

Primer:

O6: Introduction of Computerized Process of Registration of Land and Property

Optional Reform under JNNURM



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The Reform: Computerisation Of The Process Of Registration Of Land And Property¹

The Jawaharlal Nehru National Urban Renewal Mission (JNNURM) *inter alia* aims at computerisation of the process of registration of land and property, so as to deliver efficient, reliable, speedy and transparent services to citizens. The states/ cities are therefore required to undertake steps to introduce computerised process of registration to bring in an efficient real estate market where transactions, i.e., sale and purchase of properties, can take place smoothly, without any barriers, and in a transparent manner. The real estate market in India is extremely narrow due to the persistence of manual method of property registration, which is extremely cumbersome. One of the many barriers to the efficient functioning of the real estate market has been, and continues to be, the age –old practice of manual system of registration, which results in corruption and delay. The registration system is governed by antiquated procedures, which include the laborious copying and indexing of documents as well as their unscientific space-consuming preservation in ill-maintained backrooms. The laborious procedures and lack of transparency in property valuation have resulted in a flourishing business of brokers and middlemen who exploits citizens selling or buying property.

Although many states have taken steps to introduce computerised process of registration, in a few states, the manual system still persists. The JNNURM requires that computerisation of the process of registration of land and property be adopted by all states and their concerned ULBs within the Mission period.

1. Rationale for the reform

Various Committees and experts have underlined the adverse effects on the economy of the existence of the manual system of registration and consequently the need to replace them by a computerised system. As a matter of fact, several states have initiated reforms to adopt computerized systems of registration of property. However, several associated procedures like obtaining non-encumbrance certificate, deed writing, and valuation of property are still done manually. Andhra Pradesh is the only state, which has adopted a software, which takes care of all these procedures.

The salient features of the manual system of registration may be outlined as follows:

▪ Age-old procedures and practices

The registration process is highly antiquated, procedure-bound, conservative and rigid. The complicated procedures are not only time consuming but also not easily comprehensible by citizens. People thus involve brokers to get their job done.

▪ Lack of transparency in valuation

¹ Based on Computer-aided Administration of Registration Department (CARD) Andhra Pradesh, J. Satyanarayana, 2002.

Since liability of stamp duty is related to value of the property, valuation of property assumes importance. A system of market value guidelines or basic values needsto be introduced whereby the rate per unit of rural/urban land is assessed for all towns and incorporated in a register for public guidance. However, registers are usually not accessible to the public, and even if they are, it is difficult for a common man to understand them and calculate the amount of stamp duty, transfer duty, registration fee and miscellaneous fee. All these hurdles create an impression that the valuation of property is ‘flexible’ and “negotiable.” This lack of transparency in valuation leads to a host of corrupt practices.

▪ **Tedious back office function**

The traditional manual methods of copying, indexing and retrieving documents are laborious, time consuming and prone to errors and manipulations by brokers/middlemen. Thus a premium is usually attached to speedy delivery of services, which ultimately increases the cost of registration.

▪ **Mystification of the Registration Process**

The lack of transparency involved in the registration process and the laborious procedures leads to the flourishing business of brokers and middlemen who exploit the mystified air shrouding the registration process.

▪ **Difficulty in Preservation of documents**

The conventional method involves manual copying of documents into the registers, which creates problems in preservation. The registers take a lot of physical space usually in ill-maintained backrooms, which deteriorate qualitatively with time and repeated handling.

The JNNURM recognizes these adverse effects of the manual system of registration. It expects that the adoption of computerisation of the process of registration of land and property will help to develop a healthy real estate market, provide fillip to the growth of the economy, and reduce the size of the black money and delay in transaction. It also expects that this will lead to an increase in revenues for the states.

Expected Outcomes of computerisation of the process of registration of land and property

- Demystify the registration process;
- Introduce a transparent system of valuation of properties, easily accessible to citizens;
- Bring in speed, efficiency, consistency and reliability;
- Replace the manual system of copying and filing of documents with a sophisticated document management system that uses imaging technology;
- Replace the manual system of indexing, accounting and reporting;
- Introduce electronic search of property (encumbrance certificate);
- Introduce electronic document writing; and
- Substantially improve the citizen interface.

Besides these primary objectives, the following secondary objectives can also be met by introduction of Information Technology:

- To cater to different levels of users;

- To provide for adequate security levels;
- To deliver all the registration services across the counter;
- To bring in maximum user-friendliness;
- To be scaleable;
- To permit modular development and implementation;
- To enable switchover to a network computing environment in the future; and
- To be easily adaptable to statutory changes in registration procedures.

2. Steps to implementing the reform and timelines

The JNNURM envisages the following seven- step exercise to adopt a computerised process of registration of land and property.

Step I: Amendment of the Registration Act

The Registration Act of 1908 is a legislation of the Union of India. It does not provide for handling the registration process on computers. The Registration Act of 1908 together with the Rules and Standing Orders, provide in great detail, the manner of presentation of document, its scrutiny, the registration process, copying of the documents into volumes of books, the ink to be used for copying, etc. The Registration Act, 1908, in its application to the respective state has to be amended to provide for the following:

- The process of registration of any category of documents may be completed and copying done with the help of electronic devices like computers, scanners and CDs and copies preserved and retrieved as per requirement.
- Copies of documents registered and stored electronically, retrieved, printed and certified by the sub-registrar shall be recognised as evidence.
- The software to be used for registration shall be prescribed by the Inspector General.

Step II: Design Forms and Reports

A set of forms and reports have been designed and printed in the required number of copies. These include:

Forms:

- Requisition form for market value assistance.
- Input form to accompany the document to be registered (urban property).
- Indent for purchase of stamp papers.
- Application for issue of an Encumbrance Certificate.

Reports (pre-printed stationery)²:

- Market value report (check slip).
- Registration check slip.
- Encumbrance Certificate.
- Cash Receipt.

Step III: Procurement of hardware and software

The application software may be developed by the National Informatics Centre or some other IT agency as per the requirements specified in Step II. After development of the application software, each feature needs to be thoroughly discussed, demonstrated, refined, tested and

² The reports/check slips to be handed over to the citizens are to be printed in different colours with the logo of the project and the emblem of the government for an attractive and authentic look.

modified. Close links and coordination between the field officers and the software development team may make it possible to modify the software to make the system work efficiently.

Step IV: Creation of the Computerised Database System

The master data

The master data may be created at the state level and be common throughout the state. It can be modified only by the specific authority of the Commissioner and Inspector General of Registration at the state level. The Master data could include registration office codes, habitation codes, rates of stamp duty, transfer duty and registration fee, standard unit rates for valuation of structures, depreciation rates, codes for different classes of instruments and codes for different classes of lands. The users at the district and sub-district levels may only read/print the above master data but cannot alter it. This could safeguard the system from possible alterations detrimental to the state's revenue and also enhance the credibility of the system among the public.

The Sub-Registrars Office (SRO) masters

The master data at the SRO should be relevant and applicable to the jurisdiction of a sub-registrar's office and may be altered only under the authority of the District Registrar. It has to contain the basic values (rates per acre/sq. yard) of all the land within the SRO, survey-number-wise and house-number-wise for residential/commercial properties.

The SRO user

This data relates to the transactions handled across the counter in the SRO. It is the user level data entered by the operators on a transaction basis. The operator cannot alter most of this data, which prevents unauthorized alterations/interpolations to the valuable data of registration, which affects the rights, and liabilities of citizens.

The computerised system handles a wide variety of transactions like registration of deeds, cash transactions, market value assistance, issuing Encumbrance Certificates and delivery of certified copies. It could scan the documents registered and "cut" the images into a CD-ROM for preservation and archiving and keep a record of inventory of different denominations of stamps, the sale of stamps, and accounts relating to all the monetary transactions to help the citizens.

Service Levels and Delivery Channels

As mentioned earlier, the computerised registration aims at improving the quality of the services offered by the registration department by providing a computer interface between citizens and government. The service levels substantially improve with the introduction of IT. The procedures that take months could be accomplished in just a few minutes. The market valuation of property, issuance of the Encumbrance Certificate (EC), the sale of stamp papers, document writing and registration of the documents etc. take a few minutes each.

Business process re-engineering

Computerization of the age-old process of registration called for considerable re-engineering effort.

Step V: Valuation of properties

Guidance values are values that are used for registering properties and other conveyance-related transactions and reflect the market values of properties, and are therefore assumed to be

- b. To what extent is the present system computerized- Comments :
- i. Is there a computerized record of registered properties? Yes No
 - ii. Can the property holder register through internet? Yes No
 - iii. Can the valuation of property be done online? Yes No
 - iv. Can one obtain encumbrance certificate online? Yes No

TIMELINE FOR REFORM

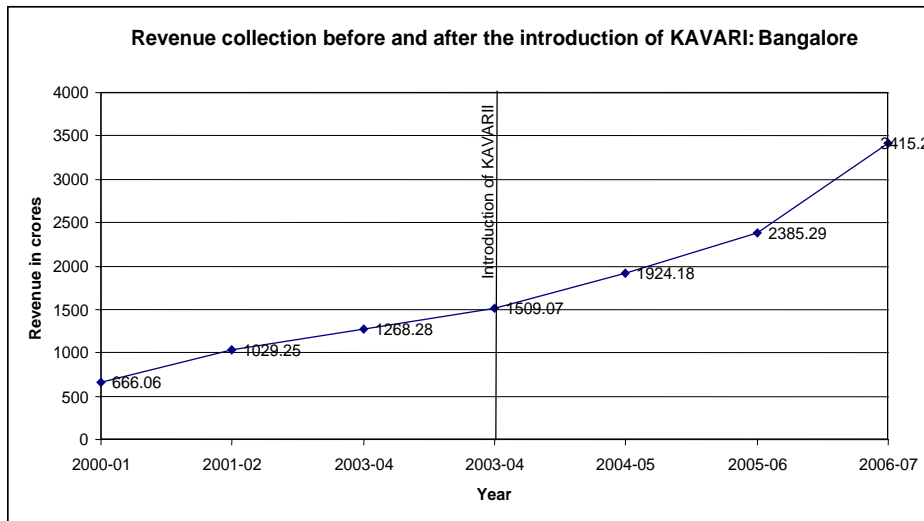
- a. Indicate the target year for conversion to an electronic process of registration

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7

Annexure 1

KAVARI (Karnataka)

The software used in Karnataka is commonly known as KAVARI, after the river Cavery. Centre for Development of Advanced Computing, Pune (C-DAC) provided the technical support in developing suitable software to cover the following aspects of registration: Registration of properties, Valuation of properties, Scanning and Archival of Documents, Reports, Vendor management system, Utilities, Website, Societies, Firms and Marriage Registration and Data Transmission.



Source: Department of Stamps & Registration Karnataka

The figure indicates that there was a significant growth in the revenue to the State exchequer after the introduction of KAVARI. Stamp duty reduced yet revenue increased. The Government of Karnataka reduced the rate of stamp duty on conveyance from 10% to 8% and Registration fee from 2% to 1% with effects from 01-04-2003. In spite of reduction in stamp duty and registration fee there was significant growth in revenue. E-Governance is not only benefiting the public in getting the documents registered in 30 minutes but also the state in getting the good revenue.

Annexure 2

Training Details of Computer-aided Administration of Registration Department (CARD) Andhra Pradesh³

To effectively use the technology, a well-designed and large training program was implemented by the National Institute of Information Technology. Training was imparted to employees at five different levels.

Training details:

Category	Number	Training Period
Senior Officers (DIGs and DRs)	45	1 week
Middle level managers	50	3 weeks
Data Processing Officers	7	Hardware used in the CARD project
Sub-registrars	300	SERVER: IBM 3500 PC based server
Data Entry Operators	1200	CLIENT: Pentium Clients with Intel Pentium Mhz with 32 bit PCI bus 64 MB SD RAM ECC DIMM expandable to 512 MB 2 X 4.33 GB Ultra Fast SCSI-II HDD 1X600 MB IDE CDROM with 24x speed 14" SVGA mono monitor 32 bit ethernet card, 33.6 kbps data/fax internal modem
<ul style="list-style-type: none"> The training programs were implemented in a corporate-like environment at a cost of about \$262,000 (Rs 1.13 crores). Decentralized training programs were run at 25 centers in the state. Training course-ware was designed and supplied. The Data Processing Officers were groomed as technical resource persons at the district level, competent to install various kinds of software, trouble-shoot technically, and to 		CLIENT: Pentium Clients with Intel Pentium CPU @ 166 Mhz MMX, PC/ISA Bus 2x168 pin DIMM slots 32 MB SD RAM expandable to 128 MB 2x2.0 GB SCSI Hard disk drive with PCI-SCSI controller HP T 41(4/8GB) SCSI CTD (3.5") 15" SVGA color monitor Gist card with GIST firmware ver 8.041 32 bit ethernet card with UTP and BNC ports SCANNER: A4 size SCANNER with ADF (50 pages capacity) (Flat Bet, Color 600 dpi, Speed=8 sec/per text page @ 300 dpi) Laser Printer: Printing speed upto 8 ppm, Printing resolution: 600*600 dpi Buffer capacity: 2 Mbyte expandable to M byte Printer language: Windows Compatible Interface: parallel, Paper Size: A4 size, letter, executive Power Supply: 220V, 50 HZ Paper Tray Capacity: 100 sheets Paper types: Plain paper, envelopes, and transparency Consumables: Toner Cartridges CD Writer: 6X read 2X write external drive with SCSI interface With append mode writing CD WRITER with SCSI Port.

³ Based on Computer-aided Administration of Registration Department (CARD) Andhra Pradesh, J. Satyanarayana, 2002.

transfer the skills required to manage the counters.

The required motivation of all the employees was brought about by the following steps:

- A cross-section of the field personnel was closely associated with the design and development of the software and especially in the task of business process re-engineering.
- No external technical personnel were recruited.
- The head of the department (the author) undertook extensive tours over the state and conducted workshops, presentations and special training camps involving all the employees of the department. The officials who managed the two pilot sites were closely associated with this effort.
- The acronym “CARD” has contributed significantly to the identification of the employees with the project.
- Support and association of senior functionaries of the government such as the Principal Secretary and Minister of the Revenue Department have been motivational factors as well.

Imaging software: A customized scanning software was developed with all the security and other features required by the CARD project. The salient features of the imaging software developed are given below:

1. Scanning of only the registered documents.
2. Archiving of images of documents on to CD/tape.
3. Retrieval of the documents by document.
4. Audit trail.
5. Management reports on documents scanned.
6. Online help feature.

Software used in the CARD Project

A & B Categories
OS for the server SCO UNIX Version 5.04
OS for the client Windows '95 Version 4.00
RDBMS Oracle work group Server.
Version 7.3, 2, 2.0

Front end for the clients Developer 2000 Forms -
4.5
Reports - 2.5

C Category

Operating System Windows '95 Version 4.00
RDBMS Personal Oracle Version 7.3, 2, 2.0
Front end Developer 2000 Forms - 4.5
Reports - 2.5