistency & uniformity in the process.
3. Provide transparency in the valuation of the properties.
4. Automate all the back office functions.
5. Remove discretions at the cutting edge level by automation on Scrutiny, Valuation, and Checking for support certificates.
6. Set quality & time standards & to have a system of evaluation of offices / officers on the basis of these standards. In SARITA software, the total process of registration including valuation of the property was done using computers. After the essential data entry regarding registration was done, the original document was scanned after registration and original was immediately returned back to the registrant within prescribed time. The thumb impressions and photographs of parties were being taken during

registration. This application was operational in a decentralized model at field offices. This project helped the department in removing shortcomings in the prevailing manual registration and resulted in significant improvement in efficiency.

Computerization of Registration Phase – II (From 2012 onwards)

With aim of further improvements in registration process and with a clear cut understanding of the problems and constraints in the decentralized registration process and feasible improvement through centralized registration process, the department decided to undertake next phase of computerization of registration process. The department kept following the objective of change strategy:

1. An easy, reliable, secure & cost effective archival system and effective search.

2. Provide backward & forward linkages with the land records & revenue department.

3. Empowerment of citizens to enter their own data avoiding dependence on data entry operators

4. Enable e-Payment of Stamp Duty and Registration Fees, with facility for verification and locking.

5. Automated validation of various modes of payment of Stamp Duty like Stamp Paper, Franking, Certificate, e-Stamps, etc.

6. Administrative ease in deployment of modifications to iSARITA software

7. Transparency increased through centralized monitoring and thumbnail printing

NIC undertook the development of centralized and integrated version of web-based registration popularly known as iSARITA (Integrated Stamp and Registration Information Technology Application) and the application was rolled out in the year 2012.

iSARITA was implemented with the objectives of providing ;

i. Centralized data collection for better analysis and other administrative offices decision making
ii. Completing the registration process in 20 minutes
iii. Centralized e-Storage of data
iv. Online payment of the stamp duty and registration fees
v. Online valuation of the land
vi. Providing transactional history of the property at the click of the button to prevent frauds.

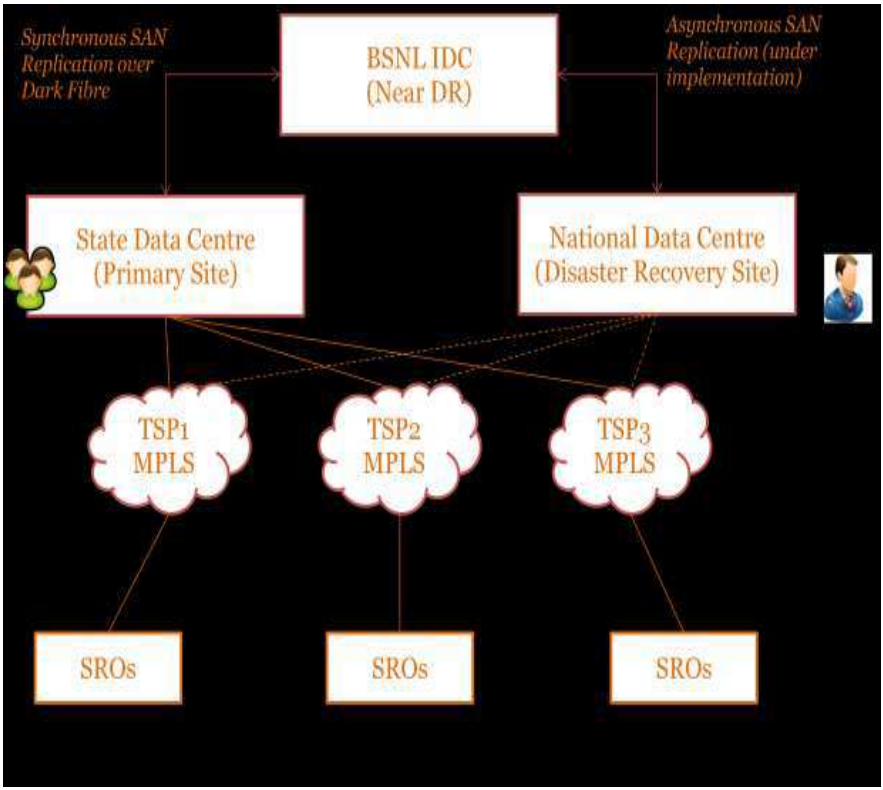
- Increased transparency.
- Empowering citizen by providing data entry into govt records.
- Having a negative list to prevent public lands being transacted without govt permission
- Possibility of identity verification thru UID
- Tie up with land records for accurate data transfer and protection of rights.

Computerization of Registration Phase III (2013 onwards)

With the ultimate aim of registration done anywhere anytime, the department decided to undertake final phase of computerization of registration process. To begin with, certain type of documents (e.g. Mortgage by Deposit of Title Deed) is being permitted to be registered online and subsequently the other type of documents shall also be permitted. The citizens can prepare their documents online,

make necessary payments online, and submit the document for registration. The department shall register the document and send the registered document electronically. The minimum requirement is for e-Registration is Web Camera, Fingerprint reader and Digital Signature of all parties (including witnesses and identifiers).

ICT infrastructure for Computerization of Registration Project



Process Reengineering of Computerization of Registration

As part of the core process of registration, the citizens are required to perform other activities. The department undertook initiatives to computerize these related activities as mentioned below.

I. **Online Property Transaction Search Report (e-Search):** The citizens were earlier required to visit the concerned Sub-Registrar Offices for searching the property transaction report. In areas of concurrent jurisdiction, the citizens were required to visit all the Sub-Registrar offices. The citizen can now search the property transactions (2002 onwards) from anytime anywhere. The citizens have also been provided with the facility to download a copy of registered document.

II. **Know your valuation (e-ASR):** The citizen can know the valuation of any property within Maharashtra by providing the details like District, Taluka, Village, Survey Number, etc.

III. **e-Payment:** The citizens are required to make payment of Registration Fees, Stamp Duty, and Document Handling Charges to the department. In traditional method, the citizen is required to make payment of (i) Registration Fees in form of Bank Challan, or Demand Draft and (ii) Stamp Duty in form of Bank Challan, Franking, Demand Draft, etc. For the convenience of citizen, the department has been integrated with Government Receipt Accounting System (GRAS). To make payment of Registration Fees and Stamp Duty, citizen can visit

GRAS and prepare their challan. The citizen then has option to either make payment using Internet Banking / Debit Card, or make payment at authorized bank branches. The challan so generated may be produced during registration as a proof of payment; the SRO shall verify the challan online and at the same time mark it to avoid its re-use.

IV. **Public Data Entry:** The registration process may involve entry of information regarding document, party details, and property details. To reduce chances of mistakes in data entry at offices and to expedite the registration process, th department has made provision for citizens to do data entry (through Public Data Entry application) at their convenience thus ensuring complete control and accuracy of data. The citizen can, at any time, modify the information entered using the user-id and password provided while initiating data entry. At the end of data entry process, the citizen gets a unique reference number. During the registration, the data entered by citizen can be imported utilizing this number. This facility is being utilized in nearly 80% documents which are being registered through iSARITA.

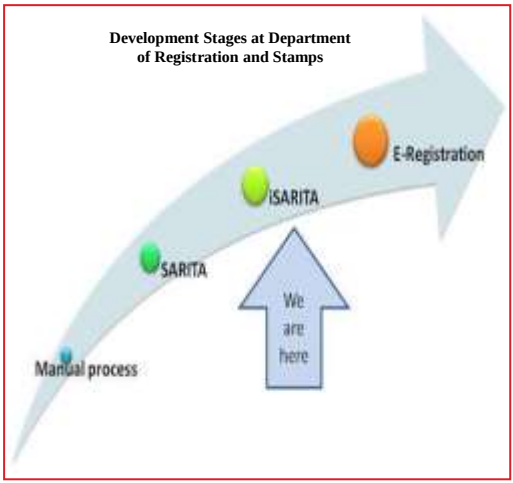
V. **Online Booking of Token (e-StepIn):** With introduction of e-StepIn, the citizens have the facility to book tokens online. This facility has been operational for 2 years now, the first 3 hours of the day are reserved for registrants utilizing this facility with first 1.5 hours reserved for registrants making e-Payment.

VI. **Thumbnail Printing and mini-CD:** In the manual process, the photocopy was required along with the original document and sub-registrar was required to make endorsement and signature on both copies and subsequently maintain the photocopy. In iSARITA, the citizen is required to bring only original document on which the sub Case registrar is required to make endorsement and signature. The registered document is scanned and thumbnail printout (1:4) of scanned

document is given to citizen for confirmation. Upon confirmation, the citizen is given a mini-CD containing scanned document. The scanned image is stored & maintained centrally, and thumbnail print signed by parties is maintained at SRO.

Current Status of Computerization of Registration

In Maharashtra, all SRO offices are computerized and iSARITA application is being used. These offices are connected to SDC via MPLS VPN. Computerisation of Registration has taken place in the entire State of Maharashtra covering 34 Districts and 358 Tehsils. Registration, Revenue and Land Records dept. integration with software is in progress. For this, Pilot Project is completed successfully at Mulshi taluka, Pune district. Computerized registered documents are stored in SDC and software for RoR is also web based and is hosted at SDC. Network connectivity in the form of VPNoBB Connectivity to connect Tehsildar, Deputy Superintendent of Land Records Offices and City Survey Offices to SDC is established. Considering Land Records and Registration department as two separate departments in the state, e-Mutation and iSARITA application servers are interconnected with each other and necessary information for registration and mutation being shared.



Status of Computerization of Registration in Maharashtra

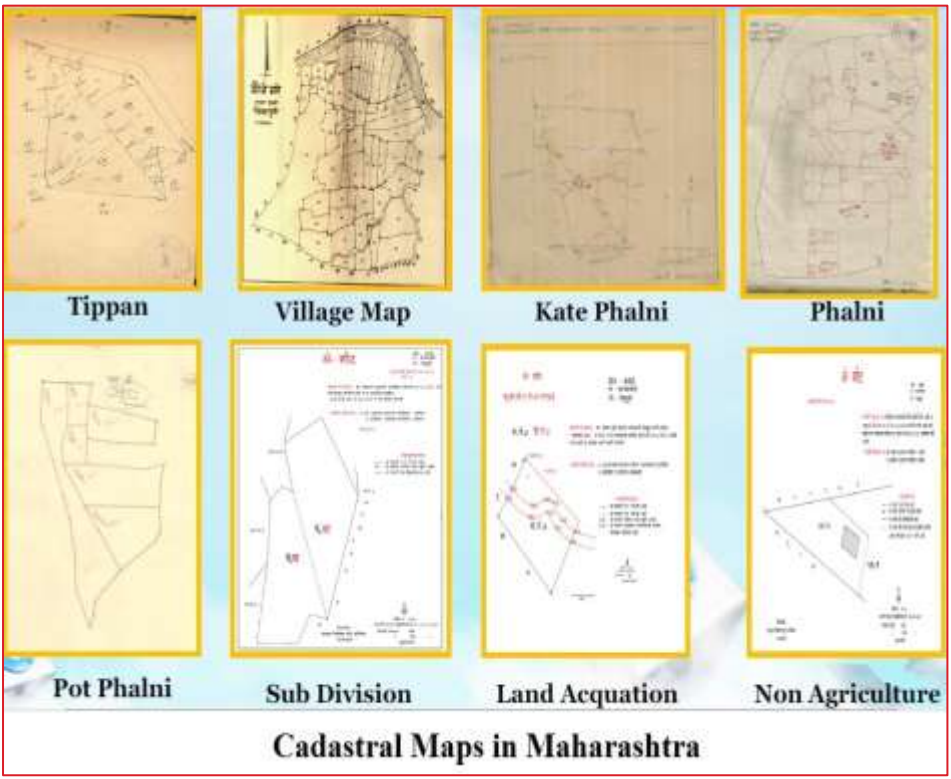
Year	No. of SROs	No. of SROs Computerized	Inter-connectivity to SROs	e-Registartion Facility Available in SROs	e-Stamping facility in No. of SROs	e-valuation facility in No. of SROs
2009	463	409	0	0	409	409
2010	463	409	0	0	409	409
2011	464	409	409	0	409	409
2012	482	482	482	0	482	482
2013	482	482	482	0	482	482
2014- till date	505	483	482	0	483	483

3. C. 2 Digitization of Cadastral maps

Digitization of Cadastral Maps is very strong components\ to make NLRMP successful. Various types of maps are available in the taluka level offices of the Dy. Director, Land Records. Maps were prepared many years back and hence destroyed, torn with the passage of time. Hence it is the need of the time to store them in the digital format. Digitization of all Cadastral maps (different purpose) are linked with 7/12 extras. Objectives of Digitization of Cadastral maps are as follows;

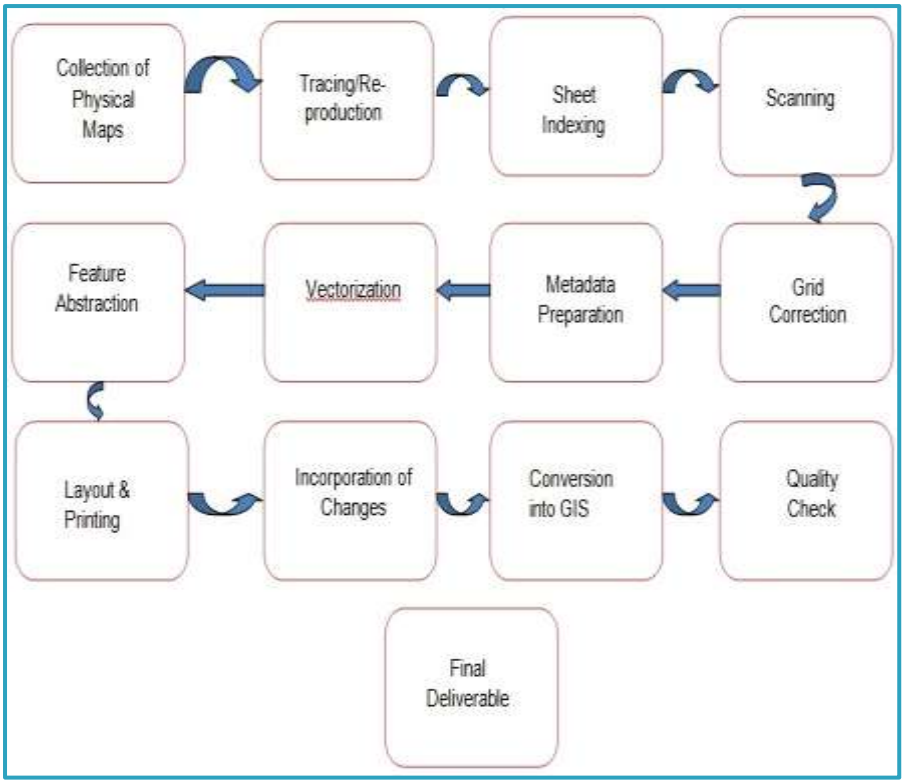
a. To convert the existing paper maps into GIS-ready digital maps
b. To obtain GIS ready digitized cadastral maps integrated with record of rights
c. Integration of textual data with spatial data
d. To convert the existing scaly maps into digitized form which can easily be used by the department for boundary confirmation and other measurement cases.
e. To use for boundary confirmation during resurvey
f. To preserve and provide maps in digital format for citizens.

In Maharashtra there are several types of maps being used for different purposes, as per the NLRMP guidelines all types of maps need to be scanned and digitized in a certain manner and same scale factor. Project for digitization of old cadastral maps has been done in the offices of Deputy SLR and CTSO. Field Measurement Book (Tippan), Phalani, pot phalani, JM Sheets of Land Acquisition, Lay outs of NA properties etc. all types of maps have been digitized from first survey i.e. 1853. Maps in Maharashtra: **Tippan**- Individual land parcel maps, **Village Map**- Mosaiced tippans, **Kate Phalni**- Division of Survey number (tippan format), **Phalni**- Division of Survey Number, **Pot Phalni**- Sub division in Phalni, **Sub Division**- Sub division in phalni, **Land Acquisition** and **Non Agriculture** Maps.



Every type of Cadastral maps has their own objectives. Use of various cadastral map sheets for measurement cases: **I.** Boundary confirmation of a survey number- Tippan, Reconstructed tippan- Vaslevar + village map, Tippans of adjacent survey numbers. **II.** Boundary confirmation of a hissa number- Kate phalni / Phodi tippan, Fairs ketch, Phalni map, Gat-book. **III.** Boundary of a gat number- Record of survey number, Hissa number. **IV.** Boundary of a N.A Plot- Layout measurement Plan, **V.** Boundary of acquired land- Land acquisition measurement sheet and Kami Jasti Patrak (KJP). **VI.** Boundary of an old survey number in Vidarbha region, Bandobast map. Savistar bhumapan mojani maps. **VII.** Boundary confirmation of hissa number in Vidarbha region- Pot hissa map. **VIII.** Boundary confirmation of survey number and hissa number in Inam villages-Minor triangulation sheet. Application is used for fixing boundary of Survey number in measurement cases for the tedious manual process Collaband Software has been developed by NIC, Delhi and customized in consultation with NIC Pune & domain group in Settlement Commissioner office. The main objective for using the software is to solve tippans by entering the measurements in ladder table. It's been successfully used in the Pilot Project at Mulshi Taluka in Pune District of Maharashtra.

Process of Cadastral Maps Digitization



The entire process of digitization of Village Maps has been done MRSAC, Nagpur cooperation by the parent organization SC & DLR, Pune in a very acute mechanism and time-bound manner. Land Records Department provided paper map of all villages in the state to MRSAC. After digitization MRSAC supplied maps in ***.dwg** format for use of department. Other Cadastral Maps digitization of the entire State is on the pipeline and completed recently.

Current Status of Cadastral Maps Digitization

Pilot project for Digitization of cadastral maps is completed in Taluka Mulshi of District Pune. Various types of maps are required to be digitized and Unit cost of digitization must be revised. For this, detailed proposal has been submitted to GoI by this office letter dtd. 21/11/2013 After approval of GoI and availability of funds state will undertake digitization work for the entire state in phase wise manner. Pilot project for Digitization of cadastral maps (Phalani, Pot Phalani, Sub Division, Land Acquisition, Non Agriculture, etc.) has started in Taluka Mulshi of District Pune. M/s RAMTECH is selected as digitization agency through competitive bidding. The Pilot Project is completed in May 2014. 11855 sheets & 2,02,426 Polygons are Digitized in Pilot Projects. In Resurvey this digitized cadastral records will be used for finalization of LPM.

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Maharashtra State Digitization of Cadastral Maps

Pilot project in Tehsil Mulshi of Pune District has been completed. Various types of maps are required to be digitized. The proposal is submitted to GoI after approval digitization project will be rolled out in the entire state.

Sl.	District	Total No. of Sheets	Total No. of Polygons	Actual Sheet Digitized (As on May 2014)
1	Pune	685317	3683428	11855 (20618 Polygons only in Mulshi Mouza)
2	Satara	548661	3214593	
3	Solapur	347110	1614208	
4	Sangli	526062	2172854	
5	Kolhapur	602313	5979003	
6	Nasik	560229	1880157	
7	Dhule	186816	434007	
8	Nandurbar	101952	458439	
9	Jalgaon	340227	1238170	
10	Ahmednagar	799680	172204	
11	Mumbai Sub Division	35460	138520	
12	Thane	377722	2260911	
13	Raigad	617419	4023635	
14	Ratnagiri	319089	2837976	
15	Sindhudurg	292056	2848413	
16	Aurangabad	317200	960166	
17	Jalna	102859	556276	

18	Parbhani	148849	604200	
19	Hingoli	115770	300330	
20	Nanded	290718	1171328	
21	Beed	209189	1142955	
22	Latur	153162	670983	
23	Usmanabad	276460	937991	
24	Amrawati	274074	979601	
25	Buldhana	251920	776999	
26	Akola	258166	1128668	
27	Washim	195104	788703	
28	Yawatmal	326248	1112643	
29	Nagpur	104635	1402624	
29	Bhandara	50941	892218	
30	Gondia	41516	1399171	
31	Gadchiroli	71318	840579	
32	Chandrapur	83795	1755993	
33	Wardha	83201	842317	
	State Total	**9695238**	**52769263**	

Types and volume of map sheets to be digitized

Sl.	Name of Document	Scale	Scanning	Digitization
Pune, Mumbai, Nashik, Aurangabad and Amravati				
1	Tippan	-	-	Yes
2	Village Map	-	-	-
3	Kate Phalni / phodi tippan	-	-	Yes
4	Phalni maps/pot hissa maps/gat plot maps	1:1000	-	Yes
5	Fair sketch	1:1000	-	Yes
6	Gat book maps	Various	-	Yes
7	Triangulation Sheets	1:1000	-	Yes
8	Original survey no. maps	Various	Yes	-
9	Cloth Mounted maps of survey numbers	Various	-	Yes

Sl.	Name of Document	Scale	Scanning	Digitization
Nagpur and Amravati				
10	Bandobast maps	1:4000	Yes	-
11	SavistarBhumapan Mojni maps	1:1000	-	Yes
Aurangabad				
12	Others	1:1000	--	Yes
All Divisions				
13	City survey maps	1:500	-	Yes
14	Court Vatap maps	1:1000	-	Yes
15	Land acquisition Maps	1:1000	-	Yes
16	Non-Agricultural maps	1.500	-	Yes
			2	13

Work of Digitization in Cadastral Maps in Maharashtra

Sl.	Name of Document	No. of books of record/maps	No. of pages of record/maps	No. of polygons in maps	Size of map
1	Tippan	99887	4379680	6741930	A4
2	Kate Phalni / phodi tippan	13885	344642	1130422	A0
3	Phalni map/pothissa map/gat plot map	201316	1726201	11124354	A0
4	Fair sketch	28113	713075	5360896	A0
5	Court Watap maps	7758	33012	127077	A0
6	Savistar Bhumapan Mojni Maps		177445	2023819	A0
7	Gat book maps	30531	1429002	10453031	A0
8	Triangulation Sheets	11227	53477	1013510	A0
9	Cloth Mounted maps of survey number	995	1220	110402	A0
10	City survey maps	---	---	5465304	A4
11	Land acquisition Maps	55301	251507	2070346	A0
12	Non Agricultural maps	26171	108450	1542246	A0
13	Others	3713	57511	927837	A0
	Total	**4,78,897**	**92,75,222**	**4,80,91,174**	**---**

3. C. 3 Online Mutation (e-Mutation)

As per the guidelines mentioned in NLRMP, in case of Mutation of documents the process has been done immediately by the Tehsildar or by the City Survey Officers after the Registration process. 358 Tehsildar offices, 384 Dy.SLR offices, 429 SRO Offices in the state are provided with hardware i.e. computers and peripherals. 5058 digital signatures are provided to talathis and circle officers for authentication of digitally maintained RoR data. 741 offices (Tehsildar / Dy. SLR /

CTSO) in the state are provided with VPNoBB and MPLS connectivity by BSNL/MTNL. There are about 30+ Mutation types like Inheritance, Sale, Mortgages, Sub Division of Land, Area Correction, NA Mutation etc. There are about 12000+ Village Officers called as Talathi (Patwari) who maintain the village wise Record of Rights (7/12). Circle Officer (Revenue Inspector) approves or rejects transaction requests on this 7/12. All these users are associated with Sevarth ID as their Login-Ids. **Digital Signatures** are being given for the purpose of authentication of Transactions. **Linkage between Tehsil and Sub Registrar Office (SRO)** is established. The Land records are being linked real time with SRO for using Land Records data during Property Registration such as Village Code/Name, Survey Number, Seller/ Buyer Names and Areas etc. After Property Document Registration is completed, these details are sent to Land Records for initiation of Mutation Process. The whole process is automated as both Registration and Land Records Data Exchange is made.

Online Mutation process is rolled out for entire State. A web based application called e-Mutation has been developed by NIC. Department has already initiated pilot projects for in 6 talukas to handle mutations generated by registered documents. e-Mutation application has undergone various audits like functional test, performance test, user acceptance test and security audit. All audits have been completed. Required IT Infrastructure like desktops, printers, biometric devices, UPS etc. have been supplied to all Tehsildar, Deputy Superintendent of Land Records Offices and City Survey Offices. Establishment of network connectivity in the form of VPNoBB Connectivity to Tehsildar, Deputy Superintendent Land Records Offices and City Survey Offices to SDC has been completed. The application is hosted on State Data Centre (SDC) at Mumbai. Conversion of all RoR data from ISCII to UNICODE is completed. 679 Master trainers for e-

Mutation application have been trained at Land Record Training Academy Aurangabad through numerous trainings. Trained master trainers have conducted District level training at their respective districts.

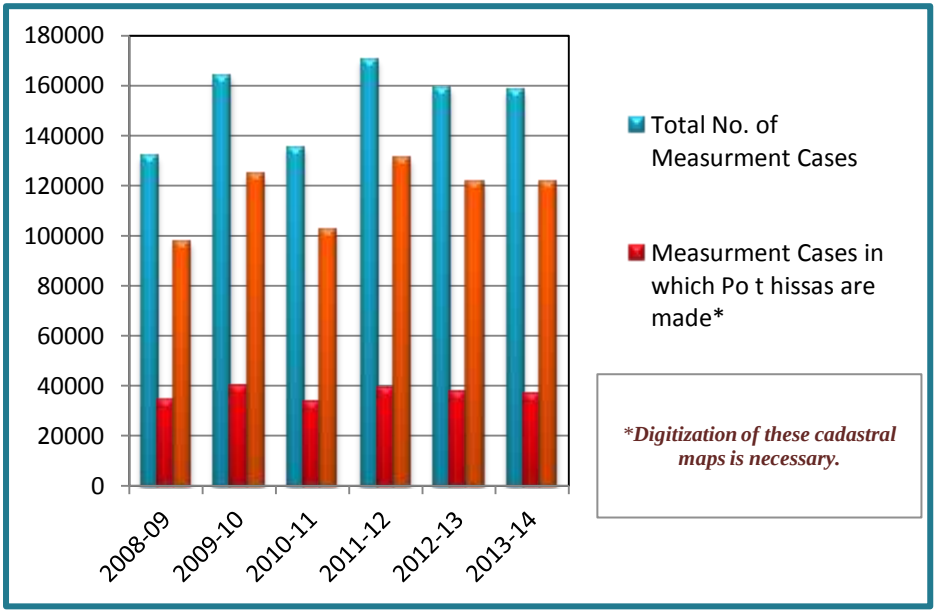
3. C. 4 Survey/Resurvey for updating Land Records

State Government has sanctioned Pilot project in 12 villages of Mulshi taluka in Pune district. Total Area covered under this pilot project is approximate 6735 hectares. Resurvey in pilot project is being carried out by using two methods i.e. ETS/GPS and HRSI to understand the merits-demerits and its practical usability for the entire state of Maharashtra. Proposal for cabinet approval for e-Resurvey of the state is in process at State Government level. Pilot project of Resurvey has been completed successfully.

Need of Resurvey in Maharashtra

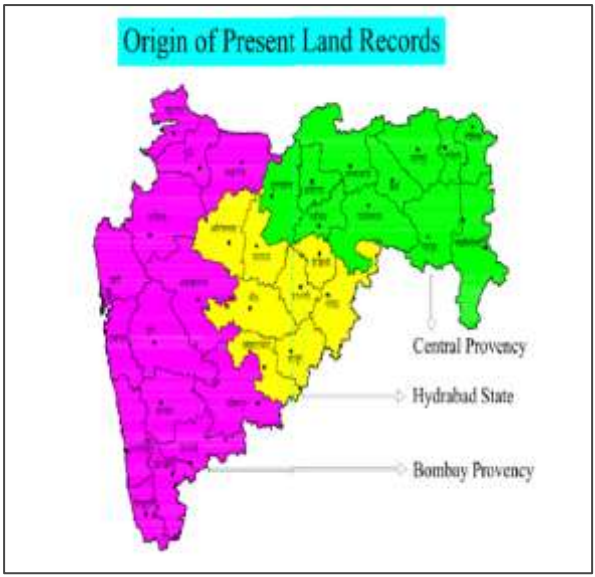
There are lots of reason behind the non transparent land records in Maharashtra, inadequate survey of land parcels is one of most viable reasons. In Maharashtra survey activity was completed almost 100 years ago. Changes in geography and in land records have taken place in the last 100 years but not been updated in the RoR or Maps. So that mismatch between the current ground reality and existing record has taken place. Developmental work or project like Dam, roads, canal, park etc. has been done over that period but not recorded in the RoR or in Village Maps.

Measurement Case Disposal



Factors influencing Resurvey in Maharashtra

- **Topography-** Hilly, Sub plateau formation and coastal areas
- **Different types of Records**- Central Province, Hyderabad State and Bombay province have different types of land records.



- **Number of Land holdings-** Maharashtra has witnessed a very strong increase in number of land holders. Increase in number of holdings - 136.74 Lakh holders Individual holders – 129.64 lakh Joint holders – 7.10 lakh.
- **Small size of land holdings**
- **Developments work** or project like Dam, roads, canal, park etc. not incorporated with Maps.
- **Record of Right not reflecting ground reality**

Pilot Project of Resurvey

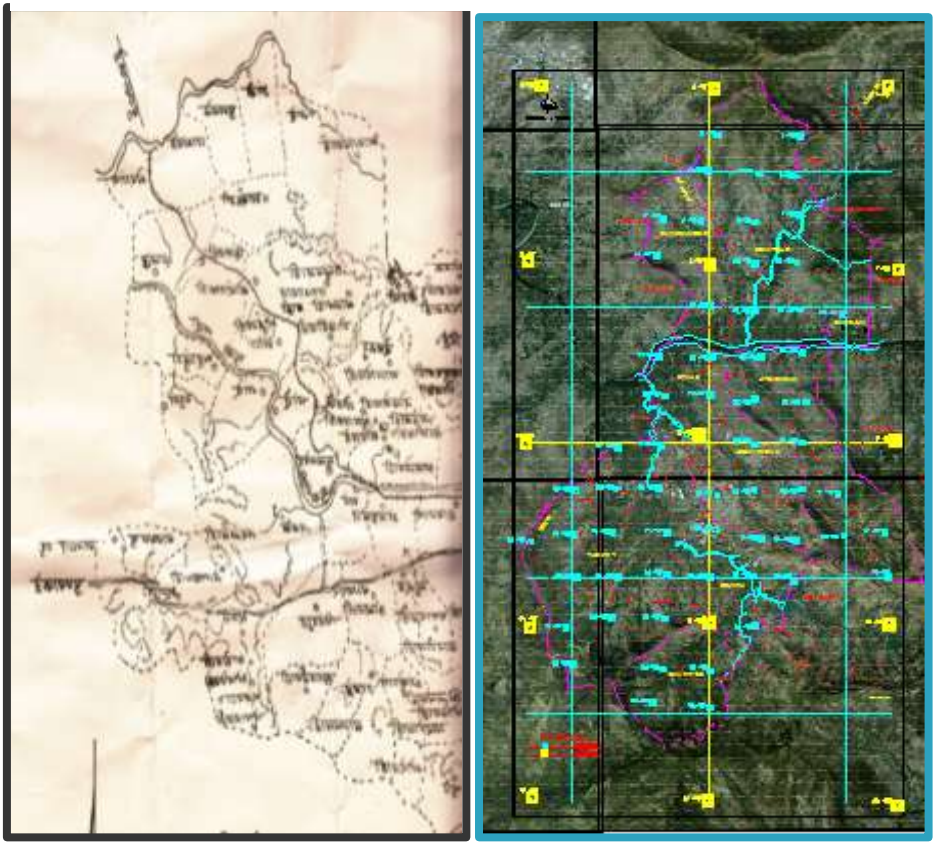
Pilot project for Resurvey has been done in Pirangut Valley 12 villages of Mulshi Taluka in Pune District. It comprised with 6735 Hectares area. Two Methods have been used for the pilot study of resurvey i. Pure Ground Method using E. T. S. & D. G. P. S and ii. Hybrid Approach by HRSI & ETS / DGPS. Total numbers of Ground Control Pints (GCP) are 176. To understand the best model for the entire State

and accuracy of Resurvey between ground method by using ETS/GPS or by Hybrid methods of HRSI & ETS/GPS, the 12 villages have been bifurcated into 5 and 7, where Pure ground method applying in 7 villages and hybrid methods used in 5 villages. Mulshi depicts the exact topographical picture of the entire state, that's why it's been selected for pilot level study on resurvey.

Sl.	Name of the Village	Area in Hectare
1	Pirangut	965.54
2	Mukhaiwadi	457.68
3	Ambadvet	917.00
4	Kasaramboli	516.02
5	Bhare	382.08
6	Botarwadi	492.79
7	Urawade	1085.70
8	Ghotawade	682.81
9	Bhegdewadi	502.73
10	Amlewadi	78.84
11	Godambewadi	252.60
12	Materewadi	400.20

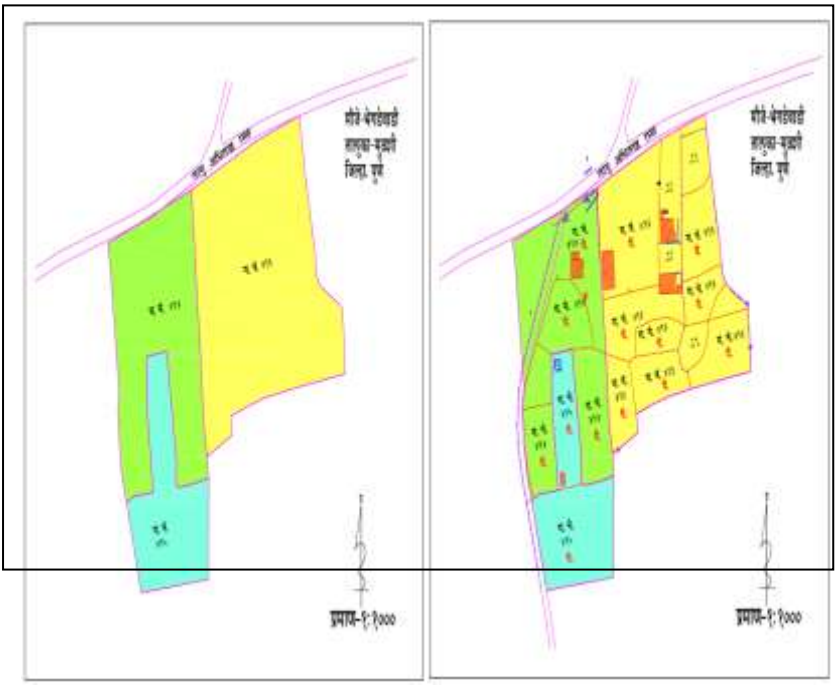
Survey of India had established Ground Control Points in Maharashtra under the National Grid Program in 1st phase 100-150 kms distance they had established 29 GCPs and in 2nd phase in 30-35kms 219 GCPs have been already established. For the pilot project 50 cm HRSI Stereo World View-2 has been used for accuracy. Geo-referencing and post processing have been done by the guidance of MRSAC, Nagpur.

Village Map GCP Network



Existing Capacities for the Pilot project of Resurvey- Traversing & Detailed measurement work is carried out by Departmental survey staff. 12 survey teams were appointed and each team constitutes one ETS machine, two surveyors, and two peons. One officer is controlling two teams. Computer, Plotter, Printer, Hardware & Software is supplied to these surveyors on field itself. In NLRMP the Resurvey component will be taking place very recently for the entire State. SC & LR Pune are asking to revise the rate to GoI for Resurvey and after that the entire process will revamp.

Output of Resurvey Pilot Project



Old Gut Map **New Gut Map**

After the resurvey process and making new map, Old Gut Map is totally different from the New Gut Map in respect of landholdings, shape and ownerships. From the example in the above maps, in Gut No. 493- 12 new parcels were found, Gut no 494- 5 new parcels were found, Gut no 495- 2 new parcels were found in new resurveyed and updated New gut map.

3. B. 5 Computerization of Land Records

Computerization of Land Records consisted of both Maps (Spatial) and attributes/RoRs (Non-Spatial). The integration of the two elements of land records need to provide to the citizens as directed in NLRMP norms. But in Maharashtra the integration of textural and spatial data is under progress, because of the new maps generation will take some more time.

All over state 34 Districts and 358 tehesils where 100% Data entry, Verification and Validation of 211 lakh Records of Rights(RoR) have been completed and legal Sanctity to computerized RoR has been provided vide GR No. CLR-1003/CR49/L-1 Cell dated 3-12-2005 and Gazette notification No. 15 Part 4B dated 17-1-2007. As per the NLRMP norms, every state should stop the manual issuance of RoRs, Maharashtra has stopped the

अ.नं	जिल्हा	जिल्ह्यातील एकुण ७/१२
1	पुणे	811050
2	सातारा	710544
3	सांगली	820589
4	कोल्हापुर	790465
5	सोलापुर	798458
6	मुंबई उपनगर	118154
7	ठाणे	698956
8	रायगड	700468
9	रत्नागिरी	775445
10	सिंधुर्ग	625454
11	अहमदनगर	886497
12	नाशिक	789456
13	धुळे	702164
14	नंदुरबार	675469
15	जळगाव	700965
16	औरंगाबाद	752485
17	जालना	595264
18	परभणी	750845
19	हिंगोली	625454
20	नांदेड	784568
21	लातुर	506048
22	उस्मानाबाद	545245
23	बीड	575468
24	बुलढाणा	604554
25	अकोला	664845
26	वाशीम	690646
27	अमरावती	520497
28	यवतमाळ	508065
29	वर्धा	520254
30	नागपुर	420489
31	भंडारा	308024
32	गोंदिया	401100
33	गडचिरोली	420801
34	चंद्रपुर	501214
एकुण		२१९०००००

manual issuance of RoRs in entirely for the State in 34 Districts and 358 tehesils. Issuance of hand written RoR is stopped in those villages the talathi office is situated in Taluka Head Quarter vides G.R. No. CLR-1008/CR2/L-1 Cell dated 27/5/2009. All Record of Rights will be hosted in State Data Centre. The entire mutation process will eventually be done in a digital format. This will lead to complete stoppage of issuance of RoR through manual procedure.

For the purpose to give services to the Citizens of Maharashtra, Department placed all 211 lakhs RoR which are available on http://mahabhulekh.maharashtra.gov.in into their website, as per the data available in the Office of the Tehsildar as on 26-03-2012. Issuance RoRs through Kiosks/Common Service Centres at Town/Village level for all the districts and tehsils is also possible. Computerized RoR are distributed on demand from Setu Kendra at District and Tehsil level, from "Maha e-Seva Kendra" located in rural area. Issuance of Digitally signed RoRs has been completed for the entire state. Total 11597 Digital Signatures are provided by State Government to Talathi, Circle officer, Maintenance Surveyor, Dy. SLR, CTSO. Issuance of Records of Rights (RoR) from Tehsil Computer Centre has been also done for the entire State. Establishment of computer centre at all over 358 Tehsil, 110 Sub Division and 34 District Data Centre, 1 State Level Monitoring Cell is completed.

Computerization of Land Records

Sl. No	Name of Division	Name of Districts	No. of RoRs (In Lakh)	RoR Computerized
(1)	**(2)**	**(3)**	**(4)**	(5)
1	**Mumbai**	Mumbai Sub Division	0.17	100%
2		Thane	10.27	100%
3		Raigad	10.34	100%
4		Ratnagiri	19.73	100%
5		Sindhudurg	15.78	100%
	Total	**5**	**56.28**	**100%**
6	**Nasik**	Nasik	9.79	100%
7		Dhule	3.97	100%
8		Nandurbar	2.06	100%
9		Jalgaon	6.78	100%
10		Ahmednagar	12.32	100%
	Total	**5**	**34.92**	100%
11	**Pune**	Pune	14.79	100%
12		Satara	12.97	100%
13		Solapur	8.73	100%
14		Sangli	7.97	100%
15		Kolhapur	9.82	100%
	Total	**5**	**54.28**	100%
16	**Aurangabad**	Aurangabad	3.06	100%
17		Jalna	2.43	100%
18		Parbhani	2.04	100%
19		Hingoli	1.75	100%
20		Nanded	4.54	100%
21		Beed	4.61	100%
22		Latur	2.80	100%
23		Usmanabad	2.73	100%
	Total	**8**	**23.96**	100%
24	**Amrawati**	Amrawati	4.28	100%
25		Buldhana	3.49	100%
26		Akola	2.73	100%
27		Washim	2.07	100%
28		Yawatmal	4.73	100%
	Total	**5**	**17.31**	**100%**
29	**Nagpur**	Nagpur	5.29	100%
30		Bhandara	3.92	100%
31		Gondia	4.64	100%
32		Gadchiroli	3.06	100%
33		Chandrapur	4.27	100%
34		Wardha	3.00	100%
	Total	**6**	**24.19**	**100%**
	Dist. Total	**34**	**210.94**	**100%**

Modern Record Rooms

Construction of Modern Record Rooms is under progress but Pilot project for Scanning of Old Land records in Mulshi and Haveli taluka of Pune districts has been completed. In this project land records in Tehsildar Record Room and Dy.SLR Record room are scanned along with metadata entry. Pilot project is concluded. Approximately 42 lakh documents have been scanned. Department has got a Document Management System (DMS) exclusively developed as per its needs and named it as **e-Records** application. Various audits like functional audit, performance audit, security audit and User Acceptance Tests are in progress.

Post pilot project, State has decided to implement scanning project in the entire state. RFP for the same has been approved by High Power Committee. RFP is published and agency has been finalized. Work order is being issued to agencies to start work of scanning in the State.

Structure of Modern Record Room in Maharashtra

Record rooms are physical infrastructure to store land records and other relevant records of a taluka. Each taluka has primarily two Record rooms at – 1.Tehsildar Office 2. Deputy Superintendent of Land Records Office and 3. City Survey Offices (wherever applicable). In Deputy Superintendent of Land Records Office following documents have been scanned and stored in the modern record rooms such as Tippan, Kami Jasti Patrak, Gunakar Book, Phalni Sheet, Scheme Book -Form No. 9(3),9(4) Akarbandh, Consolidation scheme Etc and in Tehsildar Offices Record Room Village forms - Form No.7/12,8A, Ferfaar Book/Mutation Register, Birth Certificate, Death Certificate, Land Acquisition Records, Land Grant Files, Non Agricultural Land Orders, Tenancy Orders etc have been kept. Till the date 4 offices where modern record room is being constructed are Dy SLR offices in Haveli and Tehesil offices at Haveli, Mulshi and Atpadi.

Maps Maintenance in Record Rooms	
D records	• Preserved for 1 year • Citizen's applications for copy.
C records	• **Preserved for 5 years.** • **Measurement Cases (These are not maps)**
B records	• **Preserved for 12 years.** • **'A' sheets of boundary confirmation measurement cases**
A records	• **Preserved permanently.** • **Tippan, Phalni measurement maps, etc**

3. C. 6 Training and Capacity Building

For the success of National Land Records Modernization Programme (NLRMP) initiatives and transparent land records methodology, relevant training and capacity building has to be done for all department officials on mass scale. Maharashtra has taken the initiatives for doing so. In order to achieve this it is decided to strengthen the land records training academy situated in Aurangabad. The academy is being provided with state of art facilities and technological instruments to make it a premier land records training academy in the country.

679 master trainers of various level government officials like District Domain Expert (DDE), Sub Divisional Officer, Tehsildar, Dy. Superintendent of Land Records, Circle officers and Talathies etc. have been trained. They have been trained on NLRMP applications like e Chawdi and e Mutation.

Capacity Building Training on Modern Record Room and Scanning (2014-15)

Training	Objective	Master Trainees
State Level Training	a. Introduction to Digitization Project b. Digitization Project Application Overview & Software demo. c. Digitization Process d. Administrative aspects of the project	All Collectors (Sensitization Training) Master Trainers (Tehsildar, Deputy SLR, CTSO, Surveyors) All DDES, All DSLRS
District Level Training		All Tehsildars, All Dy. SLRs, All CTSOs, All Surveyors
Taluka Level Training		Officials of dedicated team from Dy. SLR, CTSO

Capacity Building Training 2014-15 Modern Record Room-Scanning

Sl.	Level of Stakeholders	No. of Trainings	Subject of Training Programme	Duration	Name of the Trainings Institute	No. of Trainees
1.	**State Level**	3	Modern Record Room	2 days	LRTA Aurangabad/YASHADA, Pune	Training 1-34 Training 2- 238 Training 3-238
2.	**District Level**	1		2 days	District	1482
3.	**Tehsil Level**	1		2 days	Tehsil	2223
	Total					4215

Capacity Building Training on Digitization (2014-15)

Training	Objective	Master Trainees
State Level Training	a. Introduction to Digitization Project b. Digitization Project Application Overview & Software demo. c. Digitization Process d. Administrative aspects of the project	All Collectors (Sensitization Training) Master Trainers (Tehsildar, Deputy SLR, CTSO, Surveyors) All DDES, All DSLRS
District Level Training		All Tehsildars, All Dy. SLRs, All CTSOs, All Surveyors
Taluka Level Training		Officials of dedicated team from Dy. SLR, CTSO

Capacity Building Training 2014-15 Digitization

Sl.	Level of Stakeholders	No. of Trainings	Subject of Training Programme	Duration	Name of the Trainings Institute	No. of Trainees
1.	**State Level**	3	Digitization of Cadastral Maps	2 days	LRTA Aurangabad/YASHADA, Pune	Training 1-34 Training 2- 238 Training 3-238
2.	**District Level**	1		2 days	District	1149
3.	**Tehsil Level**	1		2 days	Tehsil	1149
	Total					2748

Capacity Building Training 2013-14 – Resurvey

Training on Resurvey has been done successfully in three levels State, District and Taluka. The topics of the training are as follows:

- Introduction to Resurvey Project.
- Procedure & stages of resurvey
- Work to be done by private agencies.
- Quality check work to be carried out by the department

State Level Training done in three stages, in Training 1 given to sensitize all the Collectors and DDLR, the total number of trainees is 33+10=43. Training 2 for the Deputy SLR, **Surveyors**, All DSLRs. Total number of participants in Training 2 and Training 3 are 175 + 175 = 350. District Level Training done for the All Tehsildars, All Circle Officers and All Dy.SLR, Surveyors, total number of participants is 3454. 19219 trainees including All Talathi & Surveyors have participated in tehesil level training where role of Talathi in Resurvey and role of Private vendors for resurvey have been discussed.

Capacity Building Training 2013-14 – Resurvey

Sl.	Level of Stakeholders	No. of Trainings	Subject of Training Programme	Duration	Name of the Trainings Institute	No. of Trainees
1.	**State Level**	3	Resurvey	1 day 7 days 4days	LRTA Aurangabad/YASHADA, Pune	393
2.	**District Level**	2		1 & 7 days	District	3454
3.	**Tehsil Level**	1		2 days	Tehsil	12719
	Total	6				16566

NLRMP IN PUNE DISTRICT: A BRIEF REVIEW

Pune District is in the western region in Maharashtra. Pune district lies in the Western Ghats or Sahyadri mountain range and it extends on to the Deccan Plateau on the east. Pune stands on the leeward side of the Western Ghats. Pune is at an altitude of 559m. (1863 ft.). Pune district is located between 17.5° to 19.2° North and 73.2° to 75.1° east. It is the second largest district in the state and covers 5.10% of the total geographical area of the state. The landscape of Pune district is distributed triangularly in western Maharashtra at the foothills of the Sahyadri Mountains and is divided into three parts: "Ghatmatha", "Maval" and "Desh".

Computerization of Land Records

In Pune District, Computerization of RoRs has been completed across all the 8 Sub-Divisions of almost 1920 villages. Total number of 13.78 lakhs RoR is available and all the RoRs have been computerized. Computerized RoR has been placed on the website for access by the citizens. In Mulshi taluka of Pune District, where pilot project has been completed for scanning all the land records and store in Modern Record Room. 2.87 lakhs Mutations have been computerized for the entire 1920 villages under 8 sub-divisions as on July-2014.

Computerization of Registration

In Pune District, 18 SROS are computerized from the total of 21 SROs, from those 18 SROs, Internet connectivity has been provided to 17 SROs. e-Registration facility is available in 19 SROs, e-Stamping and e-Valuation facility in the 19 SROs.

Status of Computerization of Registration in Pune

Year	No. of SROs	No. of SROs computerized	Internet Connectivity to SROs	E-Registration facility available in SROs (No)	E-Stamping facility in No of SROs	E-Valuation facility in no of SROs
2014-15	21	19	17	19	GRAS & e-SBTR in 19 SROs	19

Note: - Newly opened SROs Baramati - 2 and KHED -3 have no options for computerization of Registration

Digitization of Cadastral Maps

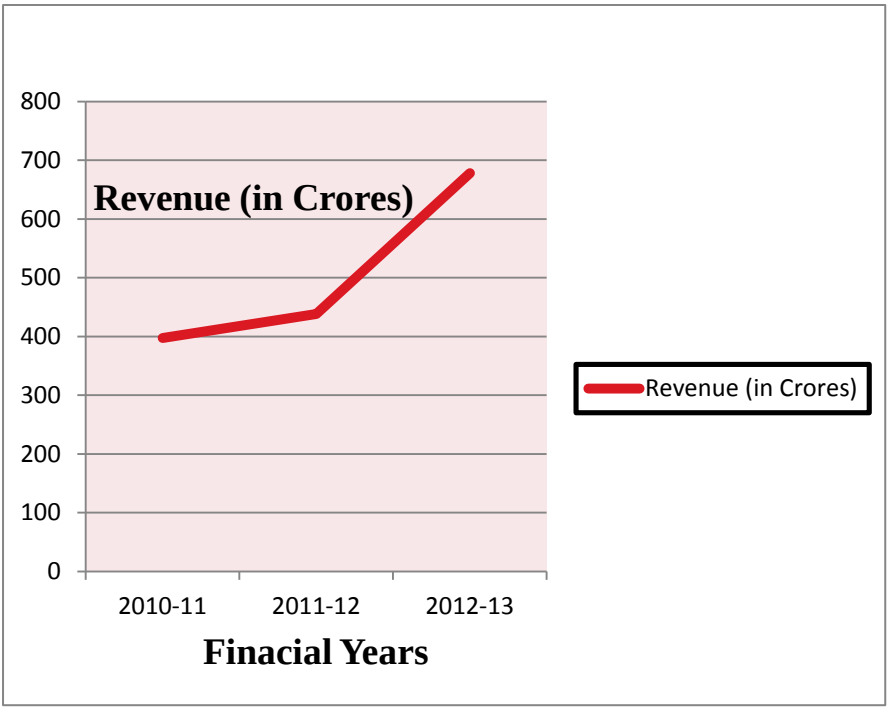
In Pune District Digitization of cadastral maps is under progress, pilot project for cadastral maps digitization in Mulshi taluka has been completed by private vendors. Administration has started the process to the citizens, whose plot has been digitized, they may rectify the maps and claim for changes. In Mulshi, one temporary set-up has taken place to provide citizen services to scrutinize their plots by own.

Pune District Digitization Information

Sl.	Tehsil	Total books	Total Sheets	Total Polygons
1	Haveli	1197	31940	146655
2	Purandar	2815	72052	301014
3	Baramati	3447	24788	161256
4	Velha	601	30171	81022
5	Indapur	1066	45438	143591
6	Daund	632	48087	418149
7	Maval	1863	102822	356530
8	Junnar	8802	61728	338454
9	Rajgurunag	2519	100464	686461
10	Aambegoa	3520	39539	185183
11	Shirur	905	83924	327007
12	Bhor	977	38299	161775
Total		**28344**	**679252**	**3307097**

Revenue Targets and Achievements

Year	Revenue Collection in Rupess (in Crore)	Growth rate (%)	Achie vements (%)
2013-14	689.58	1.75 %	98.51%



Revenue collection in Pune District

Financial Year	No. of Blocks/ Tehsils	No. of Deeds	Total Revenue (in Crores)
2010-11	19	113624	397.58
2011-12	19	114350	438.29
2012-13	19	125731	677.75

Chpater-4

CONCLUSION AND RECOMMENDATIONS

Conclusion:

Modernization of Land Records in Maharashtra is quite steady in progress, due to the efficiency of Settlement Commissioner and Director of Land Records Office, IG Registration and other government offices. For the last 20 years Maharashtra has been experiencing a huge pressure on land and revenue administration due to the demographic pressure and other socio-economic factors. However, State has implemented so many citizen-centric services like computerization of land records, online mutation or online registration process which will lead Maharashtra to a better future in land administration and management. State has implemented Cadastral maps digitization to provide maps to the citizens along with the computerized records of rights, for that purpose State has successfully completed lots of pilot projects. All RoRs are placed in the website but digitized plot maps are not available due to the different types of maps available in the state for different purposes and however, the resurvey is in progress, in order to complete the process of digitization of maps. Integration of Textural and Spatial data is also in progress. As per the NLRMP components are concerned, State has done a remarkable work in Online Mutation and Registration process but other components are still on the pipeline. To complete the NLRMP programme successfully, State needs to focus on the other components also. Dedication from state NIC and other Departments may successfully complete the programme to provide accurate land records data to the citizens of Maharashtra.

Major Challenges faced by the Land Administration, are as follows:

1. Revision of rates for Digitization of Cadastral Maps. Maharashtra has different types of maps for different purposes, so it is viable to digitize all types of map data. Digitization rates are quite high and due to that, digitization of maps for the whole state is not possible till the date.
2. The methodology followed by the State for Cadastral Resurvey is very intact and accurate, but it needs huge amount of money. The topography of Maharashtra is quite different than that of the other state. It may follow different technologies and methodology as per the topographic scenario; therefore it needs more funding.

3. Co-ordination amongst the various wings of Govt. i.e. Revenue, Land Records and Registration department is not good enough to execute the programme very successfully.

4. Control, Supervision, Monitoring and Review of project machinery in widespread Geographical mass of Maharashtra are quite difficult and time-consuming.

The State has both strengths and weakness to execute the NLRMP. The strength in its dedication of the departments and officials. The weaknesses on the other hand are political obligations and compulsions. State is adequate enoughto execute the programme successfully; Online Registration and Mutation proves that, interconnectivity between the departments has also been established. Modules of online registration like e-payment or e-StepIn are the unique features in Country, developed by the State. But the state is far more lagging behind with respect to integration of textual and maps data and also to the process of upload to websites. Therefore, citizens didn't access their land information online. Digitization of cadastral maps, ground truthing of

old cadastral maps with the real time satellite imagery to generate new maps, geo-referencing of maps with reference to the satellite data or GPS points or by aerial photos are yet to be done. Modern Records Room and Resurvey of the entire sate with modern technologies are yet not done very progressively. However, it is expected that the state will come up with new approaches to address these issues soon.

Recommendations:

Maharashtra State has put a tremendous effort to modernize and develop an authentic land records and has provided good services in land administration to the citizens.

1. All kinds of cadastral maps should be digitized by the vendors for the entire state. Citizens are not getting proper information of their land, because of the failure of integration of Maps and RoRs; it will be done when all types of maps will be digitized. So it's quite inevitable to create map database for the entire state.

2. RoRs of the state has been digitized in order to construct modern record room for the entire state to preserve the rights.

3. State Level Data Centre (SLDC) should be constructing the Office of Settlement Commissioner and Land Records Office in Pune and all the Taluka, Block and District level data centre should be connected with that. All the up gradation has been done by the tehsil or in district level. All kinds of land related documents like ownership, legal status, registration or mutation should also be available in the State Level Data Centre.

4. NIC Maharashtra like W.B should develop system Software to check and validate the digitized maps online. So the manpower will be utilized for other works.

5. Capacity Building and training from the lower to upper staff need to be maximized. Department should identify officers and Staffs who should be responsible for the modernization of land records programme. The persons who understand the programme and policies very well, must put their effort only in this work not in any other works of the Department and the State, by which the trained manpower would be utilized properly in this programme.

6. Interconnectivity and good relations with the other departments who worked hard to make this programme successful are much needed. Taluka, District, land records department, Revenue, survey department and NIC should jointly work for the better execution of this Programme.

7. Government should take further policy initiative for cadastral survey. Different areas have different needs for choosing survey methodology and model. So survey should be started for the entire region on the basis of the topography and others related to this.

Annexure-I

Statement showing release of funds, Utilization and outstanding balance under the Centrally Sponsored Scheme of Computerization of Land Records (CLR)

(Rs. In Lakh)

Sl. No.	Name of State/Uts	Funds released since inception	Funds utilised	Outstanding balance	Ucs upto
1	ANDHRA PRADESH	3708.31	3457.11	251.20	29.02.2012
2	ARUNACHAL PRADESH	75.30	75.30	0.00	31.3.2008
3	ASSAM	2010.30	480.50	1529.80	1.4.2010
4	BIHAR*	3105.72	3105.72	0.00	20.01.2014
5	GUJARAT	3257.67	2616.43	641.24	31.3.2008
6	GOA	243.90	240.83	3.07	1.4.2010
7	HARYANA	1575.30	1575.30	0.00	21.01.2014
8	H.P.	1445.51	1029.56	415.95	1.4.2010
9	J & K	1828.00	286.00	1542.00	31.3.2008
10	KARNATAKA	3831.71	2650.36	1181.35	31.3.2010
11	KERALA	1261.94	1261.94	0.00	29.02.2012
12	Madhya Pradesh	5168.46	4372.69	795.77	11.5.2010
13	MAHARASHTRA	4247.40	4183.11	64.29	27.06.2013
14	MANIPUR	348.77	149.00	199.77	31.3.2010
15	MEGHALAYA	28.00	28.00	0.00	31.3.2010
16	MIZORAM	569.96	569.96	0.00	29.02.2012
17	NAGALAND	213.55	213.55	0.00	31.3.2010
18	ORISSA	4321.07	3590.82	730.25	31.3.2010
19	PUNJAB	562.25	429.61	132.64	30.11.2010
20	RAJASTHAN	3612.27	3198.71	413.56	1.01.2013
21	SIKKIM	210.73	207.23	3.50	1.4.2010
22	TAMIL NADU	3698.34	3572.86	125.48	29.02.2012
23	TRIPURA	738.03	738.03	0.00	31.3.2011
24	UTTAR PRADESH	3609.45	2834.55	774.90	29.02.2012
25	WEST BENGAL	3934.16	3934.16	0.00	1.01.2013
26	CHHATTISGARH **	1061.50	1061.50	0.00	31.3.2010
27	JHARKHAND	1701.50	725.76	975.74	31.3.2010
28	UTTRAKHAND	1874.55	660.08	1214.47	31.3.2010
29	D & N. H.	12.38	0.22	12.16	31.3.2010
30	DELHI	101.13	4.31	96.82	31.3.2010
31	Puducherry	189.09	77.15	111.94	31.3.2010
32	CHANDIGARH	15.00	0.00	15.00	31.3.2010
33	Daman & Diu	50.00	6.58	43.42	31.3.2010
34	Lakshadweep	50.00	15.90	34.10	29.02.2012
		58661.25	47352.83	11308.42	

* Excludes Rs. 217.50 Lakh allotted by the State Govt. for the Districts of Jharkhand
** Includes Rs. 217.50 Lakh allotted by Govt. of Bihar for the Districts of Jharkhand

** Excludes Rs.406.00 Lakh received from Govt. of Madhya Pradesh
* Includes Rs. 406.00 Lakh transferred to Govt. Chattisgarh

Annexure-II

Statement showing Release of funds, Utilisation, Pending UCs and Outstanding balance under the Centrally Sponsored Scheme of Strengthening of Revenue Administration & Updating of Land Records (SRA & ULR)

(Rs. In Lakh)

Sl. No.	Name of State/Uts	Fund released since inception	Funds utilised	outstanding balance	Pending Ucs
1	Andhra Prdesh	1692.80	885.50	807.30	1
2	Arunachal Prdesh	173.75	173.75	0.00	0
3	Assam	888.45	357.18	531.27	1
4	Bihar	1979.38	1423.59	555.79	1
5	Chhattisgarh	1447.18	662.20	784.98	1
6	Gujarat	2030.20	1687.26	342.94	1
7	Goa	585.48	572.33	13.15	1
8	Haryana	848.535	848.54	0.00	1
9	Himachal Prdesh	959.38	744.88	214.50	1
10	J & K	1509.00	1312.88	196.12	1
11	Jharkhand	250.00	0.00	250.00	1
12	Karnataka	2190.35	681.59	1508.76	1
13	Kerala	2589.84	2513.01	76.83	1
14	M.P.	5126.84	4738.81	388.03	1
15	Maharashtra	4877.75	4815.25	62.50	1
16	Manipur	60.18	0.15	60.03	1
17	Meghalaya	74.00	74.00	0.00	0
18	Mizoram	2144.79	2144.79	0.00	0
19	Nagaland	958.36	958.36	0.00	1
20	Orissa	1523.47	762.84	760.63	1
21	Punjab	1548.31	1427.19	121.12	1
22	Rajasthan	2360.29	1833.74	526.55	1
23	Sikkim	186.46	186.46	0.00	0
24	Tamil Nadu	1012.68	776.85	235.83	1
25	Tripura	1209.14	1192.09	17.05	0
26	Uttar Pradesh	4521.58	2551.68	1969.90	1
27	Uttrakhand	549.71	298.99	250.72	1
28	West Bengal	3629.64	2464.76	1164.88	1
29	A & N Islands	43.03	28.18	14.85	1
30	Chandigarh	32.00	32.00	0.00	0
31	D & N Haveli	219.74	213.74	6.00	1
32	Delhi	62.00	44.26	17.74	1
33	Daman & Diu	6.50	6.50	0.00	0
34	Lakshdweep	61.23	50.71	10.52	1
35	Pondicherry	184.15	93.21	90.94	1
	TOTAL	47536.17	36557.26	10978.91	28

Annexure-III

FINANCIAL PROGRESS (Release of Funds & Utilization reported) under the NLRMP 2008-09 to 2013-14 — Rs. in lakh

Sl. No.	States/UTs	Released	Districts covered	Unspent balance	2013-14					
					Funds released	Districts covered	Total Released	Districts covered	Utilization reported	Unspent balance
1	Andhra Prd.	5505.440	6	5486.690			5505.440	6	18.75	5486.690
2	Arunachal Prd.	48.600	1	48.600			48.600	1		48.600
3	Assam	2135.745	27	2135.745			2135.745	27		2135.745
4	Bihar	5404.408	27	2703.008	2327.815	11	7732.223	38	2701.4	5030.823
5	Chhattisgarh	3345.565	13	3188.940			3345.565	13	156.625	3188.940
6	Gujarat	6456.755	22	4810.415			6456.755	22	1646.34	4810.415
7	Goa	0.000	0	0.000			0.000	0		0.000
8	Haryana	3886.430	21	2842.430			3886.430	21	1044	2842.430
9	Himachal Prd.	2320.570	7	1859.340			2320.570	7	461.23	1859.340
10	J & K	889.960	7	889.960			889.960	7		889.960
11	Jharkhand	2389.910	20	2389.910	117.64		2507.550	20		2507.550
12	Karnataka	2451.200	6	2451.200			2451.200	6		2451.200
13	Kerala	926.240	7	110.500	632.00	4	1558.240	11	815.740	742.500
14	M.P.	10102.640	27	7167.150			10102.640	27	2935.49	7167.150
15	Maharashtra	4717.150	16	4304.890	39.2		4756.350	16	1302.34	3454.01
16	Manipur	168.530	4	168.530			168.530	4		168.530
17	Meghalaya	623.750	5	623.750			623.750	5	78.07	545.680
18	Mizoram	766.770	3	177.810			766.770	3	588.96	177.810
19	Nagaland	815.135	6	476.875			815.135	6	729.435	85.700
20	Odisha	2580.41225	15	182.58725	6252.1	16	8832.51225	31	2397.825	6434.68725
21	Punjab	1440.063	5	1362.063			1440.063	5	78.00	1362.063
22	Rajasthan	4137.210	4	3907.520			4137.210	4	39.94	4097.270
23	Sikkim	231.900	4	170.510			231.900	4	61.39	170.510
24	Tamil Nadu	281.140	2	109.950			281.140	2	171.19	109.950
25	Tripura	1595.351	7	1055.986			1595.3506	7	539.365	1055.9856
26	Uttar Pradesh	1852.488	26	1826.498			1852.488	26	538.35	1314.138
27	Uttarakhand	72.000	0	72.000			72.000	0	0	72.000
28	West Bengal	7530.570	19	7006.550			7530.570	19	524.02	7006.550
29	A & N Islands	72.250	1	20.850			72.250	1	51.4	20.850
30	Chandigarh	0.000	0	0.000			0.000	0		0.000
31	D & N Haveli	96.040	1	71.750			96.040	1	24.29	71.750
32	Delhi	132.070	3	132.070			132.070	3	0	132.070
33	Daman & Diu	103.720	2	103.720			103.720	2		103.720
34	Lakshdweep	166.410	1	29.750			166.410	1	136.66	29.750
35	Puducherry	344.570	2	344.570			344.570	2		344.570
36	Misc. (MC)	397.800	0	280.910	34.87		432.670	0	116.89	315.780
Total All States/UTs		**73988.79185**	**317**	**58513.02685**	**9403.625**	**31**	**83392.41685**	**348**	**17157.700**	**66234.71685**

Annexure-IV

FINANCIAL PROGRESS (Release of Funds & Utilization reported) under the NLRMP 2008-09 to 2014-15
(As on 19.06.2014)

Rs. in lakh

Sl. No.	States/UTs	Year														Total		Utilization Reported	Unspent Balance
		2008-09		2009-10		2010-11		2011-12		2012-13		2013-14		2014-15					
		Funds released	Districts covered	Funds released	Districts covered	Funds released	Districts covered	Funds released	Districts covered	Funds released	Districts covered	Funds released	Districts covered	Funds released	Districts covered	Funds released	Districts covered		
1	Andhra Pradesh	3356.60	5			117.64		900.00	1	1131.20						5505.44	6	18.75	5486.69
2	Arunachal Pradesh					48.60	1									48.60	1	0.00	48.60
3	Assam			1806.12	20	329.63	7					1.81				2137.56	27	0.00	2137.56
4	Bihar	748.48	2	720.80	3	744.43	5	1623.23	11	1567.47	6	2327.82	11			7732.22	38	4206.34	3525.88
5	Chhattisgarh			553.86	2	414.71	3	1500.00	8	877.00						3345.57	13	156.63	3188.94
6	Gujarat	715.45	3			5527.24	12			214.07	7	1511.00	4	832.00	4	8799.76	30	3270.75	5529.01
7	Goa													398.55	2	398.55	2	0.00	398.55
8	Haryana	285.06	2	1374.94	8	2101.48	11			124.95		30.00		99.20		4015.63	21	1929.63	2086.00
9	Himachal Pradesh	488.95	3	326.82				500.00	4	1004.80		10.78		1194.24	5	3525.59	12	1846.24	1679.35
10	Jammu & Kashmir**	65.63	2			235.20			7	589.05		333.88				1223.76	9	0.00	1223.76
11	Jharkhand					162.25	4	2227.66	16			117.64				2507.55	20	1.19	2506.36
12	Karnataka									2451.20	6					2451.20	6	0.00	2451.20
13	Kerala			700.79	3			225.45	4			632.00	4			1558.24	11	815.74	742.50
14	Madhya Pradesh	1266.33	5	4168.04	15	3031.83		1602.59	7	33.85		47.00				10149.64	27	2935.49	7214.15
15	Maharashtra	3693.01	6	788.78		117.64	10	117.00		0.72		1819.01	18			6536.16	34	1457.36	5078.80
16	Manipur	168.53	4													168.53	4	0.00	168.53
17	Meghalaya	431.43	3	192.32	2											623.75	5	78.07	545.68
18	Mizoram					323.72	1	265.24	1	177.81	1	661.31				1428.08	3	588.96	839.12
19	Nagaland	58.97	2			181.63	2	574.54	2			612.48	3			1427.62	9	729.44	698.19
20	Odisha	924.27	4	1467.22	3	147.05				41.87	8	7047.62	15			9628.04	30	3311.64	6316.40
21	Punjab	814.17	2			585.61	3			40.28		39.20				1479.26	5	78.00	1401.26
22	Rajasthan			3901.94	4	235.27						4137.34	7			8274.55	11	39.94	8234.61
23	Sikkim	9.36	3			65.70	1	156.84				594.29				826.19	4	179.40	646.79
24	Tamil Nadu							281.14	2			1101.46	30			1382.60	32	263.00	1119.60
25	Tripura	271.68	4			385.65		117.63		820.39	3	57.28				1652.63	7	1082.82	569.81
26	Uttar Pradesh	1346.50	5	70.86		435.13	3				18					1852.49	26	538.35	1314.14
27	Uttarakhand															0.00	0	0.00	0.00
28	West Bengal	3991.55	10	3264.54	9			235.28		39.20						7530.57	19	1600.00	5930.57
29	A & N Islands	25.71	1	28.39		12.15		6.00								72.25	1	51.40	20.85
30	Chandigarh															0.00	0	0.00	0.00
31	D & N Haveli*	24.29	1	33.68		33.68				4.39		3.42				99.46	1	24.29	75.17
32	Delhi									132.07	3					132.07	3	0.00	132.07
33	Daman & Diu			103.72	2											103.72	2	24.51	79.21
34	Lakshdweep			4.21	1	162.20										166.41	1	136.66	29.75
35	Puducherry	190.00	2	36.93				117.64								344.57	2	0.47	344.10
36	Misc.					80.00		155.00		234.80		222.69				878.32		285.58	592.74
Total All States/UTs		**18875.96**	**69**	**19543.96**	**72**	**15478.43**	**63**	**16685.24**	**63**	**9485.12**	**52**	**21308.03**	**92**	**2523.99**	**11**	**98006.56**	**422**	**25650.64**	**72355.91**

* Revalidated

** Surrender

Annexure-V

National Land Records Modernisation Programme (NLRMP) Services

Sr. No	States	ROR Data entry	Mutation	ROR services & Mutation Abstract	ROR on the Web	Computerisation of Registration	Services at SRO	Integration
1	Andhra Pradesh	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	Arunachal Pradesh	No	No	No	No	No	No	No
3	Assam	Under Progress	Under Progress	Yes	Yes	Yes	Yes	Yes
4	Bihar	Under Progress	Under Progress	Yes	Under Progress	Yes	No	No
5	Chhattisgarh	Yes	Yes	Yes	Yes	Under Progress	No	No
6	Gujarat	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	Goa	Yes	Yes	Yes	Yes	Yes	No	Yes
8	Haryana	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	Himachal Pradesh	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10	Jammu & Kashmir	Under Progress	No	No	No	No	No	No
11	Jharkhand	Under Progress	Under Progress	Under Progress	No	Yes	No	No
12	Karnataka	Yes	Yes	Yes	Yes	Yes	No	Yes
13	Kerala	Under Progress	Under Progress	Under Progress	No	Yes	Yes	No
14	Madhya Pradesh	Yes	Yes	Yes	Yes	Under Progress	Under Progress	No
15	Maharashtra	Yes	Yes	Yes	Yes	Yes	Yes	Yes
16	Manipur	Yes(plain dists)	Yes	Yes	No	Under progress	No	No
17	Meghalaya	No	No	No	No	No	No	No
18	Mizoram	Under Progress	Under Progress	Under Progress	No	No	No	No
19	Nagaland	No	No	No	No	No	No	No
20	Odisha	Yes	Yes	Yes	Yes	Yes	Yes	Yes
21	Punjab	Yes	Yes	Yes	Yes	Yes	Yes	No
22	Rajasthan	Yes	Yes	Yes	Yes	Yes	Yes	Under progress
23	Sikkim	Yes	Yes	Yes	No	Yes	Yes	No
24	Tamil Nadu	Yes	Yes	Yes	Yes	Yes	Yes	No
25	Tripura	Yes	Yes	Yes	Yes	Yes	Yes	No
26	Uttar Pradesh	Yes	Yes	Yes	Yes	Yes	Yes	No
27	Uttarakhand	Yes	yes	Yes	Yes	Yes	Yes	No
28	West Bengal	Yes	Yes	Yes	No	Yes	Yes	No
29	Andaman & Nicobar	Under progress	No	No	No	No	No	No
30	Chandigarh	No	No	No	No	Under progress	Under progress	No
31	Dadra Nagar Haveli	No	No	No	No	Yes	Yes	No
32	Daman & Diu	Under progress	No	No	No	No	No	No
33	Delhi	Under progress	Under progress	Under progress	No	Yes	Yes	No
34	Lakshadweep	Under progress	No	No	No	No	No	No
35	Puducherry	Yes	Yes	Yes	Yes	Yes	Yes	No
Summary		ROR Data entry	Mutation	ROR services & Mutation Abstract	ROR on the Web	Computerisation of Registration	Services at SRO	Integration of Land Records &
		Yes = 20	Yes = 20	Yes = 22	Yes = 18	Yes = 23	Yes = 19	Yes = 9
		No = 5	No = 9	No = 9	No = 16	No = 8	No = 14	No = 25
		Under Progress = 10	Under Progress=6	Under Progress = 4	Under Progress = 1	Under Progress = 4	Under Progress = 2	Under Progress = 1

Annexure-VI

National Land Records Modernisation Programme (NLRMP) Services

Sr. No	States	Record Rooms	Cadastral Maps	Map Service	Survey/Resurvey	Access to Banks	Access to Courts	Licensed Surveyors	Delivery through Kiosk
1	Andhra Pradesh	Under Progress	Yes/Scanning	Yes	Under Progress	Discussions on	No	Yes	Yes
2	Arunachal Pradesh	No	No	No	No	No	No	No	No
3	Assam	No	Under Progress	No	No	No	No	No	No
4	Bihar	Under Progress	Under Progress	No	Under Progress	Under Progress	No	No	No
5	Chhattisgarh	No	yes	yes	No	No	No	No	No
6	Gujarat	Under Progress	yes	yes	Under Progress	Yes	No	Yes	Yes
7	Goa	No	Yes	Yes	Yes	Under Progress	Under Progress	No	Yes
8	Haryana	Under Progress	Under Progress	Under Progress	Under Progress	Under Progress	Under Progress	No	Yes
9	Himachal Pradesh	Under Progress	Under Progress	Under Progress	Under Progress	Under Progress	Under Progress	No	Yes
10	Jammu & Kashmir	Under Progress	Under Progress	No	Under Progress	No	No	No	No
11	Jharkhand	No	Under Progress	No	No	No	No	No	No
12	Karnataka	No	No	No	No	Yes	Discussions on	Yes	Yes
13	Kerala	No	Under Progress	Under Progress	Under Progress	No	No	No	Yes
14	Madhya Pradesh	Under progress	Under Progress	Under Progress	No	No	No	No	Yes
15	Maharashtra	Under Progress	Under Progress	Under Progress	Under Progress	No	No	No	No
16	Manipur	No	No	No	No	No	No	No	No
17	Meghalaya	No	No	No	No	No	No	No	No
18	Mizoram	No	No	No	No	No	No	No	No
19	Nagaland	No	No	No	No	No	No	No	No
20	Odisha	Under progress	Under Progress	No	No	No	No	No	No
21	Punjab	Under progress	Under Progress	No	No	No	No	No	Yes
22	Rajasthan	Under progress	Under Progress	No	No	No	No	No	Yes
23	Sikkim	Under progress	Under Progress	No	No	No	No	No	No
24	Tamil Nadu	Under progress	Under Progress	No	No	No	No	No	No
25	Tripura	Under progress	Under Progress	Under progress	No	No	No	No	No
26	Uttar Pradesh	Under progress	Under Progress	No	No	No	No	No	Yes
27	Uttarakhand	No	No	No	No	No	No	No	No
28	West Bengal	Under progress	Yes	Yes	No	No	No	No	No
29	Andaman & Nicobar	No	No	No	No	No	No	No	No
30	Chandigarh	No	No	No	No	No	No	No	No
31	Dadra Nagar Haveli	No	No	No	No	No	No	No	No
32	Daman & Diu	No	No	No	No	No	No	No	No
33	Delhi	No	No	No	No	No	No	No	No
34	Lakshadweep	No	No	No	No	No	No	No	No
35	Puducherry	Under progress	Yes	No	No	No	No	No	No
	Summary	Record Rooms	Cadastral Maps	Delivery of Maps as service	Survey/Resurvey	Access to Banks	Access to Courts	Licensed Surveyors	Delivery through
		Yes = 0	Yes = 6	Yes = 5	Yes = 1	Yes = 2	Under Progress = 3	Yes =3	Yes = 11
		No = 18	No = 13	No = 24	No = 25	No = 28	Discussions on = 1	No = 32	No = 24
		Under Progress = 17	Under Progress = 16	Under Progress = 6	Under Progress= 8	Under Progress =4	No = 31		
						Discussions on=1			

Annexure-VII

NLRMP Government of India Grants Status up to May 2014

Sl.	Components	Grants Received Rs. in lakhs	Expenditure Rs. in lakhs	Balance Rs. in lakhs
1	Computerization of Land Records Data Entry/Re-entry/ Data Conversion	170.00	164.4739	5.5261
2	Digitization of Cadastral Maps	84.36	11.2598	73.1002
3	Inter connectivity among revenue offices	1253.00	801.1615	451.8385
4	Survey/Resurvey and Updating of Survey & Settlement Records	406.65	0.00	406.65
5	Modern Record Rooms/Land Record Management Center at Tehsil	3626.6810	11.7978	3614.8832
6	Computerization of SRO	141.5663	23.89	117.67
7	Data Entry of valuation details	13.22	0.00	13.22
8	Data Entry of Legacy Encumbrance data (Index II)	23.25	0.00	23.25
9	Connectivity of SRO with Revenue office	392.87	192.59	200.29
10	State level data center	150.00	150.00	0.00
11	Training and Capacity Building	234.64	153.2950	81.3450
12	PMU	39.20	0.8637	38.3363
13	Other	0.7273	0.7273	0.00
	NLRMP GOI Total	**6536.1752**	**1510.0595**	**5026.1158**

Annexure-VIII

NLRMP Government of Maharashtra Grants Status up to May 2014

Sl.	Components	Grants Received Rs. in lakhs	Expenditure Rs. in lakhs	Balance Rs. in lakhs
1	Survey/Resurvey and Updating of Survey & Settlement Records	406.6505	48.7196	357.9309
2	Modern Record Rooms/ Land Record Management Center at Tehsil	1846.87	0.00	1846.87
3	Computerization of SRO	424.6989	146.0300	278.6689
4	Data Entry of valuation details	39.6600	0.00	39.6600
5	Data Entry of Legacy Encumbrance data (Index II)	69.7539	0.00	69.7539
6	Connectivity of SRO with Revenue office	1178.6364	580.9806	597.6558
	NLRMP GoM Total	**3966.2747**	**775.7302**	**3190.5445**

Annexure-IX

Relative Human Development Status of Districts of Maharashtra: 2001 and 2011

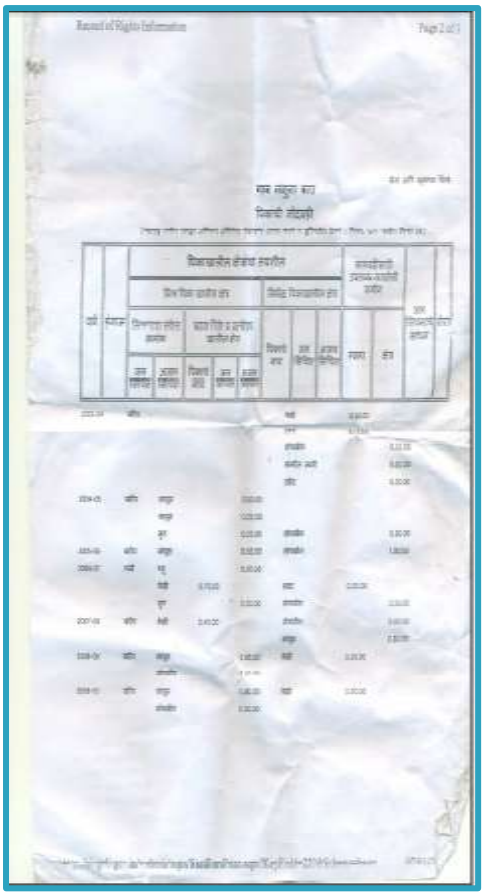
District	HDI 2001	Relative Category	District	HDI 2011	Relative Category
Nandurbar	.513	Low	Nandurbar	.604	Low
Gadchiroli	.538		Gadchiroli	.608	
Jalna	.554		Washim	.646	
Washim	.554		Hingoli	.648	
Nanded	.558		Osmanabad	.649	
Hingoli	.561		Nanded	.657	
Buldana	.567		Jalna	.663	
Parbhani	.578		Latur	.663	
Dhule	.579		Dhule	.671	
Osmanabad	.588	Medium	Beed	.678	Medium
Yavatmal	.592		Parbhani	.683	
Latur	.595		Buldana	.684	
Beed	.606		Yavatamal	.700	
Gondiya	.617		Gondiya	.701	
Bhandara	.623		Amravati	.701	
Jalgaon	.624		Bhandara	.718	
Solapur	.624		Chandrapur	.718	
Ahmednagar	.626	High	Ahmednagar	.720	High
Ratnagiri	.629		Akola	.722	
Akola	.631		Wardha	.723	
Amravati	.633		Jalgaon	.723	
Wardha	.634		Aurangabad	.727	
Chandrapur	.637		Solapur	.728	
Aurangabad	.650		Ratnagiri	.732	

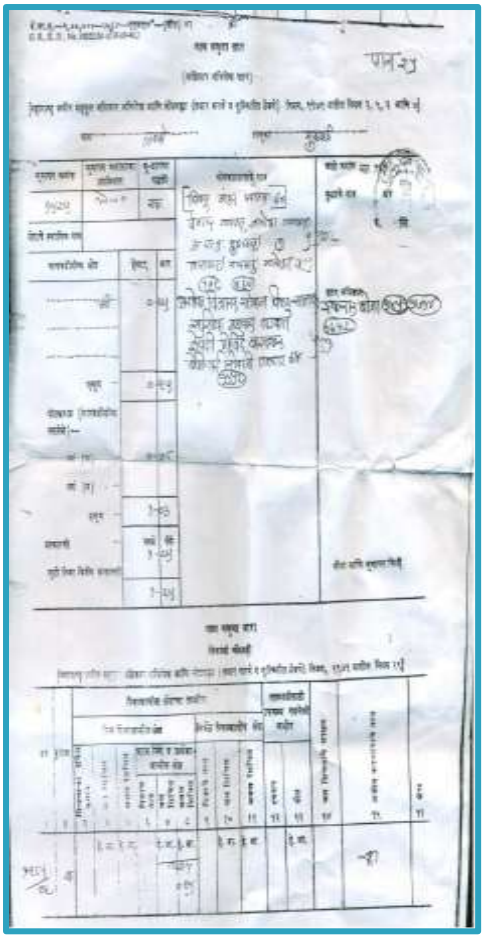
Nashik	.652		Satara	.742	
Satara	.661	Very High	Sangli	.742	Very High
Sindhudurg	.667		Nashik	.746	
Sangli	.670		Sindhudurg	.753	
Kolhapur	.678		Raigarh	.759	
Nagpur	.691		Kolhapur	.770	
Raigarh	.717		Nagpur	.786	
Thane	.721		Thane	.800	
Pune	.722		Pune	.814	
Mumbai	.756		Mumbai	.841	
Maharashtra	***.666***		***Maharashtra***	***.752***	

Source: Maharashtra Human Development Report 2012

Annexure- X

Computerized Copy of Records of Rights provide to Citizens (Mulshi Taluka)





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