Modernization of Land Record System in India: A Case Study of 'e-Dhara'

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Abstract. Land Revenue is one of the oldest arms of government and Land Record System is one of the important areas of administration since the times of civilization. But in modern times the traditional system of land records was facing many obstacles. Hence, Government of India has initiated modernization of the Land Record System by competent use of modern technology. The paper talks about the development and status of Land Record System in India by various policies of union government and a case study of state initiative 'e – Dhara' under such policies.

Keywords: Land Record System, Modernization, e-Dhara.

1. Introduction

From time immemorial mankind had distinct association with LAND. The Revenue Department is the oldest arm of the Governments existing from times of civilizations and Kingdoms. The village was the basic unit of administration and has remained so throughout the centuries especially in a country like India where 65%-70% people lives in villages dependent on agriculture. Fair maintenance of land records is a prime need for efficient administration of Land Revenue. The history, evolution, advancement and modern eminence of Land Records System in India is described below with a case study of 'e-Dhara' project of the State of Gujarat.

2. History and Evolution of Land Record System in India

2.1. Pre-independence

The history of land records is as old as the Indian civilisation. Maintenance of these records has gone through a process of evolution as it passed through various administrative systems and socio-economic compulsions. The present system of preparing and maintaining land records in a written form originated from the Mughal period by the great revenue administrator Todar mal who first served Sher Shah Suri and later became the minister of Akbar. During their rule the British fine-tuned the form of agrarian system of the Mughals by superimposing a new System over the existing pattern in line with the prevalent British customs and laws related to land.

2.2. Post-independence

Land is a State subject in the Constitution of India, and the systems of land records management formulated during the British rule has gone through series of local influences and hence vary from State to State, often even within a State, depending upon their historical evolution and local traditions. However the record-of rights is almost uniform across the country. According to this system, land record data are kept primarily in tahsil office and are to be updated every 30 years through the process of survey and settlement operations. Ever since, the First Five-Year Plan, the emphasis has been on the proper maintenance of land records which provides a basis for good administration, aiming at social justice through better implementation of various rural development programmes.

3. Meaning, Importance and Complications of Traditional Land Records System

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3.1 Meaning

Land records are essentially records of the earth's surface that can be owned as property and everything annexed to it, whether by nature or by the human hand. The records essentially contain a graphical sketch depicting the extent and boundaries of individual landholdings (land parcel map) and the corresponding record-of rights (RoR)-a textual document dealing with ownership, occupancy, tenancy, crop inspection register, mutation register, disputed cases register, etc

3.2 Importance

Land is the asset, providing the primary and secondary needs of people. Thus planning and maintaining land-records is a pre-requisite for proper implementation of any land-reform policies, for fair transaction of buying and selling of land parcels and for prevention of mischief in such transactions. Maintenance of proper land records are of utmost importance so that people know of their ownership and proprietary rights especially in a agrarian country like India.

3.3 Obstructions

The traditional process of land record maintenance is riddled with various obstacles like:

- The First obstacle is that in the traditional system the land records are written manually which is highly time consuming, difficult to preserve for long time and may get affected by fraudulent deeds of record keeper.
- Several departments are involved in managing land records in most of the States, and the citizen has to approach 3 to 4, or even more, agencies for complete land records, e.g., Revenue Department for textual records and mutations; Survey & Settlement (or Consolidation) Department for the maps; Registration Department for verification of encumbrances and registration of transfer, mortgage, etc.; the Panchayats (in some States, for mutation), and the municipal authorities (for urban land records), leading to waste of time, exposure to rent seeking, and harassment.
- These departments work in a somewhat stand-alone manner, and updating of records by any one of them makes the records of the others outdated. Thus, the records are almost always outdated and don't reflect the ground reality. Also, there is no integration of textual and spatial records, making it difficult to give maps-to-scale with the records of rights (RoRs).
- The most important activity for updating the records, i.e., survey has been neglected by most of the States. Also, the earlier technology for survey is cumbersome, painfully time-taking and costly, and there is need for adopting modern technology across the country.
- Further, the Registration Act, 1908 provides for registration of deeds and documents, not titles. Merely the transaction is recorded, and the transfer of ownership title remains presumptive only. Also, there is significant time lag between registration and mutation, giving rise to scope of fraudulent transactions in land, disputes, etc.

4. Government Initiative for Modernization of Land Record System

Following a decision in the Conference of the State Revenue Ministers in 1985, the Government of India had initiated two Centrally-sponsored schemes-Strengthening of Revenue Administration & Updating of Land Records (SRA&ULR) and Computerization of Land Records (CLR).

4.1 Strengthening of revenue administration & updating of land records (SRA&ULR)

The scheme of SRA&ULR was launched in 1987-88 to help the States and Union Territories (UT) in updating and maintaining the land records, setting up and strengthening of the survey and settlement organizations and the survey training infrastructure, modernization of the survey & settlement operations, and strengthening of the revenue machinery. Funding under the SRA&ULR scheme has been on 50:50 cost-sharing bases between the Centre and the States. The UTs are provided 100% Central assistance.

4.2 Computerization of land records (CLR)

The CLR scheme was launched in 1988-89 with pilot projects in 8 districts and was subsequently extended to cover the rest of the country. The main objective of the scheme was to ensure that the landowners get computerized copies of the Record of Rights (RoR) on demand. Under this scheme, 100% financial assistance has been provided to the States and UTs.

4.3 Disadvantages of the existing SRA&ULR and CLR schemes

The activities included in the schemes of CLR and SRA&ULR were basically meant for strengthening of revenue administration, but also included activities that contribute to conclusive titling. The choice of activities was left to the States and UTs, most of which didn't utilize the fund in the activities for which it is allocated by the union government. The way the schemes were framed, no timeframe for achieving the goal of conclusive titles can be set. Technology options for survey were not indicated and the work remained neglected in most of the States. Neither was the system of monitoring emphatically spelt out, nor was the exit mode defined in either of the existing schemes. Further, both the schemes of CLR and SRA&ULR excluded interconnectivity, geographic information system (GIS) mapping, connectivity with banks and treasuries, and Registration-the last of which is a vital link in updating the land records.

Hence the need was felt for a comprehensive modernization scheme integrating Land Records and Registration. Accordingly the National Land Records Modernization Programme (NLRMP) has been shaped by the government of India.

5. National Land Records Modernization Programme (NLRMP)-2008

The Cabinet has approved the proposal of the Department of Land Resources , Ministry of Rural Development, Government of India to merge the two existing Centrally-sponsored schemes of Computerization of Land Records (CLR) and Strengthening of Revenue Administration & Updating of Land Records (SRA&ULR) and to replace them with a modified Centrally-sponsored scheme in the shape of the National Land Records Modernization Programme (NLRMP), with the ultimate goal of ushering in the system of conclusive titles with title guarantee in the country.

5.1 Activities under the NLRMP
- Computerization of land records
    a) Data entry/re-entry/data conversion of all textual records including mutation records and other land attributes data
    b) Digitization of cadastral maps
    c) Integration of textual and spatial data
    d) Tehsil, sub-division/district data centres and State-level data centres
    e) Inter-connectivity among revenue offices
    f) Connectivity and linkage with central server at state capital
- Survey/resurvey and updating of the survey & settlement records using the modern technology options like Ground Positioning System (GPS)
- Computerization of Registration
    a) Computerization of the sub-registrar's offices (SROs)
    b) Data entry of valuation details
    c) Data entry of legacy encumbrance data
    d) Scanning & preservation of old documents
    e) Connectivity to Sub-Registrar offices with revenue offices
- Modern record rooms/land records management centres at tehsil/taluka/circle/block level
- Training & capacity building
    a) Training, workshops
    b) Strengthening of the Survey and Revenue training institutes

5.2 Status of computerization of land records in states/Uts

Table 1: Status of computerized land records in states and UTs*

Status	Name of States/UTs	Total Number of States/UTs
RoR data entry completed	Chhattisgarh, Goa, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Sikkim, Tamil Nadu, Uttar Pradesh, Uttarakhand, West Bengal, and NCT of Delhi	13
RoR data entry likely to be completed soon	Assam, Haryana, Himachal Pradesh, Orissa, Tripura, and UT of Puducherry	6
RoR data entry started but not completed	Arunachal Pradesh, Bihar, Jharkhand, Kerala, Manipur, Mizoram, Nagaland, and UTs of Andaman & Nicobar Islands, Dadra & Nagar Haveli, and Daman & Diu	10
Still at preparatory stage	J&K, Punjab, and Meghalaya and UTs of Chandigarh, and Lakshadweep	5
Stopped manual issues of RoRs	Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Tamil Nadu, Uttar Pradesh, Uttarakhand and West Bengal	8
Placed RoR data on website	Chhattisgarh, Gujarat, Madhya Pradesh, Orissa, Rajasthan, and Uttarakhand	6

6. Case Study: 'e-Dhara'

6.1   Introduction

'E-Dhara' project is initiated by Government of Gujarat since 1988-89 for computerization land records. 'Dhara' means land in Gujarati and Hindi and 'e' is used for 'electronic'. Thus the name 'e-Dhara' itself signifies the vision of project that is to enable access and maintenance of village land records in an easy, transparent and secure manner. Many significant managerial, technical and administrative changes have been made in the project through all these years to improve and enhance the service qualities. Since 1997, Government of Gujarat has expanded the services offered by 'e-Dhara' with technical support from National Informatics Centre (NIC).

6.2   Project description

After digitizing all land records, e-Dhara Kendras(e-DK) have been setup at Tehsildar offices and a special post of 'e-Dhara' Deputy Tehsildar has been generated to take up day to day activities of land records such as mutations and issue of Record of Rights (RoR), entry and approval of transactions of agriculture lands, issuance of various village forms (most commonly VF no 7, 8A, 12) etc. 'e-Dhara' works on various software like BhuLekh (developed since 2004-2005), e-Registration, e-Jamin etc. developed by NIC. All these systems and software were integrated during the year 2010-2011 for the efficient, accurate, swift, easy and advanced management of 'e-Dhara'. The hardware, software and connectivity facilities are provided by the State government (from the fund given by Central Govt under NLRMP) to each district and District level execution committee tries to meet the financial needs for hardware repair or replacement, appointing operators at rural level etc by generating funds by the self sustainable 'e-Seva' society.

6.3   Current status

More than 9.8 million records of Village Form (VF) No 7/12 and more than 5.4 million records of VF No 8A has been digitized by January 2004 of all 225 tehsils of the State. The implementation rate of e-Dhara is 100% in the state as all the 225 Tehsils of all 33 Districts has been covered under it and the manual system of keeping land records has ended in the State now. Government has tried to go beyond this level and thus the database of computerised land records has been made available to some villages where e- Gram centre is working by the state wide GSWAN (Gujarat State Wide Area Network). 65%-70% villages of total 18560 villages of State are covered under this initiative.

6.4   Administrative structure

An administrative structure has been put up by the state for efficient execution and to reduce the time in service delivery so the maximum number of people gets benefitted from qualitative and citizen centric services good governance. This administrative hierarchy is figured below.

Figure 1: Hierarchy of e-Dhara administration[**]

6.5 Facilities provided to citizens

By the positive will and efforts of government the digital land record system of 'e-Dhara' has become technically modern and easy available to citizens. The benefits it provides to the citizens are described below:

- The most significant benefit of this system is that a person can view and get the copy of RoR or other village forms from the e-gram centre of his village by paying a nominal fee of Rs 5 only. He/she doesn't need to travel up to tehsil or Sub- Division for just a copy of RoR.
- For the mutation process one need to go to the e-Dhara Centre at Tehsildar Office. A Sub-Registrar office has been opened now at all the Tehsils thus the e-Registration has also become easy.
- Increased safety and security of land records by introducing photo and fingerprint feature of land owner and the map of land parcel and hence leads to the minimization of fraudulent practices in land transactions.
- The very recent advancement of e-Dhara is 'AnyRoR' which means now a person can get the copy of his/her RoR from any village or any e-Dhara Centre of the state. Earlier it was limited to one's own village only.
- Furthermore the Computerized data of land records has been put on internet by the government so one can see the status of his/her land records from anywhere in the world. This is a revolutionary step in the modernization of land records.

6.6 Observations

My working as an intern for 4 weeks at Tehsildar Office-Chotila, District Surendranagar has helped me understanding outputs and outcomes of e-Dhara some of which are described below:

- It has helped to create an e-Governance environment in rural areas. Not all the villages are equipped with working hardware and up graded software but 7 out of 10 villages are having hardware in working conditions and RoR@village facility.
- One of the reasons of speedy process of computerization of land records at village level is the participation of youth either as an operator or as a talati (village revenue officer).
- Created a new source of revenue records, apart from the hand written records of village revenue officer.
- Any mutation can be entered in digital system only after personal login and thumb print of e-Dhara Deputy Tehsildar which adds the responsibility and accountability mechanism in the administration.
- Helped in land-related litigation cases and Ease in administration of other land related department like acquisition, grant etc.
- Led to greater transparency and minimized tampering of land records
- Reducing efforts of other stakeholders to validate and use land records
- The success rate of the project can be further increased at village level by providing better structural facilities and increasing literacy and awareness among villagers.

6.7 Achievements
- Selected as a second runner-up at CSI-Nihilent Award 2006 under Best e-Governance Project category.
- RoR@Village has also received Microsoft Award under Service delivery category.

7. Conclusion

The State of Gujarat is one of the foremost states who commenced the modernization of land records system in India. Gujarat has achieved its goal by the pioneer project 'e-Dhara' and still thinking for advancement and professional approach in it to achieve good governance. Future development of the system is likely to focus on disaster recovery and management capabilities and on enhancing the system to benefit other stakeholders, such as financial institutions, agriculture department and the judiciary. Also, there are plans to integrate land records data with spatial data and with data on survey settlement activities.

8. Acknowledgment

I would like to express my hearty gratitude to Mr Pragnesh R Jani, Tehsildar-Chotila (Dist. Surendranagar) and his staff for their help and support for my research work. I am also thankful to my Professor Santosh Kumar for his guidance and suggestions.

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