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# **Summary: Critical Findings**

- A. All 4.32 crore RoRs have been digitised. Jamabandi register was computerised between 2017 and 2018, and is currently the *defacto* RoR being used in the state.
- B. According to secondary source, Bihar has a history of legislation-led land reforms with limited success, land related conflicts, and poor maintenance of records due to natural disasters and other factors. Multiple registrations on same land parcel, and erroneous data entries, complicate the state's land records. Updation backlogs may persist over past several decades, especially around inheritance.
- C. Owing to the poor maintenance of land records in past, the digitised jamabandis have multiple errors in them. These include instances where the khata number, khesra number, or area is mentioned as zero/blank.

In the village surveys, 5 percent of cases did not have online records; 6 percent RoRs had missing khata and khesra number entries, and 2 percent had errors in names. The above 13 percent cases are in addition to the 11 percent cases with claims of area mismatch, and 8 percent cases where the ownership on ground was slightly different from the records.

D. State has introduced another portal called *parimarjan* which allows land holders to apply for changes in the digitised records.

- E. Most jamabandis have a single landholder's name, with less instances of multiple ownership. This was confirmed in the village surveys; only 13 percent of RoRs had multiple owners.
- F. In Bihar, land record maintenance does not require spatial division. Partition means splitting the textual record into two jamabandis with specified area (in acres); but the survey number for both remains the same. The system makes it difficult to reconcile spatial records with on ground condition possession of land.
- G. All spatial records have been digitised, and around 34 percent have been georeferenced. There is limited linkage of RoR with cadastral maps. Maps are available online on BhuNaksha, and there is a facility for door step delivery as well.
- H. Bihar maintains rights and cadastral maps for settlement areas (abadi) and urban areas as well. Land parcels are marked; however, they are not updated since 50 or 100 years.
- I. The revenue department and registration department exist independently of each other. While there is some digital linkage between the software and databases of the two departments, their day to day functioning or geographical jurisdiction does not seem to be related.
- J. All 137 DSR/SRO offices are computerised.

Registration system has been computerised since 2006, when SCORE was introduced. Legacy records for registration are available in a digitised form since 2006, and can be accessed online. Some DSRs have digitised records till 1995.

E-Nibandhan, a web-based portal replacing SCORE, allows citizens to apply for registration at their convenience and book appointments. As of September 2024, E-Nibandhan was rolled out in 87 SROs.

K. Application for registration does not link to land records database to input or verify RoR details.

Auto-triggered mutation (known as suo-moto mutation) is available for cases with a single buyer, single purchaser, and name of seller present in jamabandi.

For other types of mutation, land owners can apply online. The state witnessed a significant jump in number of mutation applications when online facility was introduced in 2017.

- L. The state has introduced online provisions for linking of mortgages and court cases to RoR. However, the on-ground application seems limited, especially for legacy cases or loans.
- M. The state is undergoing a fresh round of survey and settlement operations named as Special Surveys. These surveys have the provision of subsequent updation of spatial records, including pre mutation revenue sketch.

- N. The state has 1.35 lakh scanned and digitised map sheets, but only 25,060 have been geo-referenced. BhuNaksha website provides survey numbers but lacks area, chauhaddi, and landholder information.
- O. Cadastral maps in the state are required to be updated, especially in cases of partition, reducing survey team workload but widening plot boundaries compared to other states.
- P. Bihar is conducting a special survey under the Special Survey and Settlement Act, 2011, to update land records in 45881 revenue villages. The state has made improvements to the survey process, including setting up special survey camps, creating more contract-based posts, and expanding the list of documents acceptable for naming.

# 1. Introduction

Bihar started its journey of computerisation of land records in the year 2006. With this, the state initiated the efforts of modernization of land records in a complex and contentious system of property ownership. In the last few years, Bihar has progressed and taken long strides in computerisation of land records and is on the way to creating a more accessible land information system. Bihar is a prominent case to understand that how issues of land and property ownership are embedded in socio-historical conditions. <sup>1</sup>

During the colonial times, the state was under the Bengal Presidency. In the year 1793, the Zamindari system, or Permanent Settlement, was introduced to the region in which large tracts of land were allotted to zamindars and revenue was collected from them. The zamindars were intermediaries who often did not do direct cultivation, and instead managed their large agricultural areas among multiple tenant farmers, in return for a share of the produce. The Zamindari system is widely considered as exploitative and was abolished after the independence of the country. Several land reforms have taken place in the state since then, with limited degrees of success.

The state of Bihar has an area of 94,163 square kilometres and a population of around 10 crore persons (Census, 2011). Nearly 70 per cent of the state's population is engaged in agriculture. The state's urbanisation ratio in 2011 was 11.3, which was significantly lower than the national average urbanisation ratio of 31.1. The state has 38 districts.

Presently, in Bihar, there are two departments which are important in the process of registration of properties, maintenance of land records and survey aspects. They are, namely,

- i. Department of Revenue and Land Reforms
- ii. Prohibition Excise & Registration Department (Registration)

For revenue administration, a district is subdivided into multiple anchals, each managed by a Circle Officer (CO) supported by one or more Circle Inspectors. The state has a total of 534 anchals. Two or more anchals within a district constitute a sub-division, overseen by a Sub-Divisional Officer (SDO) who also holds judicial authority in specific revenue-related matters. Each anchal is further divided into halkas, led by a Halka Karmachari. A halka comprises several mauzas, which correspond to villages. For Stamps and Registration purposes, each district has a DSR (district sub-registrar). He is assisted by

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<sup>&</sup>lt;sup>1</sup> Jha, D., Mitra, S., Goswami, A., Sasidharan, S., & Lushington, K. (2021). Land records modernisation: Bihar. Indian Institute for Human Settlements.

other sub-registrars who have their own sub-registration office jurisdictions. SROs cover a larger area than anchal offices, and the jurisdictions are generally independent of each other. The Registration Department defines which anchals/mauzas come under which SRO.

The revenue and registration departments exist independently of each other. While there is some digital linkage between the software and databases of the two departments, their day to day functioning or geographical jurisdiction does not seem to be related.

## 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, district (District Sub-Registrar) and block levels (Anchal/Circle Officer). This data was obtained from state and district-level officials from the revenue department as well as the registration department. 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.

With the help from the state-level as well as district-level officials, two villages were selected in the state of Bihar for the primary survey which was conducted to analyse the record keeping practices onground. Keeping in mind the ongoing state-wide Resurvey exercise and its advancements, two districts were selected, attempting to capture an overall comprehensive representation of the state. Therefore, Muzaffarpur being one of the major urban centers in the state and a prominent district in northern Bihar, and Munger being an agriculture-driven district in the south-eastern part of the state, were selected for the survey. The two villages chosen from these districts were Bhagwanpur (Kudhani circle, Muzaffarpur) and Ithari (Jamalpur circle, Munger). Muzaffarpur district underwent a revisional survey carried out in 1961-62 and hence has slightly more updated land records than Munger district, which was last covered in cadastral survey in the year 1901-02.

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

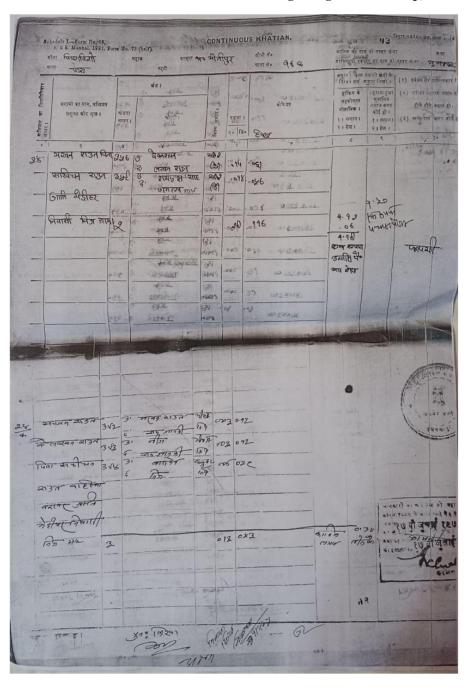
information collection and primary survey—have been systematically analyzed to identify trends, discrepancies, and areas requiring improvement. These have been presented along different thematics as in the questionnaire to enable an easy retrieval of collected information. The five informative sections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

Table 1: Terminologies and applications commonly used in the state

Jamabandi Panji/Panji – II	Jamabandi Panji (also known as Panji-II) is an official register maintained by the Revenue Department in Bihar that records detailed information about landholdings in a village. It holds vital information regarding land ownership, area and tax related details.  Each Jamabandi has a Jamabandi sankhya (unique no.) which is a computergenerated identification number for the landholding. It is considered to be the up-to-date land related record in the state.
Khatian and Continuous Khatian	A <i>Khatiyaan</i> is the textual record of right document, prepared village wise (mauja level) after a survey and settlement operation. It typically states the <i>khata</i> number, <i>khesra</i> number, name of the owner, <i>chauhadi</i> , land classification, area, possession, and rent assigned.  Khatiyaan is a static document and does not get updated. Copies of the
	<i>khatiyaan</i> are stored at district headquarters (HQ) and <i>anchal</i> (revenue subdivision within a district) offices, while a third copy is provided to the landowners post-survey.
	<b>Continuous</b> <i>khatiyaan</i> is the updated copy of original <i>khatiyaan</i> , also maintained at the village level at every <i>anchal</i> office. Whenever a mutation gets sanctioned, the names of new owners are entered in the continuous <i>khatiyaan</i> . Similarly, RoRs for the newly created land parcels also form part of the continuous <i>khatiyaan</i> , and not the <i>khatiyaan</i> .
Chakbandi (Consolidation)	<i>Chakbandi</i> is the process by which land parcels within a village are exchanged based on their value, such that each farmer would then have a contiguous piece of landholding, instead of several smaller non-contiguous parcels. In Bihar, some areas were consolidated during the 1950s–1970s, but it was not reported to be a state-wide successful initiative.
Dakhil Kharij	<b>Dakhil Kharij</b> is the legal process of <b>mutation</b> in the state, which involves updating land records to reflect a change in ownership after the sale, inheritance, gift, or transfer of a property.
Aam Suchna and Khas Suchna	Aam Suchana is a notification issued during the mutation process of a land parcel for notifying about the mutation taking place and also to invite any objections from people within a span of 14 days.

	Khaas Suchana is the notification for officials for the same mutation process.
Shuddhi Patra	A slip issued by the circle officer (CO), on sanctioning of a mutation, for
(Correction slip)	effecting changes in the continuous khatiyaan, Tenancy Ledger Register, and
	Khesra Register. Four copies are made, including one for the petitioner.

Figure 1: Tradition form of Continuous Khatian reflecting changes in ownership, use and rights



# 2. Record of Rights (RoRs)

Record of Rights (RoRs), which is also known as Jamabandi Panji in Bihar, is an important document which consists of information regarding,

- i. Raiyat name (Owner name)
- ii. Jamabandi sankhya (Computerized Jamabandi no.)
- iii. District, Circle and Village/town name
- iv. Khata no. (Account no., which is common for a set of owners in a village/city)
- v. Khesra/Plot no.
- vi. Rakba (Area of land parcel in acres, decimal<sup>2</sup> and hectares)
- vii. Chowhaddi (Adjacent plot owners/no. or road names)
- viii. Mutation details (if any)
  - ix. Lagaan (Amount of revenue payable)
  - x. Previous lagaan (revenue payment) details
- xi. Land mortgage and revenue case details (if any)

## 100% of land records computerized; 4.3 crore online RoRs

Bihar has a total of 4.32 crore RoRs and all the RoRs till date, have been computerized.

Record of Rights (RoR) in Bihar has evolved from its traditional handwritten form to a digital one, marking a significant stride in land record modernization. The traditional form of RoR, which is also known as Panji-II or Register-II, was handwritten records. After computerization, digital RoR came into place and according to state documents, manual RoRs have been stopped. However, the use of other paper-based records (e.g. khatiyaan or rent receipt) has not been completely discontinued, and these may be used to make corrections in the digitised RoR on a case by case basis.

The Bihar government has launched a dedicated Digital Management System (DMS) portal named BhuAbhilekh, to provide public access to scanned and digitized land records. The portal offers free viewing of Khatian (land records), revenue maps, and other important documents, streamlining access to crucial land-related information. The access to the textual records of the state is provided through the Biharbhumi portal. Citizens can view and download a copy of the jamabandi register through the website using the Khesra no., Owner name, Khata number or *Jamabandi Sankhya*. Bhu-Abhilekh. They can also get a digitally signed copy with QR code online, which is considered a valid document in the state.

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<sup>&</sup>lt;sup>2</sup> One decimal of land is equal to 435.6 square feet or 0.01 acres.

## All 4.32 crore RoRs have been digitised.

Jamabandi register was computerised between 2017 and 2018, and is currently the *defacto*RoR being used in the state.

#### Both Khatian and Jamabandi as RoR

The term RoR or 'record of rights' is used for both *khatian* and *jamabandi* in Bihar. The Bihar tenancy Act of 1885 defined the process of creation of record of right through survey, thus giving *khatian* the legal position of RoR in the state. This was reinforced by the Bihar Land Mutation Act of 2011.

However, the khatian is a one-time document, without any provisions for an update. When Bihar (re)started its journey of computerising land records under DILRMP in 2008, it first digitised a document named 'continuous khatiyan'<sup>3</sup>. This digitised document was made available online (see figure 3) as the 'adhikar abhilekh' (translating to record of right).

In 2017, the state revenue department changed its stance, and started digitising Jamabandi register, or Register II, instead of the continuous khatian. It completed the digitisation process in October 2018. An amendment was also brought in the Bihar Land Mutation Act in 2017, defining what is a jamabandi register<sup>4</sup>. Although the 2017 amendment did not define jamabandi as the record of right, the document is currently the defacto RoR in the state, and is available as RoR on the bihar bhumi and bihar abhilekh websites. It is also the base document for all online services such as mutation, payment of land rent, land-possession certificate, Parimarjan etc.

<sup>&</sup>lt;sup>3</sup> 'Continous khatian' was earlier defined under Bihar Tenants Holdings (Maintenance of Records) Act, 1973 and the act included provisions for its annual updation. The Bihar Land Mutation Act 2011 repealed this 1973 Act, and referred to continuous khatian as an updated record of right.

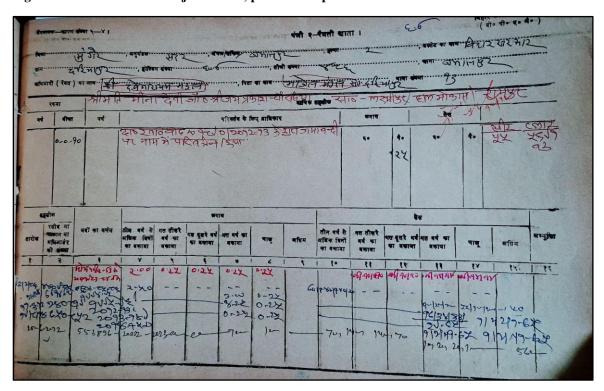
<sup>&</sup>lt;sup>4</sup> According to a presentation shared by the state revenue department, the jamabandi register was created after the abolition of zamindari, for the purpose of collecting rent. A jamabandi (i.e. a number in the tenants ledger register) was opened for each account in the khatian. The legal definitions of jamabandi and jamabandi register can be accessed at https://state.bihar.gov.in/cache/11/Circulars/Mutation\_101020171840.pdf.

Figure 2: Latest progress of various components under DILRMP scheme in Bihar state

(A)	Core Components	I was a second s
SI.	Components	Bihar's current Score
1	2	3
1	Computerization of RoRs	99%
2	Digitization of Maps/FMBs	100%
3	Cadastral Maps Linked With RoRs	100%
4	SROs computerized	100%
5	SROs integrated with land records	
6	Modern Records Room	100%
7	Survey/Re-Survey	85.39%
8	PMU established	0.10%
9	State Data Centre established	Yes
10	NLRMP CELL	Yes
B)	Outcomes Achieved	Yes
11	Manual RoRs discontinued	Yes
12	RoRs available on Web	100%
13	Maps available and downloadable on Web	Yes (www.bhuabhilekh.bihar.gov.in)
14	Geo-referenced maps	Yes
15	Digitally Signed RoRs	
16	Legal acceptance of digitally signed RoRs	Yes Under Process

Source: Annual Progress Report 2023-24, Directorate of Land Records and Survey, Bihar

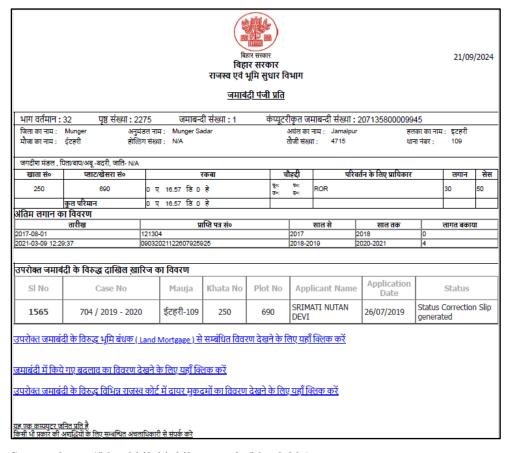
Figure 3: Traditional form of jamabandi, prior to computerization



अनूपलाल मंडल स्व॰ सिंगेश्वर मंडल रैयत का नाम: राजस्व एवं भूमि सुधार पिता/पति का नाम: निवास स्थान: साकिन-कल्याणटोला,थाना-बरियारपुर,जिला-मुंगेर बिहार सरकार जाति : राजस्व थाना जिला: (24) मुंगेर अंचल: (2) जामालपुर नंबर: 109 अधिकार अभिलेख मौजा : (268) ईटहरी \*\* स्तंभ 11:लगान/बेला नकदी खेतो के निस्वत शर्ते,कब्ज़ा लिखो(९)ठहराया हुआ मुनासिब लगान अगर कोई हो खाताधारी सं.: 2401020268002284 लगान अलावे शेष (२)तरीका ठहराने लगान वो शरायत अगर होले होले बढता हो (३)खास शर्ते शेष अगर कोई हो परिवर्तनो को दर्ज करने हाकिम के रकव गैर नवैयत का आदेश का सारांश, . तहकीकात किस :खलदा रैयत का नाम खेत चौहदी दखल, दखल का स्वरुप मुताबिक ज्ञापन और तिथि आदेश रैयत के माबंद देने वाले पदाधिकारी का लगान डे॰ ऐ॰ हे कब्जे की नं. एवम सेस पदनाम मुद्दत 1 5 6 7 8 10(₹) 11(₹) 13 14 3 12 1684 पू.-पीडब्लूडी मकान 0 विक्रयनामा संड्क प- भरत मंडल सहन वगैरह उ.- सुरेश मंडल द.- खोसली मंडल वगैरह जिला :(24) मुंगेर, अंचल :(2) जामालपुर, मौजा :(268) ईटहरी, खाता नंबर :03, खाताधारी सं.: 2401020268002284 चालू खतियान को प्रारूप के तौर पर प्रकाशित किया गया है। इस प्रारूप में टंकण या अन्य अशुद्धियाँ हो सकती है, इसलिए वर्तमान में इसकी कानूनी मान्यता नहीं होगी और इसके आधार पर भूमि स्वामित्व संबंधी दावा स्वीकार्य नहीं होगा। इस प्रारूप के आधार पर रैयत अपनी आपत्ति (यदि हो तो) संबंधित अंचल कार्यालयों में प्रकाशन की तिथि से 30 दिनों के अंदर दायर करेंगे, जिस पर अंचलाधिकारी द्वारा नियमानुसार यथोचित कार्रवाई करते हुए अंतिम प्रकाशन किया जाएगा। एन.आई.सी., बिहार के तकनीकी सहयोग द्वारा विकसित

Figure 4: First Phase of computerization of RoR: Continuous Khatiyaan

Figure 5: Second phase of computerization of RoR: Jamabandi register



Source: https://bhuabhilekh.bihar.gov.in/bhu-lekh/

## Majority of single-ownership land parcels; no shares mentioned

One of the main findings from the village survey is that the majority of the jamabandis have name of a single landholder. There are a few instances of multiple ownership of land, but the ratio is less. In these cases with multiple owners, no shares are mentioned against the names.

Also, in practice, it is considered that if a land parcel has to be inherited by multiple heirs, then they need to carry out a (textual) partition amongst themselves such that each heir would have a separate jamabandi with separate area mentioned.

In village survey findings, 87 percent RoRs were of single ownership. However, 39 percent of these are cases where inheritance was not updated. When the inheritance in these parcels is incorporated, they will either turn into multiple-owners RoR or will be split into multiple single-owner RoRs.

## Many jamabandis share one survey number

The land record maintenance system in Bihar does not require spatial division of land parcels. Instead, when a parcel of land is being subdivided amongst multiple heirs, each of them would get a separate jamabandi with exact extent (area in acre/decimal) mentioned, but the survey number in each of these jamabandis would continue to be the same.

Thus, several jamabandis can/do exist in one survey number.

Most jamabandis have a single landholder's name, with less instances of multiple ownership.

Land record maintenance in the state does not require spatial division. Typically many RoRs share a single survey number without any documentation of spatial division

#### Missing or Erroneous entries in records

Bihar has a long history of land conflicts, loss of land records due to natural disasters or mismanagement, and changing landscape of land reforms which were implemented to limited extend. The state tried to carry out a resurvey (named as revisional survey) in 1970s, but it could not be

completed, and hence in many areas the *khatian* is century-old (from colonial times when zamindari was prevalent), and does not match with current possession.

Over the last few decades, multiple registrations executed upon a single land parcel compounded the challenges in the state. Moreover, the disjunct between registration and land records function in the state also led to registrations which were never incorporated in land records through mutation. The state managed to successfully introduce computerized mutation in 2017 only, and then saw a significant jump in the number of mutation applications, indicating that there is a backlog of mutations (that were either never applied for or were not processed) from past several decades.

The first few attempts at computerisation of land records also suffered from erroneous data entries. As a result of these multiple factors, the land records in Bihar are prone to missing or erroneous entries, including missing details of plot area or survey number in some instances.

In the village surveys, 5 percent of cases did not have online records; 6 percent RoRs had missing khata and khesra number entries, and 2 percent had errors in names. This was in addition to 11 percent cases with mismatch in area, and another 8 percent cases where onground ownership was slightly different from that noted in the online records.

Owing to poor maintenance of land records in the past, the digitised jamabandis have multiple errors in them. These include instances where the khata number, khesra number, or area is mentioned as zero/blank.

State has introduced another portal called parimarjan which allows land holders to apply for changes in the digitised records.

Figure 6: Sample jamabandi with name of person but no khata number, survey number or area

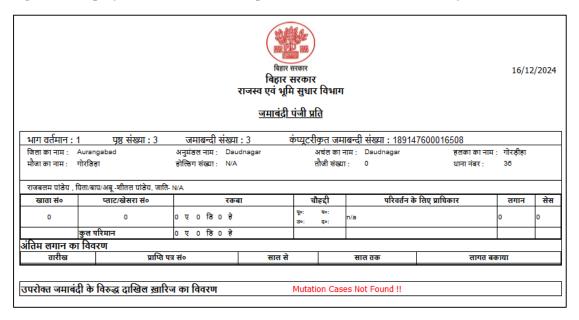


Figure 7: Sample jamabandi without Khasra Number mentioned on it



In view of these limitations, the state revenue department has introduced an online application named *parimarjan* or *parimarjan plus*, which allows citizens to apply for correction in the entries. This represents an incremental approach to improving the accuracy of existing land records. The state is also trying to carry out a resurvey exercise, for enmasse correction/updation in land records. Both of these are discussed in further sections of this document.

# Manual payment of lagaan for lands that don't have Khata/Khasra number mentioned in digital RoR

In the absence of reliable RoR, other documents are also used to prove ownership or possession over land parcel, on a case by case basis. The payment receipt for land revenue is one of such documents. Unlike some other states, Bihar has not removed the practice of collecting land revenue from land owners – and a small amount (sometimes as low as one or two rupees per year) is collected. The receipt generated after paying the revenue is an important document in the state to show continued possession. Landowners can also pay this rent online.

When digital jamabandis are not captured with khata/khasra number or having errors in them, the payment of land revenue (Lagaan) cannot be processed through the online system. In such cases, the manual payment process i.e, through offline mode is carried out. An individual landholder (Rayat), provides their details for manual verification for paying the lagaan. The details are manually verified by searching the Rayat's name in the Register-II (jamabandi register), and subsequently the revenue is paid and is documented in the same register for future reference. Such manual records are still being kept in the state. This process is followed to document the lagaan payment details due to absence/incomplete digital records.

The state reports that manual RoRs (i.e. jamabandis) have been discontinued. However, there are many other paper-based documents (e.g. khatian, rent receipts) which are used by landholders to prove their rights on the land, on a case-by-case basis, especially when digitised records have errors.

## **Online process for Error correction**

There is a facility for citizens to apply online for correction of the RoR/Jamabandi. People can use the Parimarjan Plus portal and app to apply for any kind of corrections in the jamabandi through online mode only.

According to the interviewed officers, the process has been online since the introduction of the predecessor portal, namely, Parimarjan. Introduced in the year 2018, it was an initiative to rectify inaccuracies in digitised *Jamabandi*, *Khatian*, and other land documents. It was succeeded by Parimarjan Plus portal in 2021. The error correction happens at the Anchal (Circle) level and can be tracked online too. Only in specific cases, a physical presence of the applicant at the respective Anchal office is required.

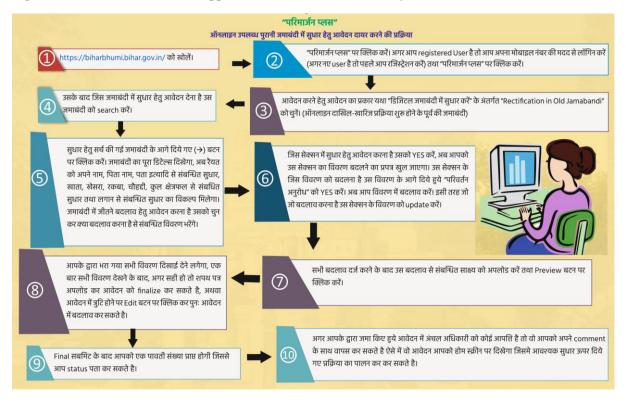


Figure 8: Process flow for citizen application for error correction in jamabandi

Source: http://biharbhumi.bihar.gov.in

The various types of corrections which can be made include:

- a) Correction in jamabandi available online (Correction/ Addition in Name, Address, Khata number, Khesra number, Chauhaddi, area, & lagaan details)
  - In Jamabandi created before online mutation
  - In Jamabandi created after disposal of online mutation
  - Jamabandi digitized in wrong village
  - Segregation of mauja wise khesra from digitized Jamabandi with khesra of multiple mauja
- b) Digitization of left out Jamabandi
  - Digitization of such Jamabandi where Raiyat have Jamabandi Proof
  - Digitization of such Jamabandi where Raiyat don't have Jamabandi proof but have proof of ownership

In a situation where rectification is needed in Khata/Khesra/Rakba in Jamabandi created after disposal of Online Mutation cases, there will be no option to file the application via Parimarjan portal. The applicant will be directed to file an appeal before the DCLR. After the order of the DCLR, the Mutation

will be executed on the basis of rectified mutation application, revoking the order passed earlier by the Circle Officer.

## Land records available for abadi areas and urban areas as well

In Bihar, record of rights (jamabandi/khatian) and cadastral maps are maintained for both rural and urban areas. Even within rural areas, the settlement part of the village (abadi/gaothan) is covered in equal detail in land records. Cadastral surveys for municipal areas have 1256 map sheets, while revisional surveys for municipal areas have 3003 map sheets. All of these have been digitised and are available online. These maps have ward-wise<sup>5</sup> land parcels marked, although the plot boundaries are very old (1910s for cadastral surveys, and 1970s for revisional surveys).

## 39% of jamabandis linked with Aadhaar

According to the interviewed officers, jamabandis are partially seeded with aadhaar number. Till September 2024 a total of 1.7 crore jamabandis had been seeded with Aadhaar, which is around 39% of the total jamabandis. Also, the jamabandis are seeded with a mobile number of landholders. When any kind of changes/modifications are being made in the jamabandi, the owner will get an SMS alert on their seeded mobile number.

#### Jamabandi linked with banks

Similarly, the jamabandi database in all the districts is linked with banks for mortgage related details. If any land parcel has any associated mortgage, it is mentioned in the jamabandi. After approval of a loan by the bank, it needs to be registered at the SRO office and the details of the loan are entered into jamabandi by the bank. Table 2 presents the process through which land mortgages are entered and mentioned in jamabandis. If the mortgage is released on a particular land parcel, in the same manner it is updated in its jamabandi too.

When any jamabandi panji is viewed through the portal of Biharbhumi, there is an option to check whether the land parcel is under any mortgage.

In the surveyed villages, only three percent of respondents had availed any form of formal loan against their land holding. In none of these cases the online jamabandi had noted presence of a mortgage. This indicates that the linkage with banks had not reached the on-ground conditions effectively.

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<sup>&</sup>lt;sup>5</sup> In a city, these ward names or boundaries may not match the latest names and boundaries as per Municipal laws.

Table 2: Process for creating mortgage entry in jamabandi

Process	Description				
Login to	The branch bank logs into the encumbrance portal using official				
<b>Encumbrance Portal</b>	credentials and OTP verification.				
Search Jamabandi	The bank searches for Jamabandi records using Volume Number,				
Details	Page Number, or Computerized Jamabandi Number. The portal				
	fetches the data via a web service (no direct access provided).				
Select Plots	Once the Jamabandi data is retrieved, the bank employee selects the specific plot(s) against which the mortgage charge is to be created.				
Enter Mortgage	The bank employee enters the mortgage details, including relevant				
Details	information, and proceeds to submit the charge request.				
Verify and Submit	Before final submission, the bank employee verifies all the				
	mortgage-related details and completes the process using OTP-				
	based verification.				
Create and Publish	Upon final submission, the charge is created on the selected plots.				
Charge	The updated information is visible in the Jamabandi records,				
	accessible to the public.				

Source: Revenue & Land Reforms Dept., Bihar

## Old land records stored and digitized at Record Rooms

The digitization of legacy land records in the state is in process. At present, the legacy records in all the districts are stored in the Record Room of the district headquarters. These records are being digitized for the people to access them online and to reduce the burden on them to visit the office for getting a copy of the legacy records.

Table 3: Types of land records that are being scanned and digitized in Record Rooms

S. No.	Type of Record	S.No.	Type of Record
1	Cadastral Survey Khatian	14	Register-D
2	Revisional Survey Khatian	15	Touji Roll
3	Return Submitted by Ex- Intermediary/Zamindars	16	Coss Fixation Registers (1942)
4	Zamindari Compensation Records	17	Real estate register
5	Jamabandi register	18	Municipal Survey Records

S. No.	Type of Record	S.No.	Type of Record
6	Dakhil Kharij Panji	19	Land Ceiling Settlement Registers
7	Bandobast bhumi panji	20	Land Ceiling Record (Finally adjudicated)
8	Home stead Parcha Registers	21	Register Related to Land Purchase
9	Mutation correction slip	22	Rent Fixation Records
10	Sorat Panji	23	All Records related to Land Acquisition
11	Records Related to Land Auction before Vesting of Zamindari	24	Case Records Started U/s Section- 103-106, 108 & 108 A of the Bihar Tenancy Act
12	Gairmanjrua Aam/Khas/Kaiser-e- Hind Register	25	Maps
13	Khas Mohal Panji		

Source: Revenue & Land Reforms Dept., Bihar

Figure 9: A view of the Muzaffarpur district record room



Source: IIHS, September 2024



Figure 10: Physical copies of records maintained at the Munger district record room

Source: IIHS, September 2024

## No Online Facility for Accessing Digital Khatian Records

Khatian record of the last cadastral survey in Bihar which was held in 1911, during British rule, is considered one of the most important land records in the state. Most of the districts have already scanned these records, in some districts processes are ongoing but the state has yet to make this record accessible and downloadable online for the citizens.

As a result, citizens have to rely on offline copies, through a due application process in local anchal office. For example, the state is undergoing a special survey where submitting a khatian record is mandatory for rayats to get their land surveyed, to collect a khatian record rayats have to apply to the circle office along with required documents and collect it thereafter.

# 3. Registration

The attempts to computerise the sub-registrar offices started in the year 2006. Since then, there has been significant progress through which today all SROs have computerized. The state of Bihar has gone through three phases in reforming the registration process:

- Pre-Computerization (Before 2005)
- Computerized registration through SCORE (2006 to 2015)
- Online Registration through SCORE (2016 to 2024)
- E-Nibandhan (2024 onwards)

#### SCORE: Intranet-based registration system in 50 SRO offices

In order to improve the efficiency and the revenue generation capabilities, the computerization of District Sub-Registrars (DSRs) was taken up by Bihar in the year 2006. The software was named System for Computerised Registration (SCORE) and was installed in standalone applications in DSR offices. By the year 2016, the data which was being stored in DSR offices were imported to a centralized server and hence, the effort was made to go online. This system was called SCORE (V4). It allowed citizens to search registered documents, and download certified copies. However, the whole system operates on intranet and is accessible only to the officials. Citizens have to prepare and present documents physically and the operators make the data entry into the system. Online payment of stamp duty, or online application, is not possible – despite some initial efforts. This SCORE system is still going on in some DSR offices in the state.

The registration department has now come up with-Nibandhan, an online system that is being rolled out across the state.

All 137 DSR/SRO offices are computerised. Registration system has been computerised since 2006, when SCORE was introduced. Legacy records for registration are available in a digitised form since 2006, and can be accessed online. Some DSRs have digitised records till 1995.

#### E-Nibandhan- Web-based registration system in 87 SROs

The SCORE system, being an intranet-based system, is now being replaced by a new portal called E-Nibandhan, which works on the internet and is easily accessible for people. With the new system, citizens through their login can apply for registration at their own convenience, and get their date and slot booked for registration process at the DSR offices. It has already been rolled out in 87 SROs and is now in process to be rolled out in the rest of the state too.

E-Nibandhan, a web-based portal replacing SCORE, allows citizens to apply for registration at their convenience and book appointments. As of September 2024, E-Nibandhan was rolled out in 87 SROs.

## BOX: Steps involved in the registration process for SCORE-V4

In the SCORE system, the citizen has to produce the required documents for the registration process in the DSR office. The executant, claimant and witnesses have to be present in the DSR office on the date and time of appointment, which have been booked by the citizen through the portal. During booking of slot for appointment property attributes like survey no., plot no., khata no., etc. are captured.

During the booking of appointment, application fees, stamp duty, registration fees, etc. can be paid through online payment method only. The circle rates (known as Maximum Value Rate in Bihar) is available to the citizens in the registration portal and e-calculator is also available to compute and calculate stamp duty fees based on the location and type of property.

The DSR office operators follow the under mentioned steps:

- 1. The initial step involves entering all the essential details of the sale deed. This includes the names of the buyer and seller, the date of the transaction, and the terms and conditions of the sale.
- 2. The details related to the stamp duty, challan, and e-stamp fees are entered. This includes the amount paid, the date of payment, and the unique identification numbers of the challan and e-stamp. Ensuring these details are correct is important for the legal validation of the transaction.
- 3. This step includes input of personal details such as names, addresses, contact information, and identification numbers (like Aadhaar or PAN, *but no verification from the Aadhaar database*). Both the buyer's and seller's details must be accurately recorded.

- 4. In this step, specific information about the property being sold are entered. Details such as the property's location, size, type (residential, commercial, etc.), and any unique identifiers (like plot number or survey number) are included.
- 5. Subsequently, the fees associated with the sale of property are specified. This includes registration fees, processing fees, and any other applicable charges.
- 6. The details of any identifiers involved in the sale process. Identifiers can include witnesses, guarantors, or any other individuals who play a role in the transaction.
- 7. A memo of presentation is provided to the citizen, which summarizes the entire transaction and includes all the details entered. It is then submitted for further process of registration.
- 8. The digital thumb impression is taken of the claimant(s) and the executant(s) with the witnesses who are mentioned in the deed.
- 9. The DSR approves the *Ekraar*, where both the claimant and executant of the deed give a verbal agreement and sign the agreement and validate the deed.

## BOX: Citizen Facing Steps involved in the registration process for E-Nibandhan

- 1. Data entry from citizen login for online application
- 2. Details of executant, claimant and witness to be filled
- 3. Details of property/land for registration
- 4. Calculation of stamp duty and fees
- 5. Downloading of check slip (receipt) and data entry check by the citizen
- 6. Payment of fees through online modes
- 7. Appointment booking at the DSR office

Once appointment is done, this starts the admin login and remaining requisites like, verification of KYC, biometric, other edits etc. which are to be carried out by the operator of DSR office. However, Aadhar is currently not mandated for this process (there was a mandatory provision but it has now been rolled back).

The executant, claimant and witnesses have to be present in the DSR office on the date and time of appointment. At the DSR office, the relevant documents are verified, before the DSR approves the *Ekraar*, and both the claimant and executant of the deed sign the agreement and validate the deed

## 100% computerization of DSRs/SROs in the state

According to the interviews with the officials, in 2006 there were around 120 DSR/SRO offices, which have increased to 137 today. All DSR/SRO offices are computerised.

## 14 lakh annual registrations; 73% in rural areas

For the year 2023-24, around 14.09 lakh properties were registered, from a total of 137 DSR offices in the state, all of which are fully computerized. Out of these 14.09 lakh registrations, 10.32 lakh registrations took place for properties in rural areas, whereas 2.05 lakh registrations were for properties in urban areas. 1.39 lakh registrations took place specifically for peripheral (peri-urban) areas, while the remaining for 0.33 lakhs happened for agreement purposes.

Table 4: No. of registered documents and revenue collected in last 10 years

S.No.	FY	Applications received (in Lac.)	Revenue (in Cr.)
1	2014-15	10.28	2903.04
2	2015-16	11.01	3562.06
3	2016-17	9.41	3256.95
4	2017-18	10.95	3823.9
5	2018-19	11.52	4440.63
6	2019-20	11.62	4647.57
7	2020-21	10.0	4257.54
8	2021-22	12.06	5215.26
9	2022-23	15.38	6583.07
10	2023-24	14.09	6170.90

Source: Registration Department, Bihar

## Digitisation of legacy registration data

Prior to computerisation, all records related to registration were kept in hard copy. With introduction of SCORE, the data from the year 2006 to 2016 was digitized, but there stood a challenge to digitize the pre-computerization period data. To address this, a phase-wise digitization process started. Indexing and recording metadata was also gradually started. On an average, the records till the year 1995 were digitized by all the DSRs. Some DSRs were able to digitize till 1989 or 1992 also.

## Online payment of stamp duty

There are two popular methods to pay stamp duty in Bihar.

- 1. Online Government Receipt Account System (OGRAS)
- 2. Physical Stamp Papers: Individuals can buy physical stamp papers from the government authorised vendors or e-stamp papers.

Women in Bihar enjoy a 0.6 percent rebate compared to men. If a particular property is being purchased by a woman. The applicable stamp duty is 5.7%, and if a male purchases the property, the duty will be 6.3%. Similarly, if a woman buys a particular property, the registration charges would be 1.9%. If a man is purchasing a property, then the charges for the same would be 2.1%. For a sale agreement, the registration fee in Bihar is 2%.

## Registration and land records are linked only for suo-moto mutation

The state documents report that all DSR/SRO offices are linked to the Bihar Bhumi/ Bhu Abhilekh system. However, the linkage is only partially effective. Owner names and area details aren't checked from land records before registration, and neither is an option available for applicants to pick up land record information from BhuAbhilekh. The DSRs also usually don't check a seller's ownership document by past record.

After registration, a mutation process gets automatically triggered in the land record database. This is true only for suo moto mutation cases where the seller is a single owner of the land, and the jamabandi is in his/her name and the buyer is also a single buyer. This suo moto mutation and prohibition on restricted lands being transferred are the only effective linkages between land record system and registration system.

Application for registration does not link to land records database to input or verify RoR details.

Auto-triggered mutation (known as suo-moto mutation) is available for cases with a single buyer, single purchaser, and name of seller present in jamabandi.

## Alerts and Grievances system being introduced

The grievance redressal system is being made available online in the new portal of E-Nibandhan, which till now used to be through offline means. Citizens can apply for any grievances related to property registration by visiting RTPS counters in person.

#### **Other Features**

- 1. Dynamic deeds are available on an older website of registration department.
- 2. The DSR is able to trigger SMS for important events during a registration process.
- 3. During the process of registration, the PAN, Aadhaar number, mobile number, etc. are captured for each party.
- 4. Facility is also available to verify eKYC of Aadhaar/PAN during the process. These identification documents are uploaded online.
- 5. DSR/SROs have access to registration deeds from the year 1995 and can use them as a ready reference.
- 6. There is no provision of capturing signature using digital pen and pad
- 7. There is no provision to check litigations online for a property scheduled for registration.
- 8. The E-nibandhan portal that can prevent 'restricted land' (i.e. government land, or properties with a relevant court order) from being registered through a pop-up notice to the DSR/SRO.
- 9. The DSR also has a facility to generate encumbrance certificates.

## 4. Mutation

Mutation (which is also known as *Dakhil Kharij*) is a process which gives the confirmation of transfer of rights. Registration solely doesn't assure this transfer and hence mutation is an important process which is to be carried out at revenue circle (*Anchal*) level. The state portal of BiharBhumi has one of the components of E-Mutation, which is used by the people to apply as well as by circle officers to follow up and dispose the mutation applications online itself.

BhuLagaan Jamabandi E-Mutation Viewing Land Land Possession Encumbrances Certificate **BIHARBHUMI** Change in Land Parimarjan Plus Use Revenue Court Digitally Signed E-Mapi Management Bhu-Abhilekh System

Figure 11: Features of the BiharBhumi portal

Source: Revenue & Land Reforms Dept., Bihar

The process of mutation is online only since December 2017. An earlier attempt in 2002 for introducing online mutation was not successful. Prior to 2017, the mutation process was manual, and at the end, the digitised RoR was updated by field officers. Thus, this led to a gap between the RoR on ground, and online RoR.

In 2017, eMutation was started in 45 anchals on a pilot basis. After the success of the pilot, in October 2018, the e-mutation was made fully functional in all the 534 anchals of the state.

## Auto-triggered mutations in some cases; Online applications for others

E-Mutation is currently being managed by the online portal of *Biharbhumi*, which has an option to file an application for mutation (*dakhil kharij*). The main motive to introduce this was to ensure that people can apply for mutation of their property without visiting any office. This process is handled by anchal (circle) offices. The application process is completely online and citizen can track their application status and view the final status on digitsed jamabandi.

Unlike in some states, where mutation can be automatically triggered after registration process, in Bihar, one has to apply it manually through online portal and can initiate the verification process. Only in case of suo-moto mutation which happens in quite specific conditions (when the seller is the sole owner and has the jamabandi in his/her name and land is being sold to a single buyer only), the mutation process gets initiated automatically after registration. It is still an optional thing and the applicant opt out of it if he/she isn't willing to carry out mutation instantly. The state officials did not have a break up of number of *suo moto* mutation applications vs number of online applications.

Auto-triggered mutation (known as suo-moto mutation) is available for cases with a single buyer, single purchaser, and name of seller present in jamabandi.

For other types of mutation, land owners can apply online. The state witnessed a significant jump in number of mutation applications when online facility was introduced in 2017.

The following table shows the process flow followed in the state for the mutation process.

**Table 5: Process flow for mutation** 

Step Details	Description of Activities
Application Submission	The process begins with the <i>Raiyat</i> (landowner/applicant) submitting the mutation application online. A unique token number is generated for tracking the application.
Defect Check	The Revenue Karmachari scrutinizes the application for completeness and accuracy. If any defects are found, the application is returned to the applicant with comments for corrections. Otherwise, the case is auto-allocated for processing.

Step Details	Description of Activities
Case Number Allotment	Upon successful defect clearance, the application is formally accepted, and a case number is automatically allotted for further tracking and processing.
Karmachari Report	A Revenue Karmachari conducts a field verification of the land details and ownership based on the submitted documents. A report is digitally prepared, signed, and forwarded to the Revenue Officer for further scrutiny.
Revenue Officer Report	The Revenue Officer reviews the Karmachari's findings, prepares their report, and digitally forwards it to the Circle Officer (CO) for final evaluation and notice issuance.
Aam-Khas Notice	Public ( <i>Aam</i> ) and individual ( <i>Khas</i> ) notices are issued by the Circle Officer, inviting objections from landowners and other stakeholders regarding the mutation request.
Passing Mutation Order	If objections are raised during the notice period, a hearing is conducted to address the concerns. If the objections are legitimate, the case may be rejected. Otherwise, the mutation order is approved.
Issuance of Correction Slip	Upon approval of the mutation, a correction slip ( <i>Shuddhi Patra</i> ) is generated and issued, completing the process. If the application is rejected, an appropriate rejection order is passed.

Source: Revenue & Land Reforms Dept., Bihar

The below RoR shows details of the mutation executed on the land parcel.

Figure 12: Jamabandi copy showing mutation details

				जमाब	द्री पंजी	प्रति							
भाग वर्तमान :	31 पृष्ठ संख्या : 20	053	जमाबन्द	री संख्या : 2	ā	<b>ज्या</b> ट	रीकृत ज	माबन्दी संख्या :	2071358000097	23			
जिला का नाम :	Munger अनुम	iउल नाम: N	lunger Sa	adar			अचंल का	नाम : Jamalpur	7.5	का का नाम	: इट <del>ह</del> री		
मौजा का नाम :	ईटहरी होलि	हग संख्या : N	//A				तौजी संख्य	T: 3535	था	ना नंबर :	109		
चुनचुन राय , पिता	/बाप/अबू -लम्बू राय, जाति- N/A												
खाता सं०	प्लाट/खेसरा सं०		7	रकबा		₹	गेहदी	परिव	र्तन के लिए प्राधिकार		लगान	सेस	
243	21,35,47,50	4 및 10.2	5 ভি 0	हे		দুe: তe:	पo: दo:	ROR			180	240	
	1013,1100	o ए o f	डे० हे			पूo: उo:	पo: दo:						
	1112	o ए o f	डे० हे			पूo: उo:	पo: दo:						
	1100	o ए o f	डे० हे			पूo: उo:	पo: दo:						
	कुल परिमान	4 및 10.2	5 ভি ০	हे									
अंतिम लगान क	ग विवरण										•		
	तारीख		प्र	ाप्ति पत्र सं०				साल से	साल तक		लागत बका	या	
2014-07-30		750093						2015					
2024-09-18 10:44	1:02	1809241041	54032437	742	2015-2016 2024-2			2024-2025	1620				
उपरोक्त जमार्ब	दी के विरुद्ध दाखिल ख़ा	रिज का विव	रण										
SI No Case No Ma				Khata No	Plot	No	o Applicant Name		Application Date	Status			
7785 1261 / 2021 - 2022		2 ईटह	री-109	243	1100		00 मीना देवी		07/09/2021	07/09/2021 Status C		Correction Slip	
8643 2119 / 2021 - 2022		2 ईटह	री-109	243			DILIP NARAYAN SINGH		14/12/2021	Status Correction S generated		n Slip	

## 32 lakh mutation applications in a year

In the FY 2023-24, 32 lakh applications were received for mutation in the state, which makes it an average of 8000 cases per day. The entire application is received on an online basis and the transactions involved in the process are also considered through online mode. The digital signature is used for authentication of the user too.

#### **Increasing number of mutation application**

Since the inception of online mutation, in a complete manner, total applications received for mutation were 130.8 lakhs out of which, 124.1 lakh were disposed of, and 6.82 lakh applications have been pending/rejected.

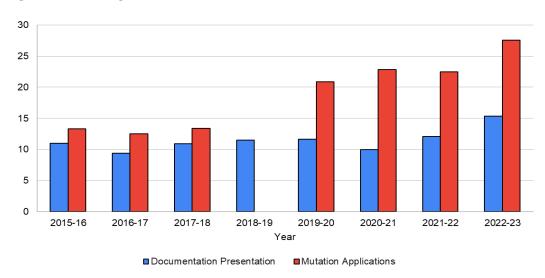


Figure 13: No. of registrations and mutations (2015-2023)

Source: Revenue & Land Reforms Dept., Bihar

As it is evident from the graph, after the roll out of online mutation system (E-Mutation), the mutation cases filing has become easier and people have used the online portal for the same increasingly. After the year 2017-18, there is a significant increase in number of applications received for mutation.

However, the number also indicates that there were a large number of un-applied-for mutations in the recent past, which were captured only after the online system was introduced and the system was made more convenient.

## Online objections can be filed

There is an option for the people to raise an objection to any mutation online itself. After a mutation application is given to process, after inspection from revenue officers from anchal office and the release of Aam-Khas notice, a 14 days period is given for raising an objection online. If any objection is received, it is reviewed by the circle officer and the case is then decided upon by the officer only after the physical presence of the applicant and the person who has objected in the circle office.

#### Mutations may take upto 3 months for sanctioning

While the prescribed period is of around a month, cases sometimes can take time due to objections, disputes and rejections which can increase the actual period in practice to 90-95 days. Cases often can end up in revenue/civil courts which can increase the period further. FIFO (First in First Out) method is used as a practice and is also enabled in the e-mutation portal to improve and ensure timely disposition of mutation applications.

If no objection is found for a mutation application, the anchal officer will generate the Shuddhi Patra (correction letter) through his login which certifies the mutation and also triggers a change in RoR (Jamabandi).

43% of RoRs have un-updated inheritance, with some RoRs remaining under ancestors' names for up to three generations. Respondents acknowledged that transactions may have occurred on the same parcel multiple times, but the records do not reflect it.

# 5. Spatial Records

It is important to understand the history of survey and settlement operations in Bihar, before reviewing the status of cadastral maps. Bihar has seen three different surveys from the colonial times to 1970s. The first survey was Cadastral Survey which took place in and around 1910s in the state. The second survey was the Revisional Survey which was conducted after independence in the 1960s. This survey could not be completed in all districts. There was also a *Chakbandi* survey (land consolidation survey), in which some parts of Bihar could complete it whereas the rest couldn't.

This has led to three different sets of surveys being followed in the state. In places where consolidation was completed, the map from *Chakbandi* survey is considered for land related tasks. The other villages follow the previously conducted Revisional Survey and use corresponding maps and khatian. In villages where neither consolidation nor revisional surveys were completed, land records and maps from cadastral survey of 1910s continue to be used.

The usage of really old cadastral survey maps in some districts, and the mismatch between on-ground position and land records, led to the state announcing a fresh round of survey and settlement operations (named Special Survey). This has been discussed in detail later.

## **BOX: Status of Cadastral or Revisional Surveys at District Level**

Extracted from Land records modernisation: Bihar

The last round of complete settlement in Bihar was the cadastral survey of 1890s–1910s. After independence and the abolition of Zamindari, a fresh round of revisional surveys was started. The status of the surveys at the district level is summarised below (derived from Preamble of the Bihar Special Survey and Settlement Act, 2011):

## 1. Revisional survey:

- a. Purnea, Katihar, Kishanganj and Araria (1952 to 1986)
- b. Muzaffarpur, Sitamarhi, Sheohar and Vaishali (1959 to 1988)
- c. Saharsa, Madhepura and Supaul (1962 to 2002)

## 2. Partial revisional survey:

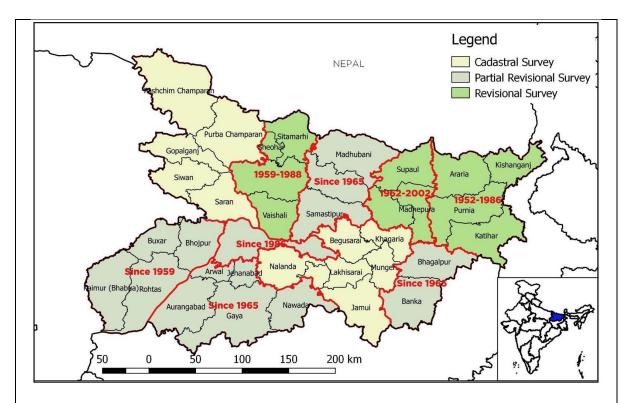
- a. Bhojpur, Buxar, Rohtas and Kaimur (since 1959)
- b. Darbhanga, Madhubani and Samastipur (since 1965)
- c. Gaya, Jahanabad, Arwal, Aurangabad and Nawada (since 1965)
- d. Bhagalpur and Banka (since 1965)
- e. Patna (since 1986)

The revisional survey in these districts was stopped when the new legislation for conducting special surveys was introduced. The surveys were to be resumed under special survey.

#### 3. Cadastral survey:

- a. Begusarai, Khagaria, Lakhisarai, Sheikhpura, Jamui and Munger
- b. Saran, Siwan and Gopalganj
- c. East Champaran and West Champaran
- d. Nalanda

In these districts, missing *khatiyaans* is a critical issue. The old documentation is necessary for reference when new work in special surveys is initiated. While most maps are available, it is estimated that 40–50 per cent of *khatiyaan* records are either missing or are in very poor condition.



Box source: Jha, D., Mitra, S., Goswami, A., Sasidharan, S., & Lushington, K. (2021). *Land records modernisation: Bihar*. Indian Institute for Human Settlements

### 100% Maps are scanned and digitised

The state has a total of 1.35 lakh map sheets across cadastral survey maps, revisional survey maps, consolidation maps, and other types of spatial records. All of these have been scanned and digitised.

**Table 6: Status of Digitization of Spatial Records** 

Map Types	Total map sheets	Percentage of maps digitised
Cadastral	73086	100%
Revisional	49771	100%
Consolidation	7821	100%
Cadastral Municipal	1256	100%
Revisional Municipal	3003	100%
Anchal Map (old)	388	100%
Irrigation Map	512	100%
District Map (old)	28	100%
Grand Total-	135865	100%

#### 34% of cadastral maps georeferenced

There are a total of 73,086 cadastral survey maps in the state. While all of them have been scanned/digitized and have also been converted into vectorized format, only 25,060 of them have been geo-referenced. It is not sure what the status of georeferencing of revisional survey maps is.

#### All cadastral maps reportedly linked with Record of Rights, but not at parcel level

According to the 2023-24 annual report of the department of revenue and land reforms, 100 percent cadastral maps have been linked to RoR. However, this link does not exist at land parcel level. The BhuNaksha website depicts survey number of each land parcel, but does not provide area, chauhaddi, khata number, or name of land holder for majority of the land parcels. Refer annexure for screenshots of bhunaksha, for a visual depiction of the same.

According to one of the interviewed officials, only around 30,092 RoRs have been linked to cadastral maps. This is a very miniscule ratio of the total 4.3 crore jamabandis present in the state, and the number could not be verified from a second source.

#### Spatial Records are not partitioned or updated

The state has a unique legal position that the cadastral maps are supposed/required to be updated. In cases of partition, the jamabandi is split between two or more land owners, and each is allotted a specific area (in terms of acre/decimal) and different jamabandi numbers, but the plot (khesra) number for all parties remains the same, and is not split. In effect this means that several jamabandis have the same survey number, without any subdivisions being noted.

Land record maintenance in Bihar does not require spatial division. Typically, many RoRs share a single survey number without any documentation of spatial division. The system makes it difficult to reconcile spatial records with on ground condition possession of land.

While this reduces the workload of the state survey team, when compared to other states, the differences between plot boundaries in cadastral maps and the possession on ground is very wide.

Nearly 11 percent of the total respondents mentioned their issues regarding the area mismatches. Issues like wrongful entries in land records and the lack of diligence in official processes after transaction of land parcels and its subsequent updation were highlighted as concerns.

#### **Spatial Records have centralised storage**

Bihar has achieved its milestones in 100 percent scanning and digitisation of cadastral maps. All original maps of the state (across cadastral survey, revisional survey etc) are stored at the Patna headquarter of the survey wing of the revenue department. This has enabled preservation of even historical maps in a good condition. This also helped the scanning and digitisation process in the state, started in 2012, due to the centralised availability of maps.

#### **Door Step delivery of Maps**

Digitised maps are available on BhuNaksha website. Since September 2022, scanned versions of these maps are also available online for download. Citizens across India can apply for door step delivery of legally certifiable copies of these maps. More than 9000 applications have been received for this service, leading to revenue of Rs 46 lakhs.

#### **Ongoing Special-Survey & Settlement**

Bihar is currently undergoing a special survey driven by the directorate of Land Records and Survey, under the provisions of Special Survey and Settlement Act, 2011. The survey aims to update land records in all the 45881 revenue villages across the state.

**Aim and objective:** The main objective of the Special Survey and Settlement Act, 2011, is to maintain the continuity of the process of maintenance, preservation and updating of digitized online rights records and maps with the help of modern technology. The goal of this special survey is to provide simple and useful services to all its users in an effective manner by integrating management of all land related information.

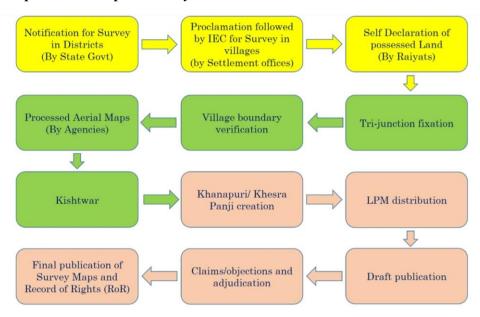


Figure 14: Steps involved in Special Survey

Source: Revenue & Land Reforms Dept., Bihar

Gradual improvements in Survey Plan of Action: Special surveys were introduced in the state in 2011 itself, but despite some initial success, final records could not be published. Since then, the state has gradually improved the processes involved in the survey. For example, in 2022 the state government decided to set up a special survey camp in every zone of the state. To meet the requirement of the workforce required to implement this new action plan, a total of 7595 additional contract-based posts of special survey personnel were approved, and 6875 contract-based posts of special survey personnel were created. Amendments were made to the Bihar Special Survey Honorarium Based Contract Employment Rules, 2019. Similarly, the state has also widened the list of documents acceptable for entering a name in the new khatian being created, as long as the person is in possession of the land parcel. For this, the availability of archival records, especially *khatian* has been made easier for citizens. Some of the land records are in *kaithi* script and the state is training its officers to read the script. State has also started using an online platform<sup>6</sup> so that the processes involved in the survey are more efficient and can be monitored.

**Progress of special survey:** As of 31 March 2024, in the first phase, the work of 'kistawar' was completed in 4927 revenue villages and the work of 'Khanapuri' was completed in 4059 revenue villages and the Khesra Panji (Form-6) prepared for 3538 revenue villages which were entered in the bhu-survekshan software. Along with this, 'Madhya Khanapuri Parcha' and LPM were distributed among the raiyats in 3351 revenue villages, draft record of rights were published in 2881 revenue villages and final records of right and survey maps in 797.

<sup>&</sup>lt;sup>6</sup> Accessible at https://dlrs.bihar.gov.in/.

The below tables, from state MIS report, accounts district wise survey progress. Phase I villages/mauzas were picked up first for implementation, and are hence at more advanced stage than villages/mauzas which were picked up in Phase 2.

However, in September 2024, the state government announced that the special surveys were being paused across the state for three months, plausibly to give people more time to collect their land related documents.

**Results of Special Survey:** An example of a small village Nirpur in Munger district has been picked up, to show the changes made in the land records and village maps, after Special survey.

- The village of Nirpur had 94 land parcels according to the Cadastral Survey conducted in 1906-07, and 181 landowners as per the latest computerised *jamabandi*. The number of jamabandis was 152.
- In this village, draft records under the Special survey have been published, and the same is now available online on Bhunaksha. The village now has 242 land parcels.
- The results show a 2.5x increase in the number of land parcels (indicating sub division) in the last 110 years or so. It also shows that the number of land parcels was higher than the recorded number of landowners or jamabandis.

#### Introduction of pre-mutation revenue sketch map

While maps from cadastral survey and revisional survey cannot be updated due to absence of such legal or administrative provisions, the state has created the legal backing required for updating of special survey maps, with every transaction of a land parcel. The Bihar Land Mutation (Amendment) Act 20217 introduced the concept of a pre-mutation revenue sketch map, which is to be submitted by land holders with their mutation application. The sketch is to be prepared by a list of empanelled persons or agencies, available district wise. The provisions are applicable for village which have undergone special surveys.

<sup>&</sup>lt;sup>7</sup> Accessed at

 $https://www.indiacode.nic.in/bitstream/123456789/20175/1/bihar\_land\_mutation\_\%28 amendment\%29\_act\_2021.pdf.$ 

**Table 7: Progress of Special Survey Phase 1** 

	SPECIAL SURVEY 2024 : DISTRICT REPORT : September 1st Week PHA SE -1																		
	SL No. 1				2		3		4		5		6	7		8			
PARAMETERS	Total Circle	Total Shivir	T otal Mau za	Boundary Updated Map's Supply (5%)		'   / Section 6 Pul		(Mauza)		Form-6 Entry in Software (Completed Mauza) (15%)		LPM & Form-7 Distribution (Mauza) (15%)		Distribution Publication		Darft Publication Form- 12 (Mauza)		Final Publication Form-20 (Mauza)(10%)	
District				A. Count	%	A. Count	%	A. Count	%	A. Count	%	A. Count	%	Weekly Target	A. Count	%	A. Count	%	
SHEIKHPURA	6	15	284	284	100.00%	284	100.00%	284	100.00%	268	94.37%	266	93.66%	284	263	92.61%	191	67.25	1
KATIHAR	3	7	167	167	100.00%	167	100.00%	167	100.00%	167	100.00%	167	100.00%	167	147	88.02%	69	41.32	2
MUNGER	5	13	308	306	100.00%	306	100.00%	304	99.35%	302	98.69%	301	98.37%	306	296	96.73%	46	15.03	3
JEHANABAD	4	10	240	240	100.00%	240	100.00%	238	99.17%	226	94.17%	217	90.42%	240	195	81.25%	106	44.17	4
PURNIA	1	4	72	72	100.00%	72	100.00%	72	100.00%	67	93.06%	64	88.89%	72	62	86.11%	2	2.78	5
BANKA	5	12	308	308	100.00%	308	100.00%	274	88.96%	284	85.71%	264	85.71%	309	242	78.57%	55	17.86	6
LAKHISARAI	5	16	376	376	100.00/	382	96.30%	350	93.09%	363	96.54%	278	73.94%	387	258	68.62%	67	17.82	7
NALANDA	9	17	398	396	100.00%	388	98.00%	382	96.46%	330	83.33%	315	79.55%	396	307	77.53%	20	5.05	8
BEGUSARAI	10	19	440	440	100.00%	438	99.50%	368	83.64%	331	75.23%	321	72.95%	435	292	66.36%	208	47.27	9
SHEOHAR	3	3	80	80	100.00%	80	100.00%	80	100.00%	56	70.00%	54	67.50%	80	48	60.00%	18	20.00	10
KHAGARIA	4	7	158	158	100.00%	158	100.00%	151	95.57%	117	74.05%	115	72.78%	158	92	58.23%	18	10.13	11
W. CHAMPARAN	4	11	281	281	100.00%	281	100.00%	249	88.61%	192	68.33%	185	65.84%	281	172	61.21%	47	16.73	12
ARWAL	5	13	312	312	100.00%	312	100.00%	281	90.06%	231	74.04%	222	71.15%	312	133	42.63%	1	0.32	13
ARARIA	2	6	158	144	92.30%	149	95.50%	144	92.31%	107	68.59%	101	64.74%	144	92	58.97%	4	2.58	14
MADHEPURA	4	6	114	114	100.00%	114	100.00%	93	81.58%	84	73.68%	72	63.16%	114	60	52.63%	4	3,51	15
SITAMARHI	4	9	253	253	100.00%	253	100.00%	247	97.63%	145	57.31%	142	56.13%	253	113	44.660/0	5	1.98	16
SAHARSA	3	5	122	122	100.00%	122	100.00%	114	93.44%	71	58.20%	71	58.20%	122	53	43.44%	7	5.74	17
JAMUI	3	6	155	155	100.00%	155	100.00%	126	81.29%	85	54.84%	85	54.84%	155	79	50.97%	17	10.97	18
SUPAUL	5	12	252	252	100.00%	252	100.00%	170	67.46%	150	59.52%	149	59.13%	252	132	52.38%	45	17.86	19
KISHANGANJ	4	17	460	460	100.00%	460	100.00%	299	65.00%	222	48.26%	207	45.00%	480	196	42.61%	3	0.65	20
Total Count	89	208	4932	4920	99.60%	4901	99%	4393	90.70%	3778	76.40%	3596	73.10%	4927	3232	65.18%	929	17.45%	

**Table 8: Progress of Special Survey Phase 2** 

				S	PECIA	L SURV	EY 202	4 : DIST	RICT RE	PORT:	Septem	ber 1st	Week	PHASE	-2					
	SL No			1			2		3		4		5	(	6	7	7		8	
PARAMETERS	Total Circle	Total Shivir	Total Mauza	List of and Settled (10%	d I land	Khatiy Ma Availa (10	ар	hocecdi	Sabha ng Photo I (15%)	Soft	m-1 ad in ware %)	1		For Softwar (Comp Mauza)	re Entry oleted	Triju Valid (5º		Verifi	ndary cation %)	RANK
District				A. Count	%	A. Count	%	A. Count	%	A. Count	%	A. Count	%	A. Count	%	A. Count	%	A. Count	%	
LAKHISARAI	2	2	53	12	27%	53	100.00%	53	100%	53	100%	93550	46.20%	52	98.11%	186	16.30%	49	92.45%	1
KISHANGANJ	3	3	311	10	23%	283	91.00%	310	100%	311	100%	106601	52.31%	289	92.93%	52	6.20%	0	0.00%	2
JEHANABAD	3	3	328	30	68%	322	98.20%	328	100%	328	100%	70767	34.10%	214	65.24%	496	48.60%	81	24.70%	3
SUPAUL	6	6	290	14	32%	265	91.40%	290	100%	290	100%	61704	47.24%	242	83.45%	0	0.00%	0	0.00%	4
KHAGARIA	3	3	99	20	45%	43	43.40%	99	100%	99	100%	83724	41.42%	99	100.00%	45	4.70%	0	0.00%	5
NALANDA BANKA	11 6	11 6	575 1020	19 5	43%	610	106.10% 82.60%	411 1020	71% 100%	575 1020	100%	73389 110675	34.89% 53.86%	543	94.43% 77.06%	26 0	3.40%	0	0.00%	6 7
SHEOHAR	2	2	115	31	11% 70%	843 115	100.00%	115	100%	115	100%	43851	19.49%	786 80	69.57%	109	0.00% 43.80%	9	0-00% 7.83%	8
SITAMARHI	13	13	553	17	39%	550	99.50%	553	100%	553	100%	138339	59.80%	39	7.05%	170	28.30%	12	2.17%	9
MADHEPURA	9	9	298	18	41%	256	85.90%	298	100%	298	100%	69512	31.90%	101	33.89%	29	2.50%	0	0.00%	10
BEGUSARAJ	8	8	676	11	25%	125	18.50%	676	100%	676	100%	99684	45.82%	314	46.45%	82	8.00%	0	0.00%	11
MUNGER	4	4	470	15	34%	254	54.00%	470	100%	470	100%	74334	36.06%	146	31.06%	299	39.10%	7	1.49%	12
KATIHAR	13	13	1336	19	43%	1336	100.00%	452	34%	1334	100%	63431	28.70%	599	44.84%	43	5.80%	114	8.53%	13
W.CHAMPARAN	13	13	1170	13	30%	1178	100.70%	539	46%	1170	100%	103073	70.84%	0	0.00%	48	5.00%	9	0.77%	14
ARARIA	7	7	574	13	30%	220	38.30%	53	9%	572	100%	98334	44.46%	386	67.25%	0	0.00%	2	0.35%	15
SAHARSA	7	7	318	11	25%	173	54.40%	276	87%	318	100%	81320	37.55%	0	0.00%	0	0.00%	0	0.00%	16
JAMUI	7	7	1284	25	57%	221	17.20%	1284	100%	1184	92%	29224	15.59%	167	13.01%	97	43.90%	0	0.00%	17
PURNIA	13	13	1123	18	41%	425	37.80%	413	37%	1122	100%	83248	38.13%	87	7.75%	0	0.00%	20	1.78%	18
ROHTAS	19	19	1958	2	5%	1	0.10%	1958	100%	1926	98%	48559	23.25%	40	2.04%	0	0.00%	0	0.00%	19
DARBHANGA	18	18	1237	2	5%	1	0.10%	1237	100%	1237	100%	9186	4.22%	0	0.00%	0	0.00%	0	0.00%	20
NAWADA	14	14	1065	2	5%	1	0.10%	1049	98%	1065	100%	1100	0.53%	21	1.97%	0	0.00%	0	0.00%	21
SARAN	20	20	1605	2	5%	1	0.10%	1605	100%	1605	100%	1834	0.91%	2	0.12%	0	0.00%	0	0.00%	22
KAMUR	11	11	1680	2	5%	1	0.10%	1680	100%	1653	98%	1255	0.56%	7	0.42%	0	0.00%	0	0.00%	23
BHOJPUR	14	14	1158	2	5%	1	0.10%	1158	100%	1158	100%	911	0.42%	0	.0.00%	_	0.00%	_	0.00%	24
GOPALGANJ	14	14	1471	2	5%	1	0.10%	1471	100%	1471	100%	647 7559	0.32%	O f	0.00%	0	0.00%	0	0.00%	25
SAMSTIPUR	20	20	1148		5%	1	0.10%	1078	94%	1147	100%		3.62%	3	0.26%	_	0.0%.	0	0.00%	26
BUXER E. CHAMPARAN	11 27	11 27	1105 1255	2	5% 5%	1	0.10%	1046 1221	95% 97%	1105 1221	100% 97%	654 1161	0.31%	22 0	1.99%	0	0.00%	0	0.00%	27 28
VAISHALI	16	16	1503	2	5%	1	0.10%	1161	77%	1503	100%	2075	1.00%	123	8.18%	0	0.00%		0.00%	29
MADHUBANI	21	21	1081	2	5%	1	0.10%	977	90%	1031	95%	1441	0.70%	0	0.00%	0	0.00%	0	.0.00%=	30
SJWAN	19	19	1448	2	5%	1	0.10%	1367	94%	1148	79%	2354	1.16%	0	0.00%	0	0.00%	0	0.00%	31
AURANGABAD	11	11	1846	2	5%	1	0.10%	1524	83%	1760	95%	2658	1.29%	21	1.14%	0	0.00%	0	0.00%	32
MUZAFFARPUR	16	16	1721	2	5%	1	0.10%	1237	72%	1721	100%	7599	3.61%	0	0.00%	ā	0.00%	Ť	0.00%	33
PATNA	23	23	1300	2	5%	·	0.10%	917	71%	1163	89%	3404	1.65%	0	0.00%	0	0.00%	0	0.00%	34
GAYA	24	24	2820	2	5%	1	0.00%	1649	58%	2605	92%	11895	6.02%	0	0.00%	0	0.00%	0		35
BHAGALPUR	16	16	1385	2	5%	1	0.10%	623	45%	1385	100%	1385	0.69%	55	3.97%	0	0.00%	0	0-00%	36
Total Count	444	444	37379		38%	7290	73.30%	30598	82%	36392	99.50%	1590437	41.02%	4438	51.78%	1682	14.21%	303	7.78%	

Figure 15: Cadastral survey map in Nirpur village (Munger district)

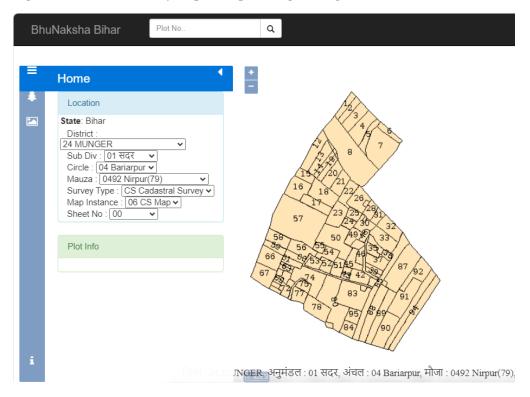
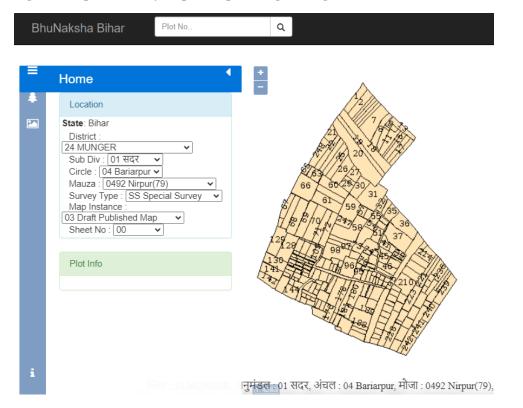


Figure 16: Special Survey map in Nirpur village (Munger district)



## 6. Revenue Courts

The Revenue Court Management System (RCMS) is an online portal for filing and managing cases pertaining to land and its related procedures. The online system of RCMS is integrated with land record databases, so that it is easy to retrieve and enter details during the process. Also, it is accessible and downloadable by the Revenue Courts too for reference. It is mandatory to enter land details along with the application. People also have the provision to upload additional document (if any) at any time during the whole process.

Table 9: Steps for filing a RCMS case and its process

Process	Description
1. Filing	Online case filing with mandatory selection of land. No token provided after filing.
2. Defect Check	Filed petition is scrutinized for defects. If no defect, the case is automatically allotted. If there are defects, the petition is reverted to the applicant with defect comments.
3. Case Progress	After the hearing day, proceedings are updated. The next hearing date is assigned, and a PDF of the interim order is uploaded.
4. Case List Publication & Hearing	Once the case is allotted, the hearing date is published and an auto-cause list is created.
5. Disposal of Cases	Once the hearing concludes, the case is marked as disposed. A PDF of the final order is uploaded.
6. Case Record	After case disposal, the case record is made available online with DSC-signed copy for public access.

Source: Revenue & Land Reforms Dept., Bihar

The state has a total of 927 Revenue Courts. Though the application process is online, the court hearings are held in-person (physically) only. The court case documents are stored in the court in both electronic and physical manners.

Pending revenue court cases are red-flagged in jamabandis. There is a separate mention in the RoR of any court cases which have been conducted or are ongoing. The registration software is not linked to RCMS software.

In village surveys, only one percent of respondents reported any ongoing court cases. The concerned jamabandis did not note the presence of a court case.

The state has introduced online provisions for linking of mortgages and court cases to RoR. However, the on-ground application seems limited, especially for legacy cases or loans.

## 7. Village 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. The selected villages were Bhagwanpur in Muzaffarpur district (Kurhani circle) and Ithari in Munger district (Jamalpur circle). Bhagwanpur village had a revisional survey map, while Ithari has a cadastral survey map.

#### Land ownership patterns

- Majority of the RoRs, i.e, 87 percent were single ownership RoRs.
- The remaining 13 percent RoRs had multiple owners, mostly from the same family.
- It should be noted that out of the above 87 percent single ownership RoRs, 39 percent are cases where inheritance was not updated. When the inheritance in these parcels is incorporated, they will either turn into multiple-owners RoR or will be split into multiple single-owner RoRs.

#### Accuracy and updation status of RoRs

- In 8 percent of RoRs, the on-ground ownership does not match the position in the online land records. Often there is:
  - Extra names present in the RoRs
  - Some names being missing from RoRs
  - Incorrect deduction of land after a transaction from another person's records
  - o Family related issues
- A significant portion of RoRs 43 percent have un-updated inheritance. Some RoRs still
  remain under the names of ancestors upto three generations ago. At the same time, transactions
  may have taken place on the same land parcel multiple times without any mutation.

- Combined with the 8 percent of mismatch, total 51 percent of land parcels did not reflect the same information that was on ground. Another two percent cases had errors in the spelling of the name.
- There are a few cases around five percent where the jamabandi was not searchable online, and hence people had offline/paper-based jamabandi copies or *lagaan* receipts through which the details could be captured. The findings of these cases have been combined with the overall results.
- From the village surveys and the discussions, it is quite clear that people at times refrain from
  updating their records through the process of mutation as it may get expensive for a few, timeconsuming for some and irrelevant as the land parcel is within the family and is being cultivated
  amongst themselves.
- When respondents of the 51 percent of the land parcels which do not have updated records, were asked about how and why the textual records remained un-updated, several reasons were identified. 23 percent of the respondents lacked awareness about the mutation process and its need. While 35 percent of the respondents had their mutation pending for a long time, they simultaneously mentioned the process being expensive or tedious and time consuming. A considerable 33 percent of the respondents stated that updation status didn't matter as the land is within the family and is being managed peacefully amongst them. The remaining respondents were willing to apply in coming times or had applied but the application process was pending.

#### Updation and accuracy of spatial records

- In Bihar, the spatial records being detached from the textual records, they are rarely updated and still reflect data which is decades old. This makes it difficult to estimate how many RoRs have updated spatial records because the state by itself does not update spatial records.
- In view of this, the following findings are made in a limited context of joint or divided land holdings, without comparing to the actual cadastral map status:
  - Approximately 28 percent of the RoRs have a joint cultivation within family and they don't require a spatial division.
  - 18 percent of the respondents have mutual understanding amongst the family regarding spatial division. People often divide the parcel of land among themselves and cultivate the land according to their decided areas.

- Discrepancies between the recorded area in the Record of Rights (RoR) and the actual onground measurements can be seen as a prevalent issue. Nearly 11 percent of the total respondents mentioned their issues regarding the area mismatches. Issues like wrongful entries in land records and the lack of diligence in official processes after transaction of land parcels and its subsequent updation were highlighted as concerns.
- After being asked about the attempts on making corrections to the records, out of the 11 percent of the respondents, one-third had applied for correction of the jamabandi entries through the Parimarjan portal provided by the Bihar govt., which wasn't completed after several days and was in process for some duration. While the remaining two-thirds hadn't applied citing several reasons. A respondent was apparently unaware of the discrepancy whereas others mentioned issues of a time-consuming process and late realisation of the mistake in the records. A case of a recent update of record was also seen, but the update was still not reflected in the online records.
- There were several errors other than the area mismatches in the online RoRs. Around 6 percent of RoRs had missing *Khata* and *Khesra* no. or had "0" as an entry; another 5 percent weren't even available online as they weren't digitized till date. In two percent of cases, there were mistakes in the names in the jamabandi.
- One of the respondents reported a critical issue involving the wrongful update of land records, where a sale-purchase transaction for another individual's land was incorrectly attributed to their holdings. This error resulted in discrepancies in the area of land reflected in their records, causing confusion. Even after applying for correction, there haven't been any updates made to the records till date. In some cases, there were name related errors and these issues were resolved over a span ranging from 15 days to 1.5 years.

### **Mutation related aspects**

- A total of 39 percent of the respondents reported having applied for mutation at some point in their lifetime.
- Out of these, in 33 percent mutation cases were regarding sale purchase, and the other 4 percent had applied for inheritance mutation. This highlights that most mutation requests were primarily driven by property transfers, and people do not perceive updating property ownership records through inheritance mutation as a critical or necessary process. The remaining 2 percent of respondents reported having unresolved cases related to mutation applications.

#### **Land use and Encumbrances**

- In 25 percent cases, the land was being used for non-agricultural purposes as well mainly as self-owned house. Out of these, only 8 percent of cases had non-agricultural landuse marked in the RoR itself.
- Only three percent of land parcels reported having any form of bank loan or mortgage relating to the property. This reflects a significantly lower rate of formal loans, when compared to other states. None of these cases of mortgage had a related entry in the RoR.
- From the discussions during village surveys, it was clear that farmers had a fear of losing their land holdings, if they take a loan from bank against their land. This was not just because of poor repaying capacity, but also unclear (and undocumented) division of land between all the co-owners in a single khesra number. This hints towards a strong link between the poor status of land records, or lack of clarity in land records, and penetration of formal agricultural credit.
- Only one percent cases reported having an ongoing court case regarding the land parcel. The same information was not reflected in the RoR.
- There were multiple instances where there is more than one claimant to a land parcel (especially through registrations or informal transactions not followed by mutation). But these conflicting claims within the family have not yet turned into court cases. Carrying out a survey operation in these circumstances may bring them up.

# 8. Good Practices and Gaps

Section/Theme	Good Practices	Gap					
RECORD OF R	IGHTS						
Computerisation status	<ul> <li>All RoRs have been computerized, totalling 4.32 crores</li> <li>The state provides public access to scanned and digitized land records</li> </ul>	<ul> <li>Use of other paper-based records         (e.g. khatiyaan or rent receipt) has         not been completely discontinued,         and these may be used to make         corrections in the digitised RoR on         a case-by-case basis.</li> <li>Cases of missing online jamabandi         were found in village surveys</li> </ul>					
RoR format	<ul> <li>Both khatian (dejure) and jamabandi (defacto) considered as RoR</li> <li>Land records available for abadi areas and urban areas as well</li> </ul>	Several jamabandis can/do exist in one survey number.					
Accuracy of textual records	Amongst heirs, a (textual) partition is needed so that each heir can have a separate jamabandi with a separate area mentioned among	<ul> <li>Missing or Erroneous entries in records. Khata number or khesar number or area mentioned as zero.</li> <li>In the survey findings, 8 percent of RoRs, the on-ground ownership does not match the position in the online land records; 5 percent cases did not have online records; 6 percent cases of jamabandi were without important details; and 2 percent cases of errors in name.</li> </ul>					
Joint ownership of land parcels	Majority of single-ownership land parcels	In case there is more than one name in the RoR, no shares are mentioned					
Aadhar seeding	39% of jamabandis linked with Aadhaar						
Error correction	People can use the Parimarjan Plus portal and app to apply for any kind of corrections in the jamabandi through online mode only.						

Section/Theme	Good Practices	Gap
Legacy record computerisation	The digitization of legacy land records in the state is in process	No Online Facility for Accessing Digital Khatian Records
Bank integration	The jamabandi database in all the districts is linked with banks for mortgage related details	Linkage with banks had not reached the on-ground conditions effectively.
REGISTRATIO	N	
Registration related services	<ul> <li>100% computerization of DSRs/SROs</li> <li>In E-Nibandhan, Citizen can submit online application for registration, and can undertake online booking of appointment</li> <li>Legacy records are available online; DSR can generate encumbrance certificates</li> <li>Facility to verify eKYC of Aadhaar/PAN during the process.</li> </ul>	No provision to check litigations online for a property scheduled for registration
Integration with Land Records	The E-nibandhan portal is integrated with the list of 'restricted land' (i.e. government land, or properties with a relevant court order) that can prevent from being the land registered through a pop-up notice to the DSR/SRO.	<ul> <li>Registration process is not linked with land records – the E-Nibandhan website does not allow applicants to automatically input RoR details from Bhu-Abhilekh</li> <li>Registration and land records are linked only for suo-moto mutation</li> </ul>
MUTATION		
Auto-trigerred- mutation	In Bihar, only suo-moto mutation is applicable which happens in quite specific conditions (when the seller is the sole owner and has the jamabandi in his/her name and land is being sold to a single buyer only)	<ul> <li>Suo-moto Mutation is still an option; the applicant for registration can opt out if he/she isn't willing to carry out mutation instantly</li> <li>In remaining cases, one has to apply for mutation separately through online portal and can initiate the verification process</li> </ul>

Section/Theme	Good Practices	Gap
Mutation pendency and timeline	The prescribed period for mutation is around a month	Mutations may take up to 3 months for sanctioning
SPATIAL RECO	ORDS	
Digitisation and Updation	100% Maps are scanned and digitised	<ul> <li>34% of cadastral maps georeferenced</li> <li>Spatial Records are not partitioned or updated</li> </ul>
Spatial and Textual record mismatch		<ul> <li>All cadastral maps reportedly linked with Record of Rights, but not at parcel level</li> <li>Many RoRs share one survey number without any documentation of on-ground possession</li> </ul>
Citizen services	Door Step delivery of Maps is available for citizens	
Survey & Settlement	Bihar is currently undergoing a special survey which aims to update land records in all the revenue villages across the state. Maps thus created will be updated through premutation revenue sketch.	
RCCMS		
	<ul> <li>Application process for filing RCMS case is online</li> <li>The court case documents are stored in the court in both electronic and physical manners.</li> </ul>	<ul> <li>The court hearings are held inperson (physically) only</li> <li>The registration software is not linked to RCMS software.</li> </ul>

## 9. Recommendations

Bihar is a state with a history of focusing on socio-political questions around land and its relationship with its citizens, and not on the administrative mechanisms of maintaining an accurate land information system. Now when the state is now trying to make it land management system more digital and efficient, it is facing legacy related challenges.

Overall, the state is taking a two-pronged approach to land record modernisation: the incremental approach, and the transformative approach. Incremental approach includes digitalising all processes and systems, so that the quality of land records is improved gradually, one case after another. The transformative approach includes carrying out a statewide resurvey, so that there is an *enmasse* updation and correction of land records.

The state needs to continue both the approaches, including:

- a) Expanding the scope of auto-triggered mutations to those parcels with more than one buyer or seller.
- b) Ensuring citizens have an option to input seller related information from land records database, while keeping the over-riding option open in the meanwhile
- c) Introduce mechanisms for district wise regular review of quality of land records, and drawing up targeted action plans for improvement. Incentives should be created for accurate assessments, and creation of resolution pathways.
- d) Introduce record-correction drives, with a focus on those jamabandis which have blank entries in khata number, khesra number or area. These can be in conjunction with special surveys.
- e) Continue the special survey such that the new records reflect the on-ground position. Political leadership is critical for this.

### Annexure

## Annexure 1: RoR-map linkage, and Land Parcel Maps

Figure 17: Screenshot of BhuNaksha showing extent of information link with RoR

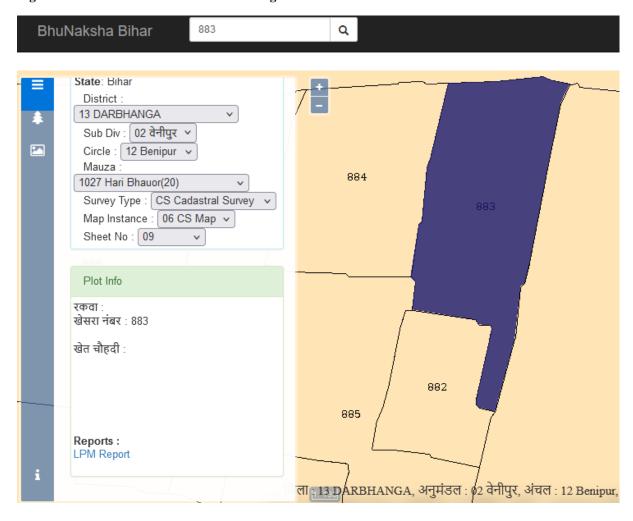
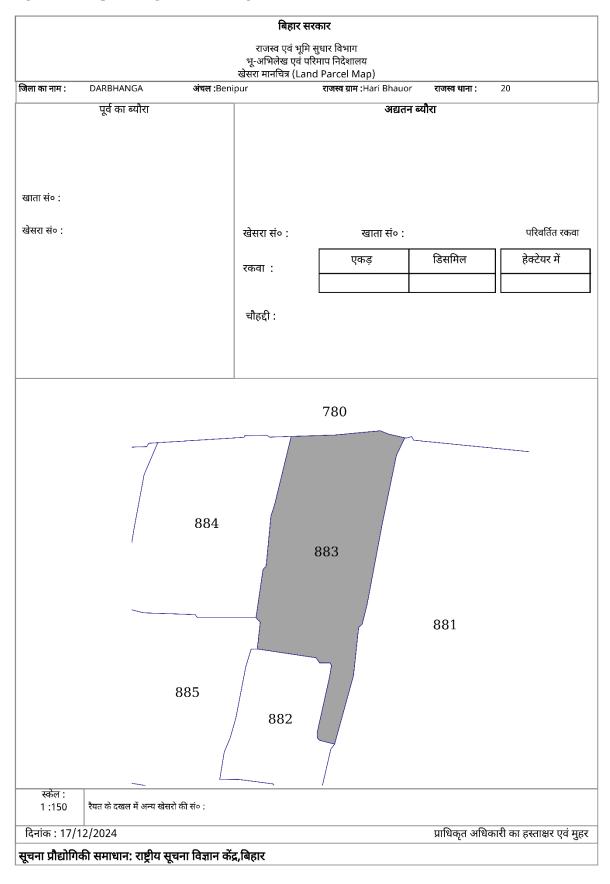


Figure 18: Sample LPM generated through BhuNaksha, but without critical RoR details



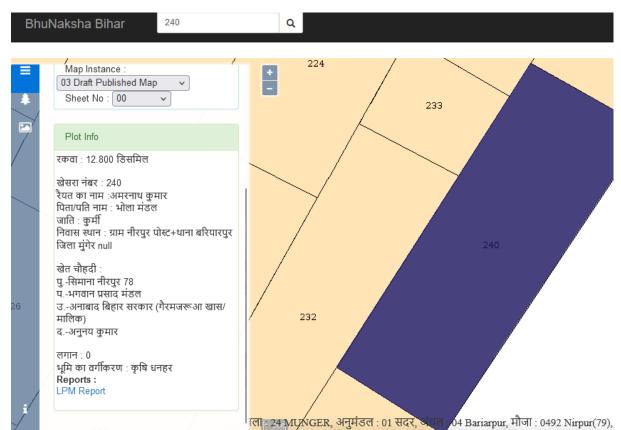


Figure 19: BhuNaksha details after (draft) Special Survey map with RoR linkage

Figure 20: Sample LPM after Special Survey (draft publication) with all details

