Evaluation of Quality of Land Records in Union Territory of Dadra and Nagar Haveli, Daman and Diu

"An assessment of Digital India Land Records Modernisation Programme (DILRMP)" of DoLR, MoRD, GoI

Report Submitted to

Department of Land Resources (DoLR)
Mistry of Rural Development (MoRD)
Government of India (GoI),

Study by

Dr. N.S.R.Prasad Dr. P. Kesava Rao



Centre for Geo-informatics Applications in Rural Development
National Institute of Rural Development & Panchayati Raj (NIRDPR)
Ministry of Rural Development (MoRD)
Government of India (GoI), Rajendranagar, Hyderabad-500030

Summary Report Evaluation of Quality of land records Union Territory of Dadra and Nagar Haveli, Daman and Diu

1. Methodology

As per the ToR of DoLR MoRD, study importantly focuses on two key activities for the evaluation study

- 1. Assessing the computerization of Land Records (**CLR**) in terms of progress across digitization of textual records, digitization of spatial records, and computerization of the registration process, integration between these three components, training and capacity building and Web Enabled Land Records. Study team collected the required secondary information as per Questionnaire Part-I, which is already available with NIC/State Government (as provided in ToR).
- 2. Assessing the status of Real time mirror (RTM) in select villages to test the efficacy of real time integrated updating of textual and spatial records and the registration process. The study team covered all land parcels from each of the two selected villages from two different districts of the Dadra & Nagar Haveli, Daman and Diu UT to conduct the beneficiary survey (as per ToR Questionnaire Part-II) for the all the parcels and prepared the report for Diu, Daman, Dadra and Nagar Haveli UT.

1.1 Approach adopted

The exercise will involve four stages: (a) Collection of complete required secondary data from concerned states and districts offices (b) Pre survey stage of finalizing the questionnaire, selection of interviewers and training of interviewers. (c) The field survey may be a set of independent investigators equally adopt in carrying out surveys. (d) Post survey actions like designing analytical frameworks and drafting the report.

Initial discussions with Daman, Dadra and Nagar Haveli UT survey and land records department
officials (Nodal Agency) – study team met with officials from the Daman, Dadra and Nagar
Haveli UT survey and land records department officials at all levels, from state to the field level,
as well as all associated officials.

2. For the required secondary data collection, demonstrated questionnaire – I (Module I-V) and was used. For the beneficiary survey interviews, we used the pre-designed questionnaires provided by DoLR, MoRD. as provided in ToR.

The beneficiary survey interviews, entire data collection has been completed through electronic data collection process, i.e., both the questionnaires are entered in **Epicollect5** data collection software and complete data is collected through smart phones.

Questionnaire design

- Study used the DoLR pre-designed questionnaires for the evaluation of the Quality of Land Records
- Data collected through Epicollect5

1.2 Sample size and sample selection process, tools used: field study/ questionnaire, primary and secondary data.

UT Level: Relevant information on land record management system has been collected from the Revenue and Registration Departments on below five parameters

- i. Computerisation of Land Records (RoR)
- ii. Digitization of Cadastral Maps/FMBs
- iii. Linkage of RoR with Cadastral maps
- iv. Computerisation of Registration
- v. Integration of Registration (SRO) with Land Records (Revenue Office) and
- vi. Modern Record Room

This section does not allow for any sample-based study.

As per the ToR, the Evaluation of Quality of Land Records in the Union Territory of Diu, Daman, Dadra and Nagar Haveli, selected two districts namely Daman and Dadra & Nagar Haveli districts for study purpose.

- The study level of analysis is UT only.
- The study covered (a) total of selected two districts from the UT
- From each selected district, one revenue village was selected based on random sampling procedure.
- From each selected 'village', available all RoR and Sub parcel have been covered.
- On the whole, at the state level, a total of 537 beneficiaries were interviewed.

Village level: Selection of the Villages - To understand the quality of land records at the ground level, two villages (Kilavani Village in Dadra & Nagar Haveli district and Dunetha Village in Daman district) have been selected in Dadra Nagar Haveli, Diu & Daman. The selection process is based on the recommendation of the respective state government department. Attempts have been made to capture necessary details through 100% coverage of land parcels in each of the two villages.

Kilvani Village: Kilvani Village is located in Dadra & Nagar Haveli district. There are 307 private land parcels in kilvani village, and the enumeration survey covers 307 (100%) land parcels.

Dunetha village: is located in the peri-urban areas adjacent to Daman city in Daman district which is also the district as well Union territory headquarter. The Dunetha village is relatively big mostley in urban nature. The enumeration survey is restricted to agricultural lands and 230 land parcels have been covered.

As per the above table 1.1, from the Union Territory of Dadra and Nagar Haveli, Daman and Diu total of 537 RoRs beneficiaries were interacted by covering 218 Land parcels and 537 sub parcels.

Table 1.1: List of selected districts for study

SI. No	Selected District	Selected Village	Total covered RoRS	Land Parcels	Sub Land Parcel
1	DNH	Kilvani	307	103	307
2	Daman	Dunetha	230	115	230
	То	tal	537	218	537

Study Area

Dadra and Nagar Haveli:

The area of Dadra Nagar Haveli spread over 491.00 sq.kms landlocked between Gujarat in North and Maharashtra in South was liberated from Portuguese Rulers by people themselves on 2nd August 1954. Dadra Nagar Haveli Situated between the boundaries of Valsad district of Gujarat on the north and west on the one hand, and Thane district of Maharashtra on its south and east on the other, the union territory of Dadra and Nagar Haveli is a tiny pocket admeasuring about 491 sq.km. in area and consisting of two distinct land blocks, viz., Dadra and Nagar Haveli interceded by the territory of Gujarat. The territory originally consisted of 72 villages and is presently reduced to 68 villages because of submergence of four villages in the Daman Ganga Project. The total population of the territory as per

the 1991 census is around one lakh and thirty thousand, out of which about 75 per cent are tribal, consisting of Dhodia, Konkana and Warlis. Silvassa is the central town which is linked with rail to the township of Vapi in Gujarat at a distance of about 20 kms from Silvassa towards the west. Daman, a coastal town and head quarter of the union territory of Daman and Diu, is located at about a distance of 10 km from Vapi towards the west. Silvassa is thus placed at a distance of about 30 kms from Daman and is interceded by the territory of Gujarat in between. At the end of the Portuguese rule in 1954, the tribal population of the territory was around 95 per cent.

Daman and Diu:

Daman and Diu was a union territory in north-western India. With an area of 112 km2, it was the smallest administrative subdivision of India on the mainland. The territory comprised two districts, Daman and Diu island, geographically separated by the Gulf of Khambat. The state of Gujarat and the Arabian Sea bordered the territory. A Portuguese colony since the 1500s, the territories were taken by India with the Annexation of Goa in 1961. Daman and Diu were administered as part of the union territory of Goa, Daman and Diu between 1961 and 1987. After the Goa Opinion Poll, they became a separate union territory. In 2019, legislation was passed to merge the union territory of Daman and Diu with its neighbouring union territory, Dadra and Nagar Haveli, to form the new union territory of Dadra and Nagar Haveli and Daman and Diu with effect from 26 January 2020.

Daman is a city and the administrative capital of the Indian territory of Dadra and Nagar Haveli and Daman and Diu. It is a municipal council situated in the Daman district of the union territory.

The Daman Ganga River divides Daman into: Nani-Daman (Little Daman) and Moti-Daman (Big Daman). Despite its name, Nani-Daman is the larger of the two parts, while the old city is mainly in Moti-Daman. This holds most of the important entities, like the major hospitals, supermarkets, and major residential areas. Vapi, Gujarat, is the nearest city to Daman.

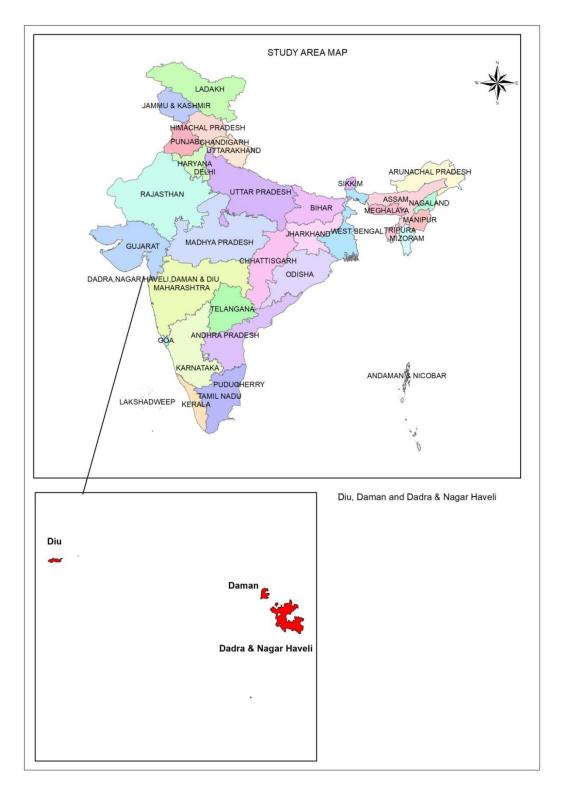
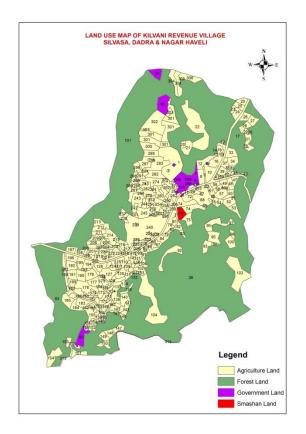
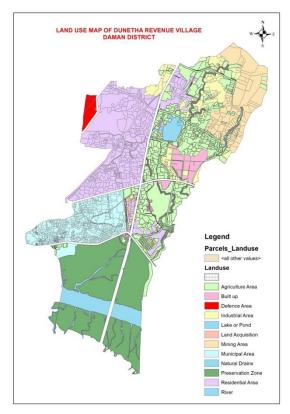


Fig 1: Study Area Map

Fig 2: Revenue Village Maps





Kilvani Village

Dunetha Village

2. Objective of the Study

The evaluation study will assess the extent of the Digital India Land Records Modernisation Programme (DILRMP) of Department of Land Resources (DoLR), MoRD, GoI implemented by the Survey & Land Records department of Dadra & Nagar Haveli, Daman and Diu. This will be done by considering and collecting the field based real time experiences of all the stakeholders on the quality of land records services offered by the land records department the evaluation of the quality of Land Records in the Union Territory of Dadra & Nagar Haveli, Daman and Diu by the study will cover the following key objectives

- ❖ To verify the extent of saturation of basic components of the DoLR programme like
 - (i) Computerisation of record of rights;
 - (ii) Digitisation of cadastral maps;
 - (iii) Integration of record of rights (textual) and cadastral maps (spatial).
- To verify and validate the extent of quality of computerization /digitization of land records in terms of the following six components:
 - i. Computerisation of Land Records (RoR)
 - ii. Digitization of Cadastral Maps/FMBs
 - iii. Linkage of RoR with Cadastral maps
 - iv. Computerisation of Registration
 - v. Integration of Registration (SRO) with Land Records (Revenue Office) and
 - vi. Modern Record Room
 - vii. To prepare a state-wise gap analysis in term of reported achievements and desired outcomes of the program

2.1 Performance of the scheme based on the Output/Outcome indicators

SI.	Output / Outcome Indicators	No.	Achievement	Remarks
No			(%)	
1	Number of villages where RoRs computerized	97	100	https://dilrmp.gov.in/
2	Number of RoRs linked with Aadhaar	Nil	Nil	https://dilrmp.gov.in/ Aadhaar seeding work is in progress
3	Number of cadastral maps digitised	2,271	100	Map Sheets
4	Number of Tippans / FMBs digitized	71,872	100	
5	Number of villages where cadastral maps/ FMBs/ Tippans are linked with RoR	35	36	
6	Number of geo-referenced land parcels	67,371	72	
7	Number of Land Parcels assigned ULPIN	67,371	72	

SI. No	Output / Outcome Indicators	No.	Achievement (%)	Remarks
8	Number of Districts in which sub- division of land parcels is as per current ownership	1	33	Only in DNH
9	Number of districts where legally valid digitally signed RoR available online for download by citizens	3	100	All Districts
10	Number of districts where Registration process is completely online and paperless	3	100	All Districts

2.2 Additional parameters

The parameters mentioned below are beyond the scope of this study:

- a) Implementation mechanism
- b) Training / Capacity Building of administrators / Facilitators
- c) IEC activities
- d) Asset/Service creation & its maintenance plan
- e) Benefits (individual, community)
- f) Convergence with scheme of own Ministry / Department or of other Ministry / Department

2.3 Gaps in achievement of outcomes

Although the study noted several gaps in the implementation of DILRMP at the state-level, in this section only those gaps have been identified that matches with the output/outcome indicators mentioned above. Other gaps have been discussed in details in the section key bottlenecks and challenges.

The gaps noted in achieving the output/outcomes are:

- Although **cent** percent RoR's are digitised, a large number of RoRs are yet to be linked with Aadhar cards, which needs to be taken up by the state government on a priority basis.
- Less numbers of villages where cadastral maps/ FMBs/ Tippans are linked with RoR.
- A significant gap is noticed in the Re-survey work in Daman and Diu districts.
- Geo-referencing of cadastral maps is limited to Dadra Nagar Haveli District.
- Linkage between RoR database and cadastral maps in the UT.
- Sub-division of land parcels as per current ownership is limited to Dadra Nagar Haveli District.

- Generation of Unique Land Identification Number (ULPIN) is limited to Dadra Nagar Haveli District.
- Only 50% of SRO's have established Modern records Rooms.
- Integration of Registration System with Land Records is pending Diu district.
- Completely absent Online and Paperless Revenue Court Case Management System (RCCMS)

2.4 Key Bottlenecks & Challenges

While digitising land records has brought many benefits, the process has encountered several challenges along the way:

A. The Record of Rights (RoRs)

- Currently, RoRs do not include details on the specific share of each landholder in cases where multiple holders are listed
- Currently, RoRs are not linked with Aadhaar numbers and mobile numbers of landholders.

B. Cadastral Maps

- The last survey was conducted in Dadra Nagar Haveli in 1965 and in Daman and Diu 1976.
 The last Re-Survey work is carried out in Dadra and Nagar Haveli is 2022. Re-survey work is initiated in Daman and Diu, is going to complete by April, 2025.
- The total of 3,234 cadastral map sheets covers a substantial portion of the UT and successfully scanned all the cadastral maps.
- All the cadastral map sheets (2,271) in Dadra Nagar Haveli are geo-referenced and vectorised. However, in Daman and Diu some of the Scanned Maps were converted into Digital Format (Vectorized) and remaining is under process of geo-referencing and vectorisation.
- The number of Land Parcels assigned **ULPIN** is 50,079 out of 73,748. Once Re-survey is completed in Daman and Diu, then they generate the ULPIN for Land Parcels.

C. Registration

- The UT has total of **03** Sub-Registrar Offices (SROs), and all are have been fully computerized. The first Sub-Registrar Office in the UT was computerized in August 2011 and in Diu district January 2021.
- UT is not implementing the NGDRS in Diu and Daman.
- Capturing PAN, Aadhaar, and mobile numbers of each party involved in registration processes.
- Al Nibhrit solution is available to generate personal information about PAN, Aadhaar number and fingerprint impressions on registered pdf deeds. The department has written a letter to the NIC, Silvassa for the specification required by NIC Pune for implementation of Al Nibhrit in online registration portal.

D. Mutation

- In the year 2023-24, a total of 3052 applications for mutation were received by the concerned authorities.
- As in the end of the year 2023-24, there were 158 pending applications for mutation.
- As of now, an **online facility** for requesting mutation is not available.
- Minimum of 45 days is a prescribed period for issue of mutation orders from the date of receipt.

E. Revenue Court Management System.

- The UT has a total of four (4) Revenue Courts, distributed across various regions to handle land and revenue-related disputes.
- All revenue courts in the UT have been computerized to show the status of cases.
- The state does not have an online system for the public to enter case details.
- Court hearings are conducted only in physical mode and court case documents are stored physically.
- The UT is requested to customise the RCMS software, to suit the UT. The Revenue Court
 Management System (RCCMS) software is under preparation by NIC.

2.5 Input Use Efficiency

This section is beyond the scope of this report.

3. Observation and Recommendation

Recommendations are provided in the last section (4.3).

3.1 Thematic Assessment

Observations and findings of the Computerization of Land Records (CLR) in terms of progress across digitization of textual records, digitization of spatial records, computerization of registration process, integration between these three components, training and capacity building, and Webenabled Land Records are explained as follows.

A. The Record of Rights (RoRs)

- 1. The total number of RoRs 1, 47,743 is recorded in the union territory. There are 72 revenue villages in Dadra Nagar Haveli, 23 villages in Daman and 2 villages in Diu districts. All the land records / RoR's are have been successfully cent percent computerized. All RoRs available on web portal (AVANIKA) for view/ download by any citizen.
- 2. The computerization of government-held land records in the state has been successfully implemented. This initiative, often referred to as the digitization of Records of Rights (RoR), enhances transparency, efficiency, and accessibility in land management. The Records of Rights (RoR) for government-held land in the state are now available on a dedicated web portal, accessible to all citizens.
- 3. The UT has created significant land administration systems, and one of its key advancements is the availability of digitally signed Records of Rights (RoR) for download by any registered citizen.
- 4. In a continued effort to enhance transparency, security, and convenience in land record management, the UT has introduced a feature that allows the verification of digitally signed Records of Rights (RoR) through a QR code or unique ID. These downloaded digitally signed RoR is a sole legally valid document in the UT. Technologies have led to significant changes in how records

are maintained and accessed. One of the most significant changes has been the shift from manual record keeping to digital records. The availability of Record of Rights (RoRs) for entire villages to any citizen marks a significant step toward transparency and efficiency in land management.

- 6. Currently, RoRs excluded details on the specific share of each landholder in cases where multiple holders are listed.
- 7. Currently, RoRs are not linked to Aadhaar numbers and or mobile numbers of landholders.
- 8. Phone number linking occurs during new registrations, record updates, and administrative notifications, whereas Aadhaar seeding is typically carried out during land transactions, inheritance processes, and government scheme applications.
- 9. As of now, there is no provision for citizens to apply online to correct their Record of Rights (RoR).
- 10. As of now, The RoR database is linked with Cadastral maps in Dadra Nagar Haveli. The RoR database is not linked with Banks for mortgage. The mortgage details are mentioned / red-flagged in the RoR in second rights of Form 7x12. Once mortgage is released then updated in the RoR.
- 11. The land records of urban and peri-urban areas are also digitized and updated in the RoRs.

 There are 9571 urban RoRs in the Dadra & nagar Haveli UT.
- 12. The gender of land holder is captured in RoR. The total females land holders in UT are 23,636.
- 13. The unit of land measurement used in RoR Ha.-Are-Sq.mt.

B. Cadastral Maps

- 1. The last survey was conducted in Dadra Nagar Haveli in 1965 and in Daman and Diu 1976 using the 1:1000 scale cadastral maps. The last Re-Survey work is carried out in Dadra and Nagar Haveli is 2022. Re-survey work is initiated in Daman and Diu, is going to complete by April, 2025.
- 2. The total of 3,234 cadastral maps covers a substantial portion of the UT and successfully scanned all the cadastral maps.

- 3. All the cadastral maps (2,271) in Dadra Nagar Haveli are geo-referenced and vectorised. However, in Daman and Diu some of the Scanned Maps were converted into Digital Format (Vectorised) and remaining is under process of geo-referencing and vectorisation.
- 4. As of the now, in Daman and Diu there are no land parcels that have been assigned ULPINs, not assigned unique to land parcels, and not made available of online facility for land owners to request surveys for sub-division.
- 5. The number of Land Parcels assigned ULPIN is 50,079 out of 73,748. The average land holders per survey number are 6. Once Re-survey is completed in Daman and Diu, then they generate the ULPIN for Land Parcels.
- 6. As a practice, the subdivisions are updated in the cadastral map. There is no online facility available for land owners to request survey of their land parcel for sub- division.

C. Registration

- 1. The UT has total of **03** Sub-Registrar Offices (SROs), and these offices are strategically located across the UT to provide accessible services to citizens. As of now all 03 Sub-Registrar Offices (SROs) in the state have been fully computerized. The first Sub-Registrar Office in the UT was computerized in August 2011 and in Diu district January 2021.
- 2. In the financial year 2023-24, a total no. of **676** number of land properties registered in DNH and **498** in Daman. All Sub-Registrar Offices are integrated with the Revenue Offices, and the Land Record database represents a significant achievement in the state's efforts to modernize its land administration system. The online facility for booking appointment slots allows individuals to reserve time for their property registration at their convenience.
- 3. The details are captured during online system for appointment slot booking are Properties details, Parties details, Witness details, Stamp Duty and Registration Fees.
- 4. In the state, government land is subject to specific regulations to prevent unauthorized transactions and ensure proper management. A key mechanism for managing government land is the process of blocking or red-flagging these properties in the registration system.
- 5. Property valuation rates such as **Circle Rates, Ready Reckoner Rates, Guideline Values, and Collector Rates** play a critical role in property transactions, influencing stamp duty and registration

fees. These rates are made available to the public through web portal of the Directorate of Survey and Land Records.

- 6. Online e-stamp facility (Online Stamp Duty Calculator) for application fees, including stamp duty and registration fees and advancement in the property registration process. By enabling digital payments the UT has improved the convenience, efficiency, and transparency of fee transactions.
- 7. A party/ owner names and area details can be downloaded as proof of checking from Land Records (RoR) before registration. There is a SOP with mandated in Rules. Thirty year's registration deeds are searched by SRO before registration.
- 8. Capturing PAN, Aadhaar, and mobile numbers of each party involved in registration processes.
- 9. As of now, the online PAN verification system is not yet fully integrated for registrations as it involves higher costs and the facility of eKYC to verify for Aadhaar and PAN during the admission of parties is not available.
- 10. As of now, the practice of capturing party signatures using a digital pen and a pad has not been implemented.
- 11. As of now, the facility to upload identification documents is not available in the registration process, and Sub-Registrar Offices (SRO) is not able to complete the registration process online.
- 12. Currently, not every registration automatically triggers a corresponding digital mutation in the Records of Rights (RoR).
- 13. Home visit module is not available for SRO's in the UT. SRO has no facility to generate encumbrance certificate through online. SRO can access legacy data as a ready reference in DNH and Daman only.
- 14. Currently, Sub-Registrar Offices (SRO) Dadra and Nagar Haveli has a dedicated mechanism to automatically trigger a corresponding digital mutation in the RoR. SRO can push pending data of mutation in case of any network failure in DNH only.
- 15. As of now, there is no online registration system available for citizens that employ eKYC for the first sale, lease, and license agreements.

- 16. Al Nibhrit solution is available to generate personal information about PAN, Aadhaar number and fingerprint impressions on registered pdf deeds. The department has written a letter to the NIC, Silvassa for the specification required by NIC Pune for implementation of Al Nibhrit in online registration portal.
- 17. An online grievance redressal system for filing complaints related to property registration at Sub-Registrar Offices is not yet available and is under development.
- 18. No mobile app has been developed for land registration related services

D. Mutation

- 1. In the year **2023-24**, a **total of 3052** applications for mutation were received by the concerned authorities.
- 2. As in the end of the year 2023-24, there were **158** pending applications for mutation.
- 3. As of now, an online facility for requesting mutation is not available.
- 4. An auto trigger mutation facility is not available in the UT.
- 5. Minimum of 45 days is a prescribed period for issue of mutation orders from the date of receipt. The updated RoRs are immediately given effect after verification of Mamlatdar in Form no. 6.
- 6. As of now there is no online facility available for submitting objections related to property administration. Also no SMS alert sent to applicant at each stage in mutation process for his information.
- 7. As of now, certified copies of mutation orders are not sent to applicants via email, WhatsApp, or made available for download from the RCMS website.
- 8. There are no mutations cases are pending in the UT, where mutation orders have been passed but certified copy is not yet sent to the applicant.
- 9. In case of allotment of Government land to Government Departments for public purpose, the mutation is carried out without inviting objection.

E. Revenue Court Management System.

The UT has a total of **four** (4) Revenue Courts, distributed across various regions to handle land and revenue-related disputes. All revenue Courts in the UT have not been computerized. Court hearings are conducted only in physical mode. Court case documents are stored physically.

The UT is requested to customize the RCMS software, to suit the UT. The Revenue Court Management System (RCCMS) software is under preparation by NIC. After that the Integration of RCCMS with Land Records will be available in the Dadra & Nagar Haveli, Daman and Diu UT.

F. REAL TIME MIRROR (RTM)

The study team assessed the RTM Status with field validation and discovered whether spatial and textual records are updated, at the time of transaction, succession, and/or sub-division at the land parcel level, in real time by covering the following key components like updation and real-time status of textual and spatial records on the ground, through interviews with land owners, tenants, and any other Institutions involved.

The key observations findings of Real Time Mirror (RTM) of six important components are as follows.

A. Differences between spatial records and textual records

- 1. The difference in extent of land parcels between land records and land parcels was expressed by more than two-third (15.5%) and the rest said that there was no such difference found.
- 2. With regard to differences between spatial records and the textual records, especially in terms of updating of partition and demarcation actions, a total of 100% reported that no difference was found in either RoR or spatial records in Dadra and Nagar Haveli.

Demarcation of spatial records will be done after the request letter from the land owner. The city survey department will initiate the survey and demarcate the land parcel.

B. Differences between on-ground status and land records status in terms of ownership details

1. UT as a whole, 100 percent reported that they did not find the RoR format able to capture non-agricultural land uses in detail (e.g. in-built up areas, ownership of flats or individual floors). But officials told this information can be mentioned in column in other rights or remarks column. None of the records shows the non-agricultural land uses in details.

But department says these details can mentioned in the remarks column in Form 1 & XIV in Daman and Diu and in other rights column in Dadra Nagar Haveli Form 7 & 12.

- 2. More than 81% of respondents reported that on-ground ownership details, including any built-up area on the land parcel, coincide with the details in the land record, especially in the context of shared ownership.
- 3. Around one fourth (19%) reported that records are not up-to-date with regard to on-ground ownership details, including any built-up area on the land parcel, coinciding with the details in land records, especially in the context of shared ownership or multiple owners. The Talathi has to update the land use details yearly once. On ground it is not happening.

C. Differences between the on-ground land use and the one stated in ROR?

- 1. On the whole, more than 92% of respondents reported that there is no any discrepancy between On-Ground Land Use and Record of Rights (RoR) while the rest reported that there are some discrepancies between On-Ground Land Use and Record of Rights (RoR).
- 2. Regarding the effectiveness of the ROR format in capturing non-agricultural land uses in detail, only 4% of respondents reported that RoR is capturing the non-agricultural land uses while the rest stated that it is RoR is not capturing the non-agricultural land use.

D. Difference between the on-ground location and that marked in the revenue maps

- 1. More than 98% reported that they didn't find any discrepancies between On-Ground Locations and Revenue Map Markings.
- 2. Similarly, 86% reported that they didn't find any differences in Area between On-Ground Situation, Spatial Records on Paper, and Records of Rights (RoR).

- 3. Around 14% of respondents reported that there are differences in Area between On-Ground Situation, Spatial Records on Paper, and Records of Rights (RoR) due to no land survey taken place since 1976 in Daman and Diu area.
- 4. Around 100% of respondents reported that, on-ground partition and demarcation proceedings have been not incorporated in textual and spatial records.

E. Differences between on-ground status and land records status, in terms of Encumbrances on parcel

Almost all respondents reported (99%) that they didn't find any differences between on-ground status and land records status, in terms of Encumbrances on parcel. Only few respondents from Daman districts reported various encumbrances' issues like court cases, litigation and issue of RoR not updating. The Dadra Nagar Haveli district exhibits no reported encumbrances, while whereas Daman has minimal instances of court issues, litigation, and properties requiring updates.

3.2 Externalities

Since Dadra & Nagar Haveli, Diu and Daman has modestly computerized its processes and digitized its RoR's and cadastral maps, the felt externalities include:

- Reduction in land-related fraud in Dadra and Nagar Haveli;
- Enhanced trust in land-related administration;
- Improved credit access owing to clarity in land titles in Dadra and Nagar Haveli;
- Improved land use regulation;
- Increased dependence on digital systems
- Technical issues/ system failures may disrupt transactions/ governance processes.

4. Conclusion

4.1 Issues & Challenges

Already discussed above in the section on key Bottlenecks & Challenges

4.2 Vision for the future

The vision for the future is to streamline the land record management system further in the UT. This can be done by filling up the gaps highlighted as major limitations. Further, the state may also look at the good practices adopted by other states for improving performance under DILRMP.

4.3 Recommendations for scheme with reasons

Based on the findings of the study, a few additional recommendations are being added for the betterment and effective reach out of the programme as follows.

- In Dadra Nagar Haveli & Diu and Daman all cadstral Maps / Tippons / FMB's have been converted into Digital Format . However, geo-referencing the cadastral maps and the integration of spatial data with RoR are pending in Daman and Diu districts and there is a need to be completed at the earliest.
- Re-survey work is completed recently (2022) in Dadra & Nagar Haveli. Need to complete resurvey work in Daman and Diu also.
- Linking of cadastral maps with RoR's need to be taken up with priority in Diu and Daman.
- Once re-survey work is completed in the UT, they may utilize the BhuNaksha software for on ground sub – divisions (Demarcations) and for generation of ULPIN (Bhu-Aadhar).
- All SRO's are computerized and need to be paper less.
- The existing 3 Sub-Registrar Offices (SROs) in the UT have been fully computerized and are using different systems like NGDRS (Dadra Nagar Haveli) and Diu and Daman (SUGAM). We recommend need to have a single software solution for entire UT.
- Online facility for requesting mutation is available; auto triggering of mutation needs to be made available.
- Implementation of Revenue Court Management System (RCMS) and integration of Land records is very much needed for this UT.
- The Real Time Mirror (RTM) findings with field (few respondents) validation varied only in case of extent of land parcels difference between land records and on ground; with regard to updating of partition and demarcation actions and records are not up-to-date with regard to onground ownership details especially in Daman and Diu, which needs to be addressed immediately.

- DoLR may extend required support and directions in association with NIC to implement NGDRS by resolving gaps identified.
- Need to immediately ground the proposed Resurvey work in Daman & Diu using modern survey technology. This will transform the present land records into a GIS enabled Geo-referenced land records platform. This will transform the present land records into a GIS enabled Geo-referenced land records platform that will act as base layer for the integration of textual and spatial data from other line departments such as Registration, Town and Country Planning, Local Bodies, Electricity, PWD, Banks, Civil Courts etc.
- Upon successful completion of Survey/Resurvey work, it will enable citizens to have seamless
 access to land records and improve the efficiency of services. This will contribute to the
 development of a comprehensive integrated land information management system which will
 be the main driving force for the development of infrastructure and economic growth in UT.

General Recommendations for the scheme:

- Integration of Land Records: Develop a unified platform linking land records with property registration, tax payments, and government subsidies for seamless access to land-related services.
- **Updation of Records:** Ensure accurate and up-to-date land records through routine audits and technology-driven mapping with drones and satellite imagery.
- Involve local communities in surveying and updating land records through community based initiatives where residents contribute to verifying land boundaries and ownership, ensuring accuracy and reducing disputes.
- Dispute Resolution Mechanisms: Land and property matters make up about two-thirds of all
 civil cases in India. Address land disputes efficiently and transparently by establishing dedicated
 online platforms where affected parties can submit grievances and track their resolution
 process.

 Policy Framework: Develop a comprehensive policy framework that supports the integration of technology in land management, ensuring alignment with local needs and national goals. Focus on user experience in the design of digital platforms, ensuring they are intuitive and accessible to all demographics, including women and marginalized communities.

Public-Private Partnerships (PPP): Encourage collaboration between government agencies and
private tech companies to leverage expertise in technology development and implementation.
 Partner with non-governmental organizations that focus on rural development to assist in
outreach and education efforts regarding land digitization.

Research and Development: More investment in R&D to explore innovative technologies that
can enhance the reliability and transparency of land records. Conduct trainings, workshops for
government officials and land record officers to ensure effective proficiency in using digital tools
and technologies.

5. References

- DILRMP guidelines, Technical manuals and Management Information System, 2021-26.
- The Dadra and Nagar Haveli land Reforms regulation, 1971.
- DILRMP web portal URL: https://dilrmp.gov.in/

6. Appendices

Field Photos:



Interacting with Mamlatdar at Silvasa



Planning exercise at Dunetha Village, Daman





Enumerators collecting the RTM data at Kilvani village DNH









Enumerator collecting the RTM data at Dunetha village, Daman

ANNEXURE -I: PART -I (MODULE I-V)

Dadra & Nagar Haveli District

S.No.	Parameter and Indicators	
Module	Record of Rights (RoRs)	
I		
1.	Total number of Land Parcels	73748
2.	Total number of RoRs in the State	73748
3.	No. of RoRs computerized	73748
4.	What are the other documents/ registers maintained by the Revenue authorities in the State related to RoR such as Jamabandi Register etc.	Form no. 6, Form no. 8 and Form no. 7x12
5.	A brief process flow of who maintains, what and when entries are made in these documents/ registers to be provided	1. An application for mutation in Record of Rights is received by the Talathi. 2. Talathi then verifies the documents and record statement, panchnama, etc. 3. Talathi also verifies if the land in question is under any litigation or if there is any objection against the same. (a) If there is any objection, then Talathi submit its report to the Mamlatdar. (b) Mamlatdar then calls the interested persons for the

		hearing.
		(c) If objection
		sustain then
		necessary
		directions are
		issued to the
		concerned
		parties and
		mutation is not
		processed.
		(d) If objection
		does not
		sustain then
		order is passed
		to the Talathi
		to proceed
		with the
		Mutation.
		4. If there is no
		objection then
		Talathi makes
		kaccha (pencil)
		entry in Mutation
		Register i.e. Form
		no. 6 and issue
		Notice u/s 143 of
		the Regulation to
		all interested
		parties inviting
		objections within
		15 days.
		5. The said entry is
		then verified by
		the Circle Officer
		after completion
		of 15 days and
		verified by the
		Mamlatdar.
		6. On verification,
		the Talathi makes
		the pacca entry in
		Record of Rights
		and give effect in
		Form no. 8 &
		7x12 which is
		online.
6.	Is RoR of Govt. held land computerized in the State	Yes (Form no. 8 &

		7x12)
7.	Is RoR available on web portal for view/ download by any citizen	Yes (Form no. 8 & 7x12)
8.	Is digitally signed RoR available for download by any citizen	Yes (Form no. 8 & 7x12)
9.	Is digitally signed RoR a legally valid document in the State	Yes (Form no. 8 & 7x12)
10.	Is digitally signed RoR verifiable through a QR code/unique ID	Yes with Unique ID (Form no. 8 & 7x12)
11.	Have manual records been discontinued so that digital records are the sole legal record?	Yes (Form no. 8 & 7x12)
12.	Is list of all RoRs of entire village available for view/download by any citizen	Yes (Form no. 8 & 7x12)
13.	Total Khata numbers in the State	72860
14.	Average number of land holders in each RoR	4
15.	Number of single land holder RoRs	26928
16.	Number of pending applications for including names in RoRs	32
17.	Where more than one land holder is mentioned in RoR, is share of each holder mentioned in RoR?	No
18.	Details regarding in what format and in which column share of each holder is mentioned to be elaborated	NA
19.	Where more than one land holder is mentioned in RoR, is sub-division of plot also done? (Details of process followed may be briefly mentioned)	NA
20.	Is RoR seeded with Aadhaar	No
21.	If yes, number of RoRs seeded with Aadhaar	NA
22.	Is RoR seeded with mobile number of land holder	NA
23.	If yes, number of RoRs seeded with mobile	NA
24.	On what occasion phone number and Aadhaar are seeded?	NA
25.	Is an alert message sent to the registered mobile number in case of any change in that RoR / mutation?	NA

26.	Is there a provision for citizen to apply online for correction of their RoR	No
27.	Total number of RoRs corrected in the last financial year (April 2023-March 2024)	183
28.	Is RoR database linked with Cadastral maps	Yes
29.	If yes, Number of RoRs linked with Cadastral maps	Yes
30.	Is RoR database linked with Banks for mortgage	No
31.	If yes, number of districts where it is linked	NA
32.	Also, number of banks and bank branches which are linked	NA
33.	Number of banks and bank branches which are not linked	NA
34.	Is mortgage mentioned/ red-flagged in the RoR	Yes, in second rights of Form 7x12.
35.	Process flow followed for mention/ red-flag in RoR to be provided	1. Upon application, the Talathi verifies the necessary documents required for Mutating mortgage in Record of Rights. 7. Once all the necessary documents are submitted by the applicant, the Talathi verifies if the land in question is under any litigation or if there is any objection against the same. (e) If there is any objection, then Talathi submit its report to the Mamlatdar.

- (f) Mamlatdar then calls the interested persons for the hearing.
- (g) If objection sustain then necessary directions are issued to the concerned parties and mutation is not processed.
- (h) If objection does not sustain then order is passed to the Talathi to proceed with the Mutation.
- 2. If there is no objection then makes kaccha (pencil) entry in Mutation Register i.e. Form no. 6 and issue Notice u/s 143 of the Regulation to all interested parties inviting objections within 15 days.
- 3. The said entry is then verified by the Circle Officer after completion of 15 days and verified by the Mamlatdar.
- 4. On verification, the Talathi makes the pacca entry in Record of Rights and give effect in Form no. 8 &

		7x12 which is online.
36.	Number of RoRs with mention/ red-flag of mortgage (as on date)	7345
37.	Is mortgage release updated in the RoR	Yes.
38.	Process flow followed for mention of release of mortgage in RoR to be provided	Same as point no. 35 above.
39.	Is online transliteration facility available for RoRs	NA
40.	Number of columns in RoRs; what details are prescribed to be captured in RoRs; What details are actually captured and not captured in practice?	39
41.	Is gender of land holder captured in RoR? If yes, how many females are land holders?	Yes, 23636
42.	What is the unit of land measurement used in RoR? What is its conversion in acres?	HaAre-Sq.mt
43.	Is land record of urban and peri-urban areas also digitized and updated?	Yes
44.	If yes, how many urban RoRs are there and which entity maintains it?	Yes, 9571, the updation is done by the Talathi and the database is maintained by NIC.
45.	Describe terms used in RORs and Maps along with English /Hindi standard terms in tabular form.	Copy of Form 7x12 in English/Gujarati is attached.

S.No	Module II : Cadastral Maps	
1.	Year when Survey was last done in the State	First Survey in 1965 and Last survey in 2022
2.	Scale of available cadastral maps	01:10 (1 cm = 10 mtrs)
3.	Total no. of Cadastral Maps	2271
4.	Total number of maps scanned	2271
5.	Total scanned maps converted into digital format (vectorized)	2271 (100%)
6.	Total no. of cadastral maps Geo-referenced	1104 (48.61%)

7.	Number of Land Parcels Geo-referenced	
8.	Number of Land Parcels assigned ULPIN	50079
9.	Whether any other unique ID assigned (Is unique ID a random number or does the ID has some logical basis? If logical, details of the same	Yes
10.	Is online facility available for land owners to request survey of their land parcel for sub- division	No
11.	Brief description of process flow from receipt of request to updation of sub-division including time taken (average days)	Agriculture land: Application Received → Site visit by Surveyor → Map prepared by Surveyor → Personal Hearing → Order Issuance. Time: Around 15 days N.A. land: Application Received → Site visit by Surveyor → Map prepared by Surveyor → Map prepared by Surveyor → Personal Hearing → Proposal recommendation & fees calculation by DNH PDA → Final approval of Collector, DNH → Order Issuance. Time: Around 25 days
12.	Number of online requests pending for sub-division (as on date)	NA
13.	Is subdivisions updated in the cadastral map, as a practice?	Yes
14.	Ratio of Survey number and RORs land holders per ROR	1:6

Mod	ule III. Registration	
1.	Total no. of SROs in the State	01
2.	Number of SROs computerized	01
3.	Month and Year of Computerisation of 1 st SRO in the State	August-2011
4.	Month and Year of computerisation of latest SRO in the State	August-2011
5.	Number of land properties registered in FY 2023-24	676
6.	Number of SROs integrated with Revenue Offices and Land Record database	01
7.	Is there online facility for booking appointment slot for registration	Yes
8.	What information/ details are captured during online system for appointment slot booking	Properties details, Parties details, Witness details, Stamp Duty and Registration Fees
9.	What Property attributes (survey number, door number, plot number, khasra, khewat, khatouni number, etc.) are captured in online system	Survey Number
10.	Whether anywhere registration is allowed in the state	No
11.	Whether sale of Govt Land is blocked/ red-flagged (details of process followed be provided)	No
12.	Whether Circle Rates/ Ready Reckoner Rates/ Guideline values / Collector Rates for lands are available to citizens in the Registration software	Yes
13.	Is Online payment facility available for application fee - Stamp duty, registration fees, etc.	Yes
14.	Is e-Calculator (Online Stamp duty calculator) made available for citizens to compute fees	Yes
15.	Is party/ owner names and area details checked from Land Records (RoR) before registration. Is the copy of RoR downloaded as proof of checking? If not, what process is followed as proof for checking?	Yes

16.	Is this mandated in in Rules, SOP, Manual or just a practice?	SOP
17.	In practice, how many year's registration deeds are searched by SRO before registration?	30 years
18.	Do SRO check seller's ownership document by past record.	Yes
19.	Whether PAN, Aadhaar number, mobile number are captured for each party	Yes
20.	Is online PAN verification system integrated for Registrations involving higher cost	No
21.	Is facility available to verify eKYC of Aadhaar/ PAN during admission of parties	No
22.	Whether party signature is captured using digital pen and pad	No
23.	Whether identification documents upload facility is available	No
24.	Whether SRO is able to complete registration online	Yes
25.	Whether home visit module is available for SRO	No
26.	Whether SRO has facility to generate encumbrance certificate and e-search	No
27.	Whether SRO can access legacy data as a ready reference	Yes
28.	Does every registration trigger a corresponding digital mutation in the RoR	Yes
29.	Whether SRO can push pending data of mutation in case of any network failure	Yes
30.	Whether SRO can check litigations online for a property scheduled for registration	No
31.	Whether SRO is able to trigger SMS for important events during document registration	No

32.	Whether there is an online registration system for citizens available through eKYC for first sale, Leave and License Agreements to facilitate presence less registration anywhere anytime	No
33.	Whether dynamic deed templates are available	Yes
34.	Whether (Al Nibhrit) solution is available for masking personal information of PAN, Aadhaar number and fingerprint impressions on registered pdf deeds	The department has written a letter to the NIC, Silvassa for the specification required by NIC Pune for implementation of AI Nibhrit in online registration portal
35.	From which year is digitised legacy data available	2011
36.	Whether an Online grievance redressal system is available for filing complaints related to property registration at Sub Registrar Office	No
37.	If yes, number of online grievances received and settled during FY 2023-24	NA
38.	Whether a document can be searched based on Name, Property details like survey number, deed number, etc.	Yes
39.	Whether there is a mobile app developed for land registration related services (Yes/No)	No

Module IV. Mutation		
1.	Number of applications received for mutation in FY 2023-24	1591
2.	Number of applications disposed in FY 2023-24	1528
3.	Number of applications pending for mutation	63
4.	Is online facility available for requesting mutation	No
5.	Is auto-trigger mutation facility available in the State	No

6.	What type of transactions are eligible for auto-trigger mutation?	NA
7.	How many such transactions occurred in FY 2023-24 which were eligible for auto-mutation?	NA
8.	Of these, how many mutations were actually completed through auto-trigger	NA
9.	Number of mutations related to sub-division	11
10.	Out of total mutation cases received through Registration how many are for mutation of land with entire Khasra	53
11.	What is the process flow followed in the State for mutation process	1. An application for mutation in Record of Rights is received by the Talathi. 2. Talathi then verifies the documents and record statement, panchnama, etc. 3. Talathi also verifies if the land in question is under any litigation or if there is any objection against the same. (a) If there is any objection, then Talathi submit its report to the Mamlatdar. (b) Mamlatdar then calls the interested persons for

	the hearing.
	(c) If
	objection
	sustain then
	necessary
	directions are
	issued to the
	concerned
	parties and mutation is
	not
	processed.
	(d) If
	objection
	does not
	sustain then
	order is
	passed to the
	Talathi to
	proceed with
	the Mutation.
ļ	4. If there is no
ļ	objection then
	Talathi makes
	kaccha
	(pencil) entry
	in Mutation
	Register i.e.
	Form no. 6
	and issue
	Notice u/s 143
	of the
ļ	Regulation to
ļ	all interested
	parties inviting
	objections
	within 15
	days.
	5. The said entry
	is then verified
ļ	by the Circle
	Officer after
ļ	completion of
ļ	15 days and
	verified by the
	Mamlatdar.
	6. On
	5. On

		verification, the Talathi makes the pacca entry in Record of Rights and give effect in Form no. 8 & 7x12 which is online.
12.	What is the process followed for receiving objections from public?	As mentioned in Point no. 11 above.
13.	Is SMS sent to all mobile number of all villagers?	No
14.	Is there facility for objections to be sent online?	No
15.	What is the prescribed period for issue of mutation orders from the date of receipt and what is actual period in practice	45 days
16.	Is SMS alert sent to applicant at each stage for his information	No
17.	Does Patwari submit his report online	Yes, only for Sale-Deed.
18.	Are certified order copy of the mutation sent to the applicant through email or whatsapp or is it available for download from RCMS website	No
19.	How many cases are pending where mutation orders have been passed but certified copy is not yet sent to the applicant? Average number of days of pendency of such cases?	NIL
20.	Is Cyber Tehsil functional or proposed to be functional in the State. If proposed, what is the stage?	No
21.	Are RoRs updated immediately after issue of mutation orders or does the State follow a different practice and cycle of updation of RoRs? If so, the details of process and cycle followed for updation	Yes, the RoRs are immediately given effect after verification of Mamlatdar in Form no. 6.
22.	In what type of mutation request it is carried out without inviting objection?	Allotment of Government land to Government Departments for public purpose.

Modu	le V. Revenue Court Management System	
1.	Total number of Revenue Courts in the State	04
2.	Number of Revenue Courts computerised	NIL
3.	Number of revenue court cases handled in the computerized system in the last financial year	NA
4.	Number of revenue court cases handled in the manual system in the last financial year	NA
5.	Does State have online system for public to enter case details? What details are captured at data entry stage?	NA
6.	Is online appointment date and time notified to applicant through email/ whatsapp/ website?	NA
7.	Is the court order typed on the RCMS system directly or is separate pdf of the court order uploaded?	NA
8.	Is court order sent to litigants on email/ whatsapp/ posted on website	NA
9.	Are court hearings held online/VC or only in physical mode or hybrid	NA
10	How the court cases documents are stored in the court (electronically/physically)	Physically
11	Is Land Records database linked to RCMS system and can RoR be viewed/ downloaded by Revenue Courts	NA
12	Is Registration software linked to RCMS software enabling pushing of land registration to auto-mutation?	NA
13	Is the fact of a pending revenue court case red-flagged in RoR? What is the system followed in the State for red-flagging and what exact remarks are mentioned on the RoR and in which column?	NA
14	Number of revenue court cases red-flagged in the RoR (as on date)	NA
15	Is Land Records database linked to eCourts system of Civil courts?	NA
16	If yes, how many eCourts are linked with LR database?	NA
17	Is Land Records database linked to eCourts system and can RoR be viewed/ downloaded by Civil Courts	NA
18	Is the fact of a pending civil court case red-flagged in RoR? What is the system followed in the State for red-flagging and what exact remarks are mentioned on the RoR and in which column?	NA
19	Number of civil court cases red-flagged in the RoR (as on date)	NA

ANNEXURE –II: PART –I (MODULE I-V) Daman District

S.No.	Parameter and Indicators	Daman
Module I	Record of Rights (RoRs)	
1.	Total number of Land Parcels	45104
2.	Total number of RoRs in the State	45104
3.	No. of RoRs computerized	45104
4.	What are the other documents/ registers maintained by the Revenue authorities in the State related to RoR such as Jamabandi Register etc.	Form No. 3, Form No. 9, Form No. 5, Khetwar Patrak, Form D
5.	A brief process flow of who maintains, what and when entries are made in these documents/ registers to be provided	 8. An application for mutation in Record of Rights is received by the Talathi. 9. Talathi then verifies the documents and record statement, panchnama, etc. 10. Talathi issued Form No. 10 for if the land in question is under any litigation or if there is any objection against the same. (i) If there is any objection, then Talathi submit its report to the Mamlatdar. (j) Mamlatdar then calls the interested persons for the hearing. (k) If objection sustain then necessary directions are issued to the concerned parties and mutation is not processed. (l) If objection does not sustain then order is passed to the Talathi to proceed with the Mutation. 11. If there is no objection then Talathi makes entry in Mutation Register i.e. Form no. 9 and issue to all interested parties inviting objections

		within 15 days. 12. The said entry is then verified by the Circle Officer after completion of 15 days and verified by the Mamlatdar. On verification, the Talathi makes the entry in Record of Rights and give effect in Form no. 9 & Form No. I & XIV which is online.
6.	Is RoR of Govt. held land computerized in the State	Yes
7.	Is RoR available on web portal for view/ download by any citizen	Yes
8.	Is digitally signed RoR available for download by any citizen	Yes
9.	Is digitally signed RoR a legally valid document in the State	Yes
10.	Is digitally signed RoR verifiable through a QR code/ unique ID	Yes
11.	Have manual records been discontinued so that digital records are the sole legal record?	No
12.	Is list of all RoRs of entire village available for view/ download by any citizen	No
13.	Total Khata numbers in the State	N.A.
14.	Average number of land holders in each RoR	Can not be defined
15.	Number of single land holder RoRs	
16.	Number of pending applications for including names in RoRs	
17.	Where more than one land holder is mentioned in RoR, is share of each holder mentioned in RoR?	Can not be defined
18.	Details regarding in what format and in which column share of each holder is mentioned to be elaborated	Preceding the name of occupant under name of occupant column
19.	Where more than one land holder is mentioned in RoR, is sub-division of plot also done? (Details of process followed may be briefly mentioned)	As per the request

20.	Is RoR seeded with Aadhaar	No (Concern based Adhaar Seeding done during Resurvey)
21.	If yes, number of RoRs seeded with Aadhaar	
22.	Is RoR seeded with mobile number of land holder	No
23.	If yes, number of RoRs seeded with mobile	No (done during Resurvey)
24.	On what occasion phone number and Aadhaar are seeded?	No (Concern based Adhaar Seeding done during Resurvey)
25.	Is an alert message sent to the registered mobile number in case of any change in that RoR / mutation?	Under process
26.	Is there a provision for citizen to apply online for correction of their RoR	No
27.	Total number of RoRs corrected in the last financial year (April 2023-March 2024)	List of order of u/s. 103
28.	Is RoR database linked with Cadastral maps	After completion of Resurvey
29.	If yes, Number of RoRs linked with Cadastral maps	No
30.	Is RoR database linked with Banks for mortgage	No
31.	If yes, number of districts where it is linked	No
32.	Also, number of banks and bank branches which are linked	No
33.	Number of banks and bank branches which are notlinked	No
34.	Is mortgage mentioned/ red-flagged in the RoR	Yes (Mortgage Mentioned)
35.	Process flow followed for mention/ red-flag in RoR to be provided	Yes (for mortgage)
36.	Number of RoRs with mention/ red-flag of mortgage (as on date)	
37.	Is mortgage release updated in the RoR	Yes
38.	Process flow followed for mention of release of mortgage in RoR to be provided	
39.	Is online transliteration facility available for RoRs	No

40.	Number of columns in RoRs; what details are prescribed to be captured in RoRs; What details are actually captured and not captured in practice?	There are total 24 colum in Form No. I & XIV details captured in Form No. I & XIV at mentioned in Table attached at
41.	Is gender of land holder captured in RoR? If yes, how many females are land holders?	No
42.	What is the unit of land measurement used in	Hectre
	RoR? What is its conversion in acres?	
43.	Is land record of urban and peri-urban areas also digitized and updated?	Yes
44.	If yes, how many urban RoRs are there and which entity maintains it?	7875
45.	Describe terms used in RORs and Maps along with English /Hindi standard terms in tabular form.	Table attached herewith

S.No.	Module II : Cadastral Maps	
1.	Year when Survey was last done in the State	The Survey was started in the year "1967" and Completing in the year "1976"
2.	Scale of available cadastral maps	1:1000
3.	Total no. of Cadastral Maps	546
4.	Total number of maps scanned	674
5.	Total scanned maps converted into digital format (vectorized)	Under process
6.	Total no. of cadastral maps Geo-referenced	Under process
7.	Number of Land Parcels Geo-referenced	Nil
8.	Number of Land Parcels assigned ULPIN	Nil
9.	Whether any other unique ID assigned (Is unique ID a random number or does the ID has some logical basis? If logical, details of the same	No
10.	Is online facility available for land owners to request survey of their land parcel for sub-Division	No

11.	Brief description of process flow from receipt of request to updation of sub-division including time taken (average days)	Flow chart for the process attached herewith.
12.	Number of online requests pending for sub-division (as on date)	NA
13.	Is subdivisions updated in the cadastral map, as a practice?	Yes
14.	Ratio of Survey number and RORs land holders per ROR	Not defined

Modul	e III. Registration	
1.	Total no. of SROs in the State	01
2.	Number of SROs computerized	01
3.	Month and Year of Computerisation of 1 st SRO in the State	
4.	Month and Year of computerisation of latest SRO in the State	
5.	Number of land properties registered in FY 2023-24	
6.	Number of SROs integrated with Revenue Offices and Land Record database	
7.	Is there online facility for booking appointment slot for registration	Yes
8.	What information/ details are captured during online system for appointment slot booking	a. Details of property.b. Details of parties.
9.	What Property attributes (survey number, door number, plot number, khasra, khewat, khatouni number, etc.) are captured in online system	Yes Survey Number, Flat Number, Plot Number etc. are captured.
10.	Whether anywhere registration is allowed in the state	No.
11.	Whether sale of Govt Land is blocked/ red-flagged (details of process followed be provided)	No.
12.	Whether Circle Rates/ Ready Reckoner Rates/ Guideline values / Collector Rates for lands are available to citizens in the Registration software	Yes.
13.	Is Online payment facility available for application fee - Stamp duty, registration fees, etc.	Yes.

14.	Is e-Calculator (Online Stamp duty calculator) made available for citizens to compute fees	
15.	Is party/ owner names and area details checked from Land Records (RoR) before registration. Is the copy of RoR downloaded as proof of checking? If not, what process is followed as proof for checking?	Yes the details of ownership are checked from Land Records. The copy of RoR is being submitted by the applican Concerned.
16.	Is this mandated in in Rules, SOP, Manual or just a practice?	Practice.
17.	In practice, how many year's registration deeds are searched by SRO before registration?	
18.	Do SRO check seller's ownership document by past record.	Yes.
19.	Whether PAN, Aadhaar number, mobile number are captured for each party	Yes. Except Mobile number
20.	Is online PAN verification system integrated for Registrations involving higher cost	PAN verification is not done.
21.	Is facility available to verify eKYC of Aadhaar/ PAN during admission of parties	No.
22.	Whether party signature is captured using digital pen and pad	No
23.	Whether identification documents upload facility is available	Yes.
24.	Whether SRO is able to complete registration online	Yes.
25.	Whether home visit module is available for SRO	No
26.	Whether SRO has facility to generate encumbrance certificate and e-search	No
27.	Whether SRO can access legacy data as a ready reference	Yes.

28.	Does every registration trigger a corresponding digital mutation in the RoR	No
29.	Whether SRO can push pending data of mutation in case of any network failure	No
30.	Whether SRO can check litigations online for a property scheduled for registration	No
31.	Whether SRO is able to trigger SMS for important events during document registration	No
32.	Whether there is an online registration system for citizens available through eKYC for first sale, Leave and License Agreements to facilitate presence less registration anywhere anytime	No
33.	Whether dynamic deed templates are available	Yes
34.	Whether (Al Nibhrit) solution is available for masking personal information of PAN, Aadhaar number and fingerprint impressions on registered pdf deeds	No
35.	From which year is digitised legacy data available	From the year 2014 to till date.
36.	Whether an Online grievance redressal system is available for filing complaints related to property registration at Sub Registrar Office	No
37.	If yes, number of online grievances received and settled during FY 2023-24	NA
38.	Whether a document can be searched based on Name, Property details like survey number, deed number, etc.	Yes
39.	Whether there is a mobile app developed for land registration related services (Yes/No)	No

Modul	e IV. Mutation	
1.	Number of applications received for mutation in FY 2023-24	
2.	Number of applications disposed in FY 2023-24	
3.	Number of applications pending for mutation	
4.	Is online facility available for requesting mutation	Under process

5.	Is auto-trigger mutation facility available in the State	No
6.	What type of transactions are eligible for auto-trigger mutation?	-
7.	How many such transactions occurred in FY 2023-24 which were eligible for auto-mutation?	-
8.	Of these, how many mutations were actually completed through auto-trigger	-
9.	Number of mutations related to sub-division	
10.	Out of total mutation cases received through Registration how many are for mutation of land with entire Khasra,	
11.	What is the process flow followed in the State for mutation process	Flow attached
12.	What is the process followed for receiving objections from public?	Manually
13.	Is SMS sent to all mobile number of all villagers?	NO
14.	Is there facility for objections to be sent online?	No
15.	What is the prescribed period for issue of mutation orders from the date of receipt and what is actual period in practice	45 days
16.	Is SMS alert sent to applicant at each stage for his information	No
17.	Does Patwari submit his report online	Yes
18.	Are certified order copy of the mutation sent to the applicantthrough email or whatsapp or is it available for download from RCMS website	No
19.	How many cases are pending where mutation orders have been passed but certified copy is not yet sent to the applicant? Average number of days of pendency of such cases?	
20.	Is Cyber Tehsil functional or proposed to be functional in the State. If proposed, what is the stage?	No
21.	Are RoRs updated immediately after issue of mutation orders or does the State follow a different practice and cycle of updation of RoRs?	Yes
22.	In what type of mutation request it is carried out without inviting objection?	No

Modu	ıle V. Revenue Court Management System	
1.	Total number of Revenue Courts in the State	04
2.	Number of Revenue Courts computerized	01
3.	Number of revenue court cases handled in the computerized system in the last financial year	68
4.	Number of revenue court cases handled in the manual system in the last financial year	-
5.	Does State have online system for public to enter case details? What details are captured at data entry stage?	No
6.	Is online appointment date and time notified to applicant through email/ whatsapp/ website?	No
7.	Is the court order typed on the RCMS system directly or is separate pdf of the court order uploaded?	No
8.	Is court order sent to litigants on email/ whatsapp/ posted on website	No
9.	Are court hearings held online/VC or only in physical mode or hybrid	No
10	How the court cases documents are stored in the court (electronically/physically)	Physically
11	Is Land Records database linked to RCMS system and can RoR be viewed/ downloaded by Revenue Courts	Yes
12	Is Registration software linked to RCMS software enabling pushing of land registration to auto-mutation?	Yes
13	Is the fact of a pending revenue court case red-flagged in RoR? What is the system followed in the State for red-flagging and what exact remarks are mentioned on the RoR and in which column?	No
14	Number of revenue court cases red-flagged in the RoR (as on date)	No
15	Is Land Records database linked to eCourts system of Civil courts?	No
16	If yes, how many eCourts are linked with LR database?	
17	Is Land Records database linked to eCourts system and can RoR be viewed/ downloaded by Civil Courts	No
18	Is the fact of a pending civil court case red-flagged in RoR? What is the system followed in the State for red-flagging and what exact remarks are mentioned on the RoR and in which column?	No
19	Number of civil court cases red-flagged in the RoR (as on date)	No

ANNEXURE -III: PART -I (MODULE I-V) Diu District

S.No.	Parameter and Indicators	
Module I	Record of Rights (RoRs)	
1.	Total number of Land Parcels	28891
2.	Total number of RoRs in the State	28891
3.	No. of RoRs computerized	28891
4.	What are the other documents/ registers maintained by the Revenue authorities in the State related to RoR such as Jamabandi Register etc.	Form no. 6, Form no. 8 and Form no. 7x12
5.	A brief process flow of who maintains, what and when entries are made in these documents/ registers to be provided	13. An application for mutation in Record of Rights is received by the Talathi. 14. Talathi then verifies the documents and record statement, panchnama, etc. 15. Talathi also verifies if the land in question is under any litigation or if there is any objection against the same. (m) If there is any objection, then Talathi submit its report to the Mamlatdar. (n) Mamlatdar then calls the interested persons for the hearing. (o) If objection sustain then necessary directions are issued to the concerned parties and mutation is not

		1
		processed. (p) If objection does not sustain then order is passed to the Talathi to proceed with the Mutation. 16. If there is no objection then Talathi makes kaccha (pencil) entry in Mutation Register i.e. Form no. 6 and issue Notice u/s 143 of the Regulation to all interested parties inviting objections within 15 days. 17. The said entry is then verified by the Circle Officer after completion of 15 days and verified by the Mamlatdar. 18. On verification, the Talathi makes the pacca entry in Record of Rights and give effect in Form no. 8 & 7x12 which is online.
6.	Is RoR of Govt. held land computerized in the State	Yes (Form no. 8 & 7x12)
7.	Is RoR available on web portal for view/ download by any citizen	Yes (Form no. 8 & 7x12)
8.	Is digitally signed RoR available for download by any citizen	Yes (Form no. 8 & 7x12)
9.	Is digitally signed RoR a legally valid document in the State	Yes (Form no. 8 & 7x12)
10.	Is digitally signed RoR verifiable through a QR code/ unique ID	Yes with Unique ID (Form no. 8 & 7x12)
11.	Have manual records been discontinued so that digital records are the sole legal record?	Yes (Form no. 8 & 7x12)
12.	Is list of all RoRs of entire village available for view/ download by any citizen	Yes (Form no. 8 & 7x12)
13.	Total Khata numbers in the State	1669

		2
14.	Average number of land holders in each RoR	3
15.	Number of single land holder RoRs	1519
16.	Number of pending applications for including names in RoRs	54
17.	Where more than one land holder is mentioned in RoR, is share of each holder mentioned in RoR?	No
18.	Details regarding in what format and in which column share of each holder is mentioned to be elaborated	NA
19.	Where more than one land holder is mentioned in RoR, is sub-division of plot also done? (Details of process followed may be briefly mentioned)	NA
20.	Is RoR seeded with Aadhaar	No
21.	If yes, number of RoRs seeded with Aadhaar	NA
22.	Is RoR seeded with mobile number of land holder	NA
23.	If yes, number of RoRs seeded with mobile	NA
24.	On what occasion phone number and Aadhaar are seeded?	NA
25.	Is an alert message sent to the registered mobile number in case of any change in that RoR / mutation?	NA
26.	Is there a provision for citizen to apply online for correction of their RoR	No
27.	Total number of RoRs corrected in the last financial	39
	year (April 2023-March 2024)	
28.	Is RoR database linked with Cadastral maps	Yes
29.	If yes, Number of RoRs linked with Cadastral maps	Yes
30.	Is RoR database linked with Banks for mortgage	No
31.	If yes, number of districts where it is linked	NA

32.	Also, number of banks and bank branches which are linked	NA
33.	Number of banks and bank branches which are not linked	NA
34.	Is mortgage mentioned/ red-flagged in the RoR	Yes, in second rights of Form 7x12.
35.	Process flow followed for mention/ red-flag in RoR to be provided	5. Upon application, the Talathi verifies the necessary documents required for Mutating mortgage in Record of Rights. 19. Once all the necessary documents are submitted by the applicant, the Talathi verifies if the land in question is under any litigation or if there is any objection against the same. (q) If there is any objection, then Talathi submit its report to the Mamlatdar. (r) Mamlatdar then calls the interested persons for the hearing. (s) If objection sustain then necessary directions are issued to the concerned parties and mutation is not processed. (t) If objection does not sustain then order is passed to the Talathi to proceed with the Mutation.
		6. If there is no objection then makes kaccha

36.	Number of RoRs with mention/ red-flag of mortgage (as on date)	(pencil) entry in Mutation Register i.e. Form no. 6 and issue Notice u/s 143 of the Regulation to all interested parties inviting objections within 15 days. 7. The said entry is then verified by the Circle Officer after completion of 15 days and verified by the Mamlatdar. 8. On verification, the Talathi makes the pacca entry in Record of Rights and give effect in Form no. 8 & 7x12 which is online.
37.	Is mortgage release updated in the RoR	Yes.
38.	Process flow followed for mention of release of mortgage in RoR to be provided	Same as point No. 35 above.
39.	Is online transliteration facility available for RoRs	NA
40.	Number of columns in RoRs; what details are prescribed to be captured in RoRs; What details are actually captured and not captured in practice?	39
41.	Is gender of land holder captured in RoR? If yes, how many females are land holders?	Yes, 150
42.	What is the unit of land measurement used in RoR? What is its conversion in acres?	HaAre-Sq.mt
43.	Is land record of urban and peri-urban areas also digitized and updated?	Yes
44.	If yes, how many urban RoRs are there and which entity maintains it?	No
45.	Describe terms used in RORs and Maps along with English /Hindi standard terms in tabular form.	Copy of Form 7x12 in English/Gujarati is attached.

Module II	Cadastral Maps	
1.	Year when Survey was last done in the State	First Survey in 1965 and Last survey in 2022
2.	Scale of available cadastral maps	1:1000
3.	Total no. of Cadastral Maps	467
4.	Total number of maps scanned	467
5.	Total scanned maps converted into digital format (vectorized)	Under Process
6.	Total no. of cadastral maps Geo-referenced	Under Process
7.	Number of Land Parcels Geo-referenced	Nil
8.	Number of Land Parcels assigned ULPIN	Nil
9.	Whether any other unique ID assigned (Is unique ID a random number or does the ID has some logical basis? If logical, details of the same	No
10.	Is online facility available for land owners to request survey of their land parcel for sub- division	No
11.	Brief description of process flow from receipt of request to updation of sub-division including time taken (average days)	Agriculture land: Application Received → Site visit by Surveyor → Map prepared by Surveyor → Personal Hearing → Order Issuance. Time: Around 15 days N.A. land: Application Received → Site visit by Surveyor → Map prepared by Surveyor → Personal Hearing → Proposal recommendation & fees calculation by

		DNH PDA → Final approval of
		Collector, DNH →
		Order Issuance.
		Time: Around 25
		days
12.	Number of online requests pending for sub-division (as on date)	NA
13.	Is subdivisions updated in the cadastral map, as a practice?	Yes
14.	Ratio of Survey number and RORs land holders per ROR	Not defined

Module	e III. Registration	
1.	Total no. of SROs in the State	01
2.	Number of SROs computerized	01
3.	Month and Year of Computerisation of 1 st SRO in the State	-
4.	Month and Year of computerisation of latest SRO in the State	January - 2021
5.	Number of land properties registered in FY 2023-24	498
6.	Number of SROs integrated with Revenue Offices and Land Record database	01
7.	Is there online facility for booking appointment slot for registration	No
8.	What information/ details are captured during online system for appointment slot booking	N. A.
9.	What Property attributes (survey number, door number, plot number, khasra, khewat, khatouni number, etc.) are captured in online system	No
10.	Whether anywhere registration is allowed in the state	No
11.	Whether sale of Govt Land is blocked/ red-flagged (details of process followed be provided)	No

12.	Whether Circle Rates/ Ready Reckoner Rates/ Guideline values / Collector Rates for lands are available to citizens in the Registration software	Yes
13.	Is Online payment facility available for application fee - Stamp duty, registration fees, etc.	Yes
14.	Is e-Calculator (Online Stamp duty calculator) made available for citizens to compute fees	No
15.	Is party/ owner names and area details checked from Land Records (RoR) before registration. Is the copy of RoR downloaded as proof of checking? If not, what process is followed as proof for checking?	No
16.	Is this mandated in in Rules, SOP, Manual or just a practice?	SOP
17.	In practice, how many year's registration deeds are searched by SRO before registration?	30 years
18.	Do SRO check seller's ownership document by past record.	Yes
19.	Whether PAN, Aadhaar number, mobile number are captured for each party	Yes
20.	Is online PAN verification system integrated for Registrations involving higher cost	No
21.	Is facility available to verify eKYC of Aadhaar/ PAN during admission of parties	No
22.	Whether party signature is captured using digital pen and pad	No
23.	Whether identification documents upload facility is available	No
24.	Whether SRO is able to complete registration online	No
25.	Whether home visit module is available for SRO	No
26.	Whether SRO has facility to generate encumbrance certificate and e-search	No

27	Whather CDO can access legacy data as a ready reference	No
27.	Whether SRO can access legacy data as a ready reference	NO
28.	Does every registration trigger a corresponding digital mutation in the RoR	No
29.	Whether SRO can push pending data of mutation in case of any network failure	No
30.	Whether SRO can check litigations online for a property scheduled for registration	No
31.	Whether SRO is able to trigger SMS for important events during document registration	No
32.	Whether there is an online registration system for citizens available through eKYC for first sale, Leave and License Agreements to facilitate presence less registration anywhere anytime	No
33.	Whether dynamic deed templates are available	No
34.	Whether (Al Nibhrit) solution is available for masking personal information of PAN, Aadhaar number and fingerprint impressions on registered pdf deeds	No
35.	From which year is digitised legacy data available	2021
36.	Whether an Online grievance redressal system is available for filing complaints related to property registration at Sub Registrar Office	No
37.	If yes, number of online grievances received and settled during FY 2023-24	NA
38.	Whether a document can be searched based on Name, Property details like survey number, deed number, etc.	No
39.	Whether there is a mobile app developed for land registration related services (Yes/No)	No

Module	e IV. Mutation	
1.	Number of applications received for mutation in FY 2023-24	1461
2.	Number of applications disposed in FY 2023-24	1195
3.	Number of applications pending for mutation	95
4.	Is online facility available for requesting mutation	No
5.	Is auto-trigger mutation facility available in the State	No
6.	What type of transactions are eligible for auto-trigger mutation?	NA
7.	How many such transactions occurred in FY 2023-24 which were eligible for auto-mutation?	NA
8.	Of these, how many mutations were actually completed through auto-trigger	NA
9.	Number of mutations related to sub-division	11
10.	Out of total mutation cases received through Registration how many are for mutation of land with entire Khasra	53
11.	What is the process flow followed in the State for mutation process	7. An application for mutation in Record of Rights is received by the Talathi. 8. Talathi then verifies the documents and record statement, panchnama, etc. 9. Talathi also verifies if the land in question is under any litigation or if there is any objection against the same. (e) If there is

	any
	objection,
	then Talathi
	submit its
	report to the
	Mamlatdar.
	(f) Mamlatda
	r then calls
	the interested
	persons for
	the hearing.
	(g) If
	objection
	sustain then
	necessary
	directions
	are issued to
	the
	concerned
	parties and
	mutation is
	not
	processed.
	(h) If
	objection
	does not
	sustain then
	order is
	passed to the Talathi to
	Talathi to proceed with
	the
	Mutation.
	10. If there is
	no objection
	then Talathi
	makes kaccha
	(pencil) entry
	in Mutation
	Register i.e.
	Form no. 6
	and issue
	Notice u/s 143
	of the
	Regulation to
	all interested
	parties
	•

		:
		inviting
		objections
		within 15
		days.
		11. The said
		entry is then
		verified by the
		Circle Officer
		after
		completion of
		15 days and
		verified by the
		Mamlatdar.
		12. On
		verification,
		the Talathi
		makes the
		pacca entry in
		Record of
		Rights and
		give effect in
		Form no. 8 &
		7x12 which is
		online.
12.	What is the process followed for receiving objections from	As mentioned in
	public?	Point no. 11
		above.
13.	Is SMS sent to all mobile number of all villagers?	No
14.	Is there facility for objections to be sent online?	No
15.	What is the prescribed period for issue of mutation orders	
15.	from the date of receipt and what is actual period in practice	
16.	Is SMS alert sent to applicant at each stage for his information	No
17.	Does Patwari submit his report online	Yes, only for
	Does ratwart submit his report offline	Sale-Deed.
10	Are certified order copy of the mutation sent to the applicant	No
18.	through email or whatsapp or is it available for download	
	from RCMS website	
	How many cases are pending where mutation orders have	NIL
19.	been passed but certified copy is not yet sent to the	1112
19.	• • • • • • • • • • • • • • • • • • • •	
	applicant? Average number of days of pendency of such	
	cases?	
	Is Cyber Tehsil functional or proposed to be functional in the	No
20.	State. If proposed, what is the stage?	

21.	Are RoRs updated immediately after issue of mutation orders or does the State follow a different practice and cycle of updation of RoRs? If so, the details of process and cycle followed for updation	Yes, the RoRs are immediately given effect after verification of Mamlatdar in Form No. 6.
22.	In what type of mutation request it is carried out without inviting objection?	Allotment of Government land to Government Departments for public purpose.

Modu	le V. Revenue Court Management System	
1.	Total number of Revenue Courts in the State	04
2.	Number of Revenue Courts computerised	NIL
3.	Number of revenue court cases handled in the computerized system in the last financial year	NA
4.	Number of revenue court cases handled in the manual system in the last financial year	NA
5.	Does State have online system for public to enter case details? What details are captured at data entry stage?	NA
6.	Is online appointment date and time notified to applicant through email/ whatsapp/ website?	NA
7.	Is the court order typed on the RCMS system directly or is separate pdf of the court order uploaded?	NA
8.	Is court order sent to litigants on email/ whatsapp/ posted on website	NA
9.	Are court hearings held online/VC or only in physical mode or hybrid	NA
10	How the court cases documents are stored in the court (electronically/physically)	Physically
11	Is Land Records database linked to RCMS system and can RoR be viewed/ downloaded by Revenue Courts	NA
12	Is Registration software linked to RCMS software enabling pushing of land registration to auto-mutation?	NA
13	Is the fact of a pending revenue court case red-flagged in RoR? What is the system followed in the State for red-flagging and what exact remarks are mentioned on the RoR and in which column?	NA

14	Number of revenue court cases red-flagged in the RoR (as on date)	NA
15	Is Land Records database linked to eCourts system of Civil courts?	NA
16	If yes, how many eCourts are linked with LR database?	NA
17	Is Land Records database linked to eCourts system and can RoR be viewed/ downloaded by Civil Courts	NA
18	Is the fact of a pending civil court case red-flagged in RoR? What is the system followed in the State for red-flagging and what exact remarks are mentioned on the RoR and in which column?	NA
19	Number of civil court cases red-flagged in the RoR (as on date)	NA