

‘Modernization of Land Records under Digital India Land Records Modernization Programme (DILRMP)’

Infrastructure Law

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Executive Summary

The Digital India Land Records Modernization Programme was introduced to create computerized land records and cadastral maps using space technology. This was brought to shift from updating manual land record system to digital record. Its main object has been to shift from presumptive land title system to conclusive land title system in India in order to reduce litigation and to provide state guaranteed land titles. This programme has tremendous benefits to citizens for accessing record of rights, digital viewing of cadastral maps, linking of property details to Aadhar Card, linking for accessing bank loans, insurance etc. it has also helped the government in managing disaster management, flood warnings, and other environmental concerns. Overall, this programme has been successful in major states such as Maharashtra, Karnataka, Gujarat, Andhra Pradesh, Haryana and Chandigarh.

Introduction

Land administration is an important function of the government and land records information forms a valuable asset for governance. The land administration system in India has been a complicated structure due to issues of transparency and corrupt practices. The Digital India Land Records Modernization Programme is implemented to provide citizen centric services to provide fair, efficient and transparent system for computerization of land records and to initiate digital registration process.¹ The aim of this programme is to replace the present manual presumptive land-title system to digital conclusive land titling system. This is an initiative by Department of Land Resources under Ministry of Rural Development.² The Land Reforms (LR) Division had implemented two Centrally Sponsored Schemes which was later on merged to replace them with a new centrally sponsored scheme known as National

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¹ ‘Book on Best Practices under DILRMP’, accessed on 5th Sept, 2020, [http://dilrmp.gov.in/faces/resources/doc/Book_Best_Practic_\(DLRMP\)_24.8.pdf](http://dilrmp.gov.in/faces/resources/doc/Book_Best_Practic_(DLRMP)_24.8.pdf)

² Ibid.

Land Records Modernization Programme (NLRMP). This programme was further re-designed has been brought under 'Digital India' Scheme.³

This programme is beneficial for the citizen as well as for the government as it brings efficiency in land revenue administration, it will enhance the utility of cadastral maps relevant to the present times, it will create a database for planning developmental activities, regulatory and disaster management task by providing location-specific information, while providing citizen services based on land records data. Many states have largely computerized the record of rights and some of them have integrated these records with other departments with added services to the citizens. The 'Person – Parcel – Pixel' concept has been evolved under this programme to have to link our land parcels with Aadhaar number. The need for having digital version land records were felt, as the best option to reduce interface between the government and common citizen and create platform where all records are digitised to ensure transparency in the system.⁴

Problem of Poor Maintenance of Land Records

Land ownership is determined through various records such as registered sale deed under Registrations Act, property tax documents and government survey records.⁵ Also, the stamp duty fees vary from state to state based on property rates. Therefore, land ownership in India is presumptive which is established only through registered sale deed. These documents are merely record of the transfer of property maintained with the tehsildars and sub-registrar offices and they are not government guaranteed title to the property.⁶ The manual land records have been poorly maintained in hand-written format and do not reflect the on-ground position and the manual records are difficult to maintain as per changing times. Recently the new legislation was introduced in the parliament, the draft Land Titles Bill, 2019 which will shift the land records system from presumptive system to conclusive land titles system.⁷

System of Conclusive Titling

³ Digital India Land Modernization Programme - Guidelines, Technical Manuals and MIS, accessed on 29th Sept, 2020, <https://dolr.gov.in/sites/default/files/Final%20%20Guideline%20of%20DILRMP%2002-01-2019.pdf>

⁴ 'Person – Parcel – Pixel Concept', accessed on 2nd Oct, 2020, <https://www.geospatialworld.net/article/person-parcel-pixel-will-help-end-land-disputes/>

⁵ Land Records and Titles in India', accessed on 29th Sept, 2020, <https://www.prsindia.org/policy/discussion-papers/land-records-and-titles-india>

⁶ Land Records and Titles in India', accessed on 29th Sept, 2020, <https://www.prsindia.org/policy/discussion-papers/land-records-and-titles-india>

⁷ Ibid.

One of the ultimate objectives of this programme is to shift from presumptive titling to conclusive titling systems, where the state guarantees for such titles. “Conclusive Titles” has four major principles:

- (i) A ‘single agency’ - to have single agency created as it becomes easier to handle various operations of land records, survey/re-survey and revenue administration.
- (ii) The ‘mirror principle’ – which reflect the ground reality.
- (iii) The ‘curtain principle’, whatever has been stated in the record is the true depiction and is not manipulated.
- (iv) ‘Title insurance’ - The title guarantee is correct and the part can indemnify for any loss due to inaccuracy.⁸

The conclusive land titling system will ensure single agency to handle various operation. It would directly reflect the on-ground reality. It should depict the true record and it cannot be manipulated. Further, title insurance can be indemnified for any loss due to errors in the records.

Stakeholder for Implementing DILRMP

The Department of Land Resources under Ministry of Rural Development is the key stakeholder in providing financial assistance and for overall implementation of this programme. Further, the Project Sanctioning and Monitoring Committee is set up at national level under the chairmanship of the secretary of department of land resources and they are supported by various agencies such as NIC, Forest survey of India, soil survey etc.⁹ Since land forms a part of state list as per Constitution. State has an important role in implementing the programme. The states have to set up Project Management Units (PMU) to strategize and formulate plans for land records. The states and UT’s will further create its own projects to implement these schemes and training programmes for the revenue, survey and registration officers for effective functioning of the subsequent operations regarding authentication of record of

⁸ Conclusive Titling’, accessed on 1st Oct, 2020, http://revenueodisha.gov.in/sites/default/files/document/DILRMP/DILRMP_at_Glance.pdf

⁹ ‘Implementation of DILRMP’, accessed on 15th Sept, 2020, [http://dilrmp.gov.in/faces/resources/doc/Book_Best_Practic_\(DLRMP\)_24.8.pdf](http://dilrmp.gov.in/faces/resources/doc/Book_Best_Practic_(DLRMP)_24.8.pdf)

rights, mutation of land, mappings and updating land records, surveying/resurveying etc. The district level project monitoring committee is handled by district collectors.¹⁰

Major Components and Scope under DILRMP

The scope of this programme is basically computerization of land records and mutations, computerization of registration process, integration of registration records and land records, digitization of cadastral maps, surveying and resurveying of original records, developing geospatial information systems and providing training and capacity development.¹¹ Computerization of registration process is an important component of DILRMP. Registration process is necessary for integration of land records with registered data. Earlier, the process involved manual registration of documents with the Sub-Registrar office which often resulted in misrepresentation of facts. Almost in all states the SRO's offices are computerized and verification process is also in computerized form.

The data entry and verification and validation task are conducted by all the states. It is the responsibility of the officials to check the validation and verification of data entered. Any form of mutations and record of rights should be updated in computerized format. As per the DILRMP guidelines, the states can have cut-off date after which only computerized record of rights can be issued and issuing of manual record of rights could be banned or not practiced by the states. This programme requires setting of State level and district level data centres. A computer centre is required to maintain the village-wise property records. Further all the land records from state to tehsil level will be collected through wide area network.¹²

The programme mandates digitized form of maps. The Bhu-Naksha Software is developed under this programme and is integrated with the respective state government's website, all the data from district level of the cadastral maps are linked on the website. This can be viewed by the owners of land property and details of land acre and ownership of each land parcel is available online.¹³ The geo-spatial database has to be maintained by the states in geo-referencing, which is associating the physical maps using satellite images. The maps

¹⁰ 'Implementation of DILRMP', accessed on 16th Sept, 2020, [http://dilrmp.gov.in/faces/resources/doc/Book_Best_Practic_\(DLRMP\)_24.8.pdf](http://dilrmp.gov.in/faces/resources/doc/Book_Best_Practic_(DLRMP)_24.8.pdf)

¹¹ 'Components of DILRMP', accessed on 16th Sept, 2020, http://revenueodisha.gov.in/sites/default/files/document/DILRMP/DILRMP_at_Glance.pdf

¹² Ibid.

¹³ 'Bhu-Naksha Software under DILRMP', accessed on 6th Oct, 2020, <https://bhunaksha.nic.in/bhunaksha/>

prevalent in the format has to be updated in digital form to facilitate cadastral maps and synchronize that with changes made in record of rights. Then further the digitized cadastral maps have to be checked to know whether it is similar to the textual record of rights. Setting up modern record rooms have to be created for physical storage of any record, indexing of data and images and maps. Computer servers and storage area network need to be operationalised. In order to implement conclusive titling system, the states will have to undertake re-surveying using high resolution satellite imagery systems for identification of location and updating the survey records.¹⁴ States can also promote the practice the liberalize form of Public Private Partnership (PPP) Model in conducting the task of DILRMP for technical assistance and registration process. To achieve the targets in proper timeframe, certain activities to streamline the implementation task could be carried out by private players. States have responsibility to conduct training programmed with revenue, survey and registration officials for effectively operating the systems. With respect to the data security management is concerned the states will have to adopt the ISO or IEC standards.¹⁵

Benefits to Citizen

The Digital India Land Records Modernization Programme is citizen-centric programme and it creates platform to help citizens in accessing land records. The major advantage is to Access to computerised copies of Records of Rights, which can be accessed on the websites created by the states. Citizens could access the records without being physically present at the tehsildar's office. This process will eliminate and Reduce Interface with the government, in order to get land records, farmers had to repeated visit tehsil offices to access land record, due to non-availability of officers and corrupt practices, computerisation of land records are more transparent and hassle-free system. Many of states have adopted this practice to provide integrated services to the people at one window to provide service in time-bound manner. State and district level data centres are established for accessing land records. In order to make property transaction efficient, the e-registration process and computer land records are integrated. Many farmers would get the benefit since the records of rights are useful for many sectors for delivery of crop insurance to farmers, fertilizer subsidy. Some of the states have

¹⁴ 'Implementation of DILRMP', accessed on 15th Sept, 2020, [http://dilrmp.gov.in/faces/resources/doc/Book_Best_Practic_\(DLRMP\)_24.8.pdf](http://dilrmp.gov.in/faces/resources/doc/Book_Best_Practic_(DLRMP)_24.8.pdf)

¹⁵ Ibid.

govern access to banks in lending and reducing time in sanction of bank loans which has become convenient for farmers. Moreover, it will also be beneficial in litigation

Best Practices under DILRMP

Recently the Minister of Rural Development released the book on 'Best Practice in DILRMP'.¹⁶ Many of the states and UT such as Chandigarh, Maharashtra, Karnataka, Andhra Pradesh, Haryana have successfully implemented this programme, all major states have finished 90% digitalisation process. Since Chandigarh is a Union Territory, it was easy to implement and monitor this scheme directly by the department of land resources and they have initiated the process of conclusive titling system which they have successfully implemented the linking of Aadhar details with property/land through mobile application. They have also set-up application for monitoring court cases through Court Case Monitoring Systems (CCMS) which has integration of court management with land records information systems. Chandigarh has been successful in abolition of stamp papers and online registration process.¹⁷

Maharashtra started its e-registration process in the year 2002, Maharashtra had started registration of documents through iSARITA (Stamp and Registration Information Technology Application) platform.¹⁸ The Maharashtra e-registration Rules, 2013 have also been framed accordingly. The applicant has to apply e-registration process for land registration on the www.igrmaharashtra.gov.in. Maharashtra government has launched 'MahaBhulekha' that provides 7/12 extract online application as well as digital records along with indication on cadastral maps are made available to citizens.¹⁹

Haryana state have made Haryana Space application Centre (HARSAC) as the nodal agency for land digitization Model which is based on accurate geo referencing of planetary data to reduce any form of field visits and surveying Haryana's land record system prevalent since Mughal period. The basic map for identification and location of ownership of land as per village area is called Mussavi in local language. It involves scanning and digitization of

¹⁶ Book release of 'Best Practice of DILRMP', accessed on 1st Oct, 2020, <https://pib.gov.in/PressReleasePage.aspx?PRID=1642671>

¹⁷ 'Chandigarh's Digital India Land Records Modernization Programme', accessed on 1st Oct, 2020, <https://cdn.s3waas.gov.in/s303afdbd66e7929b125f8597834fa83a4/uploads/2018/07/2018072721.pdf>

¹⁸ Ibid.

¹⁹ 'MahaBhulekha' accessed on 1st Oct, 2020, <https://www.mahabhulekh.site/>

mussavi's and cadastral maps, correcting maps using higher resolution and satellite data using photo-geometric process and developing documents management systems. Digitized mussavi's are then matched with records of rights and updating it.²⁰

Andhra Pradesh had started the Mee- Seva software in order to reduce the Benami transactions and for computerization of land records in Andhra Pradesh. It is integrated service which is available in online form to provide convenient access to citizens. 'Aadhar seeding' is also one such project which has decided to insert Aadhar number of the each Pattadar's in the software in identifying genuine pattadars for issuing loans and government schemes.²¹

Karnataka started with the Bhoomi project which was integrated with Kaveri software, this was the state which faced problem with respect to manual record of rights, tenancy and crops which could be tampered or destroyed leading to harassment of farmers. The state has banned any form of manual issuance of record of rights. Any form of mutation request can be issued in kiosk. Further, Kaveri software has been developed for registration process and it uses Bhoomi database during registration process. Only the owner whose data is available in Bhoomi can transfer the rights. The mutation transaction is initiated automatically with the integration of Bhoomi project with the Kaveri software. After integration credit to financial institutions are entered without fail. Since all the documents are recorded in Bhoomi records. This process has considerably reduced litigation and has increased benefits to farmers.²²

Sample Records of 7/12 Extract (RoR)

The 7/12 extract is the ownership details of the piece of land maintained with the revenue department of the government of Maharashtra. In Maharashtra it is governed under Maharashtra Land Revenue Code, 1966 under section 149-159 of the Act. These forms are maintained under the Maharashtra Land Revenue Record of Rights and Registers (preparation and maintenance) Rules, 1971. The extract consists of name of the owners, mutation number is indicated in case change in ownership takes place, cultivable land, non-cultivable land, loan taken over that land is indicated, survey number. The upper portion of

²⁰ 'Re-survey under DILRMP- Haryana', accessed on 1st Oct, 2020, Book on Best Practices under DILRMP', accessed on 1st, 2020, [http://dilrmp.gov.in/faces/resources/doc/Book_Best_Practic_\(DLRMP\)_24.8.pdf](http://dilrmp.gov.in/faces/resources/doc/Book_Best_Practic_(DLRMP)_24.8.pdf)

²¹ 'Mee – Seva software of Andhra Pradesh', 'Book on Best Practices under DILRMP', accessed on 2nd Oct, 2020, [http://dilrmp.gov.in/faces/resources/doc/Book_Best_Practic_\(DLRMP\)_24.8.pdf](http://dilrmp.gov.in/faces/resources/doc/Book_Best_Practic_(DLRMP)_24.8.pdf)

²² 'Bhoomi and its integration with Kaveri – Karnataka', 'Book on Best Practices under DILRMP', accessed on 2nd Oct, 2020, [http://dilrmp.gov.in/faces/resources/doc/Book_Best_Practic_\(DLRMP\)_24.8.pdf](http://dilrmp.gov.in/faces/resources/doc/Book_Best_Practic_(DLRMP)_24.8.pdf)

the extract is village form – 7 which consists of ownership details, whereas the lower portion of form is village form – 12 which tells us which crops are grown in the cultivable land. Now online application or registration is also available at the state government’s website (Maha-Bhumiabhilekh). All the records of 7/12 extract are available in digital format.²³

Conclusion

The Digital India Land Records Modernization Programme will certainly bring efficiency in management of land records and will minimize scope of land or property disputes. Since this model proposes shift from presumptive titling structure to conclusive titling system, it will ensure state-guaranteed land title to the owners of the land. This programme will bring transparency and eliminate corrupt practices by reducing interface between the citizens and government. It will provide real-time record with proper security of ownership details while maintaining information confidential. In order to achieve this programme successfully it would require support from legal, administrative logistic support to bring efficiency in the administration process.

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