

DIGITALIZATION OF LAND RECORDS IN INDIA

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INTRODUCTION

Digitization is a process that has transformed every industry and the real estate sector has not been unscathed from it. It is transforming real estate in all aspects of the sector. In the real estate sector land is a precious commodity which accounts for major cost component, until recently, there are only a few countries which are having an electronic public register of real estate. India is moving forward in this space but there is a need for much more to be achieved.

Most of the land records in our country in the past were through either paper record which included the name of all the occupants or village maps marking boundaries. The biggest challenge was the land ownership issue which led to a property dispute. One was only presumed to be an owner and unless proved he will not be considered as a conclusive owner. Hence, making land records available to be checked became the objective of the Government of India around the late 80s. In order to give effect to this Government of India in August 2008 launched the Digital India Land Records Modernization Programme (DILRMP). Under this programme, digitization and computerization of land records is a responsibility of the states, was supposed to cover 620 districts by 2017 at the close of 12th Plan.

Due to the recent land scam case that has come up against retired IAS officer GS Sandhu, who transferred a society deed measuring 40,000 square yards of land to a builder against the norms in 2011 when he was on duty. In the light of this land scam, Modi government in the year 2016-17 took a step and supported The Land Transformation Management System to overcome this nuisance of illegal land acquisition cases. This step will put an end to the age-old malpractices regarding fraud in land transactions. The scheme is of digitization of land records in 2016 is relaunched as National Land Records Modernization Programme. The modernization of management of land records will enhance transparency and minimize the scope of land disputes

in the land records maintenance system. The Union Finance Minister Arun Jaitley provided Rs 150 crore for this scheme to be implemented, which is a necessary step, which was why the programme backfired in the past.

In the implantation government to faced difficulties. Most of the times land acquisition for developmental projects were done but 7/12 land extract, i.e., an extract which is from the land department maintained by the revenue department, did not reflect any of these changes. As a result, the acquired land was fraudulently sold to another person by taking advantage of this loophole.

HISTORY

The history of land records in India can be considered as old as Indian Civilization. Maintenance of land records has gone through a process of evolution as it has moved through various administrative systems and socio-economic compulsions. The origin of the present system of preparing and maintaining the land system can be traced back to the Moghul period and during the British rule, it reached the scientific form. All the efforts made after it is largely revisional de novo preparations which are combined largely with newly accredited areas based on existing laws and rules. Land records are of great importance to contemporary socio-economic imperatives and their revision and updating are necessitated for capturing the essentials of changes in social dynamics.ⁱ

The system of updating and correcting land records is very complex and elaborate. Cadastral maps i.e. map depicting land parcels are required to be updated every 30 years through a settlement and survey operations. After independence, most of the states have not opted for any settlement or survey operations. As a consequence of this updating of records has suffered to a great extent and they no longer represent the ground realities relating to possession and ownership. This situation has been recognized at various forums at different point of time. December 1988, the Conference of Revenue Secretaries of States took cognizance of the poor state of land records and recommended immediate action.ⁱⁱ Even the First Plan has taken note of this fact and its possible consequences. In a primarily agrarian economy with a distorted social structure, it has serious implication in terms of its impact on the execution of all welfare/economy development activities.ⁱⁱⁱ

INITIATIVES DURING FIVE YEAR PLANS

The First Plan focused on proper maintenance of land records as the basis for good administration, which aimed at achieving social justice through better implementation of rural development programmes.^{iv} Same was reiterated in the Second and Third Plans.

The Sixth Plan had foreseen the updating and completion of land records from 1980 to 1985. It stated that systematic programmes would be taken to complete this objective of compilation or updating of land records within a period of five years. Where the backlog is heavy, in those states aerial survey techniques can be employed to complete survey expeditiously. Appropriate provisions will be made to confer legal status on these documents to be declared as proof of title and rights in land.

The Seventh Plan focused on the need for updated and accurate land records. According to the Seventh Plan document, “Land records form the base for all land reform measures and, therefore, regular periodic updating of land records is essential in all states. This will necessarily have to include a scientific survey of unmeasured land and recoding of rights of tenants and share-croppers which have remained unrecorded up till now”.^v

The Eight and Ninth Plan focused on the fulfilment of all the five-year principles of National Land Reform Policies. It stated that planning and maintaining of land records is a pre-requisite before any land reform policy is successfully implemented. Therefore, computerization of land records is considered as an essential step to achieve all the goals especially if we have to realize the goal of decentralized planning and administration as mentioned in the 73rd Amendment to the Constitution of India.

The Government of India and the respective state governments working has been seized because of the problem of inadequacy in the maintenance of land record system. This had created difficulty in administration and had served to neutralize the benefits. After the Conference of Revenue Ministers of states/UTs (1985) and Report of Study Group (1985), a workshop on computerization of land records (1987) reviewed the experience of different states in computerization of land records (CLR) made at their own initiative and recommended that the Government of India should fund this programme on a pilot project basis.^{vi} CLR had seven objectives out of which two are considered to be most important:

- To facilitate easy maintenance and updating of changes which occur in land database such as changes due to availability of irrigation/natural calamities/consolidation/ or on account of legal changes like transfer of ownership, partition, land acquisition, lease etc.^{vii}
- To provide a mechanism for comprehensive scrutiny to make land records tamper-proof, which has the possibility to reduce the risk of litigation and social conflicts which are associated with land disputes.

LEGAL FRAMEWORK

Land records in India are poor or unclear which can have a wide-reaching impact across various sectors. Therefore, it is important to have clarity on land ownership by way of records. There are various reasons because of which there are unclear land titles in India.

Land Titles are Presumptive

The current system of land records was inherited from the pre-independence days (zamindari system) and has not changed much since then.^{viii} The transfer of land between a buyer and seller is recorded through a sale deed, which according to the current legal framework needs to be registered. Such registration means the registration of the transaction and not the land title. This registration does not guarantee the title by the government. This implies that even bonafide property transactions may not always guarantee ownership as an earlier transfer of the title could be challenged.^{ix} Currently, land can be transferred through sale, purchase, inheritance, gift, tenancy and mortgage. Therefore, all sale deeds relating to land or immovable property transfer are to be registered under the Registration Act, 1908.

Registration of a sale deed means that the document of transfer is now part of permanent public record. The onus of checking the rightful ownership of the property rests on the buyer. There are gaps between the records with the government and the actual state of land ownership because past transactions are not recorded properly. Therefore, the Committee on Financial Sector Reforms (FSRC) in 2009 had recommended moving from a presumptive to a conclusive titling system. Conclusive titles are state-guaranteed titles, where the state guarantees the title for its correctness and provides for compensation in case of any disputes. Guaranteed title systems

have been developed and adopted in countries such as Australia, New Zealand, United Kingdom, and Singapore.^x

Registration of Property is not Mandatory for all Transactions

Registration of property is not mandatory for all transaction under the Registration Act, 1908. The FSRC (2009) had observed that compulsory registration of leaseholds (where the property has been taken on lease from the state for a longer duration, typically 99 years) and title would provide protection to tenants.^{xi} It has recommended that in order to not discourage people from registering transfer of property, the registration fees should be minimal and the procedure of registration should be simple.

The cost of registering property is high

For registering the transaction related to property, registration fee along with the stamp duty must be paid by the buyer. The registration fee and stamp duty vary across the states. India used to have among the highest rates of the stamp duty in the world.^{xii}

High Litigation

A study of the World Bank suggests that in India land-related disputes account for two-third of the pending cases in court. These disputes are related to the validity of land records and titles, and rightful owner. A NITI Aayog paper suggests that land disputes on average take about 20 years to be resolved.^{xiii}

Benami Transactions

A transaction where a property has been provided for or paid by one person but has been held by or transferred to another person. The unclear titles and non-updated records enable in carrying out proper transactions in a non-transparent manner. The Standing Committee on Finance (2015) examining the Benami Transactions Prohibition (Amendment) Bill, 2015 noted that generation of black money through Benami transactions could be pre-empted and eliminated by the digitization of land records and their regular updation.^{xiv}

REFORMS UNDERTAKEN TO IMPROVE THE SYSTEM OF LAND RECORDS

An attempt has been made in the last three decades to improve the quality of land records and to make them accessible, various schemes had been launched by the central government for modernization of land records. The central government around 1988-89 started to computerize all land records under the Computerization of Land Records Scheme.

State governments have also carried out some of the most interesting work of sorting out the mess created in land titling, some of them are-

- **Bhoomi Project (Karnataka), 2000** was the first project which led the way even before the Union government got into action. At the turn of the century state government began to digitize land records. The necessary documents like the record of crops, rights and tenancy have been made available with the help of kiosks. Therefore, there is no need to pay bribes in order to get access to the basic information in government offices.
- **Rajasthan Urban Land (Certification of Titles) Act, 2016** passed by the Legislature of Rajasthan. Under this law, state government is considered as a guarantor of land titles in the state and in case of defective title it will provide compensation. The guarantee is based on certification provided by the Urban Land Title Certification Authority, which will verify ownership of any property for a fee.^{xv}
- The state of **Andhra Pradesh** has tied with a Swedish firm to use m to use new **blockchain technology** to prevent property fraud. In all other trades, the blockchain will allow the participants in a distributed ledger to check on the ownership of a particular land parcel.

Other schemes to improve land records and administration that were introduced around the same time were the Strengthening of Revenue Administration and the Updating of Land Records schemes.^{xvi}

In the year 2008, all these individual schemes were merged into a centrally sponsored scheme, the National Land Records Modernization Programme (NLRMP). The scheme has now been renamed as the Digital India Land Records Modernization Programme (DILRMP) and is a part of the Digital India initiative.^{xvii} In April 2016 the scheme was changed to Central Sector

Scheme. Therefore, with this change, the scheme will now be implemented by the central government and 100% of the grants will be coming from the centre. Between 2009 and 2016, about Rs 946 crore was sanctioned by the central government under NLRMP, of which Rs 412 crore was released.^{xviii}

The major components of the schemes are:

1. Computerization of the existing land records which includes mutations or transfers.
2. Integration of spatial and textual data and digitization of maps.
3. The survey, updating of all survey, re-survey and settlement of records including cadastral records wherever necessary.
4. Computerization of registration and its integration with the land records maintenance system.
5. Development of core Geospatial Information System (GIS) and capacity building.

DIGITAL INDIA LAND RECORDS MODERNIZATION PROGRAMME (DILRMP)

Background

Historically land administration has been the authority of the government. Land and land related activities are directly or indirectly related to the citizens who reside in the rural and urban areas. By far one of the major assets of any government is the land record information. Land related data should be organized meaningfully so that the government decision makers can assess the impact of the decision and provide citizen centric services. Land administration in India has been a complex process and now when the country is on its journey to e governance and promoting technology it becomes essential to restructure the land administration system which exists. This will keep pace with time and provide efficient, fair and transparent service to the citizens of the country. With the aim to help union territories and the states, the government came up with two central funded schemes for the task of updating land records and strengthening land revenue and computerization of land records. Between the period 1987-1988 and 1988-1999 respectively the Strengthening of Land Records and Updating of Land

Records (SLR & ULR) and in the later period Computerization of Land Records (CLR) were the two centrally funded schemes initiated by the government. In a meeting held on 2008 the union cabinet approved the merger of these two schemes with the department of land resources, and come up under Digital India with one centrally sponsored scheme named National Land Records Modernization Programme^{xix}. The plan came in effect in the year 2016 and is called the Digital India Land Records Modernization Programme (DILRMP).

Objective

The DILRMP is a major reform initiative that will not only computerize, update and maintain land records but provide a transparent data base, it will create a ware house of land records that is easily accessible. A comprehensive data base will be provided which will help in planning development, manage disaster management activities which will provide specific targeted land related details to the citizens.^{xx}

The main objective of this scheme is to replace the present manual method of recording land related data. The old system of land titling is inefficient and cumbersome, not duly updated and non-agreeing among within corresponding records, it is manipulative and hard to administer^{xxi}. In the old system the state does not take guarantee and the land titles so transferred are only presumptive. The DILRMP aims to modernize the land record management system and to usher into automated and automatic mutation, inter connectivity of revenue with registration process, to facilitate eventually moving towards conclusive titles and replace the present system of registration and presumptive title system, so to minimize the land related disputes and enhance transparency in the land record maintenance system.

Land being the costliest asset is often in limelight due to fights and disputes over it. In 2016-2017 the Modi government took the necessary step and supported the digitalization of land records movement due reduce the nuisance of illegal land acquisition cases. In the light of the scam where in a retired IAS officer GS Sandhu maliciously transferred a society deed admeasuring 40,000 square yards to a builder against the norms that were active in the year 2011, being the additional chief secretary of urban development and housing abused his powers to do such an illegal act. the digital maintenance system will put an end to such old malpractices

and abuse of power by the government officials as the new programme aims at transparency. At the best the prime minister has also taken a step to integrate all land records with the Aadhar.

The DILRMP promises to provide conclusive land titling system with guaranteed land title, this is based on four main principles:^{xxii}

1. A “single agency” is appointed means a single window where in the maintenance, updating of land records will take place, maps, textual records, survey, settlement and registration of immovable property.
2. The “mirror principle” which connotes that at any given point the land records provide prima facie the ground reality.
3. The “curtain principle” indicates that the record of title is the true depiction of the ownership status, followed by automated mutation and automatic registration, there does arise a need to probe into past records and that the title is the collusive proof.
4. “Title insurance” which refers to the fact that title is guaranteed for its correctness and indemnifies the title holder in case of any lose arising out of any inaccuracy therein.

Scope

The new maintenance system covers wide areas exclusively important in terms of land records and reforms for better recording of the same. The DILRMP outlines the following:^{xxiii}

1. Computerization of Land Records
 - a) State level data center
 - b) Data entry, reentry, data conversion of textual records and mutation records and other land records
 - c) Inter connectivity among revenue offices
 - d) Tehsil, district computer centers.
2. Survey and updating of the Survey Resettlement Records
 - a) Includes ground control network
 - b) High resolution satellite imaginary and ground trothing
 - c) Global positioning system
 - d) Hybrid methodology using aerial photography
 - e) Pure ground method using electronic total station.

3. Computerization of Registration
 - a) Preservation and scanning of documents
 - b) Computerization of the sub-registrar's office
 - c) Data entry and encumbrance of data and details
 - d) Connectivity with revenue offices.
4. Training & Building of Capacity
 - a) Empowering revenue and survey training institutes
 - b) Organizing training workshops etc.
 - c) Promoting soft skills and use of technology
5. Legal Changes
 - a) Model law for conclusive titling
 - b) Amendment to the state stamp acts
 - c) Amendment to the Registration Act, 1908
 - d) Other necessary legal changes.
6. Programme Management
 - a) Information, communication and education activities
 - b) Programme sanctioning and monitoring committee.

LAND TRANSFORMATION SYSTEM AND CONTENT MANAGEMENT

1. Data entry, verification, updating and validation process.

The first and major step is to collect the old records which exist in textual form or in form of cadastral maps. All textual data needs to be updated including mutation records and record or rights that exist. All pending and in process data shall also be taken into consideration and updated and be given a priority basis so that due recording is done in an efficient manner and nothing is missed or left out. All spatial data shall also be updated and recorded for the purpose of DILRMP. Every state is mandated to fix a dead line after which the land records and record rights will be recorded and issued in digitalized format only. All the ongoing mutations and updating of data shall be done on computerized platform. The revenue officials and registrar are solely responsible for checking, verification, and validation of the data entered.^{xxiv}

2. District Computer Centers

For maintaining the village wise property records, a computer center at the tehsil/sub division is necessary to provide citizens easier and convenient services which is in their approach. Likewise, district/ sub district computer centers shall be emerged to maintain divisional level database for data verification, analysis etc. District computer centers will collect the land records from the sub districts and tehsils in their respective districts.

3. State level Data Center

The system goes level wise, in order to maintain data repository, it is important to establish a data center at the state level. The state will need to establish a dedicated data center which will have high storage capacity according to the volume of land data records and will also include switched, security and software devices, high speed processors and fiber optic for easy and smooth recording of data and appropriate back in cases of hard disk crash or any other technological malfunction.^{xxv}

4. Land Record Management Centers

These centers are established to provide support for upgrading land record management centers with storage areas and storage devices for physical storage of records and maps. It also includes an operational area with computers printers, storage area network etc. A reception, public waiting area is also to be constructed so that it is citizen friendly. The land records details shall be indexed and then stored. The management system which includes scanning of old documents, digital storage and retrieval system shall be put to use for online storage and retrieval of data, records and indexing of images etc. for the maintenance of land records in dematerialized form.^{xxvi}

5. Inter- Connectivity Among Revenue Offices

All the land record office from the state level to the tehsil, district level shall be inter connected with a wide area network. Registration offices will also be securely connected in an appropriate configuration based on functional and technological requirements. to achieve functional integration among all the data centers, a 2 mbps network connectivity link from the point of presence will be provided to each center. Till the state wide area network is not properly established the government has asked to use alternative methods and procedures for the time being.

6. Updating Survey and Settlement Records

Early in the 20th century most of the villages were surveyed and corresponding village maps were prepared. The cadastral maps which were prepared and surveyed earlier are known as re survey. To attain the stage of conclusive titling the state will have to undertake survey and re survey using the best in class technology of surveying and mapping the land to ensure true ground depiction on maps and land records. Adapting the technology according to the terrain, location etc. and then update the land records in digitalized form.

7. Computerization of Registration Process

Registration is one of the most important features of the DILRMP. Digitalization of the registration process is a major component; it is necessary for integrating land records with the registration of land and making the process hassle free. There exists a dire need to shift from the manual process of registration process which is old and involves working with paper copies of registered documents.^{xxvii} The old process results in miss classification, miss representation of facts and other such loses. It takes time and is a cumbersome process. The digital process would include computerization of the verification process, biometrics, finger prints, verification of the stamp duty of the presenting person. E-stamping and online availability of stamp duty values so that the transacting parties can ascertain stamp duty liability online via internet.

8. Data Security

With the process of digitalization comes the issue of data protection and security. The security of vital data bases in terms of authentication, access, control, roles and responsibilities of various users are concerns that need to be kept in mind and tackled, hence there is a need for the state to adopt and implement security management systems for building trust in the system and to have a hassle free process.

9. Training

Training programs and workshop are important so that the people can develop skill and learn. Training helps in digesting the paradigm shift to digitalization process, by providing them skill and education regarding the computer etc. comprehensive training

programme develop human resource for proper smooth functioning of the new DILRMP.^{xxviii} Long term training and awareness workshops shall be organized for field level officers.

10. Public Private Partnership

The digitalization system has overburdened the government machinery involved in the process like the existing registration and revenue departments. There is a lot of change and high-level technological inputs at every stage, hence in order to efficiently implement the programme the state might reach out for PPP model in certain activities enumerated under the programme. Outsourcing on turnkey basis may also take place.

REVIEW MECHANISM^{xxix}

The scheme also consists of a monitoring and review mechanism. It is necessary for such a mechanism to be in place at different levels so that accountability exist.

1. District Level Monitoring Committee

It is a mandate for all districts to have at district level a monitoring and review committee. The committee will be headed by the district collector along with the additional district magistrate who are hearing or dealing with the land revenue case or land records. Sub registrars, sub collectors, and other officers having jurisdiction over the district will be appointed as member. Technical member from technical agencies will be appointed as representatives. The committee will review the progress of the implementation of the scheme once every quarter.

2. State Level Monitoring and Review Committee

A state level committee is to be constituted in the state for the purpose of DILRMP. The committee will be chaired by the chief secretary. Members of the committee will include the revenue divisional commissioner, inspector general of registration, board of revenue, principal secretary of the departments of revenue, finance, planning and coordination and information technology. The committee will monitor and review the progress of the new programme and facilitate in the necessary process and guide the authorities.

3. Project Management Unit

Under the DIRLMP, the project management unit is formulated specially for the state of Orissa. The unit is headed under the chairmanship of chief secretary, Orissa. It is a form of registered society at the state level under the name “Odhis Land Records Modernization Society” and is mandated to formulate strategies, plans and policies for the management of land records and provide financial, legal, and technical framework for the IT enabled land record management system.

ISSUES AND OUTCOME OF DIRLMP

No doubt the new system is the need for the hour but does face some issues. It would be very difficult to train the stake holders and employees, moreover not everybody is technology friendly. It also to be understood that this digitalized system is trickier, complicated and difficult. It is not easy when compared to any e- government programme, and has multi facets included to it like technology, legal, administrative, attitudinal and political will.^{xxx} Achieving hassle free smooth functioning of this digitalized way would involve getting across many management and administrative hurdles.

Though every scheme or step as its disadvantages it is rather important to look at the brighter side. The scheme in the long term reap the fruits like the land information system would be the result of this scheme. It will ensure conclusive title with title guarantee in the country. The following are the benefits:

➤ For Citizens

1. Real time records will be made available.
2. Free accessibility to the records will enable more transparency and reduce the interference of the government and the citizens hence reducing rent seeking and harassment.
3. Abolition of stamp paper and stamp duty would be one of the biggest outcomes of this new scheme. The registration fees will be payable via an online mode and the interference of the registration machinery would be reduced.
4. The time to obtain registration and other important documents would be less due to the advancement in technology.

5. Single window service would allow access from anywhere at any time, also the registered citizens will have their specific ID's making it accessible and confidential.
- For Government
1. Will be useful to the central and state government in bringing out land reforms.
 2. A comprehensive tool for planning various land-based development and regulatory activities including disaster management activities which need specific location would be made easy and also easily accessible to the public.^{xxxii} Land value assessment, land use planning and environmental protection and resource management would be easily done with the use of the scheme.
 3. Information about soil health cards and smart cards for farmers, e banking and e governance will be given a push and help the sector to grow.
 4. Settlement of compensation claims, land acquisition and rehabilitation, crop insurance, grant of agricultural subsidy, all such measures can be taken and hence reduce litigation and increase transparency.

CONCLUSION

The land and property have been in debate for the longest time in India. Right to property was a fundamental right but now it is abrogated from the part III of the constitution which provides for fundamental right. Being a scarce resource and of much value the issue of land concerns everyone. The old system of land registration and mutation is no more the need in the current digitized era. The government under its digital India campaign has come up with the DILRMP which aims to digitalize the land record system. This step by the government will bring about a lot of changes and help reduce litigation and corruption related to transfer, buying and selling of land, and land titles. The new scheme aims to provide conclusive land titles, further it increases transparency and accountability. Single window system would be created where registered citizens can log in and get the information available. This would ensure confidentiality as well and easy and free access anywhere anytime to such information. The government will also be benefitted by the successful working of this scheme as all planning related to land and its usage, disaster management, and policies regarding agriculture will be more accurate and specific due to availability of such information and reduce the interference of government in stamp duty and stamp papers as even those would be paid online.

To achieve all this all the tehsils, districts and states will have committees and stations formed which will provide the technical know-how and assist in the working of the scheme. Information related to every land would be collected and stored on digital platform for better access and interpretation using high end technology and photography.

Like every scheme this also suffers with its own drawbacks and issues. It is very hard to upgrade the system especially the administration from paper friendly to a whole new level of digitalization. Training the stake holders would not be an easy task and the scheme will suffer from behavioral, legal, administrative, techno and political attitudinal change and management hurdles.

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