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Summary: Critical Findings

- A. Textual records are computerised and online in 99 percent villages. 89 percent of surveyed land parcels had their textual records correct, in accordance with the state's land administration system.
- B. 96 percent Cadastral maps in rural areas are computerised; 77 percent are georeferenced. However, spatial records of only 38 percent to 54 percent land parcels actually fit the on-ground possession.
- C. Majority of land parcels (84 percent of surveyed parcels) are jointly owned with shares specified in the RoR. No subdivisions have taken place, even though (54 percent within the 84 percent) people possess separate land parcels on mutual understanding
- D. Auto-triggered Mutation has brought down mutation timelines and pendency, but significant backlog of 2 lakh applications remains from previous years.
- E. After mutation, the name of the new owner does not automatically revert in 'ownership' column. Instead, a mutation number is added in the remarks columns. This reduces the reliability of the online RoR (since mutation records are not always online) and increases complexity for prospective buyers.

F.	Majority of land owners do not apply for mutations in cases of inheritance.
	These cases are updated only on a need-basis. Land acquisition instances also
	do not lead to mutation.

- G. Partitions are not subdivided online, but efforts are ongoing. In partition cases, even the jamabandi may not be updated online before the five-year period is over.
- H. Haryana has undertaken drone mapping of complete state, and has created a user-friendly GIS platform to view spatial records. One-fourth of these maps are currently uptodate with partition markings.
- I. The state is targeting 100 percent digitisation of all archival records through Modern Revenue Record Room for easy storage and access. This will substantially improve citizen convenience.

1. Introduction

Haryana, located in northern India, is one of the country's most agriculturally prosperous states. With an area of 44,212 square kilometers, it shares borders with Punjab Himachal Pradesh, and Uttar Pradesh, and surrounds the national capital, New Delhi, on three sides. Geographically, Haryana is part of the Indo-Gangetic Plain, with flat and fertile terrain, making it one of India's most agriculturally productive regions. The state is also home to the Aravalli Range, particularly in the southern districts like Gurgaon and Faridabad, which provides a varied topography. Haryana's economy is one of the most developed in India, driven by a strong agricultural sector, particularly wheat and rice production, as well as a rapidly growing industrial and services sector. Haryana also has one of the country's most prolific real estate markets due to its proximity to New Delhi.

Haryana was formed out of Punjab on November 1, 1966, primarily on linguistic lines, and shares its land revenue system with Punjab and parts of Himachal Pradesh. As of 2021 projections, Haryana has a population of approximately 29 million. Its urbanization is concentrated in cities like Gurgaon, Faridabad, and Panipat, though a significant portion of the population remains in rural areas.

Haryana's land consolidation exercise, initiated in the 1950s, reorganized fragmented agricultural land into more manageable and contiguous plots. Most of its villages feature rectangular land parcels of equal area. This reform improved farming efficiency and irrigation, laying the groundwork for the state's significant role in India's Green Revolution, which boosted agricultural productivity, especially in wheat and rice production.

Table 1: Haryana Revenue set up

Divisions	6
Districts	22
Sub-Divisions	73
Tehsils/Sub-Tehsils	143
Kanoongo Circle	256
Patwar Circle	2691
Revenue Estates	7088

Institutionally and technologically, the state has an integrated system of land records management. It was among the early states to have linked computerized land records and registration systems though a two-way bridge (DoLR, 2008). Currently this technological integration is evident in the presence of just one website (jamabandi.nic.in) which hosts both ROR and registration related functions. Institutionally as well, there is a merging of revenue and registration functions, such that the same functionary is expected to fulfill functions across the two components of the land records management system. For example, generally, the tehsildar of a particular tehsil is also the sub-registration officer (SRO) for the co-terminus SRO jurisdiction.

Integration of ROR and Registration

In Haryana, the Record of Rights (ROR) information and property registration system are integrated through the webHALRIS portal (<u>Jamabandi.nic.in</u>). This makes it one of the few states to have the same portal for both ROR and registration services. Some of the key features of the portal are:

- 1. Web-based access to RoR, for checking and for verified copy
- 2. Registration of a deed (multiple sub-processes)
- 3. Web-based access to mutation orders and status
- 4. Links to revenue court orders and cadastral maps
- 5. Searching for urban records

Prior to 2000, registration of sale deeds was carried out manually, which was time consuming and, because of discretionary powers held by sub-registrars (tehsildars), there remained scope for corruption and misuse. Similarly, the RORs were also maintained held in a manual, paper-based format, and revenue officers on field had had multiple discretionary powers. HARIS and HALRIS were the two IT systems introduced in 2000 and 2004 for registration and ROR/mutation, respectively, by state Revenue Department working with the state NIC. These systems computerized the manual processes and increased the efficiency of public service delivery. Between 2004 and 2006, HARIS and HALRIS were integrated for the first time through a two-way bridge system. Subsequently the two IT systems were upgraded and integrated as webHALRIS between 2021-24. The current report looks into the status of land records modernization in the state more than twenty years after the two softwares were first launched. It also looks at the status of modernization of spatial records, for which the idea was first initiated in 2008 by the introduction of NLRMP (now known as DILRMP), and what progress has been made therein in Haryana.

Methodology

The methodology for this study was systematically divided into two main components: information collection primarily at state level, and primary surveys at village level. Data was gathered at multiple administrative levels, including state, tehsil, and Sub-Registrar Office (SRO) levels. This data was obtained from state and district-level officials from the revenue department as well as from a range of stakeholders such as National Informatics Centre (NIC), and Haryana Space Applications Centre (HARSAC). A comprehensive questionnaire was provided by DoLR, which was divided into multiple modules focusing on a specific aspect of the DILRMP, including Record of Rights (RoRs), cadastral maps, registration, mutation, and the Revenue Court Management System. Government officials at the state and district levels were asked these questions, to identify gaps between the reported achievements and the desired outcomes of the program.

The primary survey aimed to assess the real-time integration of textual and spatial records and the registration process in selected villages within Haryana. For this purpose, two villages were selected in consultation with the Haryana Revenue Department. One of the important criteria for selecting the regions was to choose districts that provide a comprehensive representation of the state. Consequently, Mahendragarh district and Karnal district were selected. Mahendragarh district is part of the National Capital Region (NCR) and is primarily rural in terms of demography and economy. In 2011, Mahendragarh district had 14.4 percent urbanisation, which was lower than the state average of 34.9 percent urbanisation (Census 2011). 70 percent of the working population is engaged in agricultural activities (Dept of Agriculture & Farmers Welfare, 2022). Some impacts of peri-urbanisation can be seen due to the influence of Central University of Haryana. Karnal district, on the other hand, is not part of NCR, and has agriculture as the predominant land use. In 2011 it was close to the state's average rate of urbanisation, with 30.2 percent urban population. In further consultation with District Revenue Officers (DROs) in both districts, specific villages were selected based on the minimal impact of urbanisation and the prominence of agricultural land use. These are Badgaon village (Narnaul tehsil) in Mahendargarh, and Jairampur village (Karnal tehsil) in Karnal.

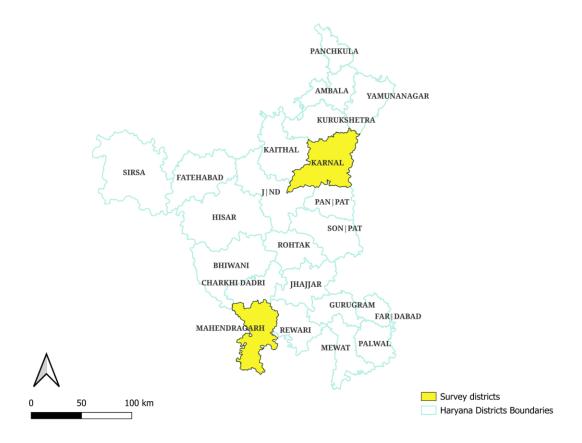


Figure 1: District map of Haryana depicting two selected districts

Detailed surveys of the selected land parcels were conducted to collect primary data on land records, ownership details, mutation status, spatial updation, loan, encumbrance, and any discrepancies. Additionally, the integration of textual and spatial records and the registration process were evaluated to understand the effectiveness and challenges of DILRMP implementation. In the two selected villages, a sample of fifty land parcels was taken from each village using snowball sampling ensuring geographical spread.

The collected data from both components—information collection and primary survey—have been systematically analyzed to identify trends, discrepancies, and areas requiring improvement. These have been presented along different thematics as in the questionnaire to enable an easy retrieval of collected information. The five informative sections on Record of Rights, Cadastral Maps, Registration, Mutation, and Revenue Court Management System are followed by listing of gaps and good practices, and the recommendation made by IIHS.

2. Record of Rights (RoR)

RoR is a type of record that registers ownership details, share holdings, areas, encumbrances, and various rights in land. This section includes details on the processes and status of computerization regarding RoR in Haryana.

Terminology:

States have their own ways of registering such records with varying terminologies and formats of RoR. The table below shows the different terminologies related to a RoR used in Haryana:

Table 2: Terminologies related to RoR

Jamabandi	It is a register prepared as part of the record of right (RoR) in every revenue estate (revenue village). It contains entries regarding ownership, cultivation and up-to-date of various rights in land. Every jamabandi has two copies—parat patwar (patwari's copy) and parat sarkar (government's copy). In Parat patwar, remarks are entered in the last column after every mutation application or sanction, while the document itself is revised every five years. Parat sarkar is revised only at the end of five years.
Nakal	Copy of an extract from the Jamabandi which contains details of a specific land parcel or a specific khewat number.
Khasra number	It is a unique plot number or survey number assigned to each land parcel
Khewat number	An account number assigned to a group of land owners who jointly own a land parcel
Khatauni number	It gives information about all the different khasras owned by a family. A khatauni register lists the names of all individuals who share rights to a specific piece of land, including their shares and any changes in ownership over time. This register is updated regularly and is used for legal purposes, including

	land disputes and transactions.
Mutation (Intakaal) register	Mutation indicates the changes that have to be brought about in ownership and title of the land. A separate register is maintained to record all the mutation applications and sanctions.
Khasra Girdawari	This is the register of harvest inspections, to be updated twice a year.
Fard Badar	Is the process of making corrections in RoR at the Patwari level

The other ROR related documents include Shajra Nasb¹, and field book².

Land records computerised and online in 99 percent villages

99 percent of villages in Haryana have computerised RoRs which are available online. According to the webHALRIS dashboard, out of total 7104 villages, 7036 villages are 'online' i.e. their records have been computerised and are live on the HALRIS website. 64 villages are under consolidation, and hence their records are not 'live' on the website. Another 4 villages are offline for 'other reasons'.³

¹ **Shajra Nasb**: This is a genealogical table maintained for each village, which records the family tree up to 10 generations of each landowner/tenant from the village. It is to be updated every five years. The sequence in which landowners and tenants are listed in the jamabandi register depends on the *shajra nasbs*.

² **Field Book**: The Field Book in Haryana is a detailed document that records the physical features and measurements of individual land parcels within a village. It includes data such as the boundaries, area, and specific characteristics of each plot. The Field Book is used in conjunction with maps (like the Shajra) to provide a comprehensive understanding of land distribution and ownership in the area.

³ These are three villages from Gurugram district, and one from Ambala district. Prima facie, these appear to be urban areas. According to interviewed officers, these villages are also under consolidation but the matter is sub-judice, and hence records are offline.

Table 3: Number of villages with Online Record of Rights

Sr No	District	Total Village	Total Online Village	Under Consolidation	Off-Line Due to Other Reason
1	Ambala	499	497	2	1
2	Bhiwani	272	257	15	
3	Charkhi Dadri	172	151	21	
4	Faridabad	192	191	1	
5	Fatehabad	250	250		
6	Gurugram	291	289		3
7	Hissar	276	275	1	
8	Jhajjar	264	258	6	
9	Jind	305	305		
10	Kaithal	278	278		
11	Karnal	436	431	4	
12	Kurukshetra	419	419		
13	Mahindergarh	374	373	1	
14	Nuh	443	437	6	
15	Palwal	288	288		
16	Panchkula	253	253		
17	Panipat	198	196	2	
18	Rewari	412	412		
19	Rohtak	147	142	5	
20	Sirsa	331	330		
21	Sonipat	349	349		
22	Yamunanagar	655	655	_	
	Total	7104	7036	64	4

Source: http://164.100.137.207/halrisdashboard/NewOnlineJamabandi.aspx, accessed 6 October 2024

Easy online access to RoR provided

A database of textual land records is made accessible through the Jamabandi website. Citizens can view and download a Nakal (Copy) of RoR through this website using the survey number, owner name, or Khewat number. This freely available copy of Nakal is only for information purposes, and not meant for any legal use or government use. Citizens can get an official copy of RoR with a government seal and QR code on it by applying for it through a separate paid section of the jamabandi website, or in person at the citizen service centers or revenue department offices. Table 4 below shows that annually more than 25 lakh copies of Nakals are issued every year through online means or at tehsil offices.

Table 4: Statistics on number of ROR copies issued every year

Year	No. of Requests for Nakal Received	Issued number of Nakals		
2021-22	25,23,292	24,45,426		
2022-23	28,69,539	28,13,527		
2023-24	27,83,490	27,54,480		
2024-25 (till Sept 24)	13,08,289	12,94,818		
Source: http://164.100.137.207/halrisdashboard/WEBHALRISDashboad.aspx, accessed 6 October 2024				

RoR of government held land in Haryana has also been computerised, and the details of government land are separately reflected on the mutation dashboard. On an average, around 8000 to 10000 copies per year of Nakal for government land have been issued in last three years

The village level survey finds that out of 100 land parcels, collectively, according to the state's processes in place, 89 land parcels had their textual records correct. However, only 51 land parcels realistically fit the description of an accurate and 'real-time' record.

Share-based ownership in RoR

One of the key features of the RoR in Haryana is individual holding is typically mentioned as a share of a group of land parcels. The share of each person is specified in the RoR as a ratio. In case of inheritance, often equal shares (*sambhaag*) among heirs are mentioned. Interestingly, the survey findings reveal that

owners of majority of such jointly-held land parcels have a mutual understanding between them, on who occupies/possesses which land parcel - but this arrangement is not reflected in the land records.

In case of sale-purchase of land, the registered deed may specify the exact area of the land being purchased (in sq meters, hectare, acres etc). However, the mutation process (by which RoR is updated) typically notes the ownership rights of the buyer as only a share of the original land parcel⁴. Mitra et al (2021) note that this legal format of a share-based system of individual property claims, combined with lack of fragmentation, has facilitated the process of extensive land assembly by private developers in Gurugram and nearby areas..

There are instances of single-ownership land parcels as well. These are typically when one or more of the joint-owners apply for a partition of land holdings.

The village level survey finds that out of 100 land parcels, only 16 were single ownership. Out of 84 which were joint ownership, all RoRs had shares marked in them. Within these 84, owners of 54 land parcels had mutual understanding between them regarding division with land parcels.

Majority of land parcels are joint - with shares specified in the RoR. No subdivisions have taken place, even though people possess separate land parcels on mutual understanding

Average number of land owners per land parcel

Ascertaining the average number of land owners per land parcel is a difficult task in Haryana because of two reasons (a) the state revenue department does not maintain data in a format that would allow an easy calculation of such a number (b) the RoR format is such that a group of land owners typically own a group of land parcels together. For example, if 5 people from a family own 5 land parcels collectively, the average number of land owners per land parcel should ideally (or logically) be 1. However, because of the shared-

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⁴ The exceptions to this are cases where there is a single owner for a land parcel or a group of land parcels; and where the legal process of partition has been carried out to delineate the exact land parcel of an individual.

ownership structure in Haryana, the average number of land owners for each of the 5 land parcels is 5 owners.

To find a response, IIHS team took a sample of 50 land parcels each from the two selected villages and 10 additional villages to arrive at average number of land owners per land parcel. To provide some context, the number of land parcels (khasra numbers), account numbers (khewat number) and number of families (khatauni number) in each of these villages has also been documented. Table 5 below reveals that the average number of land owners per land parcel in a village varies from 3 to 15, with some land parcels recording as high as 45 or 72 number of land owners in a given parcel. Number of single land-owner land parcels ranged from 6 percent to 52 percent of the sample size.

In a sample of 12 villages (50 land parcels each):

- Average number of land owners per land parcel varies from 3 to 15
- Some land parcels recording as high as 45 or 72 number of land owners
- Number of single land-owner land parcels ranged from 6 percent to 52 percent

Table 5: Ascertaining average number of land owners per land parcel from 12 villages

S. no.	District	Tehsil	Village	Total Khewat	Total Khatoni	Total Khasra	Average no. of land owners per land parcel*	Maximum no. of land owners in a parcel*	Mode (Number of occurrences) - of no. of owners in a land parcel*	Number of single land holder land parcels*
1	Nuh	Nuh	Palla	699	747	1687	3.06	29	1 (26)	26
2	Kaithal	Kaithal	Kyodak	1753	2715	11819	4.92	34	1 (15)	15
3	Jind	Jhulaanaa	Karelaa	465	513	3653	6.47	34	1 (15)	15
4	Kaithal	Kaithal	Chhot	175	341	2176	9.43	31	4 (20)	3
5	Yamunanagar	Saraswati	Ambli	584	733	3499	11.12	72	5 (23)	4
6	Kaithal	Kaithal	Ujaana	143	233	1608	8.04	34	6 (30)	5
7	Rohtak	Kalanaur	Bahali Anandpur	584	733	3499	15.16	45	2 (7)	0
8	Sirsa	Raniya	Jeevan nagar	3007	3599	20597	3.56	12	2 (25)	3
9	Sonipat	Sonipat	Kishora	147	170	801	6.82	21	2 (18)	4
10	Jind	Alewa	Hasanpur	270	347	1803	9.34	45	1 (11)	11
11	Mahendargarh	Narnaul	Badgaon	224	275	1632	4.11	15	2 (17)	5
12	Karnal	Karnal	Jairampur	206	254	1226	4.02	15	1 (17)	17
	* These numbers are indicative, and valid only for a sample of 50 land parcels per village									
Source: jamabandi.nic.in accessed in September 2024										

RoR is not seeded with identification documents

Identification documents such as Aadhar cards, PAN cards, and mobile numbers are not seeded in RoR and other revenue records. An attempt was made to seed Aadhar identification with RoR on a pilot basis in Jind district in 2016. according to interviewed offiials,, following a Supreme Court order that Aadhar cannot be made mandatory, the Aadhar seeding was made voluntary and was not picked by Haryana for extensive implementation.

According to interviewed officers, even in RoRs which have been aadhar-seeded, only the aadhar number of the first (primary) landowner is linked, and not all land owners.

Error correction application is manual; process is centralised

Online application process for correction in RoR is not available, citizens manually apply at the local Patwari office for required changes in the RoR. According to interviewed field level officers, the error correction process is centralised at the state headquarters, and takes few months to resolve since there are consistency checks at multiple levels.

RoR is linked to banking system

In Haryana, the bank credit system or mortgage information is integrated with Jamabadi. Every loan that is granted against a land parcel is reflected on RoR. After approval of a loan by the bank, it needs to be registered at the SRO office and the details of the loan are entered into RoR by the patwari. The 'Remark' column in the RoR contains loan or other encumbrance details. Information on the mortgage due date or the loan repayment (mortgage release) is also recorded in RoR through a similar process.

The village level survey finds that all of the agricultural landholders who have ongoing KCC (Kisan Credit Card) loans have loan details reflected in RoR against land parcels. However, the integration is not available at the time of banks approving loan requests, and bank officers have to rely on applicants' official copies of RoR. They can also check the Jamabandi website to check the records themselves.

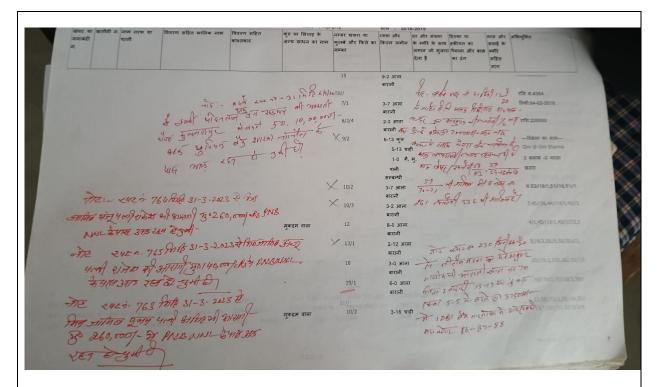


Image 1: Handwritten notes regarding loan/mortgage on the ROR hardcopy at village level. These are also entered in webHALRIS

Land use noted through Girdawari, but accuracy and frequency issues

Girdawari register is a type of record that notes crop details against each land parcel every six months (crop cycle). This is one of the important components related to land records along with RoR (Jamabandi), Mussavi, Cadastral map, etc. since it registers information on current crop patterns, and is often also the record where a change in land use (such as a transition to non-agricultural use of land) is noted.

Although the state of Haryana is among the better states in terms of land record modernization, a significant gap in girdawari updation was reported from the field surveys. The process of girdawari updation has also been computerised in the state. However, several landowners in the two selected villages raised concerns over inconsistent crop records registered on girdawari, and pending girdawari.

12 of the 100 land parcels had some form of non-agricultural use, majority of them (10 parcels) being a self-occupied house. Out of the 12 non-agricultural land parcels, land records of only 3 parcels noted the non-agricultural use of land, through the girdawari. The RoR did not note non-agricultural use of land in any of these cases.

GFasal Dashboard

GFasal Dashb

Figure 2: G-Fasal software used for noting crop details using GIS

Archival records stored and digitised at Modern Revenue Record Rooms

A key component of the digital transformation in the state is the implementation of the Modern Revenue Record Room (MRRR), aiming to digitize legacy data of land records since 1850. All 22 districts have a Modern Revenue Record room (MRRR) at the district headquarters.

Five types of records are being digitized in MRRR centers such as - *Estemaal Basta* (Colonial records in Urdu language), Field book, Jamabandi, Office Files, and Revenue Court Cases. A QR code-based indexing system has been developed to digitize legacy revenue records since 1850. Physical copies, at the first level, are compiled into files with QR codes on them, then multiple compiled files are contained in galvanized boxes with QR tagging, and boxes are finally racked up with QR tags. This indexing helps retrieve both physical and digitized records by searching a specific village, tehsil, or district name in the digital catalog. One of the challenges MRRR centers face is the unavailability of transliteration systems required for colonial revenue records scripted in the Urdu language.



Image 2: Modern Revenue Record Room in Mahendargarh district

However, these records have not been made public since the digitization work is ongoing, and in many districts, the records are awaiting different levels of verification. Currently the entire process of digitization is tracked through 'Revenue Record Room Management System'. According to state level officers, a pilot software is currently under testing phase, which will allow citizens to access these records online, or atleast apply for them.

The state is targeting 100 digitization of all archival records through Modern Revenue Record Room for easy storage and access. This will substantially improve citizen convenience.

3. Registration

From the first successful attempt in June 2000 to the latest SRO computerization in February 2021, Haryana has made significant strides in digitizing registration records and processes. All 242 registration offices in the state are now computerized, ensuring that every transaction related to land is registered online. All 143 SROs (sub registration officer)⁵ are integrated with Revenue Offices and the land record database, streamlining the registration process and enhancing the efficiency and accuracy of land records

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⁵ There are 143 tehsils in the state, and 143 SROs. In addition there are also 77 SDM offices and 22 DRO offices where registration takes place, and these are considered equivalent to SROs.

management. In addition, the SROs are also linked to databases maintained by Haryana Shehri Vikas Pradhikaran (HSVP), Directorate of Town and Country Planning, Haryana State Agricultural Marketing Board (HSAMB), Housing board, and Municipal Corporations and other urban local bodies.

The impact of these advancements is evident in the increasing registration statistics. During 2022-23 and 2023-24 financial years, **more than 7 lakh** properties were registered in Haryana, bringing in stamp duty worth 8000 crores and 10000 crores respectively.

Table 6: Registration statistics in Haryana for 2022-25

Financial Year	Number of deeds registered	Stamp duty collected in INR crores
2024-2025 (25 July 2024)	2,55,617	4071.48
2023-2024	7,44,856	10312.66
2022-2023	7,40,810	8,882.67

Source: webHALRIS dashboard

WebHALRIS Registration system:

In Haryana, Deed registration is being done through webHALRIS using the Jamabandi website...

Citizens can book appointment slots online for deed registration through the Jamabandi website, and the registered deed is delivered on the same day of the appointment. The Jamabandi website also features an online calculator that helps determine stamp duty and collector rates for lands at the time of deed registration. However, the system lacks an online or contactless registration option for the first sale, Leave and License Agreement, which could facilitate presence-less registration from anywhere at any time. Deed registration is exclusively conducted at sub-registrar offices under the revenue department, with no other facility centers permitted to perform this process. The home visit module for deed registration is not available in Haryana, and home visits registrations are processed manually SRO is able to complete registration online, but is not able to push pending data of mutation incase of a network failure

Various identification documents, such as PAN, Aadhar, and mobile numbers, are captured for each party involved in a transaction. PAN number is verified in all high-value transactions through a tie-up with NSDL (National Security Depository Limited) and Income Tax Department. In 2017 e-KYC Rules for Aadhaar

based real time authentication of buyers, sellers and witnesses were notified. However, the Aadhaar based e-KYC is now optional for completing the registration. The integration of DigiLocker, a secure OTP-based digital wallet for documents, with the Jamabandi portal is still pending. A technological solution for masking of PAN, aadhar and other personal details in registered pdf deeds is available in the state, but it was yet to be implemented as of July 2024.

The Haryana Government has also introduced an integrated e-stamping facility, allowing citizens to purchase stamps online. The collected amount is directly deposited into the state exchequer without the involvement of any other agency. This initiative has increased revenue collection, with stamp duty collections rising from ₹8,882.67 crores in the 2022-2023 financial year to ₹10,312.66 crores in 2023-24, marking a 16 percent increase.

Deed templates are provided but not dynamic:

To assist citizens, a checklist for deed registration is available in both Hindi and English, and 14 types of standard deed templates (Non-dynamic) are provided on the website. These templates cover a range of transactions, including Sale, Mortgage, General Power of Attorney (GPA), Transfer of Property, Lease, Release, Adoption, Redemption of Mortgage, Revocation of Power Attorney, Agreement, Exchange, Gift, Surrender of Lease, and Rent.

Legacy data of registration is available for 2002 onwards:

Availability of legacy registration data varies from one SRO to another. Typically registration data from 2002 to 2006 onwards is available in the state. SRO does not search the previous registration data before registration, although he/she can access the data easily.

The webHALRIS portal earlier allowed viewing and download of registered deeds for citizens, but the facility has recently been curtailed to avoid potential misuse of personal identification information of parties.

SVAMITVA property cards being registered

While Haryana introduces the concept of SVAMITVA (Survey of Village Abadi and Mapping with Improvised Technology in Village Areas), the state is yet to accord an RoR-equivalent legal status to the

property cards distributed under the SVAMITVA scheme. According to officials, a legal amendment for this is pending. In the meantime, landowners in abadi areas are now registering the SVAMITVA property cards to accord them legal validity. The process typically involves presence of gram panchayat member/s during the registration process. A nominal fees is charged for the same, and no stamp duty charges are applicable.

Registration is linked to RoR and urban property databases:

The registration software allows citizens to check and input RoR details from jamabandi website, thus empowering the parties on the legal principle of 'buyer beware'. All 143 SRO offices at tehsil level are linked to RoR database.

webHALRIS portal is also integrated with DTCP to verify the NOC issued for Controlled Areas, and with departments such as HSVP and ULBs to verify transfer permissions, verify no objections certificates, and to ensure that there are no pending dues regarding property tax, development charges etc, This integration was carried out in 2020-21.

According to interviewed officers, SRO can also check any court orders (e.g. stay orders) on properties, but only through a manual register maintained at tehsil level, and not through an online database.⁶ For ongoing litigation, citizens have the facility to check revenue courts database from the jamabandi portal.

78 percent of property related registrations in the state in 2024 are regarding urban areas.

State had linked registration software to NOC systems and property record databases of multiple urban agencies.

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⁶ However, the jamabandi portal does have a list of stay orders. It is not clear what is the difference between the manual check by the SRO and the online list of stay orders.

Urban Areas have 78 percent of registrations:

Haryana has undertaken a unique classification to address the challenges of urban transition for land and property records management systems. The entire property space (geographical) is divided into four categories: (a) Rural within lal dora (b) Rural outside lal dora (c) urban area within MC limits (d) urban area outside MC limits. Mapping of villages and localities was done on the basis of above given categories. Accordingly, the department also tracks the number of registrations in each of these categories. Table 7 below presents the split of property-related registration for the first six months of FY 2024-25, with rural areas outside abadi areas accounting for only 22 percent of total registrations.

Table 7: Split of Registered deeds by geographical or institutional jurisdiction (from 1 April 2024 to 30 sept 2024)

RURAL	
Outside Abadi	81168
HSAMB	70
SVAMITVA	0
TOTAL	81238
	22%

Urban With In MC	
MC Area	26587
HSVP	14225
Licensed Colony	66235
HSAMB	140
Housing Board	2105
Authorized Colony	42754
Others	4642
TOTAL	156688
	43%

Urban Outside MC	
Licensed Colony	8003
HSVP	352
HSAMB	106
HSIIDC	567
Housing Board	21
SVAMITVA	0
Old Village Abadi	0
Others	118557
TOTAL	127606
	35%

4. Mutation

Mutation is the key process through which a changed name (new owner) is entered in the record of rights. This is typically after registration of a sale/gift/lease deed regarding land, or in cases of inheritance. 'Integrated auto-mutation' is one of the features in the land record system that the Haryana government has successfully implemented to reduce the chances of errors and delays in the mutation process.

⁷ Source:

https://cdnbbsr.s3waas.gov.in/s3d69116f8b0140cdeb1f99a4d5096ffe4/uploads/2024/09/20240912832921986.pdf

Mutation is Auto-triggered after registration:

In Haryana, the process of mutation is streamlined and integrated with the deed registration process, making a separate mutation request unnecessary. When an individual goes for deed registration, the mutation is automatically initiated as part of the process. This is applicable for four types of four types of registered documents – sale, gift, family transfer, and mortgage with possession. The automation captures basic details of the transaction and sends the information to the Patwari's system. A fee of Rs. 200 is collected during the deed registration. Thus, there is no need for a separate application for mutation. The auto-triggered mutation facility eliminates the need for manual follow-ups and reduces the chances of errors or delays in the mutation process.

Additionally, there is an option to apply for mutation through the SARAL portal, although this step is not mandatory due to the auto-triggered mutation process. The SARAL portal allows users to manage their mutation applications online, further simplifying the process.

In a conversation with a district-level official, it was revealed that only the unique number against each mutation process is auto-generated, the remaining processes are manually performed and are susceptible to availability and discretion of relevant officers. Thus, Haryana's online mutation system can be best described as 'auto-triggered' mutation instead of 'automatic mutation'.

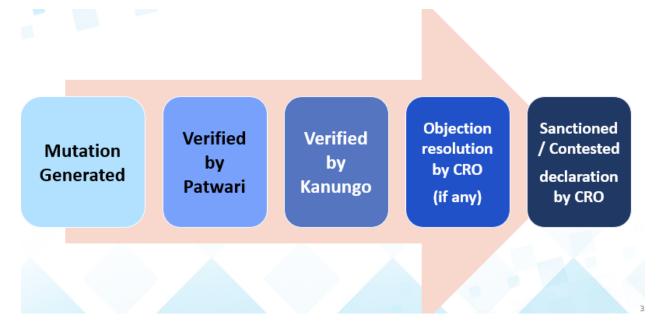
Village surveys revealed gap areas: cases where land was acquired by a government agency, but no mutation was carried out. The RoR continues to state name of previous owner, even though there is a road on ground.

Mutation is typically sanctioned in ten-twelve days:

Once a mutation process is auto-initiated, for the first ten days, the mutation details are publicly visible on the jamabandi.nic.in website, and objections can be raised during this period. The objections are primarily raised offline, although online objections through email are also possible. There is no provision of sending SMS to all villagers or to related parties. If no objections are raised in during this period then the mutation gets sanctioned. On the average, this translates to 12-13 days of timeline. If an objection is raised, the Tehsildar then checks the objection and makes a decision as to whether to go ahead with mutation or to consider the objection and declaring the mutation as 'contested', start quasi-judicial proceedings. If the mutation is sanctioned, a certified copy of the order can be downloaded from the website. This process ensures transparency and efficiency in updating land records. Mutation statistics are also tracked through a state level dashboard, in order to avoid delays.

According to interviewed officials at state level, the technological system earlier allowed sanctioning of mutation within one day of the registration. However, the timeline was then increased to ten days, to allow people to file objections.

Figure 3: Mutation process in Haryana



Source:

https://cdnbbsr.s3waas.gov.in/s3d69116f8b0140cdeb1f99a4d5096ffe4/uploads/2024/09/20240912832921986.pdf

More than 2 lakh mutations pending in state:

However, a significant number of registered deeds are pending to be mutated in various districts. WebHALRIS dashboard shows around 2.3 lakh mutations are pending in the beginning of October 2024 in the state of Haryana. Out of these, around 86,000 mutations (37 percent of total) were pending for more than the stipulated timeline of ten days. 8,400 pending mutations (4 percent of total) were within the stipulated timeline of ten days. However, the largest backlog (59 percent) is 1.35 lakh mutations which have been sanctioned but their details have not been entered in webHALRIS. The figure 4 below shows district-wise mutation pendency.

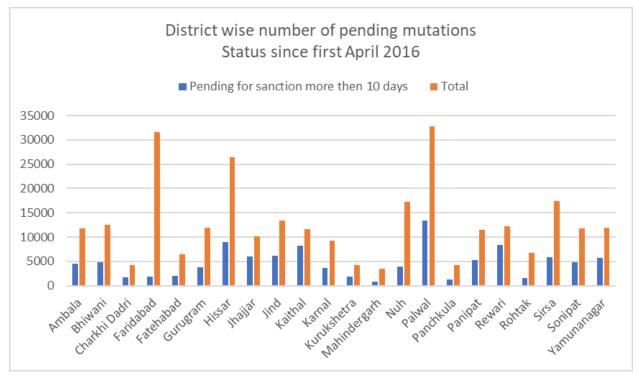


Figure 4: District wise number of pending mutations

Source: http://164.100.137.207/halrisdashboard/MutationPendencyStatus.aspx_Status since 1st April 2016 & data extracted on 6 October 2024

The dashboard also provides a year-wise breakup of pending mutations (figure 5). It does not coincide with the total figures of pending mutation, but atleast gives an idea that for how long the mutations have remained pending. This reveals that the auto-triggered (or automatic) mutation facility has brought down the pendency of mutations applications since it was introduced. However, there continues to be a backlog of mutation applications for transactions in earlier years. According to interviewed NIC officials, there are no administrative reasons for the delays, and instead the majority of pending mutations are from related parties who are not in consensus. However, the officials do acknowledge that some mutatiosn ahev

Auto-triggered Mutation has brought down mutation timelines and pendency, but significant backlog remains for previous years.

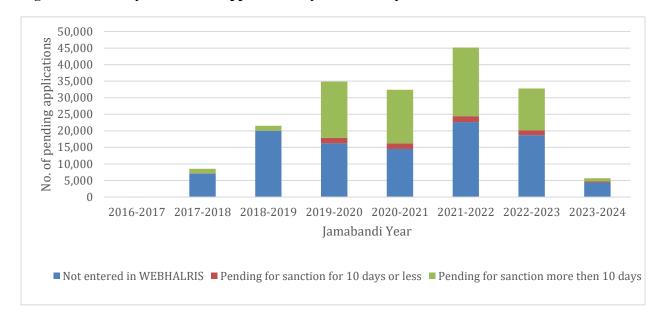


Figure 5: Pendency of mutation applications by Jamabandi year

Source: http://164.100.137.207/halrisdashboard/MutationPendencyStatus.aspx_Status since 1st April 2016 & data extracted on 6 October 2024

Long waiting period for sequential mutations due to shared ownership

In Haryana, only one mutation can be processed on a RoR/Nakal/Khata number at a time, meaning subsequent mutations must wait until the current one is completed. This can cause delays in updating land records and force landowners to wait for their turn.

For example, in cases where multiple mutations are required, such as when one person sells their land to several buyers simultaneously, the mutations must be completed sequentially, with each mutation needing to be fully processed and finalized before the next one can begin. Similarly, in cases of shared ownership, if one co-owner's mutation is pending, the other co-owners cannot initiate their mutation, even if their transaction is unrelated to the first.

This procedural limitation has two significant implications: (a) the ROR/Nakal may not be up to date for some time, leading to potential discrepancies in the land records, and (b) landowners may experience delays, as they must wait for their turn to have their mutation processed.

In cases where a previous mutation is pending, such as when a person sells land before the mutation process is completed, the system can still proceed with the new registration. The Sub-Registrar cannot refuse the new deed registration even if the name has not yet been updated in the land records. This situation, referred

to as "tabi" in Urdu, results in overlapping mutations. The system accommodates these overlapping mutations by ensuring that the pending mutation and the new registry are processed sequentially.

Perception of un-updated RoR post-mutation

Haryana has a system of maintaining two copies of the original Record of Right – parat patwar and parat sarkar. It is the parat patwar version of the RoR which is available for online viewing. When a transaction takes place and mutation is initiated, the Parat patwar copy of the RoR is edited to reflect remarks in the last column in a red colour. If the mutation is sanctioned, the mutation sanction number is entered in the remarks column⁸. This mutation order or nakal of mutation can be separately viewed on the jamabandi.nic.in website, if the scanned copy has been uploaded. However, the name of the landowner who has already hold his land is not immediately replaced with the name of the new buyer. This creates a perception that the RoR is not up to date. Instead, this replacement of previous landowners name from the owners column happens only in a five year cycle where the RoR/jamabandi of the village is 'consigned'.⁹

This complex process of RoR updation can have the following implications:

- 1. For a prospective buyer who is unaware of this system of noting mutations, the online copy of RoR may be misleading, as names of older owners are mentioned in the owners column.
- 2. Given the context of multiple owners for each parcel of land, a prospective buyer needs to check each mutation entry in the remarks column to see whether it is applicable for the owner from whom they intend to purchase property. This makes the process of title search more cumbersome.
- 3. For farmers/citizens who have recently bought land, proving their ownership is more convoluted as they have to rely on more than one document, of which the mutation order may not be as easily

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⁸ Annexure 1 shows an image of an RoR, with mutation related remarks in the last column in red colour and in black colour.

⁹ One-fifth of villages in the state are 'consigned' very five years, thus ensuring that records of each village are consigned once in five years. The consignment begins on 15th June of every year. For the statewide consignment cycle for 1381 villages which began on 15th June 2024, 533 villages have been completed, 778 are in progress, and 70 are yet to begin. *Parat sarkar*, on the other hand, remains unchanged for the five years, and is revised at time of consignment based on notings of *parat patwar*.

accessible as RoR¹⁰. In the village level survey, five such 'new' land-owners reported that their names are not entered in the RoR.

4. The number of pending mutations whose data has not been entered in webHALRIS accentuate the problem, because for these the land owners and prospective buyers may need to visit field offices.

After mutation, the name of the new owner does not automatically revert in 'ownership' column. Instead, a mutation number is added in the remarks columns. This reduces the reliability of the online RoR, and increases complexity for prospective buyers.

It appears that the computerised processes of mutation approval and subsequent jamabandi updation in Haryana have replicated the traditional/manual processes which were being followed in a digital setting. This would have meant an easy transition for revenue officers when moving to the online system two decades ago. However, the state does not seem to have not introduced process-engineering to some of these aspects, which could have brought in simplicity and efficiency to the system.

Grievance Redressal System for Registration and Mutation:

A grievance redressal system exists in Haryana to address issues related to property registration and mutation. One way for individuals to submit their grievances is by calling the dedicated call center. The call center then forwards the grievances to the relevant authorities (NIC in this case) for further action. Additionally, there is a dedicated online portal for grievances, which operates at the tehsil level. When a grievance is filed through this portal, the tehsil office is responsible for registering the complaint. This system is designed to handle not only issues related to property registration but also any grievances pertaining to land records. Once a complaint is registered, a notification is sent to the relevant authorities. The concerned officials then check the portal, verify the details of the complaint, and work towards resolving the issue. This approach ensures that grievances are systematically addressed and resolved in a timely manner, thereby improving the overall efficiency and transparency of property and land record management in Haryana.

¹⁰ In one of the two villages selected for this study, several mutation orders could not be accessed online as the scanned order was yet to be uploaded

In the previous financial year of 2023-24, a total of 14,160 grievances were received. At the time of data collection, 85 new grievances had been received, which the NIC claimed would also be resolved within 48 hours, with all of them being resolved cases.

5. Spatial records

96 percent Cadastral maps in rural areas are computerised; 77 percent are georeferenced

Cadastral maps of majority of villages have been digitised, georeferenced and are available for viewing as superimposed on drone/satellite imagery. According to officers interviewed, there are a total of 7103 villages with cadastral maps in the state¹¹, out of which maps of 6836 villages (96 percent) have been computerised as of 15th July 2024. Another 237 villages were under process, while mussavis from 30 villages were yet to be received by the digitisation team.

Out of the digitised villages, maps of 5493 villages (77 percent of total) have been georeferenced, including georeferencing of all their land parcels. This has been possible under the HaLSMP project (see box for details).

Innovation in Spatial Mapping: Harvana Large Scale Mapping Project (HaLSMP)

On March 8, 2019, the Haryana Government and the Survey of India signed a Memorandum of Understanding (MoU) to initiate large-scale GIS mapping of the entire state of Haryana. This ambitious project aimed to map an area of 44,212 square kilometers, covering rural agricultural areas, abadi deh areas, and urban areas across 88 towns and cities. The primary objective was to provide the Haryana Government with precise land demarcation, facilitating the determination of each land parcel's location, detecting alterations, and identifying encroachments on government lands, including those owned by local bodies, boards, or corporations. The total estimated cost of the project was Rs. 150 crores.

¹¹ According to an earlier HaLSMP document, total number of revenue estates in the state is stated as 7128. The difference of 25 villages may be explained as uninhabited villages – i.e. revenue estates without abadi deh area. It is not clear whether the number of 7103 includes revenue estates which have been urbanised and are now part of municipal boundaries.

On January 26, 2020, Sirsi village in Karnal district became the first in Haryana to be fully mapped using new drone-based imaging and GIS technologies. For the first time in Haryana, individual properties within the abadi deh area were also documented in the names of proprietors, which was a precursor to the SVAMITVA scheme.

Technological Support and Systems: The Continuously Operating Reference Stations (CORS) infrastructure comprises a network of permanently installed Global Navigational Satellite System (GNSS) reference stations that continuously stream raw satellite observations to a central server. The server archives, catalogs, analyzes, and processes the reference station data, which is then hosted on the web for users. This real-time system is available 24/7 and provides data and corrections in open, non-proprietary data streaming standards for easy consumption. The Survey of India has conducted training programs for Revenue and Panchayat Officers/Officials on using the CORS Network.

Progress and Implementation: According to state level officers, the HaLSMP project was paused for some time, as the focus turned to first covering the abadi deh areas of all villages in the state, under the SVAMITVA scheme. After completing the SVAMITVA surveys, efforts resumed to collect HaLSMP data, which now excluded abadi areas. HaLSMP is now being implemented intensively across the state, with regular tracking of progress.

This resumption also helped recognise a gap between SVAMITVA and HLSMP surveyed areas, which are now being incorporated under a Svamitva Plus scheme.

HaLSMP Status as of 15 July 2024

- 1. Rovers Procurement and Usage: Haryana has plans to procure 40 rovers through the GeM portal for revenue staff under HLSAMP. Despite limited availability, patwaris have begun using the CORS network for Murabba stone observations.
- 2. Mapping of Revenue Estate Areas: The accurate mapping of agricultural lands in each village is essential to determine the exact location of Murabba stones and to ensure their stability against natural events like earthquakes and landslides. As of now, drone-based imaging has been completed in 4,867 villages covering agricultural areas or revenue estates.

Draft for Discussion

3. State has established a Drone Corporation named 'Drone Imaging and Information Services of

Haryana Ltd' (DRIISHYA) with inhouse capabilities to operated Drones to cater for the

immediate needs of the State and provide Geospatial data, services and solutions

4. Drone Flying: Out of Haryana's total area of 44,212 square kilometers, the Survey of India has

completed drone-based imaging of 40,372 square kilometers. The remaining 3,840 square

kilometers, restricted by DGCA due to defense establishments, was allocated to DRIISHYA,

which has completed 3,212 sqkm. The remaining 920 sqkm are to be covered using satellite

imagery, since these areas are defense establishments or are inaccessible.

5. Feature Extraction: The Survey of India has completed feature extraction for 20,195 square

kilometers out of the 41,177 square kilometers of rural areas. In urban areas, out of total of 2,822

square kilometers across 88 ULBs, Sol has completed feature extraction of 1,957 square

kilometers in 62 ULBs. Data of 56 ULBs, complete in all respect has been handed over to ULB

Department along with Drone images.

6. Musavvis / Tatima Updation: Tatima updation has been completed in 1,819 villages across all

districts, except Kaithal, where the process is yet to start. The Survey of India has provided digital

data for total 6,765 villages after integrating revenue data/online jamabandi data for updating

Musavis at the district level. The tatima updation details for remaining 4,946 villages are under

process at district level.

7. Murabba Stone Observation: Observations have been completed in 6,910 villages across all

districts, except part of Panchkula, which lacks Murabba stones in its hilly areas.

8. Training of Patwaris: Training on the use of rovers has been completed for 335 patwaris across

19 districts, except for Nuh, Palwal, and Faridabad.

Source: HaLSMP project documents

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User-friendly GIS webportal; Legally valid maps available offline

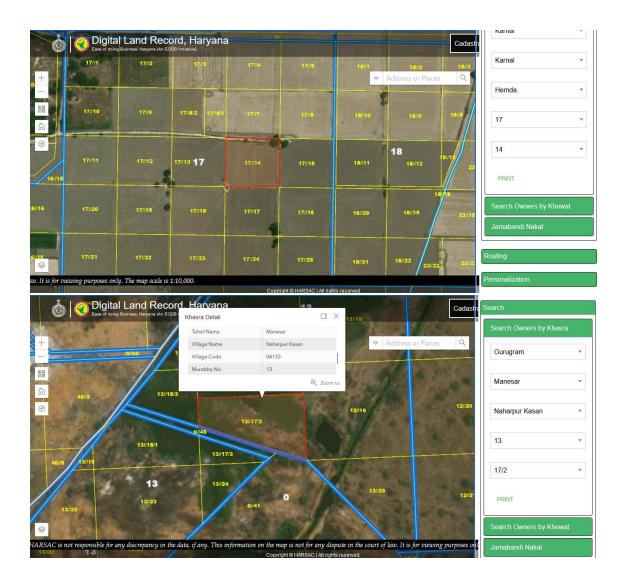
The goal of the digitsation exercise is to superimpose the updated musavi over drone images, integrating it with jamabandi information. This creates a platform where clicking on a land parcel provides ownership details. The adjoining figure presents some views from the GIS enabled webportal for the same, wherein users can trace the details of each land parcel's boundaries, superimposed over the ground imagery. However, ownership data from RoR is yet to be integrated into the portal

While data collection is ongoing and pilot projects are needed, the system aims for real-time updates in the future. Currently, users must visit the jamabandi website for this information.

The webportal is meant for information purposes only. To access legally valid and uptodate copies of the cadastral records, citizens must visit the local revenue office/s.

Figure 6: Screenshots from the GIS webportal indicating (a) revenue villages in a tehsil, (b) land parcels within a village, and (c) specific details for each land parcel





Haryana has undertaken drone mapping of complete state, and has created a user-friendly GIS platform to view spatial records.

Only 25 percent - 33 percent Online maps updated with partition details; Online records yet to sync with offline changes

In many cases, the digitized and georeferenced maps are outdated as the partitions that have taken place on offline maps (called musavis) have not been updated on the geospatial platform. This means that while the GIS platform is user friendly and an innovative tool, it is currently meant only for information purposes and cannot be relied upon for accuracy of on-ground situation. There is currently no way for a prospective land buyer citizen to determine whether the cadastral maps of a particular village on the GIS webportal are uptodate/reliable or not.

Out of total 7103 villages, only approximately 1,819 villages (25 percent) have completed the tatima updation, and continuous updates are ongoing in these villages. These form 33 percent of total 5,493 georeferenced villages.

Only one-fourth of the online maps are currently uptodate with partition markings. Legally valid copies can be accessed at village level only.

In the Mahendergarh district, more than 70,000 land parcels in the district across 368 revenue villages require spatial updation i.e. incorporation of partition details. Each of these cases are digitised and resolved by the district HARSAC cell in consultation with respective patwaris. Images below show the extent and complexity of partition markings in a typical village map.

In villages where digitization is complete, districts have received updated musavis, and data is continuously updated with new mutations and registrations. This ongoing process aims to make updated information available online, and a pilot project may help to fully implement the system.

In the village level survey, collectively, according to the state's processes in place, 89 land parcels had their textual records correct. However, spatial records of only 38 to 54 land parcels actually fit the on-ground possession.

Partition process is manual

In Haryana, the spatial partitioning of land is known as 'tatima cutting', which necessitates an update to the musavi, or cadastral map. Tatima cutting/demarcation/subdivision application process is still manual in the state and there is no online process for the same.

The partition process is typically carried out manually by patwaris using red ink on musavi drawings, and is now being digitized. Applicants need to go to Patwari office for subdivision. According to field level staff, the tatima cutting process, right from application to completion needs 3-4 days, if there is no dispute in the case. If a dispute arises, it may take more than 6 months subject to the complexity of the case.

Partitions are not subdivided online, but efforts are ongoing. In partition cases, even the jamabandi may not be updated online before the five-year period is over.

The digitized drawing process allows for more precise and efficient updates to land records. The digitization involves creating vectors (after manual tatima-cutting by patwaris), adding additional information to these vectors, and including this data in the jamabandi (record of rights). The Haryana Space Applications Centre (HARSAC) is playing a key role in this process by using advanced GIS technologies and remote sensing to create detailed and accurate maps. Once this data is included, it is sent to the district, where the NIC team generates a Unique Land Parcel Identification Number (ULPIN). For example, when the entire High-Level Scanning Map (HLSM) data for Karnal district was uploaded to BhuNaksha (a web-based GIS system), the ULPIN was generated from there and further data uploads were managed via an API.



Image 3: Maps (musavis) indicating partition of land holdings through red lines ('tatima-cutting'). The map copies with partition markings are maintained by village patwaris, and the red markings are currently being digitised and incorporated in georeferenced m

The village level survey finds an overall hesitance in formal partitions, when even there is a clear mutual understanding. In 54 out of 84 jointly-held land parcels, there was a mutual agreement between land owners on spatial division of land holdings, but it is not reflected in any records, and no partition applications have been filed. Only 5 land parcels have had a demarcation or partition to denote the sub-divided land parcels.

Targeting 100 percent drone coverage through SVAMITVA PLUS

The SVAMITVA scheme was initiated to map and survey the abadi (inhabited) areas of villages, and focused exclusively on these zones. However, overtime, as the settlement areas in villages had expanded, people had begun constructing houses around the abadi deh area, in land parcels which were earlier meant for agricultural or common purposes. Areas that were once roads or common land at the village periphery now have houses built on them. The revenue department had no updated records of these expansions. To address this expansion and to ensure comprehensive land mapping, the Svamitva Plus initiative is being introduced in Haryana. This new scheme aims to geo-reference any areas left out between the HaLSMP

(Haryana Land Survey Management Program) and Svamitva, facilitating the digitization of the entire state's land parcels.

Svamitva Plus will target villages where panchayat and revenue department land parcels do not merge seamlessly. In areas where drone imagery has already been captured, ground verification is necessary to determine land ownership, including barren lands.

6. Revenue courts

Revenue courts in Haryana play a critical role in adjudicating disputes related to land and revenue matters. These courts address issues such as land ownership, tenancy, boundaries, and other land-related disputes. The hierarchy of revenue courts in Haryana includes the following:

- 1. Tehsildar/Naib Tehsildar Courts: These are the first point of contact for revenue disputes at the local level. They handle cases related to land records, mutations, partition, and tenancy.
- 2. Sub-Divisional Officer (SDO) Courts: These courts deal with appeals against the decisions of Tehsildar/Naib Tehsildar courts and have original jurisdiction in certain revenue matters.
- 3. District Revenue Officer (DRO) Courts: They handle appeals and revisions against the orders of SDO courts and have supervisory powers over lower revenue courts.
- 4. Commissioner Courts: These are the highest revenue courts in a division and deal with appeals and revisions against the decisions of DRO courts.
- 5. Financial Commissioner Court: This is the apex revenue court in the state, dealing with final appeals and revisions in revenue matters.

Digitization of Revenue Courts

The Government of Haryana has undertaken significant measures to digitize revenue courts as part of its broader efforts to modernize the state's revenue administration. The digitization process aims to enhance transparency, efficiency, and accessibility in the functioning of revenue courts.

Key Initiatives and Features of Digitization

- 1. e-Courts System: The implementation of an e-Courts system in revenue courts allows for the electronic management of case records, filing of petitions, and tracking of case status. This system reduces the dependency on physical documents and streamlines court processes.
- 2. Online Case Filing and Management: Parties involved in revenue disputes can file cases online through designated portals. This includes submitting petitions, evidence, and other relevant documents electronically. The system also allows for the online scheduling of hearings and issuance of notices. Applicants are informed of their appointment dates through the website.
- 3. Case Management System (CMS): A robust CMS has been developed to manage the lifecycle of revenue cases from filing to resolution. This system tracks the progress of cases, maintains digital records, and generates reports for administrative purposes.
- 4. Digital Case Records: Legacy case records have been digitized and integrated into the new system. This ensures that historical data is easily accessible and can be referred to during proceedings. Digital records also minimize the risk of document loss or damage.
- 5. Online Hearings: With advancements in technology and in response to the COVID-19 pandemic, revenue courts adopted online hearings. This facilitates remote participation of parties and legal representatives, ensuring that proceedings are not delayed due to physical constraints. However, most courts have reverted to physical modes of hearings.
- 6. Transparency and Public Access: The digitization efforts have made information related to revenue court cases publicly accessible. Details such as case status, hearing dates, and judgments can be viewed online, promoting transparency and accountability.
- 7. Integrated Grievance Redressal System: An online grievance redressal system has been established to address complaints and issues related to revenue court functioning. Citizens can submit grievances online, which are then tracked and resolved through the system.
- 8. Training and Capacity Building: Training programs have been conducted for judicial and administrative staff to ensure smooth adoption and operation of the new digital systems. This includes training on the use of e-Courts systems, CMS, and other digital tools.
- 9. Litigation Management System (LMS): The government has developed an LMS for various departments to track properties involved in litigation. When an issue reaches the court, the

relevant department is summoned and makes an entry in the LMS. All departments are actively updating this system, which streamlines the management of litigation-related properties.

The Land Records database is linked to the eCourts system of Civil Courts. However, the complete data has not yet been fully entered, so comprehensive information cannot be retrieved at this time. Only a few demonstration records have been saved so far. As of date, a manual system of red-flagging RoRs is in practice, wherein SRO office maintains records of which land parcels have a stay order from courts.

7. Village level survey findings

The primary survey aimed to assess the real-time integration of textual and spatial records and the registration process in two selected villages: Badgaon village (Narnaul tehsil) in Mahendargarh district, and Jairampur village (Karnal tehsil) in Karnal district. As discussed in the methodology section, detailed surveys were conducted to collect primary data on land records, ownership details, mutation status, spatial updation, loan, encumbrance, and any discrepancies. The important findings from the survey are organised under various thematics.

Land ownership patterns

- Only 16 percent of surveyed land parcels had single ownership
- Out of 84 percent which were joint ownership, all RoRs had shares marked in them
- Out of 84 percent which were joint ownership, 16 percent parcels had at least one owner who was not from the same family. Yet the land is not partitioned between the parties.
- In 54 percent out of 84 percent jointly-held land parcels, there is a mutual agreement between land owners on spatial division of land holdings, but it is not reflected in any records. Only 5 percent land parcels have had a demarcation or partition to denote the sub-divided land parcels.
- Another 19 percent land parcels did not have any formal or informal spatial division of land parcels, and cultivation (or any other use) was joint.
- These findings indicate an overall hesitance towards formal partitions, when even there is a clear mutual understanding. This study does not dwell into the reasons for this hesitancy.

Accuracy and updation status of ROR

- In 51 percent of the surveyed land parcels, the textual information in record of rights was same as ground situation.
- For around 6 percent land parcels, mutation (including partition in some cases) was carried out but the name of the new owner/s was not mentioned in the ownership column, and instead the mutation number was entered in the 'remarks' column. This is in line with the land administration system in Haryana, and the changes in the ownership column will be made in the next round of consignment of jamabandi, which happens every five years. However, farmers reported this as a 'not updated' record.
- Another 32 percent land parcels were those where inheritance-related mutation had not been carried out, i.e. person named in ROR was generally the father or grandfather of the person/s in possession of land. However, for 29 percent within these cases, land owners reported the land record status as 'accurate and up-to-date'. This ratio is important because, since an inheritance related mutation is carried out only on-application by the farmer, it appears that citizens do not find it important to update the records of their ancestral lands unless needed.
- Collectively, according to the state's processes in place, 89 percent land parcels had their textual records correct. However, only 51 percent land parcels realistically fit the description of an accurate and 'real-time' record.
- In 6 percent cases, RoR was not updated after a land acquisition or a mutation application. In another 5 percent cases the RoR had an error where the name of an earlier owner was still present in the records, someone had made fraudulent entries in the land records, or there were similar incorrect entries.

Updation and Accuracy of Spatial Records

- 15 percent of the land parcels had single owners, and 23 percent had multiple owners but joint cultivation. Hence the spatial records of these 38 percent parcels were reported as accurate and uptodate.
- Landowners in the 54 percent jointly-held land parcels indicated that there was a mutual understanding regarding who owned which land parcel, but there was no ongoing process of partitioning the land holdings. In very few of the cases, demarcation had been carried out to measure

the exact extent of the land parcels. In 16 percent within this 54 percent, the cultivation was also joint.

- In four percent cases, partition or sub-division of land holdings had been carried out recently but the details on the website, including textual records, were not updated (offline map with the patwari did indicate partition of land holdings). In these cases, the online records were not uptodate. Similarly, in three percent cases, part of the land or the entire land had been acquired for a road project, but the online land records did not indicate this, including spatially.
- Collectively, according to the state's processes in place, 89 percent of land parcels had their textual records correct. However, spatial records of only 38 percent to 54 percent land parcels actually fit the on-ground possession.
- Out of total respondents who had formally partitioned their land holdings at some point of time, fifty percent reported that the online cadastral map does not show the partitioned boundaries, even when the jamabandi has been updated to reflect the new subdivision numbers.

Use of Land

- 12 percent surveyed land parcels had some form of non-agricultural use, majority of them being a self-occupied house.
- Only 3 percent within these noted the non-agricultural use of land, through the girdawari. The RoR did not note non-agricultural use of land in any of these cases.

Encumbrances

- Owners of only 4 percent land parcels reported being part of an ongoing or previous dispute. Out of these, RoR noted the case details in half of the cases, while the other half of the cases did not have any mention in RoR. It is understood from state level interviews that court case related details are linked to RoR only when there is a court order impacting the rights of concerned parties.
- Owners of 51 percent of surveyed land parcels reported having taken a loan against their property at some point of time. This includes 37 percent with existing loans, and 14 percent cases where the loan has been paid off.

• In all of these cases, the RoR reflected the details of the loan in the 'remarks' column. This indicates remarkable linkage between revenue department and banking processes.

8. Good Practices and Gaps

Section/Theme	Good Practices Gap						
RECORD OF RIGHTS							
Computerisation status	Land records computerised and online in 99 percent villages Easy online access to RoR provided	64 villages which are under consolidation do not have their records online					
RoR format		Perception of un-updated RoR post- mutation. Name of new owner is not entered directly in owners column.					
Accuracy of textual records	According to the state's processes in place, 89 percent land parcels had their textual records correct.	However, only 51 percent land parcels realistically fit the description of an accurate and 'real-time' record.					
Joint ownership of land parcels	Shares are specified in case of joint ownership of land parcels.	No subdivisions have taken place, even though people possess separate land parcels on mutual understanding					
Aadhar seeding		RoR is not seeded with identification documents					
Error correction		Error correction application is manual and takes time					
Changes in Land use	Provision to note Land use change through Girdawari	Accuracy and frequency issues in girdawari. Village survey: Only 3 percent cases with non-agricultural uses were noted in girdawari; total 12 percent reported non-agricultural use in the survey.					
Legacy record computerization	Establishing MRRR center to digitize all the legacy revenue records	Digitized records before 2002 & 2006 in some districts are inaccessible to the citizens.					
		One of the challenges MRRR centers face is the unavailability of					

Section/Theme	Good Practices	Gap					
		transliteration systems required for translating colonial revenue records in the Urdu language.					
REGISTRATION							
Registration related services	Majority of registration related services such as public data entry, online appointment, online stamp duty payments, deed templates are available	ID seeding, Integration of DigiLocker, Masking of personal information is pending. Concerns regarding misuse of un- masked personal information have led to stopping download of registered deeds.					
Integration with Land Records	RoR information and property registration system are integrated through the webHALRIS portal (<u>Jamabandi.nic.in</u>). This makes it one of the few states to have the same portal for both ROR and registration services.						
Integration with urban agencies	Registration is linked to urban property databases						
Svamitva property cards registration	Provision of registration of property cards granted under SVAMITVA, with stamp duty waiver	Ideally, SVAMITVA property cards should be same status as RoR. Legal changes are pending.					
MUTATION							
Auto-mutation	Mutation is Auto-triggered after registration	Internal processes are manually performed and are susceptible to availability and discretion of relevant officers					
Mutation pendency and timeline	Auto-triggered Mutation has brought down mutation timelines and pendency. Mutation is typically sanctioned in ten-twelve days	Significant mutation backlog remains for previous years. More than 2 lakh mutations pending in state					
		Long waiting period for sequential mutations due to shared ownership					
SPATIAL RECORDS							

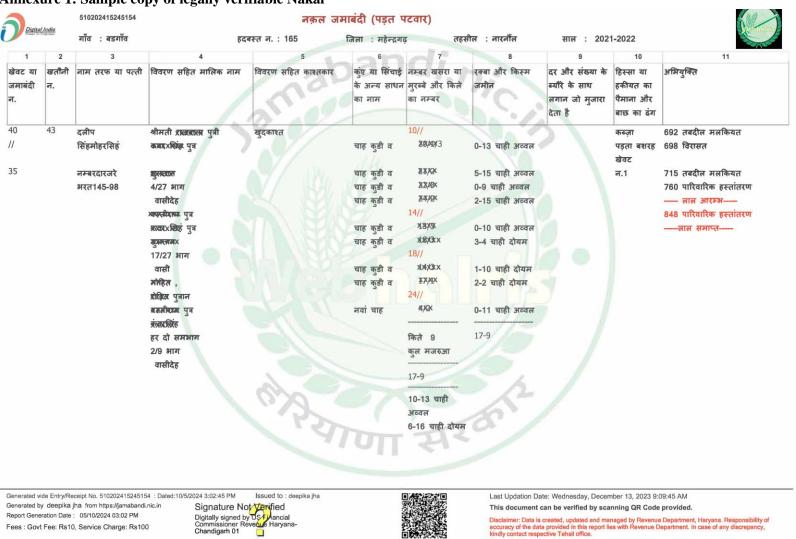
Section/Theme	Good Practices	Gap
Digitization and Updation	96 percent Cadastral maps in rural areas are computerised; 77 percent are georeferenced	Only 25 percent - 33 percent Online maps updated with partition details; Online records yet to sync with offline changes
Drone Mapping	Innovation in Spatial Mapping: Haryana Large Scale Mapping Project (HaLSMP) Targeting 100 percent drone coverage through SVAMITVA PLUS	
Citizen services	User-friendly GIS webportal	Legally valid maps are available only offline. Partitions are not subdivided online, but efforts are ongoing.

9. Recommendations

- 1. The state should speed up the efforts of digitisation and georeferencing of partition/subdivision markings so that the online maps reflect the latest spatial details.
- 2. The state should set up processes for real time online updation of spatial maps, and for providing online access to legally valid spatial records.
- 3. Haryana should consider bringing in changes to the ROR format or the associated processes of consignment, so that the names of the new owners are immediately reflected in the owner's column. Legal changes may be needed to bring this simplification into effect.
- 4. Haryana can consider introducing easier processes of partition by mutual consent or undertaking partition drives for joint-owners who possess separate parcels. This will help make the land records more reflective of ground realities.
- 5. Mutation backlog needs to be addressed tehsil-by-tehsil. Updation gaps such as those after land acquisition should be reduced.
- 6. Given the prevalence of joint-ownership, Haryana can consider technological solutions to enable more than one mutation on one RoR/khewat number at a given time (if they are not sequential).

Annexures

Annexure 1: Sample copy of legally verifiable Nakal



1/1

Annexure 2: District wise registration statistics for the last 3 years

	Total Deeds Registered			Total Stamp duty collected (in Cr.)				
				2024-25				2024-25
Districts	2021-22	2022-23	2023-24	(April to Sept)	2021-22	2022-23	2023-24	(April to Sept)
Ambala	24541	24659	25365	12470	137.06	163.79	206.25	110.02
Bhiwani	29969	32292	29921	14538	68.29	81.94	87.24	46.94
Charkhi Dadri	13202	14465	13234	5743	26.26	30.87	31.9	15.53
Faridabad	38834	44952	47948	21474	738.11	895.8	987.71	474.25
Fatehabad	28994	33645	30587	14191	82.76	102.86	94	53.3
Gurugram	105439	127799	133601	69316	3563.28	4362.26	5274.26	2957
Hissar	47775	45174	40413	19532	209.43	251.87	221.62	137.43
Jhajjar	29356	31011	31332	14815	227.16	282.85	338.6	168.22
Jind	31922	33622	36736	16340	96.99	102.95	122.04	61.25
Kaithal	31600	32848	31341	13898	107.87	110.76	130.42	71.23
Karnal	33264	30858	31443	15196	261.26	275.02	368.86	190.58
Kurukshetra	24586	24751	25116	11390	133.7	159.4	182.71	94.14
Mahindergarh	18308	19015	19673	8849	43.96	54.07	56.32	28.99
Nuh	17041	20804	19305	10861	82.61	147.89	132.61	68.17
Palwal	25262	26168	25887	13818	137.23	175.2	198.97	89.7
Panchkula	14012	16006	16198	7447	236.87	286.63	323.96	192.21
Panipat	24251	27305	33138	16360	201.18	303.27	347.35	173.28
Rewari	24055	26881	27812	12474	144.71	172.72	222.23	128.54
Rohtak	23493	23681	24422	11403	160.54	187.84	202.15	105.94
Sirsa	38545	39842	37114	20724	118.96	123.82	126.89	72.66
Sonipat	34067	39442	38452	20869	367.55	471.66	495.45	307.67
Yamunanagar	22690	25590	25818	12217	113.18	139.21	161.14	85.95
Grand Total	681206	740810	744856	363925	7258.96	8882.68	10312.68	5633
Source: http://164.100.137.207/halrisdashboard/DeedRegistration.aspx, accessed 6 October 2024								

Annexure 3: District Wise Mutation Pendency

Sr No	District	No. of Tehsils	Number of Villages	Not entered in WEBHALRIS	Total Pending for Sanction	Pending for sanction more than 10 days	Total
1	Ambala	7	499	4875	3395	3023	8270
2	Bhiwani	6	272	11104	6722	5859	17826
3	Charkhi Dadri	3	172	2169	1726	1522	3895
4	Faridabad	8	192	28829	3284	2936	32113
5	Fatehabad	7	250	4569	3181	2814	7750
6	Gurugram	9	291	7138	5965	5600	13103
7	Hissar	9	276	8341	5269	4888	13610
8	Jhajjar	6	264	2837	3432	3140	6269
9	Jind	7	305	3334	4630	4186	7964
10	Kaithal	7	278	3764	8432	7733	12196
11	Karnal	8	436	3306	2813	2400	6119
12	Kurukshetra	6	419	2274	2824	2478	5098
13	Mahindergar h	6	374	2139	2133	1990	4272
14	Nuh	6	443	7667	3904	3711	11571
15	Palwal	5	288	12059	8853	8394	20912
16	Panchkula	5	253	1613	1626	1449	3239
17	Panipat	5	198	4325	5975	5421	10300
18	Rewari	8	412	3011	4798	4639	7809
19	Rohtak	5	147	3582	1751	1545	5333
20	Sirsa	7	331	9464	4628	4111	14092
21	Sonipat	6	349	4549	5164	4740	9713
22	Yamunanagar	7	655	4255	3788	3324	8043
	Total		7104	135204	94293	85903	229497

Source: WebHalris | Dashboard. Status since 1st April 2016 & data extracted on 6 October 2024