HALRIS # HARIS Bridge:
Dynamic Integration of Property
Registration and Land Records
Administration in Haryana

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Abstract
In Haryana, the revenue department plays a crucial role in matters fundamental to the existence of the citizen. With a view to streamlining the working of the revenue establishment, the process of computerisation of land records on one hand, and property registration on the other was started. Once the property registration system (HARIS) and land records administration system (HALRIS) were standardised and stabilised, a need was felt to integrate HARIS and HALRIS in a workflow environment. Accordingly, the National Informatics Centre, Haryana State Centre (NIC HRSC) developed an integrated software product, HALRIS#HARIS bridge, which dynamically integrates the property registration and land records workflow under a single unified data base. HARIS is being implemented in 100% tehsils and sub-tehsils (112 locations). During the year 2005–2006, the stamp duty collected through HARIS was Rs 1373 crores, whereas it was only Rs 782.71 crores during the year 2004–2005 (an increase of 57%). An average increase of up to 40% has been recorded since the year 2001–2002. There are 7081 total villages in the state, out of which 6918 villages have been entered in the computers. Of the total, 163 villages were not available for computerisation, because the jamabandies of these villages were under consolidation operations. Out of 6918 jamabandies, 6840 have been validated by the patwaris, and 6524 jamabandies have been made online after incorporating the latest mutations. These jamabandies have around 50 lakh khewats (accounts). The record of rights (RORs) of more than 40 tehsils have been made available on the web for anytime, anywhere access. Successful implementation has resulted in greater transparency, ease of service delivery, and increase in revenue collection. The project has received a number of recognitions. This article gives an overview of the HALRIS # HARIS bridge system of Haryana.
Introduction

In most states of the Indian Union, the finance department handles property registration work, and the revenue department looks after land records administration work. Haryana is one of the few states where property registration and land records administration work have been merged into a single department. The Department of Revenue, Government of Haryana, deals with maintaining and updating of revenue records, transaction by way of sale, mortgage, collection of revenue, consolidation of holdings, etc. The functionaries of the revenue department come into close contact with the general public in connection with various activities/transactions dealing with immovable property. The department also executes a large number of acts and rules, which have a direct bearing with the public. Thus plays a crucial role in matters fundamental to the existence of the citizen. A single revenue officer designated as tehsildar/naib-tehsildar functions as the sub-registrar while handling the work of property registration. He also functions as CRO while handling the work of land records administration.

Property Registration: Age-old procedures and traditional work-culture has brought about problems in the office of sub-registrar, which includes lack of a high degree of transparency in valuation of properties, calculations of stamp duty and registration, delays in providing the services, in office record maintenance and in management of voluminous documents. These issues called for radical reforms, so that the rigid and complex system can be simplified to bring transparency and provide a one-stop service to the common man. The perception of the general public, especially rural masses, about the image of the state government is to a large extent determined by the performance of the revenue department and the way the revenue functionaries deal with the citizens. Keeping the aforesaid objectives in view, the Haryana Revenue Department decided to computerise the registration of documents at all tehsils/sub-tehsils of Haryana, in technical consultation with NIC HRSC, in a phased manner. HARIS was developed and implemented in all tehsils in Haryana.

Land Records Administration: Jamabandi is a document prepared as part of the record-of-right in every revenue estate. It contains entries on ownership, cultivation and other rights of land. All changes of rights in land coming to the notice of the revenue agency are reflected in the jamabandi according to a set procedure, after the revenue officer has verified the changes. Each type of writing the jamabandi and incorporating the mutations have been studied and standardised across the state.

HALRIS # HARIS bridge: With a view to streamlining the working of the revenue establishment, the process of computerisation of land records was started on one hand and the property registration on other. Once HARIS and HALRIS were standardised and stabilised, a need was felt to integrate HARIS and HALRIS in a workflow environment. Accordingly, the NIC
HRSC linked the software products, HALRIS and HARIS, which dynamically integrated the property registration and land records workflow under a single unified data base.

**Project Objectives**

- To facilitate collectors/DCs to re-structure their collector rates based on the segment, control area and prime area and achieve standardisation. Facilitating reduction of litigations under section 47-A of the Registration Act.
- Reduction of litigations and frauds by enforcing controls and enabling online availability of updated records directly into the system at the time of transaction, thereby stopping the possibility of selling the same piece of land to multiple parties.
- Making standard deed templates and online pre-registration audit available in the system, thereby saving the rural public from the hands of middlemen, deed writers and auditors
- To facilitate availability of RORs on an anytime, anywhere basis with transparency.

**Process of Involvement of Stakeholders**

The financial commissioner of the revenue department constituted a state-level standardisation and monitoring committee. NIC HRSC put together a dedicated team of professionals for the project. The workshops were organised at the division commissioner level; all stakeholders were called and various re-engineered processes were discussed. At the field level also, detailed discussions were held among patwaris, private deed writers, panchayats, and retired revenue officials, and at the level of district revenue officers, tehsildars, kanoongos, etc. The manual workflow of property registration and land records administration is shown in Fig. 1. The automated workflow of integrated property registration and land records is shown in Fig. 2. The home page, www.jamabandi.nic.in, is shown in Fig. 3.

**Service Orientation of the Project**

The integrated HALRIS software product provides a complete solution for the management of land records in the state and improved delivery of government-to-citizen (G2C) services related to land administration and property registration. The web interface for jamabandi nakal has also been made available to citizens for access to ROR on an anytime, anywhere basis.
The HALRIS#HARIS bridge solution has been developed in Hindi. The system is being operated at remote places by revenue staff/contractual staff on their own. They were provided initial operational training. All services are provided through a single window at the HARIS/HALRIS centre.

Fig. 1. Manual workflow of property registration and land records administration
Fig. 2. *Automated workflow of integrated property registration and land records*
Fig. 3 Home Page of www.jamabandi.nic.in
Transparency and Citizen-Centricity

The system has improved the quality of service in tehsils by reducing the total time taken by the tehsil staff for registration. Now, documents are returned the same day to the public, whereas earlier it sometimes took weeks or months to get a registered deed. The system uses the collector rates as reference rates for computing the stamp duty. So, in no case is the registration of land allowed below the DC rates. This feature of the system has eliminated the requirements of pre-registration audit. Therefore, the government has stopped the pre-registration audit of documents, which has saved the general public from harassment at the hands of auditors. The photographs of witnesses are also taken along with the sellers and buyers online. This has reduced the incidents of false witnesses, which was very prevalent before the implementation of the system. Online availability of updated naka of ROR to the public helps in reduction of litigations and frauds, as it is not possible now to sell the same piece of land to multiple parties/people. Web enabling of the land records has helped in bringing transparency and in making access to the ROR available on an anytime, anywhere basis.

Technology

Computerisation of land records (CoLR) was started on a pilot basis in the Rewari district during 1990–91, and it was extended to all districts during 1997–98, under a 100% centrally sponsored scheme. More than 90% of jamabandi data was digitised under the CoLR scheme, but this data was not fully used for citizen services due to the delay in data verification and finalisation by patwaries (village accountants). The Patwaries delayed the process because of lack of knowledge and very little interest in data finalisation. Jamabandies were taken for data entry without standardising the way of writing. It was soon found that each patwari used multiple ways of righting the shares of owners/cultivators in the same jamabandi. There was no provision for online capturing of transactions taking place in villages and tehsils. The CoLR software had various stand-alone modules on Unix platform using Gist terminals and no provision for incorporating online mutations and automatic updation of jamabandi. On the other hand, property registration computerisation (HARIS) was started at all tehsils/sub-tehsils (taluka) of Haryana, in technical consultation with NIC HRSC, by raising the funds through District Red Cross Societies. HARIS was developed on Microsoft technologies using the client/server architecture. Due to these constraints, it was not possible to integrate the CoLR software with the HARIS. To address all such issues, a workflow-based integrated land records information system (HALRIS) was developed by NIC HRSC using Microsoft Windows OS, SQL Server RDBMS at the back end, MS-IIS server
for web hosting, MS-VB/ASP, Crystal Reports as front end application development tools and Gist SDK for Hindi language interface. The integration of 2D-bar coding on ROR using hashing has also been completed.

**Sustainability and Cost-Effectiveness**

For implementing the project in Haryana, the District Red Cross Society has been found handy, as the Deputy Commissioner is the chairperson and controller of its functions.

- District Red Cross Society is taking service charges from each applicant as budgetary support for the sustainability of the project.
- The state government is generating Rs 5–6 crores as service charges from the HARIS project. A District IT Society (DITS), again headed by the Deputy Commissioner and DIO, NIC HRSC as Member Secretary, has been formed in each district.
- Functions of DITS are performed by the District Red Cross society by keeping separate accounts for both income and expenditure.
- The income from service charges can only be utilised for legitimate purposes of records maintenance. The service charges have been standardised across the state. The HARIS project has been working for four years. The initial expenditure, made by the District Red Cross Societies, was recovered within one year itself. Property registration and land records have been declared as two mission-mode projects under NeGP. Funding will be available from GOI under the new scheme, Comprehensive Management of Land Records (CMLR). Interconnectivity with high-speed bandwidth will be provided under the SWAN project, which has already been initiated under GOI funding and NeGP. The project implementation is on a long-term, self-sustainable basis, with cost-effectiveness.

**Benefits to Citizens**

- The system has improved the quality of service in tehsils by reducing the total time taken by the tehsil staff for registration. Now, documents are returned the same day to the public; earlier, it sometimes took weeks or even months to get a registered deed.
- The system uses the collector rates as reference rates for computing the stamp duty. So, in no case is the registration of land allowed below the DC rates. This feature of the system has eliminated the requirements of pre-registration audit. Therefore, the government has stopped the pre-registration audit of documents, which has saved the general public from harassment at the hands of auditors.
- The photographs of witnesses are also taken along with the sellers
and buyers online. This has reduced the incidents of false witnesses, which was very prevalent before the implementation of this system.

- District Red Cross Societies are using a part of the service charges for running social welfare programmes for the weaker sections of the society.
- Online availability of updated Nakal of ROR to the public helps in the reduction of litigations and frauds, as it is not possible now to sell the same piece of land to multiple parties.
- The system has enforced low manual intervention and data capturing at source. This has lead to fewer errors in the records, and thereby a reduction in litigations.
- Web enabling of the land records through http://jamabandi.nic.in has helped in bringing transparency and in making access to the ROR available on an anytime, anywhere basis.
- The system has also helped in generating around 500 jobs for the local Haryana youth, as all the operators have been appointed from local areas.

**Benefits to Government**

- After the implementation of the system, there is a straightway 40% increase in stamp duty collection. This increase has become possible, as the system has forced the collectors to make their collector rates uniform.
- The system has helped in reducing the practice of concealing the exact location of property for saving stamp duty; now it is not possible to register a property below the collector rate. This has stopped the revenue leakage caused by the registration of under-valued deeds.
- The system has also reduced the number of 47-A cases to a considerable extent. It was a common practice by the parties to register an under-valued deed, and then get it impounded by the tehsildar. Later on, they were able to get the deed back by paying bribes or a small amount of money as fine.
- The project has been generating Rs 5–6 crores per annum from registrations as service charges. Till date, more than Rs 1800 lakhs have been collected as service charges, which is enough for executing the other e-governance projects related to the revenue department.

**Details of Recognitions, Awards and Other Accolades Already Received**

- The project received the ‘Silver Icon’ National Award at the eighth National e-Governance Conference held at Bhubaneshwar (Orissa).
The project received the ‘Copper Icon’ National Award at the Ninth National e-Governance Conference held at Kochi (Kerala).

The project was accepted for demonstration at a national conference on land records computerisation at LBSNAA, Mussoorie, International Conference on e-Governance at IIT Delhi, and a national conference at IIM Bangalore.

The Haryana government has declared HALRIS as a standard software product good for replication across the state.

The Joint Secretary (P) at DIT, Government of India, appreciated the HALRIS product during its detailed demonstration.

The product was demonstrated at ELITAX-2005, New Delhi. The Honourable Minister for Communication and IT, Government of India, saw the product and appreciated it.

During the national conference of revenue secretaries, the Special Secretary and Director of Land Records, Haryana, highlighted the features of HALRIS.

Additional Secretary of Rural Development at the Ministry of Rural Development, Government of India, appreciated the HALRIS project.

Future Development Plan with the Project

- The work of generating sajra-Nasab (pedigree tree) and sajra aksh (cadastral maps), with integration to jamabandis is being initiated under the NeGP grant-in-aid scheme.
- ROR services will also be provided through the 1127 proposed rural common service centres (CSCs) and 100 urban CSCs, planned to be established on a PPP model under the Government of India scheme of one lakh CSCs across the country.
- e-stamping for property registration is also under consideration.