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INDIAN INSTITUTE FOR HUMAN SETTLEMENTS

EVALUATION OF QUALITY OF LAND RECORDS

Himachal Pradesh

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In Himachal Pradesh, the registration department is integrated with the revenue department at the state level, and the integration extends upto the tehsil level. The position of sub-registrar (under the Registration Act) and the position of tehsildar (under the state revenue acts) are vested with the same officer. However, the settlement division within the Revenue Department has a separate functioning, which is often independent of the day-to-day maintenance of land records or registration.

B. RoRs are computerised, but online version are not legally valid

Himachal Pradesh has online portal for viewing of land records, but legally valid copies can be accessed only from citizen service centers or revenue offices. Manual RoRs continue to be valid, indicating that there is a scope for discrepancy between online and offline records.

An online revenue court management system exists but it is yet to effectively link to HimBhoomi. Around seventy thousand revenue cases are pending in the state.

C. Mutation does not lead to immediate change in name of owners

Land records of all villages are computerised. However, names of some owners may be in remarks column instead of owners column (for upto a period, or daur, of five years), which makes it difficult to fully implement technological linkages between registration and land records. 84 percent of villages are currently under such updation, while another 16 percent are pending for two or more daurs.

D. NGDRS used, but is not paperless

100 percent SRO offices are computerised, and use NGDRS software for improved citizen convenience, including reduction in time taken for registration. However, there is 22 percent pendency in scanning and uploading of registered NGDRS documents.

Registration process is not completely paperless, and does not link to updation in land records, because of the pendency in 'daur'. There is continued reliance on hardcopies of RoR documents submitted by applicants.

E. No Auto mutation or auto triggered mutation

The state does not have auto-mutation, or auto-triggered mutation, since an earlier attempt at it was not successful. Mutation process includes separate application by the buyer and field visits by the revenue staff for verification; and has pendency ratio of 77 percent for mutation applications in last two financial years.

F. Spatial Records are digitised, but not georeferenced or uptodate

98.6% of cadastral maps are digitised, and 70% of maps are uploaded online on Bhunaksha. A new format of RoR is available online, which includes land parcel map (tatima) as well.

However, the maps on Bhunaksha are not geo-referenced. Maps also do not have recent spatial sub-divisions marked on them.

G. Significant differences between cadastral maps and on-ground situation

Differences between cadastral maps and on-ground position, leading to requests for boundary demarcation, is one of the most common issues faced by revenue officers in Himachal Pradesh. It is often difficult to reconcile ground situation with cadastral maps because of changes in use of land, changes in topography, and high margin of errors in existing records.

The state is trying to use latest survey technology to create new cadastral maps which are more accurate. However, the mismatches between area in RoR and area as per new survey methods often lead to high number of objections.

H. Urban features included in RoRs

RoRs in urban areas cover urban specific details such as use of land, and ownership of flats, but these are fitted under a typical rural RoR format. The state can notify a separate format for urban RoRs thus reflecting these details in a more effective manner.

I. Ownership Structure reflects High Joint Ownership with Share-Based System

74 percent of surveyed land parcels were held in joint ownership, with individual shares specified in the Record of Rights (RoR). In 54 percent of such cases, this shared ownership is largely based on mutual understanding rather than formal subdivision of plots. While such arrangements are often respected among landholders, the lack of formal partition complicates the legal landscape, particularly for transactions or inheritance claims.

J. Discrepancies Between Ground Reality and Official Ownership Records

A gap exists between the number of landowners physically managing the parcels and those formally registered in the Jamabandi. Five percent were cases where land was in *abadi deh* area, and no names were mentioned, or the land was under dispute, or land transfer had occurred for a government purpose and mutation had not been carried out. Several cases were noted where the ownership recorded in the official RoR does not match the actual situation, often due to family members not applying for inheritance mutation (18 percent cases), or mutation not leading to immediate changes in land ownership column (7 percent cases).

K. E. Minor Errors in Official Records Affect Usability

RoR of 4 percent of surveyed parcels contain errors, such as misattributed names or missing names of legal heirs. Though minor, these inaccuracies can complicate property transactions and hinder the effectiveness of digital record-keeping systems. Strengthening error correction mechanisms would enhance record reliability and reduce administrative challenges.

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1. Introduction

Himachal Pradesh: Demographics and Topography

With an area of 55,673 square kilometres (sqkm), Himachal Pradesh is one of the smaller states of the country. It is a northern state located at the foothills of the Himalayas. HP has a population of 6,864,602 persons (Census of India, 2011), and is a low-density state (123 persons/sqkm, compared to the national average density of 368 persons/sqkm) because the terrain is largely hilly. A significant proportion of the state is also under forest cover (over 60 per cent). With only 10 per cent of its population classified as urban, HP has low levels of urbanisation. Administratively, the state is divided into 12 districts and 176 tehsils. These are under three revenue divisions (Shimla, Kangra, and Mandi), and two settlement divisions (Shimla and Chamba). Shimla is the only Class I town with a population of 169,578 persons (Census of India, 2011) and accounts for a quarter of the state's urban population. There are five municipal corporations, 29 municipal councils and 27 nagar panchayats in the state (UDD, 2020). HP ranks as high as third in the country on the Human Development Index (Planning Commission, 2002), with a literacy rate of over 82 per cent.

The land records management in HP provides useful lessons to understand the robustness and diversity of current initiatives to modernise land records, both in terms of process (of comprehensive recording) and outcome (of creating a comprehensive 'mirror' that accurately reflects relations between people and land in the state). Some of its unique features include:

Topography and property regimes: Most of the land in the state is under forest cover and categorised as 'wastelands' (as per land revenue terminology), owing to its hilly topography. The property regimes that have historically developed in the state go beyond the private property regimes that developed in the plains, and have traditionally included customary rights, common property resources and jointly held rights. There are also use and possession arrangements. These wider features of the land administration system in Himachal Pradesh do not get easily translated to an ownership-focused digital land information system, and the same must be recognized when assessing the targets and status of land records modernization in the state.

Restrictions on transactions/transfers in the state: There are restrictions on who can transact properties in the state, aimed at preventing alienation of land. Section 118 of the HP Tenancy and Land Reforms (HPTLR) Act, 1972 is a particular legal provision that, subject to exceptions, imposes a restriction on the transfer of land in favour of a 'non-agriculturist', i.e. someone who does not cultivate agricultural land in

Himachal Pradesh. However, in urban areas, transactions involving non-agriculturalists are still possible in cases where the transaction involves apartments and other built-up structures, without the underlying land.

Table 1: Himachal Pradesh Revenue set up

Divisions	3
Districts	12
Tehsils	120
Sub Tehsils	68
Patwar Circles	2388
Revenue Villages	21,631
Total Land Parcels	1,44,95,794

Himachal Pradesh's land records management process has undergone significant transformation since 2005 with the launch of Himbhoomi and HimRIS, developed by NIC, HP. HimBhoomi was focused on making computerised land records available online, for the convenience of famers while HimRIS aimed to streamline deed registration in Sub-Registrar Offices, ensuring simple, uniform document registration and same-day return of original documents. The two platforms also linked to each other for verification or mutation information.

Despite integration with HimBhoomi in 2008 for real-time land transaction updates, challenges remained: infrastructure constraints in some districts, software bugs affecting decimal entry and transaction limits and delayed updates (Mitra et al, 2021)[1]. Legislative gaps between tehsildars and SROs roles further complicated registration integrity enforcement. Challenges also persisted due to exemptions under the Indian Registration Act, leading to manual registration in some areas. Key issues include prolonged processing times, lack of transparency and potential fraud (ibid).

[1] Mitra, S., Goswami, A., Jha, D., Sasidharan, S., Lushington, K., & Wangchuck, T. (2021). *Land records modernisation: Himachal Pradesh*. Indian Institute for Human Settlements. https://doi.org/10.24943/9788195648504

Subsequently, HimBhoomi was upgraded to web-based eHimbhoomi, now accessible through MEGH portal. HimRIS was replaced by National Generic Document Registration System (NGDRS), which is also a web-based system with provisions for online data entry, stamp duty payment, and fixing of appointments. Later sections of the report cover features of these two initiatives in detail.

Integration of Revenue and Registration functionaries

In Himachal Pradesh, the registration department is integrated with the revenue department at the state level, and the integration extends upto the tehsil level. The position of sub-registrar (under the Registration Act) and the position of tehsildar (under the state revenue acts) are vested with the same officer.

However, the settlement division within the Revenue Department has a separate functioning, which is often independent of the day-to-day maintenance of land records or registration. With time, the relevance of settlement division appears to have decreased. However, the division is taking up survey activities using new technological methods.

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). 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 Himachal Pradesh. For this purpose, two villages were

selected in consultation with the Himachal Pradesh Revenue Department. One of the important criteria for selecting the regions was to choose districts that provide a comprehensive representation of the state. Consequently, Solan district and Mandi district were selected, which are part of Shimla division and Mandi division respectively. The Kangra division was not selected to avoid delays due to difficult tweather conditions.

Mandi district has a population of 9,99,777 (Census 2011), and an estimated population of 11.15 lakhs for 2024. In 2011, 6.27 percent population was urban and rest 93.73 percent belonged to rural areas. With a total area of 3950 sq.km, the population density was 253 people per sq.km.. In Mandi 79 percent of the total population is dependent upon agriculture and allied activities.[2] On the other hand, Solan District has a population of 5,80,320 (Census 2011) of which 82.4 percent of this population lives in rural areas and other 17.6 percent in urban areas. The area of the district is 1936 sq.km making the average density 300 people per sq.km. The current estimated population is 6.79 lakhs for 2024. In the district 80 percent of the rural population is directly involved in agricultural activities.[3] (Himachal Pradesh State Agricultural Marketing Board).

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 Palech village (Kandaghat tehsil) in Solan district, and Dhali Sabmohal village (Mandi tehsil) in Mandi district. In these two selected villages, 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. Fifty land parcels was taken from each village, ensuring their geographical spread across the village. Additionally, the integration of textual and spatial records and the registration process were evaluated to understand the effectiveness and challenges of DILRMP implementation.

[2] From Himachal Pradesh State Agricultural Marketing Board website. Refer https://hpsamb.org/mandi_home1#

[3] From Himachal Pradesh State Agricultural Marketing Board website. Refer https://hpsamb.org/solan_home

Figure 1: District map of Himachal Pradesh depicting two selected districts

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 recommendations made by IIHS.

2. Record of Rights (RoR)

The **Record of Rights (RoR)**, known locally as *Jamabandi*, serves as the cornerstone document of land ownership and property rights in Himachal Pradesh. It provides comprehensive information about land holdings, including details of landowners, possession status, land classifications, and liabilities such as mortgages. The Jamabandi is supported by various supplementary documents, each playing a crucial role in the overall land administration system, ensuring a reliable framework for property rights, dispute resolution, and revenue management.

Structure and Key Supplementary Records

1. Jamabandi (RoR)

- The Jamabandi is meticulously prepared for each revenue estate (village) and is updated every five years. This periodic update is essential to incorporate changes in ownership and address discrepancies over time.
- Each Jamabandi entry includes detailed information about ownership shares, cultivation status, and any remarks that indicate legal or financial obligations attached to the land parcel.
- The periodic five-year updates ensure that changes like inheritance or land sales are accurately reflected, preserving the relevance of the records.

2. Wajib-ul-Arz

- Wajib-ul-Arz documents capture customary rights linked to village land, such as rights to water usage, tree cutting, and public pathway access.
- Though not directly tied to specific land parcels, Wajib-ul-Arz serves as valuable evidence in dispute resolution processes within Tehsildar and SDM (Sub-Divisional Magistrate) courts. This document maintains a record of traditional practices and rights that may impact land use and community relations.

3. Mussavi/Momi/Latha

- The cadastral maps are referred by different names, depending on their purpose and updation status. *Mussavis* are the original cadastral maps prepared for each village at the time of settlement or consolidation. *Mussavis* are maintained at district headquarters are not updated.
- *Maumi (or momi)* are wax-copies of the mussavis which are maintained at the tehsil headquarters. All changes in land parcel boundaries occurring due to partition, sale etc. are entered from the Parat Sarkar (Government Copy) Mutation onto the Momi.
- *Latha* is a cloth copy maintained by the patwari which is updated from time to time with partition boundaries. These are often carried by the patwaris in person.

- These maps assign unique plot numbers, or *Khasra numbers*, to each land parcel, which are essential for tracking ownership and land use changes in the jamabandi. This connection ensures that physical boundaries and areas are accurately represented in both textual and spatial records.

4. Misal Haqiyat

- Compiled during settlement processes, the *Misal Haqiyat* includes names of owners, *Khasra* numbers, and rough maps of landholdings. It serves as a preliminary reference that informs the finalization of the Jamabandi, making it integral to ensuring accurate ownership representation in the RoR.

5. Tatima Maps (Field Maps)

- *Tatima* maps are generated for specific purposes, such as land partition, and provide updates to both the Jamabandi and cadastral maps. They serve a critical role in formalizing land divisions among heirs or co-owners, enhancing clarity in cases where land parcels are subdivided.

These documents collectively ensure accurate land ownership tracking, rights documentation and dispute resolution within Himachal Pradesh's land revenue administration.

Terminology

States have their own ways of recording information on land, with varying terminologies and formats of RoR. The table below shows the different terminologies related to a RoR used in Himachal Pradesh:

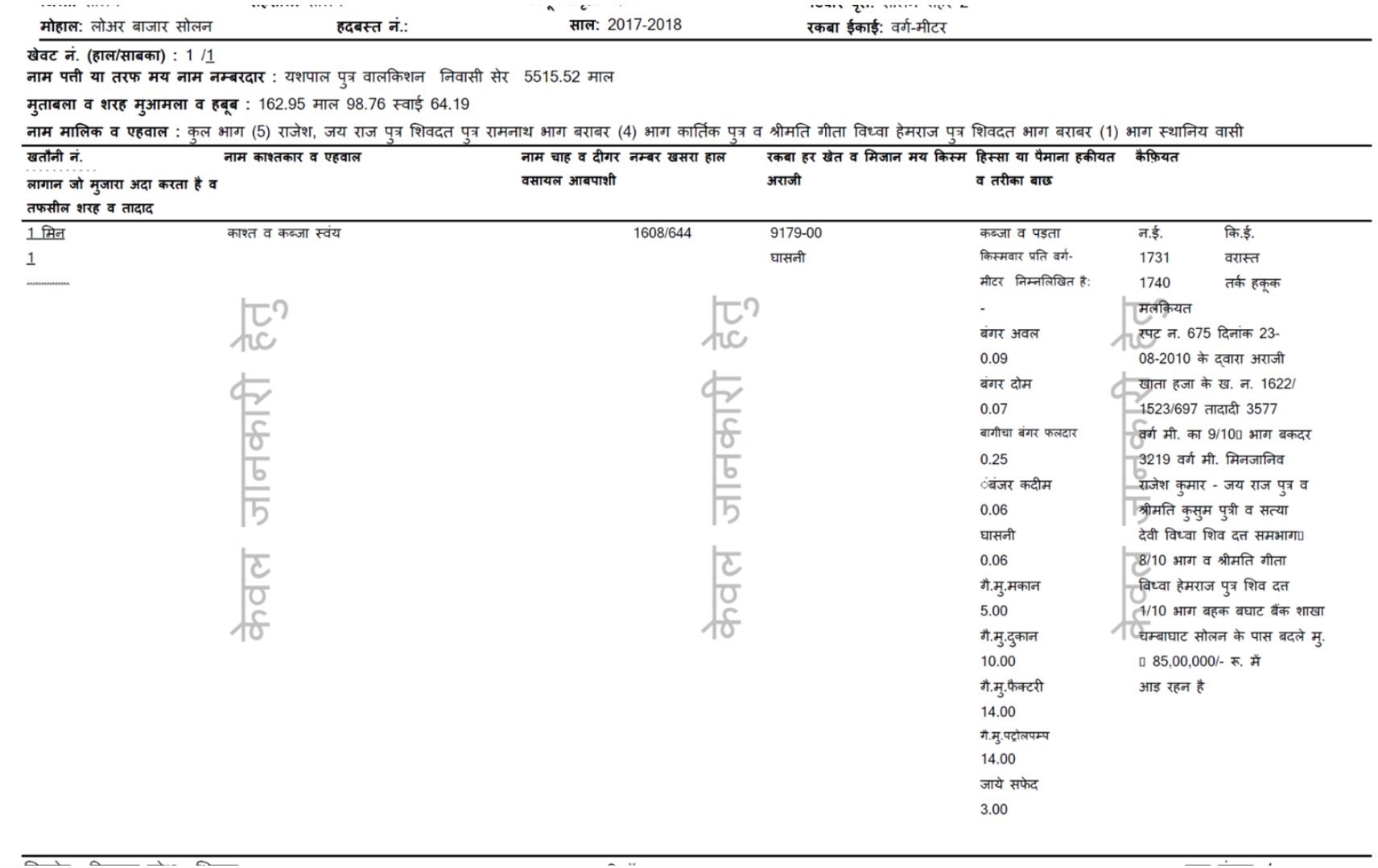
Table 2: Commonly used terminologies related to RoR

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. In Himachal Pradesh Jamabandi is updated every 5 years after making the previous records.
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 an unique plot number or survey number assigned to each land parcel
Khewat number	An account number assigned to a group of landowners 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 every 6 months
Shajra Nasb	Shajra Nasb is a genealogical table for each family in a revenue estate (village). It is used to derive succession to ownership rights within a family. Shajra Nasb also serves as an index for locating an owner's accounts (Khata Numbers) in the Jamabandi. It is revised after every five years along with Jamabandi; the in-between changes are noted by Patwari.

A sample RoR from the state is provided in Figure 2. The format includes details on land ownership (column 4); possession (column 5); irrigation status (column 6); type of land i.e. agricultural land, grassland, construction (column 8), among others. The last column is remarks column, which includes details on loan, mortgage, latest mutations etc.

Figure 2: A sample of a Nakal Jamabandi



मोहाल: लोअर बाजार सोलन **हदबस्त नं.:** **साल:** 2017-2018 **रकबा ईकाई:** वर्ग-मीटर

खेवट नं. (हाल/साबका) : 1 /1

नाम पत्ती या तरफ मय नाम नम्बरदार : यशपाल पुत्र वालकिशन निवासी सेर 5515.52 माल

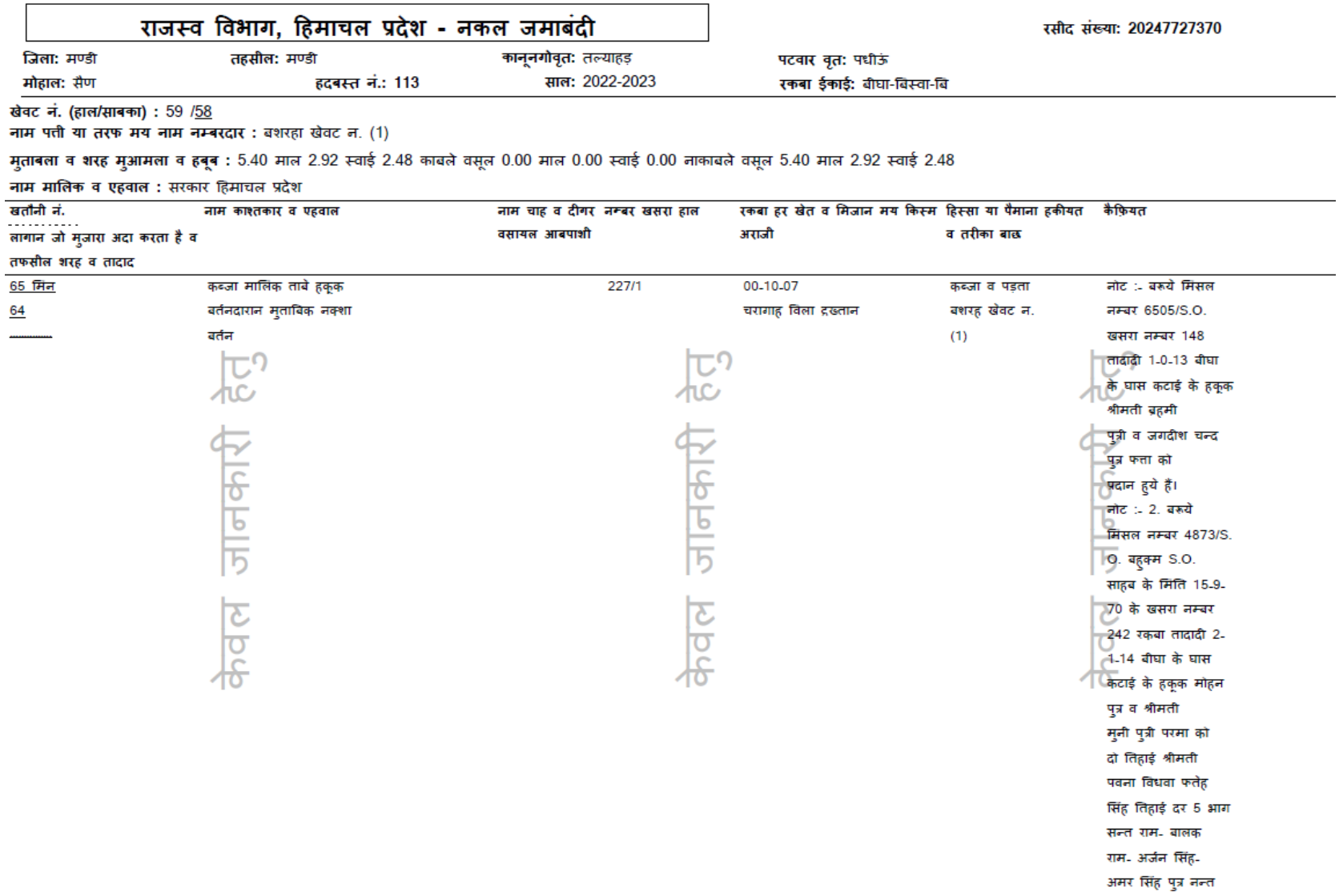
मुताबला व शरह मुआमला व हबूब : 162.95 माल 98.76 स्वाई 64.19

नाम मालिक व एहवाल : कुल भाग (5) राजेश, जय राज पुत्र शिवदत पुत्र रामनाथ भाग बराबर (4) भाग कार्तिक पुत्र व श्रीमति गीता विध्वा हेमराज पुत्र शिवदत भाग बराबर (1) भाग स्थानिय वासी

खतौनी नं. / लागान जो मुजारा अदा करता है व तफसील शरह व तादाद	नाम काश्तकार व एहवाल	नाम चाह व दीगर वसायल आबपाशी	नम्बर खसरा हाल	रकबा हर खेत व मिजान मय किस्म अराजी	हिस्सा या पैमाना हकीयत व तरीका बाछ	कैफ़ियत	
1 मिन 1	काश्त व कब्जा स्वंय		1608/644	9179-00 घासनी	कब्जा व पड़ता किस्मवार प्रति वर्ग- मीटर निम्नलिखित है: - बंगर अवल 0.09 बंगर दोम 0.07 बागीचा बंगर फलदार 0.25 ंबंजर कदीम 0.06 घासनी 0.06 गै.मु.मकान 5.00 गै.मु.दुकान 10.00 गै.मु.फैक्टरी 14.00 गै.मु.पट्रोलपम्प 14.00 जाये सफेद 3.00	न.ई. 1731 1740	कि.ई. वरास्त तर्क हकूक मलकियत रपट न. 675 दिनांक 23-08-2010 के द्वारा अराजी खाता हजा के ख. न. 1622/1523/697 तादादी 3577 वर्ग मी. का 9/10 भाग बकदर 3219 वर्ग मी. मिनजानिव राजेश कुमार - जय राज पुत्र व श्रीमति कुसुम पुत्री व सत्या देवी विध्वा शिव दत समभाग 8/10 भाग व श्रीमति गीता विध्वा हेमराज पुत्र शिव दत 1/10 भाग बहक बघाट बैंक शाखा चम्बाघाट सोलन के पास बदले मु. 85,00,000/- रू. में आड रहन है

Source: HIMBHOOMI

Figure 3: Sample RoR format with Jamabandi and Tatima details



राजस्व विभाग, हिमाचल प्रदेश - नकल जमाबंदी

रसीद संख्या: 20247727370

जिला: मण्डी तहसील: मण्डी कानूनगोवृत: तल्याहड़ पटवार वृत: पधीऊं

मोहाल: सैण हदबस्त नं.: 113 साल: 2022-2023 रकबा ईकाई: बीघा-बिस्वा-बि

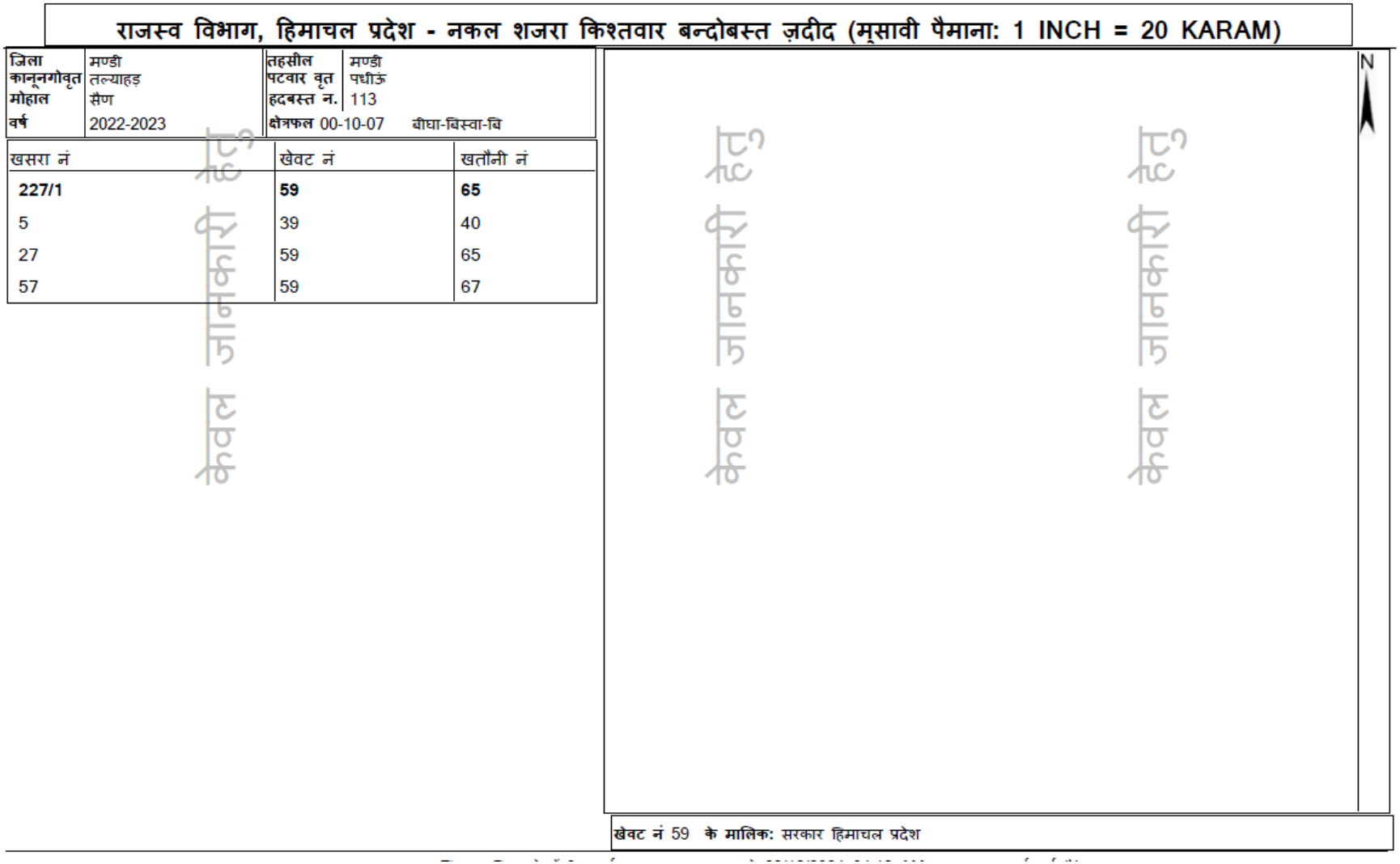
खेवट नं. (हाल/साबका) : 59 /58

नाम पत्ती या तरफ मय नाम नम्बरदार : बशरहा खेवट न. (1)

मुताबला व शरह मुआमला व हबूब : 5.40 माल 2.92 स्वाई 2.48 काबले वसूल 0.00 माल 0.00 स्वाई 0.00 नाकाबले वसूल 5.40 माल 2.92 स्वाई 2.48

नाम मालिक व एहवाल : सरकार हिमाचल प्रदेश

खतौनी नं. लागान जो मुजारा अदा करता है व तफसील शरह व तादाद	नाम काश्तकार व एहवाल	नाम चाह व दीगर वसायल आबपाशी	नम्बर खसरा हाल	रकबा हर खेत व मिजान मय किस्म अराजी	हिस्सा या पैमाना हकीयत व तरीका बाछ	कैफ़ियत
65 मिन 64 ----------	कब्जा मालिक ताबे हकूक बर्तनदारान मुताबिक नक्शा बर्तन		227/1	00-10-07 चरागाह विला इख्तान	कब्जा व पड़ता बशरह खेवट न. (1)	नोट :- बरूये मिसल नम्बर 6505/S.O. खसरा नम्बर 148 तादादी 1-0-13 बीघा के घास कटाई के हकूक श्रीमती ब्रहमी पुत्री व जगदीश चन्द पुत्र फत्ता को प्रदान हुये हैं। नोट :- 2. बरूये मिसल नम्बर 4873/S. O. बहुक्म S.O. साहब के मिति 15-9- 70 के खसरा नम्बर 242 रकबा तादादी 2- 1-14 बीघा के घास कटाई के हकूक मोहन पुत्र व श्रीमती मुनी पुत्री परमा को दो तिहाई श्रीमती पवना विधवा फतेह सिंह तिहाई दर 5 भाग सन्त राम- बालक राम- अर्जन सिंह- अमर सिंह पुत्र नन्त



राजस्व विभाग, हिमाचल प्रदेश - नकल शजरा किश्तवार बन्दोबस्त ज़दीद (मूसावी पैमाना: 1 INCH = 20 KARAM)

जिला	मण्डी	तहसील	मण्डी
कानूनगोवृत	तल्याहड़	पटवार वृत	पधीऊं
मोहाल	सैण	हदबस्त न.	113
वर्ष	2022-2023	क्षेत्रफल	00-10-07 बीघा-बिस्वा-बि

खसरा नं	खेवट नं	खतौनी नं
227/1	**59**	**65**
5	39	40
27	59	65
57	59	67

खेवट नं 59 के मालिक: सरकार हिमाचल प्रदेश

Source: https://himbhoomilmk.nic.in/viewlandrecords.aspx

RoRs of all villages are computerised

There are around 21 thousand villages in Himachal Pradesh. Record of Rights of all villages are computerised. Documents like Wajib-Ul-Arz and Shaira Nasib are also digitised and available in the Himbhoomi portal but are not available for public viewing.

Easy access to computerised RoRs through MEGH and HimBhoomi

Himachal Pradesh provides digital access to land records through the **HimBhoomi** portal. This platform allows citizens to view copies of their **Record of Rights (RoR)**, also known as *Jamabandi*, which significantly improves access and transparency in land record management. Free copies are accessible for informational purposes, and citizens can view them by inputting the land parcel's survey number, owner name, or *Khewat* number.

The state's MEGH (Management of Electronic Governance of Himachal pradesh) Portal provides link to HimBhoomi, in addition to facilitating online application for mutation, tracking land revenue court cases, integrating Geographic Information Systems (GIS) for visualizing land parcels, and offering a grievance redressal system.

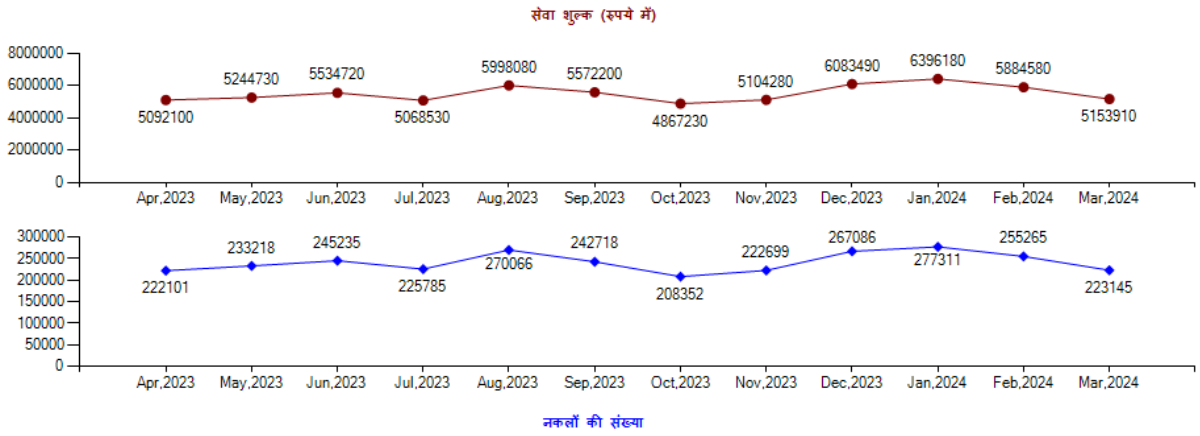
Access to certified copies through LMKs and Sugam centers

Legally certified copies with government seals and QR codes are available through a paid service at designated citizen service centers (lok mitra kendra, or LMK) or at tehsil headquarters. The LMKs are a self-sustaining network of common service centers at gram panchayat level which provide a bouquet of digital services to citizens on a payment basis. There are around 5500 LMKs in the state, run by private entrepreneurs.

Around 29 lakhs digital requests for Nakal copies were recorded in the last financial year (2023-24) and another 14.7 lakh digital nakal copies have been issued this year, highlighting the system's widespread acceptance and reliance among Himachal Pradesh's landowners. Of the 29 lakh digital copies obtained last financial year, 97 percent were through LMK[4], which have a higher reach, and only around 89 thousand copies were issued from Sugam centers or tehsil center.

[4] According to notification number Rev-C(F)/10-1/2009 dated 14-Feb-2011, the Jamabandi copy issued through LMK is presumed to be true as per Section 45 of the Land Revenue Act, 1954 until the contrary is proved or a new entry is lawfully substituted.

Figure 4: No. of digital RoRs issued, and revenue generated in 2023-24



Source: https://himbhoomilmk.nic.in/

Legally certified copy of RoR cannot be downloaded

While the state has a unique and reliable model of LMKs, it does not provide allow online download of legally certifiable copies of the RoR. The online versions are only for information purposes. According to interviewed officials, the state does not use digital signatures in RoR.

Manual RoR still valid

The state is yet to disallow manual RoRs and shift to a completely digital model. This gap sometimes translates to a requirement for citizens to visit relevant government offices to obtain latest legally valid copies of their land records.

Himachal Pradesh has online portal for viewing of land records, but legally valid copies can be accessed only from citizen service centers or revenue offices. Manual RoRs continue to be valid, indicating that there is a scope for discrepancy between online and offline records.

Digital RoR available for Government Land

In addition to individual land records, RoRs for government-held lands have been digitized, ensuring transparent tracking and management of state-owned land. These records, which account for approximately **15 percent of the state's total land parcels**, are accessible through the MEGH/HimBhoomi portal, enabling efficient monitoring and reducing the potential for encroachment on public lands.

Share-Based Ownership in RoR

Himachal Pradesh land records system follows a **share-based ownership** model, which is reflected in the RoR entries. Instead of individually subdivided parcels, ownership is often recorded as a percentage share within jointly-held land parcels. In cases of inheritance, shares are commonly divided equally (*sambhaag*) among heirs. While the structure has its benefits, it also presents challenges. The absence of documented sub-division/possession of land parcels may lead to poor clarity and conflicts over exact boundaries and usage rights.

During sales, the registered deed may specify the land's physical dimensions (in hectares, square meters, or acres), yet the mutation process in the RoR records the new ownership only as a share of the original parcel. This can lead to complications for buyers who expect specific plots rather than shared ownership.

Instances of single-owner parcels generally occur only when joint owners pursue formal partition proceedings.

> *In the surveyed villages, 76 percent of land parcels adhered to joint ownership, which often entails family or partnership arrangements among landowners. Out of these, 54 percent had some form of mutual understanding regarding spatial division of land parcels.*
>
> *Only 24 percent of land parcels were of single-ownership nature.*

Mutation entries not reflected in ownership column for upto five years

In Himachal Pradesh, sanctioning of a mutation order does not lead to the name of new owner immediately entering the land ownership column. Instead, details related to mutation are entered in the remarks column. After every five years or so, a 'daur' process is undertaken where the entire record of right of the village is

updated, by making updates to the ownership column based on mutation entries. The process has its origins in the Punjab Tenancy Act, and is also followed in Punjab and Haryana.

In the early twentieth century, the cyclical concept of 'daur' ensured that revenue officers are not overloaded with work, and RoRs of different villages are picked up for updation on a rotational basis. However, its continued prevalence in the technological era presents the following difficulties:

1. Someone not familiar with the system may not understand that owners name can also be found in remarks column. However, compared to its neighbouring state of Haryana, the mutation entries in HP are more detailed (often with name of person) and thus more useful. HP also prohibits sale of agricultural land to people not from the state, and hence the possibility of external buyers not familiar with state's RoR systems is relatively low.
2. The bigger issue is that since name/s of new owner/s is not added directly to ownership column, the NGDRS software cannot automatically detect the name of the owner (in case of recently transacted land parcels) from eHimBhoomi records. This stops the technological link between registration and land records from achieving its full potential.

In village surveys, seven percent cases had either mutation pending or mutation was carried out, but the names were not entered in remarks column and would be shifted to ownership column only after the completion of daur. In eighteen percent cases, inheritance had taken place on ground, but subsequent updation in land record had not taken place.

As of September 2024, daur updation was going on 84 percent of the villages. Another 16 percent villages have pendency of two or more daurs. 1. The software for live updation of land records on registration can be implemented only after 100 percent of land records have been updated upto the current Daur.

Land records of all villages are computerised. However, names of some owners may be in remarks column instead of owners column (for upto a period, or daur, of five years), which makes it difficult to fully implement technological linkages between registration and land records. 84 percent of villages are currently under such updation, while another 16 percent are pending for two or more daurs.

Urban features are covered, but in a limited manner

Himachal Pradesh uses the same RoR format for both rural and urban areas. As a result, some urban characteristics are captured in the same rural format. For example,

1. Use of land is noted under the 'type of land' column. Refer RoR sample in Annex 1 to note petrol pump and shop as some of the land categories.
2. Ownership of flats is noted in the 'remarks' column, while land ownership is noted in the 'ownership column'

While the state revenue department has tried to capture useful details in the rural format itself, sometimes these details in the remarks column, combined with multiple owners in one RoR and detailed mutation entries, make a single nakal of RoR several pages long. It also means that separate urban-specific databases cannot be extracted from this framework.

RoRs in urban areas cover urban specific details such as use of land, and ownership of flats, but these are fitted under a typical rural RoR format. The state can notify a separate format for urban RoRs thus reflecting these details in a more effective manner.

Mortgage information is reflected in RoR, but continued reliance on physical copies for verification

In Himachal Pradesh, mortgages or loans against land parcels are integrated within the Jamabandi. Upon loan approval, the bank informs the *Patwari*, who enters the loan details in the RoR's remarks column, ensuring transparency regarding financial encumbrances.

Survey data shows that **100 percent of Kisan Credit Card (KCC) loans** and **97 percent of other land-based loans** are recorded in the RoR. However, surveys revealed that bank officers must often rely on physical Nakal copies rather than the HimBhoomi portal for real-time loan approvals due to incomplete digital updates.

Landowners seeking loans follow a multi-step process: obtaining a Nakal from a Lok Mitra Kendra, verifying their share through the *Patwari*, and then finalizing the loan at the bank and Tehsil office. This workflow ensures record accuracy but could benefit from greater automation. See box for details.

BOX 1: Integration with Financial Institutions: Charge Creation Process Flow

The Himbhoomi system has integrated a charge creation module that directly connects with financial institutions. This streamlines the process for banks when they need to create a charge on land records as collateral during loan disbursement.

Banks requesting for creation of a new charge: The charge creation process begins when a bank initiates a request through eHimbhoomi. Each bank user accesses the system with a unique login, identified by the bank's IFSC code, which is also tied to security protocols within eHimbhoomi. When a borrower seeks a loan using land as collateral, the bank representative logs into the system and selects the "Create New Charge" option. This module allows the bank to enter loan-specific details, including loan amount, interest rate, and tenure, which are essential for creating a valid charge.

Once the bank submits a charge creation request, the application is routed to the Assistant Collector (often the Tehsildar) responsible for the area where the land is located. The Assistant Collector's role is crucial, as they act as an intermediary, checking the request to ensure that it meets regulatory and procedural standards. Upon reviewing the request, the Assistant Collector has the discretion to either approve it or send it back for additional information. If approved, the charge creation request is forwarded to the Patwari for on-ground verification, making it a dual-layered verification process.

Verification and Documentation by the Patwari: The Patwari's involvement in the charge creation process underscores the importance of local verification within the land records system. Upon receiving the Assistant Collector's forwarded request, the Patwari reviews the details of the land parcel and conducts physical or record-based checks as necessary. This verification step often includes updating the *Rojnamcha* (a daily diary maintained by the Patwari) to document the charge creation and record the entry in the local land register.

Once verification is complete, the Patwari generates a report and assigns a unique report number to the charge creation request. This report is critical, as it links the bank's charge to a verified entry in the land records, ensuring that any future updates to the Jamabandi (Record of Rights) reflect the encumbrance accurately. The Patwari then sends the report back to the Assistant Collector for final review, marking the end of the Patwari's involvement in the process.

Final Approval and Update in Jamabandi by Assistant Collector: After the Patwari completes the verification, the charge request is returned to the Assistant Collector for final approval. The Assistant

Collector reviews the Patwari's report, checks the updated details, and, if all requirements are met, gives final approval to the charge request. Upon approval, the charge is officially recorded in the Nakal remarks section of the Jamabandi, which is the formal land ownership record.

By including the charge in the Nakal remarks, eHimbhoomi ensures that any financial encumbrances are clearly documented in the land's Record of Rights. This transparency is beneficial not only for the bank, which gains assurance over the security of the collateral but also for other stakeholders, such as potential buyers or investors, who can view any liens or loans against a property through the public record. This integration, thus, protects both lenders and borrowers by establishing a clear, traceable financial record linked to the land.

Notification and Transparency for Stakeholders: Throughout the charge creation process, eHimbhoomi supports real-time notifications to keep all parties informed. SMS notifications are sent to the applicant (borrower) and the bank user whenever there is an update on the charge request, whether it's under review, forwarded for verification, or finalized. This notification system helps maintain transparency, allowing applicants to follow the status of their collateral in real-time, thereby reducing uncertainty and enhancing trust in the process.

Charge Vacating: eHimbhoomi also facilitates charge vacating, which is essential when a loan is repaid or closed. Similar to the creation process, the bank initiates a charge vacate request through the system, which then follows an approval chain involving the Assistant Collector and Patwari.

Changes in land use noted bi-annually through Girdawari

According to interviewed officers, when a land owner does not carry out agriculture on his/her land parcel, the patwari notes that that land parcel has been empty for such a period of time. This notingis through the process of girdawari which happens every six months.

The **Girdawari** register, updated semi-annually, is a critical component of land related recordkeeping. It documents land use and crop patterns for each land parcel. This register complements the RoR and cadastral maps, providing timely insights into land utilization and supporting land-related revenue collection. Although digitized, the Girdawari system still faces challenges with data accuracy and timely field verification, often requiring manual correction processes.

Survey data reveals that **around 68 percent of landowners rely on Girdawari** for verifying crop records and land usage, especially for crop insurance or subsidy claims. However, around **32 percent raised concerns over inconsistencies** in crop data or delays in Girdawari updates. Field surveys report delays in Girdawari updates, with **24 percent of landowners** citing discrepancies in recorded crop data. This inconsistency affects landowners' ability to access agricultural benefits and secure accurate records for legal or financial purposes.

Difficulties in comprehending or correcting legacy records

In Himachal Pradesh, accessing legacy land records (predating computerisation initiatives) is a significant challenge. These older records were originally maintained in Persian language, and the translation barriers complicate modern record-keeping efforts. This legacy data gap impacts landowners, particularly in verifying long-standing ownership or resolving boundary disputes, leading to increased reliance on newer records or field verification by Patwaris.

For example, there are cases where land was mortgaged decades or even centuries ago, and those entries remain in the records, preventing current owners from accessing financial services like mortgages. The process of correcting such entries, often written in Persian, is lengthy and tedious, involving courts and evidentiary hearings, despite the fact that many parties involved may have long passed away. Himachal's land record system also suffers from issues like mismatched names in documents. For instance, a person might be known by one name locally but have a different name on official records, leading to confusion and potential legal challenges.

Others

Himachal Pradesh RoR system does not currently incorporate unique identification details, such as Aadhaar or PAN numbers. Aadhar Seeding process was initiated in 2016-17 but was not taken forward. A software for aadhar seeding is to be developed soon, and will be provided to all patwaris.

Himachal Pradesh has established **Modern Revenue Record Rooms (MRRRs)** as part of its digital transformation initiative. These record rooms aim to preserve historical documents and facilitate easy access to digitized land records. Although records are not yet fully accessible to the public, this system allows revenue officers to access digitized records internally, expediting administrative and legal procedures.

Citizens can apply for corrections in RoR both offline and online. However, most corrections are handled offline through the Tehsildar's court. The field-level officers do not have the authority to rectify RoR errors; they have to write to the NIC for changes.

Figure 5: Modern Revenue Record Room in Rohru

Source: IIHS, September 2024

3. Registration

NGDRS has brought in improvement over the previous software

In Himachal Pradesh, the National Generic Document Registration System (NGDRS) portal facilitates the registration of land transactions. It was introduced in the state in September 2019, and HP was the seventh state in the country to implement it. NGDRS brought in significant improvements over the older registration system HimRIS (Himachal Registration Information System), including the introduction of web-based portal, data entry by citizens, online appointment systems, and online calculation and payment of stamp duty and registration charges.

100% SRO offices are computerised

NGDRS is available across 185 SROs and has enabled registration of around 5.2 lakh documents till date, with highest number of registrations in the districts of Kangra and Solan. According to state officials, there are 186 SROs in the state and all of them are computerised. While state officers say 186 SROs are linked to NGDRS, the NGDRS portal itself states the number of SROs as 185.

Another two tehsils have been recently added in the state, taking the total number to 188 SROs. However, as of September 2024, these two new tehsils were yet to have a functional office, and hence the rollout of NGDRS was pending.

Table 3: District wise registration statistics

District	Total Registered Deeds on NGDRS
Kangra	1,15,214
Solan	71,539
Mandi	65,807
Bilaspur	65,433
Sirmaur	64,580
Shimla	55,395
Una	51,233
Hamirpur	42,664
Kullu	35,950
Chamba	18,234
Kinnaur	2,408
Lahaul-Spiti	1,081

Source: https://ngdrs.gov.in/NGDRS_Website/da_tejavi.php , accessed 17 Nov 2024

Process flow in NGDRS

Citizens often take the help of Lok Mitra Kendras to file a registration application and to submit documents, including ID proof and sale deeds. The LMKs then send these to the registrar along with the application documents.

The concerned documents are forwarded to the SRO's office (who is also the tehsildar) for processing. The final registration is conducted in the presence of both the buyer and the seller before the SRO. Following this, the registration details are recorded by the SRO's office and forwarded to the Patwari, who is responsible for logging the information into the HimBhoomi system for the mutation process.

NGDRS was designed with an aim to have a common and configurable application for registration departments across the nation, and its development as well as roll-out is led by the Department of Land Resources, (Ministry of Rural Development, GOI) itself. Hence, the details of the software have not been covered in this report.

Reduction in average time taken for Registration

According to NGDRS statistics, the number of registrations has been increasing every year for past three years. At the same time, the mean time taken for registration has been reducing. This indicates the improving effectiveness of NGDRS in the state.

Table 4: Number of registrations and time taken

	2021-22	2022-23	2023-24
No. of Registered Documents	1,22,933	1,43,737	1,50,008
Mean time taken for registration	14 min 52 sec	13 min 10 sec	12 min 59 sec
Median time registration	01 min 36 sec	01 min 34 sec	01 min 35 sec

Source: https://ngdrshp.gov.in/NGDRS_HP_LIVE/Graph/citidash, accessed 17 Nov 2024

22% of NGDRS registration documents yet to be scanned and digitised

As of September 2024, registered documents for 78 percent of the registrations done though NGDRS have been scanned and digitized in the state. The remaining 22 percent are pending for scanning, and are expected to be complete by December 2024.

Pre-2019 registration deeds yet to be computerised and made available online

Digitised legacy data Is not available. The registration deeds prior to 2019 are to be scanned and uploaded on a new software. Six scanning locations have been set up in the state for scanning and digitization of older registered documents, and the target for completing it is September 2025.

100 percent SRO offices are computerised, and use NGDRS software for improved citizen convenience, including reduction in time taken for registration. However, there is 22 percent pendency in scanning and uploading of registered NGDRS documents.

100% SROs linked to land records, but processes not linked completely

All the SRO offices in the state are linked to land records database. There is also an institutional link, as the SRO is also the Tehsildar, and SRO offices are usually the same as tehsil headquarters, where majority of revenue functions are located.

However, the digital linkage does not really serve its entire purpose. This is because the ownership details in the computerised RoRs are updated only after a 'daur' is complete. Also, there is no provision of digitally signed RoRs in the state and all legally valid documents must be signed/stamped by an officer. As a result, sellers and purchasers submit physical copies of the RoR with the deed, which can then be used by SRO to check names of the parties and area details. This is as opposed to some other states (e.g. Karnataka) where registration software can directly check the name of the owner in the RoR.

After the registration, the process of mutation gets triggered automatically, in the form of information being sent to the land records database. However, the automation stops after this, and subsequent details are entered by the Patwari. This is done generally on the same day or within 1-2 days if they are on the field.

Registration process is not completely paperless, and does not link to updation in land records, because of the pendency in 'daur'. There is continued reliance on hardcopies of RoR documents submitted by applicants.

According to state revenue department, the software for the live updation of registration on land records can be implemented only after 100 percent of records have been updated as part of the 'daur'. As mentioned earlier, the 'daur' causing non-availability of updated land records also is cited as the reason for the registration process not being completely paperless.

Auto-mutation was attempted in 2011-12 but was reversed

In 2011-2012, an attempt was made to streamline the linkage between registration and land records through auto-mutation. However, the auto-mutation trials faced challenges due to errors that arose from bypassing Patwari verification, leading to the termination of the trials.

The state has since then not carried out auto-mutations. It does have a rudimentary form of auto-triggered mutation, wherein NGDRS informs the land record software that a registration has taken place on specific khasra/khatauni numbers.

SRO may or may not check ownership documents

While the digital link to land records is not effective to its complete potential, interviews with the state and district officers brough forward graded responses to the question on whether SROs check ownership documents. Some officers stated that the SRO does verify ownership documents by checking RoR

documents submitted with the deed, and copies of previously registered deeds for the same property. Since legacy registration data is not available in a digital format, SRO can use it for ready reference only in a physical form.

Some other officers pointed that as per the law, the SRO is not allowed to check the merits of the document. But as Assistant Collector (Tehsildar), when the mutation happens, the same officer can check the merits of the document. They pointed out that the government's priorities in registration and mutations processes are different.

While there is no harmonious picture on whether documents are checked prior to registration, **there is confirmation that the same officer does check the documents at some point of time in the registration-mutation cycle**. As of today, the state seems to focus more on retaining the sanctity of mutation, and the institutional integration plays an important role.

Features of NGDRS in HP

- Property attributes such as survey number, plot number, khasra number, khewat number and khatauni number are captured in the online system.
- Dynamic deed templates are available.
- Circle rates are available for citizens to download. An online ecalculator is also available.
- Online payment facility is available through eStamping since 2011. Different banks also have authorized collection centres.
- The sale of govt land is red-flagged as 'prohibited' property. However, SRO cannot check for litigations in an online manner because there is no digital link to RCMS system.
- SRO is not able to trigger SMS for important events, but she can push pending data of mutation in case of a network failure.
- Anywhere registration is not allowed in the state, and there is no facility for online registration for specific deeds such as leave and license agreement. But, there is a home visit module.
- PAN number, aadhar number and mobile numbers are generally captured for each party especially for transactions worth Rs 25 lakhs or more. However, this information is not documented in an electronic format.

There is no system for online verification of PAN or eKYC. There is no facility for uploading of ID documents, and AI Nibhrit solution is yet to be used for masking of personal information.

4. Mutation

The mutation process in Himachal Pradesh is managed digitally through the *eHimBhoomi* platform, which is designed to streamline the updating of land ownership records following property transactions, inheritance, or other ownership changes. This system provides a digital pathway to ensure accuracy, transparency, and accessibility in managing the Record of Rights (RoR), a critical document that tracks the official ownership and history of land parcels. The mutation process involves several steps that engage key administrative roles, including the Patwari, Kanoongo, and Tehsildar, to confirm and approve the transfer of land rights.

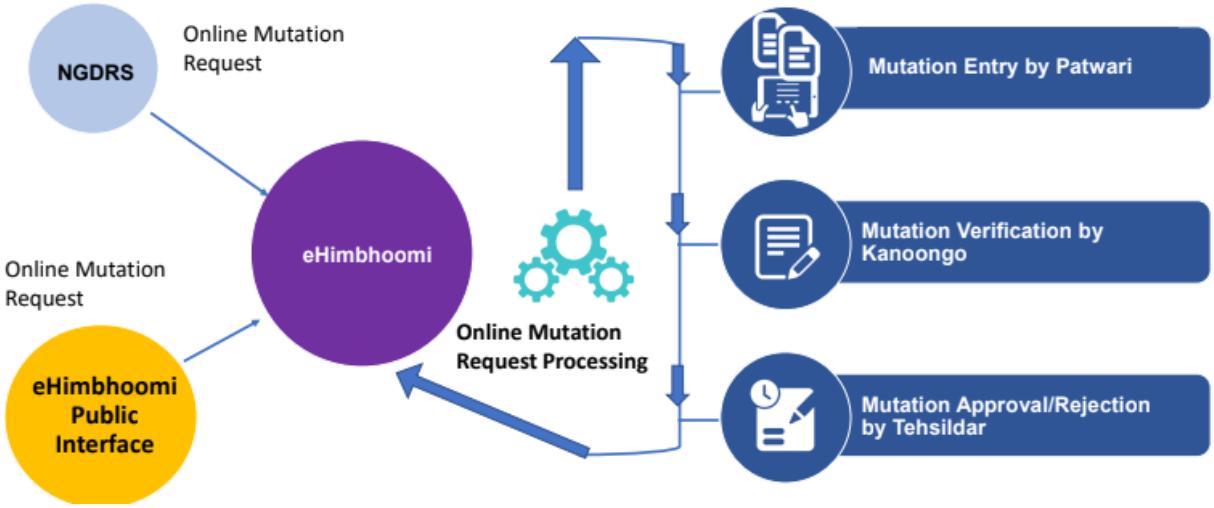
Unlike in some states where mutation can be automatically triggered post-registration, HP's mutation process requires manual initiation and verification, ensuring each update is verified on the ground.

Mutation Process

Step 1: Initiating a Mutation Request

The mutation process begins when the applicant, typically following a property transaction or inheritance event, requests an update in land records to reflect the new ownership status. In case of registered deeds, the information/request for mutation comes through the NGDRS portal, and subsequent mutation related details are entered by the Patwari within 1 or 2 days. In other cases, a mutation request can be initiated by the concerned citizen and communicated to the Patwari, who is the primary field officer responsible for local land records. Alternatively, individuals may directly initiate the request through an online portal by submitting necessary documents, such as identification proof and transaction deeds. The *eHimBhoomi* system is configured to accept and organize these applications, centralizing data to facilitate further processing.

Figure 6: Sources of mutation requests in Himachal Pradesh



Source: NIC Himachal Pradesh

Upon receiving the request, the Patwari logs into the *eHimBhoomi* system to create a new Digital Original Record (DOR) entry, which serves as a digital record of the mutation request. This entry includes details of the land parcel, transaction type, applicant's details, and supporting documentation. Once the entry is made, the Patwari generates a PDF version of both the Jamabandi (the Record of Rights) and the Shajra Nasab (a lineage document outlining family connections to the land), creating digital copies of these foundational records to support the mutation verification.

Step 2: Verification by Kanoongo

After Patwari submits the mutation request into the *eHimBhoomi* system, the entry is automatically routed to the Kanoongo for verification. The Kanoongo, who supervises the Patwari and oversees broader administrative roles, reviews the DOR entry for accuracy, completeness, and consistency with existing land records. This verification process is crucial as it ensures the accuracy of data and provides a second layer of validation before any updates are made to the official record. The Kanoongo cross-checks submitted documents and confirms that all procedural requirements have been met. After completing this review, the Kanoongo forwards the verified DOR entry to the Tehsildar's office for final approval.

Step 3: Field Approval or Rejection by Tehsildar

Upon receiving the verified mutation request from the Kanoongo, the Tehsildar conducts the final review of the mutation request. At this stage, the Tehsildar examines all entries in detail, ensuring they adhere to

land laws and government regulations. The Tehsildar has the discretion to either approve or reject the mutation based on the validity of the submitted documents and the verification process results. The verification may include a visit to the concerned village – the MEGH website provides schedule of tehsildar field visit for mutation to specific patwar circles.[5]

In cases where the Tehsildar finds discrepancies or inaccuracies, the mutation request may be rejected, with reasons provided to the applicant or Patwari for necessary corrections.

If approved, the Tehsildar finalizes the mutation entry by consignment. This action integrates the new ownership details into the official Record of Rights, where it is recorded as a confirmed entry. Consignment by the Tehsildar is a significant step as it officially validates the change in ownership and transitions the record to a permanent status within the *eHimBhoomi* system.

Step 4: Record Consignment and Public Access

Once the mutation is consigned by the Tehsildar, the newly updated Record of Rights becomes accessible to the public through the *eHimBhoomi* interface. This system ensures transparency by allowing citizens to view and retrieve the latest ownership records, including recent changes, through Lok Mitra Kendra (LMK) centers or directly online. The consignment also updates the RoR for any future references or transactions involving the land parcel, providing an authenticated, digital record of ownership. Through this streamlined digital integration, *eHimBhoomi* enables landowners, financial institutions, and government departments to access up-to-date land records efficiently.

Table 5: Mutation workflow and respective officers in-charge

Step	Action	Responsible Party	System Update
1. Mutation Request Initiation	Application submitted online or by Patwari	Applicant/ Patwari	Mutation request entered into e-HimBhoomi
2. Mutation Entry	Patwari enters mutation details and documents	Patwari	DOR created: Jamabandi and Shajra PDFs generated
3. Verification	DOR entry verified for accuracy	Kanoongo	Verified DOR submitted to Tehsildar

[5] Refer https://ehimbhoomi.nic.in/OMR/frmScheduleMutation_Teh_Pub.aspx.

Step	Action	Responsible Party	System Update
4. Approval	Mutation approved or rejected	Tehsildar	Approved DOR consigned updated in RoR
5. Record Consignment	Mutation made available for public access	System	RoR updated and accessible via LMKs

No auto-triggered mutation or automatic mutation

In 2011-2012, an attempt was made to streamline the linkage between registration and land records through auto mutation. The verification process done by the patwari during mutation was removed, and a mutation entry was directly made into the jamabandi. However, the auto mutation trials faced challenges. For example, mutation was done on properties where stay orders were issued, and later these has to be rectified. The state has since then not carried out auto-mutations.

Instead, the state has chosen to pursue careful consideration of mutation applications, including field verification, before their approval or rejection. This is meant primarily for mutations originating from sale-purchase transactions or inheritance.

Other forms of changes in RoR such as mortgage entries, or entries related to court orders, are not referred as ‘mutation’ in the state, and hence have a shorter timeline.

The state does not have auto-mutation, or auto-triggered mutation, since an earlier attempt at it was not successful. Mutation process includes separate application by the buyer and field visits by the revenue staff for verification; and has pendency ratio of 77 percent for mutation applications in last two financial years.

Time limits not prescribed

According to interviewed officials, there is time limit of one day for a patwari to fil the mutations applications online, once erquested by ciztie. However, there is no prescriebd time limit for the tehsildar to

carry out the final attesation, and depends on the mohal-wise schedule of the specific tehsildar. This introduced the possibility of discretion at the tehsildar level.

The states also allows a limit of 6 days within which a mutation order must be incorporated online. A mutation is considered complete, only when the online RoR has been changed by making an entry in the remarks column.

Respondents in 89 percent of the land parcels reported having applied for a mutation process in their lifetime. Only around half of these were able to recall the time taken for mutation – 5 percent reported that the mutation was carried out in ten days or less, while 33 percent reported waiting for up to one month for the mutation. Another five percent waited for 30-60 days for mutation. When asked about number of visits needed for mutation process, 10 percent reported that they visited the patwari/revenue office only once, while 19 percent reported 2-3 visits. Another 13 percent reported four or more visits.

Low approval rates and high pendency ratio in online mutation applications

Online mutation applications, i.e. those initiated through NGDRS or through eHimBhoomi are tracked through a state level mutation dashboard. On an average, 27 percent of online mutation applications were approved in 2021-22, and the ratio has subsequently reduced to 23 percent over the next two years. More than 99 percent of the online mutation applications are received from the NGDRS portal, and online mutations requests from eHimBhoomi are relatively very low (around 500 applications each in 2022-23 and 2023-24).

Table 6: Mutation applications received from online sources

	Total No. of Mutations Applications		**Mutation Requests from NGDRS**		**Online Mutation Requests from eHimBhoomi**	
	Received	Approved	Received	Approved	Received	Approved
2021-22	66410	17982	66201	17922	209	60
2022-23	70380	16100	69803	16044	577	56
2023-24	19151	4457	18656	4435	495	22

Source: https://ehimbhoomi.nic.in/ehimbhoomidashboard.aspx, accessed 17 Nov 2024

The tables also reveal high numbers of mutation pendency, with more than 90,000 online applications pending from just last 3-4 years.

Two percent respondents highlighted cases where the mutation was reportedly completed but was not reflected in the online Jamabandi system. This gap is often due to challenges in synchronizing records between physical and digital repositories. Despite the mutation process being finalized on paper, such cases reveal gaps in digital record management that may impact landholders who rely on online records for transactions or legal proof of ownership.

Table 7: Pendency status of online mutation applications (April 2021 onwards)

Year	**Total No. of Mutations Applications**			
	Received	Approved	Pending	In progress
2021-22	66,410	17,982 (27%)	32,764 (49%)	15,460
2022-23	70,380	16,100 (23%)	40,024 (57%)	14,062
2023-24	19,151	4,457 (23%)	10,503 (55%)	4,119
2024-25 (till Nov 2024)	11,515	927 (8%)	9,006 (78%)	1,569
TOTAL	1,67,456	39,466 (23.5%)	92,297 (55%)	35,210

Source: https://ehimbhoomi.nic.in/ehimbhoomidashboard.aspx, accessed 17 Nov 2024

It must be noted that these numbers represent only those mutations which are applied online, or originate through NGDRS. For mutation applications that are filed directly with the patwari, statistics are not available at state level. These include mainly non sale-purchase related mutations, including inheritance and family settlements.

Table 8: District wise statistics on pendency of online mutation applications (April 2021 onwards)

District	Received	Approved	Pending	In progress
Kangra	43,162	9,501 (22%)	24,103 (56%)	9,265
Mandi	22,386	1,706 (8%)	15,617 (70%)	4,779
Hamirpur	16,411	3,490 (21%)	9,863 (60%)	2,793
Shimla	25,937	11,243 (43%)	8,194 (32%)	6,018
Kullu	12,735	3,508 (28%)	7,043 (55%)	2,165
Sirmaur	8,181	607 (7%)	5,849 (71%)	1,710
Bilaspur	8,742	683 (8%)	5,695 (65%)	2,320
Chamba	7,970	1,203 (15%)	5,346 (67%)	1,359
Una	15,319	6,557 (43%)	4,693 (31%)	3,878
Solan	4,837	1 (0.02%)	4,318 (89%)	506
Lahaul-Spiti	508	212 (42%)	205 (40%)	88
Kinnaur	1,268	755 (60%)	172 (14%)	329

Source: https://ehimbhoomi.nic.in/ehimbhoomidashboard.aspx, accessed 17 Nov 2024

In many cases, heirs or successors of the land parcel are not reflected in the Jamabandi, leading to a disconnect between the recorded owners and actual current owners. Some landowners cited delays in updating official records after private transfers or sales of land shares within families. Such discrepancies impact roughly 18 percent of the cases where inheritors have not filed for mutations.

5. Spatial records

The settlement department in Himachal Pradesh maintains spatial records of the villages, and also carries out survey and settlement operations, if needed. The last settlement (refer box) across the state was done between 1908 and 1911. The last revised settlement was initiated in 1975 and was completed in 1983, in parts of the state.

BOX 2: Settlement and Record Management

Under Section 33 of the HP Land Revenue Act, there are two major types of settlements: regular and revised.

- Regular settlements are conducted when no RoR is available in a particular area. All areas of HP have undergone regular settlements and hence records are now available for all villages.
- Revised settlements are conducted in areas where records exist but need to be revised. Revised settlements were typically to be held every 40 years, as that is the duration for which a revenue assessment is valid in the state (section 57). According to interviewed officials, the nature of the land changes a lot over 40 years, including change of land use, and terrain.

  However, the state has now stopped carrying out revision settlements because there is a paucity of staff and a revision settlement typically leads to a high number of disputes, on account of area mismatches (discussed in next section).

  Settlement occurs periodically to update land records, capturing changes due to sale, inheritance, or partition. During settlement, the Record of Rights (RoR) is updated, and critical documents such as the *Misal Haqiyat* (an individual's land account), *Shajra Nasab* (genealogical tree), and *Wajib-ul-Arj* (customary records of village practices) are created or revised. These records reflect both ownership and social customs influencing land use and rights, making cadastral maps more than just spatial documents—they serve as historical and cultural records of the land.

Under the guidance of the Punjab Settlement Manual, which Himachal Pradesh follows, the settlement process includes various roles, from Assistant Settlement Officers to Patwaris. The process begins with *Hadbast* (boundary demarcation) and continues through the verification and attestation of land details, a process meticulously documented through cadastral maps. The completion of this process enables the issuance of *Parcha Zamindari* (ownership certificates) and the final compilation of the *Misal Haqiyat*.

98.6% cadastral maps are digitised

There are 21,631 villages in Himachal Pradesh, and cadastral maps are available for each one of them. Out of these, cadastral maps of 21,313 villages have been digitised. The state has a total of 1.45 crore land parcels.

70% maps uploaded online

Cadastral maps of 14,980 villages have been uploaded on the Bhu-naksha software. Maps of another 6,420 villages are digitised but are yet to be uploaded on Bhu-naksha because of discrepancies in the digitized maps, which are being corrected with the assistance of field employees.

While 70 percent of maps are online, the online versions are not legally valid, and are only for information purposes. For legally valid maps acceptable in courts or banks, citizens must approach the local revenue officials for a signed extract of the map.

98.6% of cadastral maps are digitised, and 70% of maps are uploaded online on Bhunaksha. A new format of RoR is available online, which includes land parcel map (*tatima)* as well.

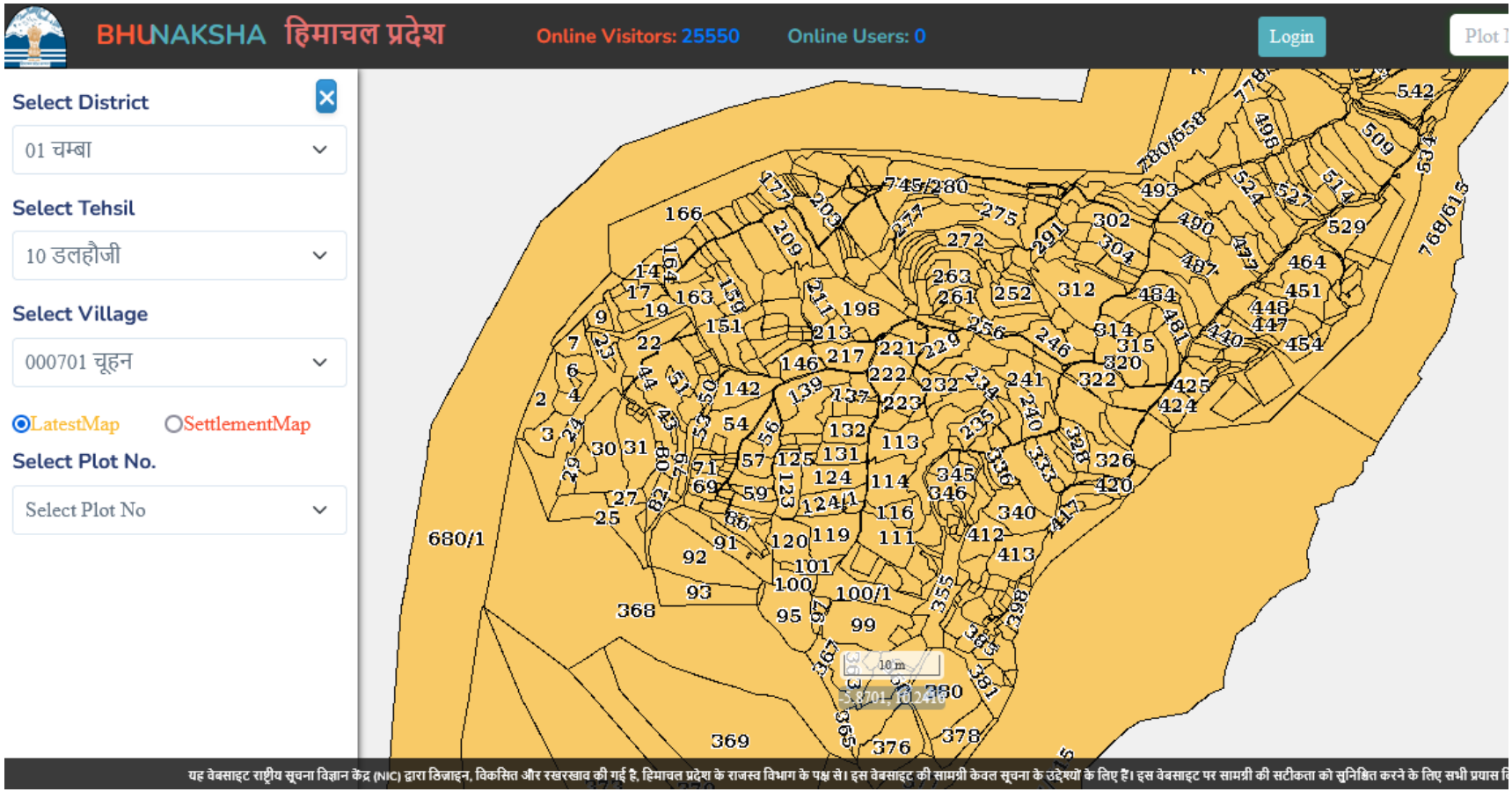
However, the maps on Bhunaksha are not geo-referenced. Maps also do not have recent spatial sub-divisions marked on them.

Table 9: Village Map Availability Status

District	No. of Tehsils	No. of Villages	No. of Villages with digitised Latest-Maumi	No. of Villages with digitised Settlement-Musavi	No. of Villages with digitised Consolidation-Musavi
MANDI	31	3367	3309 (98.28%)	3020 (89.69%)	44 (1.31%)
CHAMBA	14	1598	1563 (97.81%)	1569 (98.19%)	0 (0.00%)
SHIMLA	26	3358	3132 (93.27%)	3035 (90.38%)	97 (2.89%)
UNA	12	868	809 (93.20%)	809 (93.20%)	0 (0.00%)
SOLAN	13	2623	2241 (85.44%)	2241 (85.44%)	0 (0.00%)
HAMIRPUR	11	1782	1522 (85.41%)	1621 (90.97%)	50 (2.81%)
KULLU	9	511	436 (85.32%)	444 (86.89%)	0 (0.00%)
KINNAUR	7	660	532 (80.61%)	536 (81.21%)	0 (0.00%)
LAHAUL-SPITI	3	521	387 (74.28%)	399 (76.58%)	0 (0.00%)
KANGRA	39	3908	1346 (34.44%)	722 (18.47%)	846 (21.65%)
BILASPUR	7	1091	0 (0.00%)	916 (83.96%)	2 (0.18%)
SIRMAUR	14	1344	0 (0.00%)	0 (0.00%)	0 (0.00%)
ALL	186	21631	15312 (70.79%)	15277 (70.63%)	1039 (4.80%)

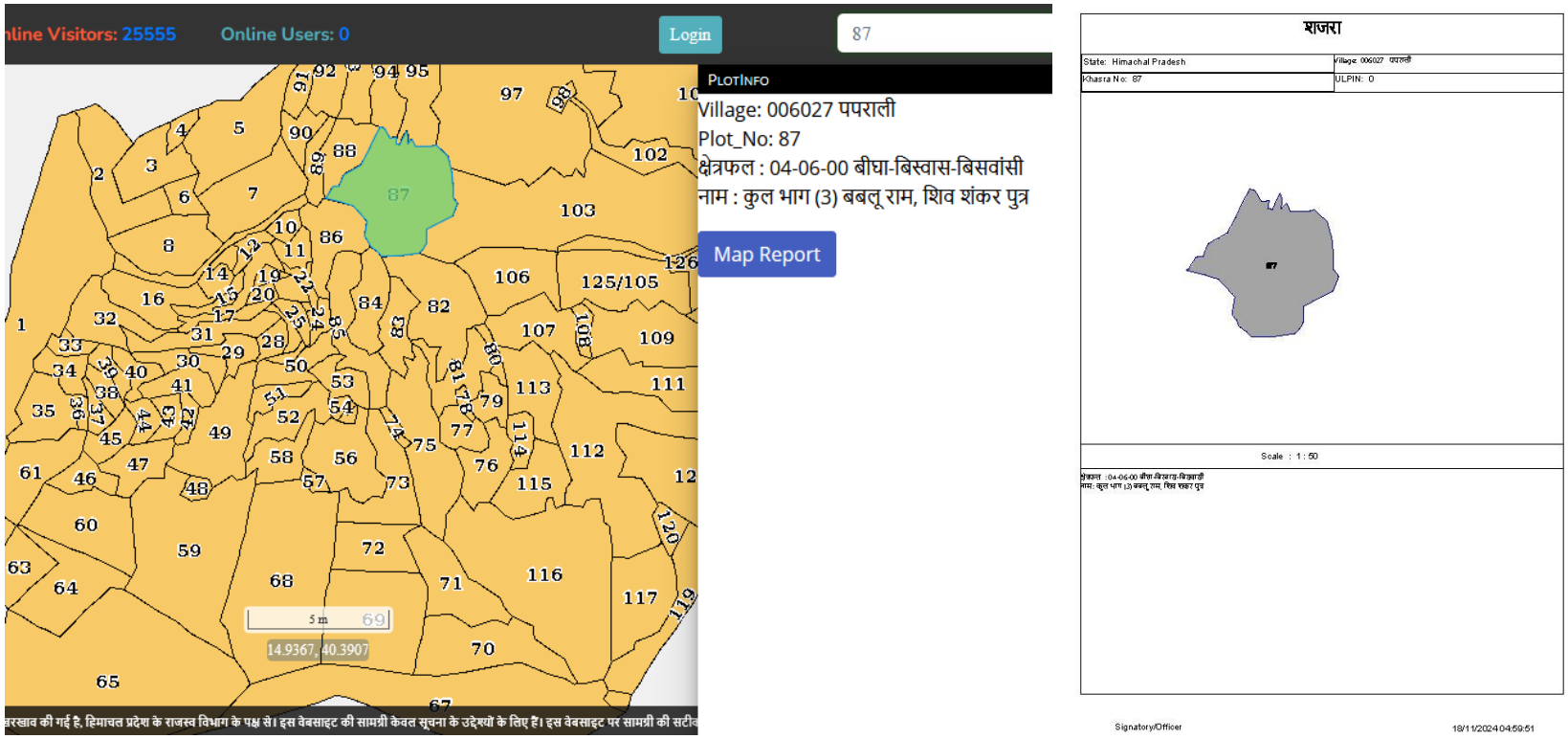
Source: https://himbhoomilmk.nic.in/mapStatusreport.aspx, accessed 18 Nov 2024

Figure 7: Bhunaksha portal in HP showing digitised cadastral maps



Source: https://bhunakshahp.nic.in/

Figure 8: Plot level details in Bhunaksha, including owner's name/s, area, and plot map named Shajra



Source: https://bhunakshahp.nic.in/

Maps are not geo-referenced

Digitised maps are uploaded on bhunaksha, but these have not been geo-referenced. In 2015 there was an initiative to digitize and geo-referenced the musavi, but the data was not matching with the ground situation. Hence the process was stopped, and only the digitised maps were uploaded on a GIS-like bhunaksha platform. The state is trying to resurvey its villages, in an attempt to create more accurate spatial records.

Provision of partition by mutual agreement

When an individual wants to make a partition, they can submit an application to the assistant collector (who is also the Tehsildar), which is then forwarded to the Patwari and kanungo. These officers go to the field and prepare a naksha and tatima based on discussion with landowners. There are two types of partitions – kangi and hookamani. Kangi is decided mutually, even if the joint-owners' final shares do not match with the proportion mentioned in the RoR, because the decision is mutual. Hookamani is where the parties want their own share properly split according to the RoR, and measured on ground. In case of a disagreement between joint owners, it takes the form of a revenue court case, which is heard by the Tehsildar.

Subdivisions not marked on online cadastral maps

The cadastral maps which have been digitised and uploaded on bhu-naksha do not have subdivision or partition boundaries updated. As a result, they do not portray the real-time situation, and have a variation from the legal record on ground, which is maintained in hardcopy with the patwari (latha). The update gap between the hardcopy Latha/Maumi records and their reflection in the digital system (in terms of days or weeks) is unclear.

Measurement/Boundary issues on ground

The larger number of problems in the Patwari's revenue estate are the cases about boundaries. It's been more than 40 years of settlement, the nature of the land has changed, including changes in topography and use of land, due to natural or man-made processes. However, the RoR continue to show old boundaries and measurements.

As a result, it is difficult identify boundaries on ground based on old cadastral maps. Moreover, as measurements extend over distances, errors can accumulate, leading to significant inaccuracies in land records. and potentially triggering numerous legal disputes. Land in urban and periurban areas has become very expensive over time, and there is a need/demand of higher accuracy in land measurements. Officials on field acknowledged that it is often difficult to reconcile the area/location on latha with the ground

situation, and they sometime use satellite imagery such as google earth to understand what issues may await them before field visits.

> *The prevalence of share-based ownership also reflects cultural practices of land inheritance in Himachal Pradesh, where it is customary for family land to be divided among heirs. However, such practices often result in fragmented land parcels without formal partitioning, as the possession based divisions remain unmarked in the spatial records. In the surveys, 54 percent multi-owner parcels were informally divided among joint owners.*

Area mismatches between cadastral maps and ground situation

The maps that were originally prepared in state between 1908 and 1911 used the chain method of surveying, which was not very accurate. Due to the hilly terrain, there is a significant difference in area calculations between the existing records (prepared using old method) and any land measurements taken using latest technology.

The state had previously tried using ETS and DGPS to carry out re-surveys in 2011-14 under DILRMP. It has currently undertaken another initiative to create GPS-enabled, more accurate maps. However, these exercises often run into litigations, due to the issue of area mismatch. It is not feasible to discard old records entirely without providing an option for legal recourse. This leads to frequent disputes, with people contesting even minor discrepancies in land measurements. According to a revenue department document, the state is actively exploring the best approach to ensure that landowners' rights are protected in this hilly region.

Differences between cadastral maps and on-ground position, leading to requests for boundary demarcation, is one of the most common issues faced by revenue officers in Himachal Pradesh. It is often difficult to reconcile ground situation with cadastral maps because of changes in use of land, changes in topography, and high margin of errors in existing records.

206 villages re-surveyed under pilot projects

To improve the precision of cadastral mapping, Himachal Pradesh has adopted advanced technologies such as Electronic Total Stations (ETS) and Differential GPS (DGPS). A pilot project using these technologies was initiated in 2011, focusing on 483 villages across varied terrains. As of now, **266 villages** have completed re-surveying under this pilot, with the remaining **217** scheduled for future work. The initial pilot results have highlighted the complexity of mapping in Himachal's hilly regions, where variation in slope leads to discrepancies in measurements. These variations in topography have presented challenges in reconciling traditional chain survey methods with modern GPS-based systems, often causing discrepancies in area calculations that can lead to legal disputes.

Use of New Technologies and Digitization in Land Record Management

Recent advancements in land record management have introduced new technologies, such as Unmanned Aerial Vehicles (UAVs), to enhance the accuracy of land surveys. However, hilly areas continue to pose unique challenges due to varying land gradients, which often range from 45 to 60 degrees. These steep inclines can introduce significant errors in mathematical calculations, potentially leading to future legal disputes over land boundaries. Although photographic and video evidence can support claims, these measures alone are not sufficient to resolve the inaccuracies inherent in the current system. Recognizing these issues, the Sub-Divisional Magistrate (SDM) has emphasized the need for a more precise and error-free land settlement system to ensure reliable, dispute-free records.

While substantial progress has been made, the transition to digital records has highlighted gaps in data accuracy, particularly where old manual records conflict with present land realities. Regular updates and thorough verification are necessary to align digital records with physical land conditions, preventing discrepancies that could result in disputes or fraudulent claims.

The state is trying to use latest survey technology to create new cadastral maps which are more accurate. However, the mismatches between area in RoR and area as per new survey methods often lead to high number of objections.

6. Revenue Courts

All revenue courts in Himachal Pradesh, including Tehsildar, Sub-Divisional Magistrate (SDM), and Deputy Commissioner (DC) courts, are now fully computerized and integrated into the **Revenue Management System (RMS)**. This system provides a centralized digital platform for managing land-related disputes, enabling case registration, tracking, and resolution through online tools. Digitization ensures that litigants can access case details, orders, and notifications in real time, reducing procedural delays and enhancing transparency in judicial processes

The Himachal Pradesh Revenue Management System (RMS) plays a pivotal role in streamlining land dispute resolution. As of 2024, RMS has digitized **122,366 cases** across various revenue courts, including **37,865 cases in Tehsildar courts**, and **21,294 cases in SDM courts**.

Process

The process begins with the registration of cases, where litigants or their representatives file disputes either online or physically at the respective revenue court. Court staff upload case details and supporting documents into RMS, generating a unique case ID. The system then prepares a digital **cause list** for scheduled hearings, accessible online to all parties. Summons and case notifications are sent electronically through SMS and email, expediting communication and minimizing delays.

During hearings, presiding officers use RMS to review case files and update outcomes in real-time. Interim and final orders are uploaded to the portal, allowing litigants to access decisions instantly without visiting the court. Upon resolution, the case is marked closed, and decisions are integrated with linked land records systems, such as HimBhoomi, to update ownership or boundary data as required. The system also supports appeals, seamlessly transferring case data to higher courts.

In Himachal Pradesh, citizens can apply for corrections in the Record of Rights (RoR) both offline and online. The primary mode of accepting applications is offline, and these applications must be filed at the Tehsildar's court, which is the lowest level court in the revenue administration.

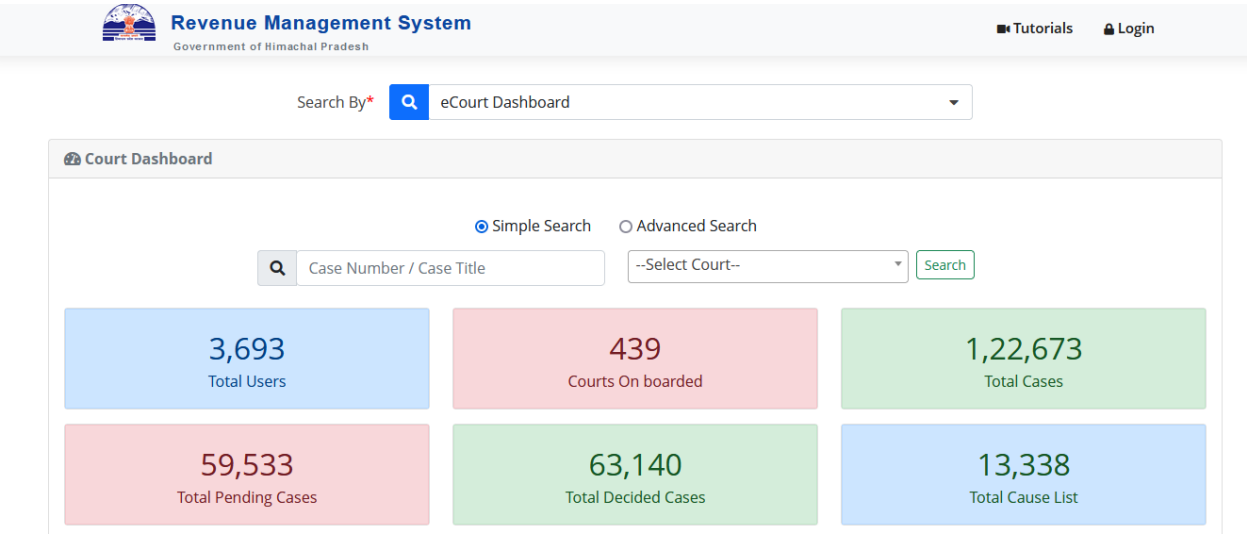
Table 10: Process followed in Revenue courts

Step	Description	Key Actions/Outputs	Stakeholders Involved
Case Registration	Litigants or advocates file cases either online or at the respective revenue court.	- Unique case ID is generated. - Documents are uploaded.	Litigants, Advocates, Revenue Court Staff
Cause List Generation	The RMS platform automatically generates a daily cause list for all pending cases.	- Daily list of cases scheduled for hearings is published.	Revenue Court Staff, Litigants, Advocates
Summons Generation	Electronic summons are issued to all parties involved in the case.	- SMS and email notifications are sent. - Summons receipt is acknowledged.	Revenue Court Staff, Litigants, Advocates
Case Hearings	Judges or presiding officers review the case files through RMS during hearings.	- Updates to case status are made in real-time.	Presiding Officers, Advocates, Litigants
Interim & Final Orders	Interim decisions and final orders are uploaded to the RMS platform for public access.	- Litigants can download orders directly.	Presiding Officers, Revenue Court Staff
Case Resolution & Closure	Resolved cases are marked as closed in RMS, and decisions are reflected in linked systems such as HIMBHOOMI.	- Updated land records reflect the court's decision.	Revenue Court Staff, HIMBHOOMI Integration
Post-Case Monitoring	Compliance with court orders is tracked, and appeals are forwarded to the next level within RMS.	- Appeals are filed digitally. - Compliance is verified with HIMBHOOMI.	Revenue Court Staff, Litigants, Appellate Courts

Around 60 thousand cases still pending; more than 63 thousand resolved

As of Dec 2024, the Revenue Management System (RMS) has digitized a total of 122,673 cases across all revenue courts in Himachal Pradesh. Of these, 59,533 cases remain pending, while 63,140 cases have been successfully resolved.

Figure 9: RMS Dashboard



Source: RMS Dashboard, Govt. of HP. Accessed https://rms.hp.gov.in/Index.aspx, on 09/12/2024

No Direct Linkage between Revenue Management System (RMS) and HimBhoomi

At present, the Revenue Management System (RMS) and HimBhoomi, Himachal Pradesh's digital land records management system, are not directly integrated. While RMS digitizes revenue court processes such as case registration, hearings, and order issuance, any updates to land records based on court rulings are carried out manually by revenue officials in HimBhoomi. This lack of direct integration means that decisions such as mutations, ownership changes, or encumbrance removals must be entered separately into HimBhoomi after they are finalized in RMS. While this process ensures the accuracy of land records, it introduces delays and the potential for human error. Plans are being discussed to establish a seamless connection between the two platforms, allowing real-time updates of land records based on court decisions.

Lack of Utilization of Computerised Land Record Data in Court Processes

Currently, revenue courts in Himachal Pradesh do not fully utilize the land record data available through government platforms, which results in inefficiencies and delays in resolving land disputes. While efforts have been made to digitize various land management processes, such as the MEGH Portal and Megh Charge, their usage has remained limited, and they have not gained widespread adoption thus undermining the potential benefits of digitization.

An online revenue court management system exists but it is yet to effectively link to HimBhoomi. Around seventy thousand revenue cases are pending in the state.

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:

Land Ownership Patterns

- In the surveyed villages of Himachal Pradesh, land ownership is primarily documented under a **share-based ownership structure**, where multiple individuals or family members own collective rights to a parcel. Specifically, the survey revealed that **76 percent of land parcels** adhered to this form of joint ownership, which often entails family or partnership arrangements among landowners.

- Of these only three percent cases had a non-family member or non-business partner as one of the joint owners, thus indicating that majority of joint ownership is family-based.

- Only 26 percent of the surveyed land parcels were of single ownership nature.

Accuracy and Updation Status of RoRs

- In thirty two percent land parcels, the ownership on ground did not match the ownership noted in land records. Of these, seven percent cases had either mutation pending or mutation was carried out, but the names were not entered in remarks column and would be shifted to ownership column

only after the completion of daur. In eighteen percent cases, inheritance had taken place on ground, but subsequent updation in land record had not taken place. In another two percent land parcels, the possession on ground varied from the names mentioned in the land records as some people were not in possession. Five percent were cases where land was in abadi deh area, and no names were mentioned, or the land was under dispute, or land transfer had occurred for a government purpose and mutation had not been carried out.

- Since daur-wise updation is the due process followed in Himachal, and inheritance related mutation is carried upon only on application by the land owner, the these two types of mismatches should be discounted when estimating the adequacy of functions of revenue department. Similarly, RoR in HP reflects only the ownership details and the details of possession are not to be reconciled unless through court cases. In effect, as per state's processes, 95 percent of land records were uptodate in terms of ownership.

- The survey also indicated that, in certain cases, recorded owners had no awareness of discrepancies in the online Jamabandi records, suggesting that more awareness efforts are necessary to guide landholders in ensuring their ownership information remains accurate and accessible.

- **Outdated Inheritance**: In many cases, heirs or successors of the land parcel are not reflected in the Jamabandi, leading to a disconnect between the recorded owners and actual current owners. For instance, a survey participant reported that the inherited parcel they managed remained registered in the name of a deceased family member, resulting in restricted access to services that require formal ownership verification. Some landowners cited delays in updating official records after private transfers or sales of land shares within families. This lack of prompt record alteration risks legal and operational confusion, as the unrecorded owners may find their claim disputed in formal transactions or loans. Such discrepancies impact roughly **18 percent of the cases** where inheritors have not filed for mutations.

  Survey participants further indicated a lack of clarity around the process for updating records, particularly in cases of inheritance where required documentation, like death certificates, has not yet been filed. **Four percent of landowners** specifically mentioned difficulties in navigating the mutation process—a necessary step to legally transfer rights in Jamabandi records—citing time-consuming procedures and unfamiliarity with digital applications for filing these changes.

- **Mutation process:** Mutations, or updates in ownership due to inheritance or sale, are essential for ensuring records reflect actual ownership status. However, landholders often face procedural delays that extend this process, particularly in areas with fewer digital processing facilities.

  Respondents in 89 percent of the land parcels reported having applied for a mutation process in their lifetime. Only around half of these were able to recall the time taken for mutation – 5 percent reported that the mutation was carried out in ten days or less, while 33 percent reported waiting for upto one month for the mutation. Another five percent waited for 30-60 days for mutation. When asked about number of visits needed for mutation process, 10 percent reported that they visited the patwari/revenue office only once, while 19 percent reported 2-3 visits. Another 13 percent reported four or more visits.
- **Unupdated Mutation: Two percent respondents** highlighted cases where the mutation was reportedly completed but was not reflected in the online Jamabandi system. This gap is often due to challenges in synchronizing records between physical and digital repositories. Despite the mutation process being finalized on paper, such cases reveal gaps in digital record management that may impact landholders who rely on online records for transactions or legal proof of ownership.
- **Errors:** For **4 percent of land parcels**, a range of errors was identified, including inaccurate names, and missing family details. Correcting these errors is often a time-intensive process, particularly for those unfamiliar with local revenue office procedures or lacking access to legal support. Several respondents highlighted the need to visit revenue offices multiple times, with some cases taking **up to three months** for even minor corrections to be reflected in Jamabandi. Landholders in rural areas report being discouraged by the effort and cost associated with these corrections, often opting to leave minor errors uncorrected unless they directly affect financial or legal outcomes.

Updation and Accuracy of Spatial Records

- The prevalence of share-based ownership also reflects cultural practices of land inheritance in Himachal Pradesh, where it is customary for family land to be divided among heirs. However, such practices often result in fragmented land parcels, and without formal partitioning, the specific shares remain unmarked in the spatial records. As a result, **some 54 percent multi-owner parcels** are informally divided among joint owners, creating complexities in clearly demarcating boundaries. This informal arrangement, while understood within families, can pose challenges in verifying ownership during external assessments or legal disputes.

Use of Land

- Total 11 percent of land parcels had some form on non-agricultural land use, including self-occupied houses or school building in seven percent cases. In all of these, the RoR noted the built-up area or the use of land (as relevant), through the girdawari and daur processes, as discussed earlier. However, four percent of land parcels had a road passing through them, which was not mentioned in the RoR. In some of these cases, the area acquired for road had also not been deducted from the original area of the ladnowners.

Mortgages

- The survey of Himachal Pradesh villages highlights that encumbrances—particularly mortgages—are relatively common, with **42 percent of respondents** confirming active or past mortgage records associated with their land parcels. However, there is a notable gap in the accurate reflection of these encumbrances within the Jamabandi records, which impacts the legal clarity and creditworthiness of landholders.
- Among surveyed landholders with mortgages, **13 percent** have fully repaid their loans, yet their Jamabandi records still show these parcels as encumbered. The delay in updating loan repayment status in official records is largely attributed to procedural backlogs at local revenue offices, where landowners must follow up persistently to ensure records reflect the cleared encumbrance. Some landowners expressed frustration with the process, citing that despite providing proof of repayment, the encumbrance notation remained in the Jamabandi, restricting their ability to use the land as collateral for future financial needs.
- **55 percent of the surveyed parcels** showed no encumbrances, either current or historical, aligning with respondents who indicated they had not leveraged their land for credit. In contrast, **29 parcels** had mortgages noted, with some landowners stating that they had proactively requested updates to their records to reflect loan repayments. However, not all landholders had succeeded in getting the updates reflected, indicating variability in service response times across different local revenue offices.
- Furthermore, **3 percent of respondents** highlighted “other” forms of encumbrances, which included informal lending arrangements or unstructured debts where legal encumbrances were not formally noted in Jamabandi. These informal encumbrances, while recognized within the community, do not appear in official records, creating potential conflicts when formal financial or legal processes require clear title verification.

- The survey also revealed that a significant portion of landowners were unaware of the need to update their encumbrance records post-repayment. Several respondents stated that they believed the bank or financial institution would automatically notify revenue authorities of repayment, which is often not the case. This assumption has led to instances where cleared loans remain erroneously marked in the Jamabandi, creating barriers for landowners attempting to access additional credit or sell their land parcels without perceived liabilities.

Encumbrances

- Court cases were reported for only four percent of the land parcels. All of these cases were now closed. The effect had taken place in RoR in all but one case, which was related to possession being documented in records, but not present on ground.

Impact of Outdated Records The lag in record updates not only hampers legal clarity for landholders but also creates logistical issues when individuals attempt to transact or mortgage their parcels. There is a need for more robust, transparent processes for updating and synchronizing land records in the state.

Moreover, the issue of outdated records seem to disproportionately affect those unfamiliar with the online Jamabandi system, who may not realize the extent to which these records are utilized by financial and legal institutions. This is despite the state having not yet completely moved to an online system, and retaining manual provisions in most processes. This awareness gap limits the ability of landholders, particularly in more remote areas, to advocate for record accuracy proactively.

8. Good Practices and Gaps

Section/Theme	Good Practices	Gap
RECORD OF RIGHTS		
Computerisation status	• Record of Rights of all 21 thousand villages are computerised. • Documents like Wajib-Ul-Arz and Shaira Nasib are also digitised and available in the Himbhoomi portal • Digital RoR available for Government Land	• Legally certified copy of RoR cannot be downloaded • Citizens need to visit relevant government offices or citizen service centers to obtain latest legally valid copies of their land records. • The state is yet to disallow manual RoRs and shift to a completely digital model.
RoR format	Himachal Pradesh captures details of built up area and ownership of flats	• Same RoR format used for both rural and urban areas. It also means that separate urban-specific databases cannot be extracted from this framework. • Mutation is noted in the remarks column, and not immediately reflected in the ownership column. It may take upto 5 years for the changes to be incorporated in ownership column.
Accuracy of textual records		In the survey, in 5 percent of land parcels, the ownership on ground did not match the ownership noted in land records. In addition another 27 percent had gaps in inheritance, and mutation was noted in remarks column.
Joint ownership of land	• Ownership is often recorded as	

Section/Theme	Good Practices	Gap
parcels	a percentage share within jointly-held land parcels	
Aadhar seeding		Himachal Pradesh RoR system does not currently incorporate unique identification details, such as Aadhaar or PAN numbers
Changes in Land use	Changes in land use noted bi-annually through Girdawari. After completion of 'daur' these changes can be moved to RoR.	
Legacy record computerisation	Himachal Pradesh has established Modern Revenue Record Rooms (MRRRs) as part of its digital transformation initiative	• Records are not yet fully accessible to the public • These older records were originally maintained in Persian language, and the translation barriers complicate modern record-keeping efforts
Bank integration	• Upon loan approval, the bank informs the Patwari, who enters the loan details in the RoR's remarks column, ensuring transparency regarding financial encumbrances. • Survey data shows that 100 percent of Kisan Credit Card (KCC) loans and 97 percent of other land-based loans are recorded in the RoR	Mortgage information is reflected in RoR, but continued reliance on physical copies for verification

Section/Theme	Good Practices	Gap
REGISTRATION		
Registration related services	• 100% SRO offices are computerised • HP also prohibits sale of agricultural land to people not from the state, and hence the possibility of external buyers not familiar with state's RoR systems is relatively low.	• Pre-2019 registration deeds yet to be computerised and made available online • There is 22 percent pendency in scanning and uploading of registered NGDRS documents.
Integration with Land Records	• 100% SROs linked to land records, but Processes not linked completely • Registration process is not completely paperless, and does not link to updation in land records.	• New owner/s is not added directly to ownership column. This stops the technological link between registration and land records from achieving its full potential
MUTATION		
Auto-mutation	• Compared to its neighboring state of Haryana, the mutation entries in HP are more detailed (often with name of person) and thus more useful • During sales, the registered deed may specify the land's physical dimensions (in hectares, square meters, or acres),	• Auto-mutation was attempted in 2011-12 but was reversed • Sanctioning of a mutation order does not lead to the name of new owner immediately entering the land ownership column. Instead, details related to mutation are entered in the remarks column. • Yet the mutation process in the RoR records the new ownership only as a share of the original parcel.

Section/Theme	Good Practices	Gap
Mutation pendency and timeline	Time limits not prescribed	• The state has pendency ratio of 77 percent for mutation applications for last two financial years. • Low approval rates and High pendency ratio in online mutation applications
SPATIAL RECORDS		
Digitisation and Updation	• 98.6% of cadastral maps are digitised, and 70% of maps are uploaded online on Bhunaksha	• However, the maps on Bhunaksha are not geo-referenced • Maps also do not have recent spatial subdivisions marked on them. It is not clear that what is the time gap between spatial record updation, and its reflection in the online maps.
	• State has a provision of mutual partition among landowners.	• In survey, landowners in 54 percent of parcels had a mutual understanding regarding spatial subdivision. • The absence of documented sub-division/possession of land parcels may lead to poor clarity and conflicts over exact boundaries and usage rights.
Spatial and Textual record mismatch		• Due to the hilly terrain, there is a significant difference in area calculations between the existing records (prepared using old method) and any land measurements taken using latest technology
Citizen services		• Legally certified copies of maps can be obtained only

Section/Theme	Good Practices	Gap
		from revenue officers, especially in cases of subdivision of land
RCCMS		
Revenue Courts	All revenue courts in Himachal Pradesh, including Tehsildar, Sub-Divisional Magistrate (SDM), and Deputy Commissioner (DC) courts, are now fully computerized and integrated into the Revenue Management System (RMS)	• Around 60 thousand cases still pending; more than 63 thousand resolved • No Direct Linkage between Revenue Management System (RMS) and HimBhoomi • Lack of Utilization of Computerised Land Record Data in Court Processes

9. Recommendations

A. The state should consider doing away with the process of five yearly updates ‘daur’, and should move to a real time updation system. This will require legal amendments, as well as software changes and upgradation.

B. The state should deepen the use of computerised processes, especially in mutation, linking of mortgages, other citizen services, and in data linkages between different softwares. This will allow it to reap the benefits of technology in a more efficient manner.

C. Hiamchal Pradesh should speeden the efforts of computerisation of legacy registered deeds, and pending cadastral maps, especially subdivisions on these maps.

D. The lack of automatic synchronization between financial institutions and Jamabandi records underscores a key area for improvement. An integrated update mechanism could alleviate the burden on landholders to manually clear encumbrances, enhancing service delivery.

E. According to an interviewed officer, there should either be skill training for *patwaris* to enhance their understanding of the technological aspects, alongside their expertise in registration and revenue processes. As an alternative, a new post should be created for individuals with technical degrees who can bridge these gaps.

F. The state should continue the practice of capturing urban specific information in its land records, but should consider notifying a separate RoR format for these areas or properties.

G. The survey findings suggest the need for greater community awareness initiatives to educate landholders on the procedural steps required to maintain accurate Jamabandi records, especially around inheritance and family transfers.

H. Establishing an automated notification system that prompts landholders to confirm record updates could enhance transparency. Periodic "record verification drives" in rural areas could assist landholders in identifying and rectifying discrepancies, helping to ensure a more reliable system.

By addressing these issues, Himachal Pradesh could improve the reliability of its land records system, ultimately supporting more efficient land transactions and strengthening the legal rights of its landholders.