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Special Issue on Land Records Computerization

Information Courtesy

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Land Records Computerization

"Earth is precious. Whatever befalls the Earth - befalls the sons of the Earth. Man did not weave the web of life - he is merely a strand in it. Whatever he does to the web, he does to himself."

This we know - the Earth does not belong to man - man belongs to the Earth. This we know, all things are connected like the blood, which unites one family (rewritten by Ted Perry)

This was the reply of Chief Seattle to "The Great White Chief" from Washington, in response to the offer made by the latter for a large area of Indian land accompanied with a promise of "reservation" for the Indian people. The quote described above is regarded as the most beautiful and profound statement on the EARTH & its Environment ever made. Land and its people define basic framework of any civilization. The resources, their ownership and accessibility of land are some of the fundamental constituents of any system which is meant to govern multilateral aspects like socio-economic; cultural and political aspects of human societies. Soon after India achieved Independence, efforts were made to liberate landowners from the clutches of colonial system by bringing in paradigm shift from tax-based approach to land resources management. In India land ownership lies in the name of individuals and not the State. After Independence due significance has been accorded to statistics related to crop, irrigation and land use for them to form a basis for land development in the country.

Hon. CM inaugurating Chota-Udepur taluka Operationalisation

Drive in Gujarat

In present day land record systems, a number of records are being maintained at the village, tehsil and district levels as in statement of land holdings, land revenue, rental cropped areas and land use pattern. There are more than 20 registers that are being maintained by Revenue Department. The number of registers varies from State to State though. Principal records being maintained are

(1) ***Village map***: A pictorial form showing the village and field boundaries;

(2) ***Field book*** or '***khasra***' which is an index to the map, in which changes in the field boundaries, their area, particulars of tenure-holders, methods of Irrigation, cropped area, other uses of land etc. are recorded.

In 1985 it was resolved in Conference of Revenue Ministers to computerize Land Records on pilot basis. The Ministry of Rural Development (MRD), Government of India, took the initiative to identify the deficiencies in the present systems of revenue administration and Land records. It provides funds to States for utilizing IT as a remedial tool to build Land Information System. The 100% Centrally Sponsored Scheme on Computerisation of Land Records (CLR) was started in 1988-89 with the intention to remove the problems inherent in the manual system of maintenance and updating of Land Records to meet the requirements of various group of users. It began as a pilot project in eight Districts/ States e.g., Rangareddy (A.P.), Sonitpur (Assam), Singhbhum (Bihar), Gandhinagar (Gujarat), Morena (M.P.), Wardha (Maharashtra), Mayurbhanj (Orissa), and Dungarpur (Rajasthan).

It was decided that efforts should be made to computerize core data contained in land records, so as to assist development planning and to make records accessible to people/ planners / administrators. Further, the scheme was extended to other districts as well.

Computerisation of land records started in Gujarat in the year 1989 when a pilot project was taken up to experiment computerisation of Gandhinagar district land records. This pilot project was financially assisted by GOI.

Due to this pilot project a detail study report could be prepared on aspects like knowledge level of land records in revenue administration, role of talati, recurring expenditure, phasing of incorporating of computerisation, role of

revenue administration, computerisation methodology, interest level of administration for computerisation, condition of land record, maintenance for updated land records, financial implications etc.

Inclusion in 9th Five Year Plan

Government of India started releasing funds for the project from 1995-96. On guidelines of Action Oriented Committee of State, this project was included as a regular scheme in 9th Five Year Plan and a target of completion of 70 taluka's was decided. Software designed in-house in pilot work was handed over to NIC, after which NIC started enhancement in software for State-wide project.

Man-Power

The man-power distribution plan in the state for the project is as follows:

The ***District Unit*** comprises of 1 Dy Mamlatdar, 1 Circle Officer, 1 Clerk and 1 Peon for primary data entry and day to day activity of the project, as a special case.

One Taluka in each district are identified for operationalisation. For these selected 25 talukas, 25 ***Taluka unit*** staff comprises of 1 Dy Mamlatdar, 1 Data Entry Operator and 1 Peon.

The ***Secretariat Cell*** comprises 1 Dy Secretary, 1 Under Secretary, 1 Section Officer, 2 Assistants and 1 Peon for monitoring the project at State level and to upkeep the administrative aspects of the project.

PROJECT MONITORING

Separate cells and committees have been setup to monitor the progress of the project. These are:

☞ ***State Level Steering Committee*** under the Chairmanship of Principal Secretary has been formed. Secretaries and HODs of the concerned departments are members of this committee. Committee meets for policy level decisions 2-3 times a year, for other important aspects of the projects and to review the progress of the project.

☞ **State Monitoring Cell** has been formed for day-to-day guidance, association of NIC, software development and testing, training. This cell is working in Revenue Department.

☞ **District Implementation Committee** formed at district level under the Chairmanship of the Collector, a District Implementation. District Heads of concerned departments, MLAs, Dist/Taluka Panchayat members participate in this this committee.

☞ **District Implementation Committee** is formed in every district. The District Collector chairs this committee. District Heads of concerned departments and political executives of the District representing Parliament, State assembly, District Panchayat, Taluka Panchayat and social activists with specific

interest are offered membership of this Committee. This Comittee advises, drives, supervises and monitors activities of this project in the district.

☞ **Nodal Officer –** One Deputy Collector has been identified in each district who takes up planning, implementation, monitoring of the district level working of this project. He reviews District Unit's work.

Focus and Objectives

☞ The Computerisation of Land Records (CLR) could safely claim to be the first initiative of E- Governance in India, at the Grass-root level. The focus of the entire operation has always been to employ state of art information technology (IT) to galvanize and transform the existing land record system of the country.

☞ Ensuring efficient, accurate, transparent delivery mechanism and conflict resolution in ownership.

☞ Providing electronic record of rights (ROR) to land owners at nominal rates.

☞ Information empowerment of landowners.

☞ Low cost and easily reproducible data for reliable and durable preservation.

☞ Value addition and modernization in land administration.

Integration with other Data sets towards Comprehensive LIS.

Stages of Computerisation of Land Record.

A Records of Rights (RoR) is obtained through the following stages:

- **Record Updation** - Errors in land records were highly needs to be scrapped before the data entry task. Guidelines for data entry were issued in two parts – I) to rectify the errors in land record ii) to data entry operators. These guidelines were conveyed up to the village level officials through meetings held at district/taluka levels.
- **Data Entry** - For the data entry work, Collectors were empowered to invite tenders and finalize the rate of D/E. Data entry is done by private agencies. As stated above guidelines for data entry operators were also issued.
- **Data entry validation** - As and when data entry work of a village is completed, checking print of VF 7/12 and 8-A along with the mismatch lists derived from the computer are supplied to the village Talati. He checks the print and does point out the errors in data entry, when it is necessary to correct to village record. Then random checking is done by Deputy Mamlatdar and Mamlatdar (Tehsildar) and corrected copies with complied mismatch lists are sent to district computer room where correction are carried out in the computer.

The State Monitoring Cell, LRC, Gandhinagar carry out test checks on random basis. Minute verifications are done and errors pointed out are solved on the spot for the problem faced at the district level. To curtail the errors in data entry and validation work and to avoid the same repetitive mistakes, SMC has issued detailed guidelines. Thus, verification and correction are carried out until the data is error-free. Then, data feed into the computer is to be considered as fit for operationalisation. The Taluka Mamlatdar is responsible for data entry validation.

- **Taluka Operationalisation** - After the data validation, data is transferred to the taluka headquarter computer, where data is converted into formats compatible with windows based platform. Form 7 part of the Village Form 7/12 is locked and nobody can make any changes without the Certified Mutation entry effect. To carry out the Mutation entry NIC has developed the software for Village Form 6 i.e. ***Mutation Register***. Special care has been taken to maintain the safety and security of this important record. Any change in VF 7 can be carried out only after use of Password by the Deputy Mamlatdar and Mamlatdar. VF 12 part will remain open at taluka level for season crop entry. Revenue department has issued the Circular for Taluka Operationalisation wherein

proformae for district level officials are also prescribed.

In the Junagadh district, Bhesan taluka is operationalised on 6th April 2001 and Computerised copies of RoR are issued. Correction in the computer data is being carried out through computer. This process is still in testing stage. State Monitoring Cell is carrying out testing of Mutation register VF 6 for further improvement.

Legalisation of Computer Prints

Revenue Deptt has already issued a Circular wherein for bank business purposes and in the court of laws the Computerised Copy of Record of Rights received from the Revenue office computer room will be considered valid. Until the system fully runs on computers, the village Talati can issue the true copy of RoR.

Security Measures

To maintain the authenticity of the printed RoR, following precautions and safety measures have been taken:

- RoR data (names of holders, area and assessment of the survey number) is locked before it is transferred to Taluka Unit
- Only through Mutation Module Software and valid paper procedure of RoR data can be updated
- Mutation Modula has three stages:
  - Descriptive entry by the data entry operator and locked by the Deputy Mamlatdar.
  - On certification of the Mutation, entry of structure form, verification by the Taluka Computer incharge.
  - Allowing effect to Ror data through Password by the Mamlatdar who is Class II Gazzetted Officer.

Computerisation of Cadastral Maps

Two pilot projects in Kheda and Sabarkantha districts have been taken up with a view to computerize tippans and village maps. Computerization of Survey Tippans of 131 villages of Kheda district is on completion and 408 villages of Sabarkantha district have been completed.

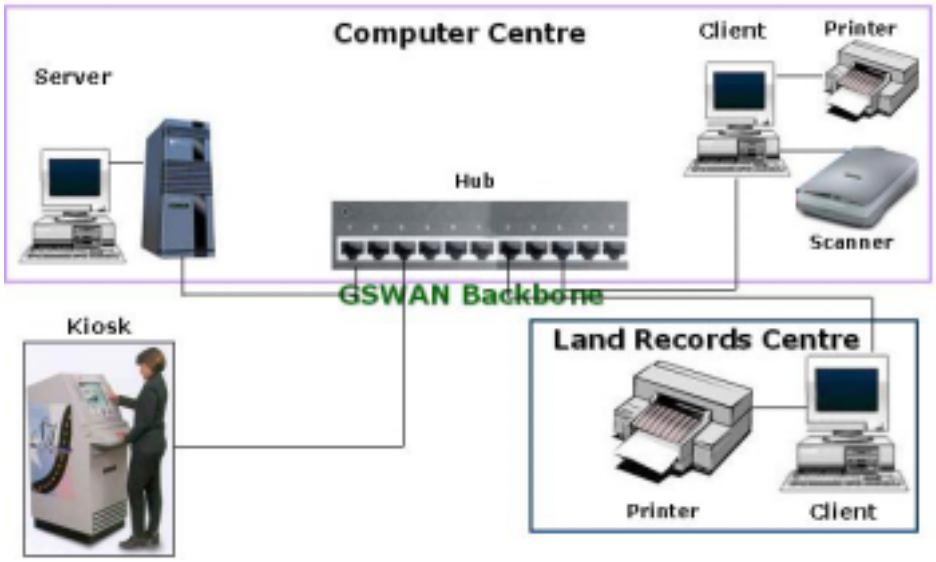
Association with NIC and GSWAN

The manual system of land records in the country is an age-old system. Over the period it has adapted to local practices and traditions. Hence, each state has its own specific way of maintaining the records. There are several ways of transfer and recording of ownership of lands as per the traditional style. These transfers should rightly represent shares and inheritance. Each plot is assigned a particular Identity number for which, particulars of owner(s) and respective shares are recorded in actual fractions. For assessment of tax, land categories and crop related details are also recorded. Village officers are supposed to update these records every harvesting season. Once transfer has been properly notified, it should be duly registered. But in actual practice, the system has not been duly adhered to and thereby the village book that records the transactions is the only document with legal standing in maximum cases. Every owner is given a reference map depicting the boundaries and location of plot(s). An ownership document and a document containing physical details of land are also given along with this, referred to as Record of Rights (ROR).

Gujarat Unit of National Informatics Centre, which is under Information Technology Ministry of GOI, is associated as technical partner of this Gujarat Computerisation of Land Record Project, in order to develop appropriate software, and has carried out a detailed system study of existing manual system. On state official guidance NIC analyzed the system, designed and developed, tested its efficiency and has implemented the various modules & sub-modules.

NIC has been providing technical support on the district level as well as the Taluka level in data management and software development in consultation with state monitoring cell.

Computer Setup At Taluka Level



Each District Unit is having a Unix Server and 6 terminals, whereas each Taluka Unit is having a NT Server all of which is connected to the Gujarat State Wide Area Network (GSWAN).

The software's developed by National Informatics Limited are using the GSWAN backbone for the Intranet applications. The users query through the client's browser uses the efficient 2Mbps GSWAN connectivity to fetch the results real-time from even the Taluka level server. The applications that can be regarded as a milestone for the computerization of Land Records are:

1. ***Land Record Information System (LRIS)***: This is a browser based application developed by NIC which ensembles in itself various useful features like Taluka wise Land Records Status, Details of various surveys and Khatas, Crops Information, Land Usage, Wasteland, etc. Some of the features requires authentication (i.e. password) to view relevant details. Such reports are based on "***Khasra***" format. However, it is important to note that the application uses Dynamic Gujarati fonts to ease the data entry tasks. Once the Land Records verification is completed, the data entry is done and on completion of the status is updated online. Thus real time status of the computerization task can be viewed anytime.

2. ***Bhulekh Soft for Land Records***: This is client server based application developed by NIC which boasts of a GIS type user interface. The Graphical Interface of the application has a map of Gujarat on which each of the districts can be uniquely identified by hovering the mouse device. Each district area when interacted provides the information of the related talukas and villages of the concerned district. This software has the unique feature of proving information on both the ***Khasra*** and ***Khatauni*** format. It also produces the RoR on the original khasra format, which is meant for giving to the farmers and citizens.

Ths these applications will enable to have the information about statistics of crops, Land related information, Debt position of the farmers, Irrigation statistics, etc.

Operationalisation Status

The phase of operationalisation is the most important and vital one and is possible only after 100% verification of the Data entry work. It is at that phase that computerised print of Record of Rights (RoR) is made available to farmers and Rural Citizens.

Narmada District is to be made completely operationalised (all 4 talukas) on 24th March 2003. 23 talukas out of all 225 talukas are operational today. Operationalisation of more 5-6 talukas is expected in near future. Digitised cadastral maps are operational in 5 talukas of Sabarkanthaone district as a result of completion of pilot project.

In all these talukas computerised copy of Village forms 6,7,8-A,12 (Record of Right) is available to rural citizen from taluka head quarter i.e. mamlatdar office.

Computerised copy of 'Khasra' being presented to a citizen.

Web Corner

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http://home.nic.in

Gujarat Science City
http://www.gujaratsciencecity.org/

State Tenders
www.statetenders.com

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