# The NCAER Land Records and Services Index

## N-LRSI 2020

### Overview

National Council of Applied Economic Research

SINCE 1956

NCAER | QUALITY. RELEVANCE. IMPACT

The NCAER-Land Records and Services Index (N-LRSI) 2019-20 could not have come at a more opportune moment. The Indian economy has slowed down dramatically over 2018 and 2019. Commentators have increasingly pointed out that the slowdown is a structural rather than a cyclical phenomenon. Attention to reform in the hitherto neglected areas will be critical for India to resume a high-growth journey. In this context, land (and labour) have been listed as the sectors deserving the highest priority. Lack of improvements in the ability to acquire and hold land, and use and transact in land and property, are major impediments inhibiting both investment and poverty reduction. India's spectacular improvement on the overall index of Ease of Doing Business (EoDB) compiled by the World Bank, stands in marked contrast to the dismal showing with regard to the component of the index that relates to land (ease of registering property).

Enhancing progress in making available land for large-scale investment opportunities as well as its use as a productive asset by the poor in a dispute-free environment is critically dependent on access to accurate and up-to-date land and property records. This has engaged the attention of the Government of India since the launch of the Computerisation of Land Records (CLR) scheme in 1987-88. However, despite three decades of successive programmes, studies indicate a mixed record of the impact of the digitisation of land records and the registration process across States/UTs. Therefore, this exercise sought to seek answers to the following questions: What is the reality across the States/UTs? Where has significant progress been made? Where are gaps most visible? and What can be done to improve the situation? Presenting a comparative picture across States/UTs on an annual basis is expected to instil a sense of competition and create an incentive for the States/UTs to do better.

The N-LRSI 2019-20 (or the Index, hereinafter) set out to answer the following questions for all the States and Union Territories (UTs) in India:

(i) **What is the actual extent of digitisation of land records and the registration process?**

(ii) **What is the improvement in key citizen services brought about by this digitisation process?**

(iii) **What is the improvement in the quality of land record brought about by the digitisation process?**

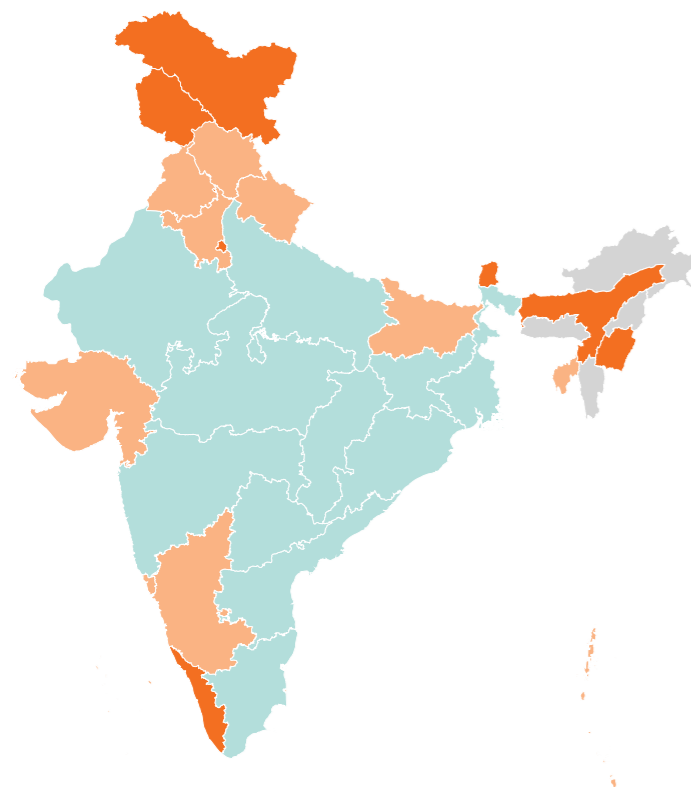## Table 1: N-LRSI Parameters, Weights and Mode of Evaluation

(Maximum points =100)

| | Textual Record | Spatial Record | Registration | Quality of Land Records |
|---|---|---|---|---|
| | 20 | 20 | 20 | 40 |

| PARTICULARS | POINTS | Desk research | KCs | Test Checks |
|---|---|---|---|---|
| **TEXTUAL RECORD** | | | | |
| a. Digitisation of Records of Rights (RoRs) | 15 | ● | ● | ● |
| b. Availability of legally useable copies of RoRs | 5 | ○ | ● | ○ |
| **SPATIAL RECORD** | | | | |
| a. Digitisation of Cadastral Maps (CMs) | 15 | ● | ● | ● |
| b. Availability of legally useable copies of CMs | 5 | ○ | ● | ○ |
| **REGISTRATION** | | | | |
| a. Public Entry of Data | 4 | ● | ● | ○ |
| b. Availability of Circle Rates | 4 | ○ | ○ | ● |
| c. Mode of Payment of Stamp Duty / Registration Fee | 4 | ● | ● | ○ |
| d. Digital Attestation of Document by Sub Registrar office (SRO) | 4 | ○ | ● | ○ |
| e. On-line Delivery of Registered Document | 4 | ○ | ● | ○ |
| **QUALITY OF LAND RECORDS** | | | | |
| a. Updating Ownership | 5 | ○ | ● | ○ |
| b. Extent of Joint Ownership | 10 | ○ | ○ | ● |
| c. Land Use | 10 | ○ | ○ | ● |
| d. Land Area | 10 | ○ | ○ | ● |
| e. Recording Encumbrances | 5 | ○ | ● | ○ |

**Note:** KCs – Knowledge Correspondents (KCs were contacted under this exercise to obtain and advise on specific questions about the status and process of land records in the States/UTs; and they variously comprised senior officers, other retired and serving revenue officers and/or experts with knowledge of land matters in the relevant State / UT.)
**Source:** N-LRSI 2019-20, NCAER

## Figure1: N-LRSI 2019-20

| N-LRSI Rank | States/UTs | N-LRSI Score | | Average 38.56 |
|---|---|---|---|---|
| 1 | Madhya Pradesh | 74.9 | | |
| 2 | Odisha | 67.5 | | |
| 3 | Maharashtra | 65.3 | | |
| 4 | Chhattisgarh | 64.1 | | |
| 5 | Tamil Nadu | 63.0 | | |
| 6 | West Bengal | 61.8 | | |
| 7 | Jharkhand | 59.2 | | |
| 8 | Rajasthan | 56.5 | | |
| 9 | Telangana | 55.3 | | |
| 10 | Andhra Pradesh | 53.9 | | |
| 11 | Uttar Pradesh | 52.2 | | |
| 12 | Lakshadweep | 47.9 | | |
| 13 | Himachal Pradesh | 47.5 | | |
| 14 | Goa | 41.3 | | |
| 15 | Karnataka | 40.9 | | |
| 16 | Punjab | 40.5 | | |
| 17 | Uttarakhand | 36.1 | | |
| 18 | Haryana | 35.3 | | |
| 19 | Gujarat | 35.0 | | |
| 20 | Tripura | 33.4 | | |
| 21 | Puducherry | 32.3 | | |
| 22 | Dadra & Nagar Haveli | 32.0 | | |
| 23 | Daman & Diu | 30.1 | | |
| 24 | Bihar | 28.8 | | |
| 25 | Andaman & Nicobar | 25.4 | | |
| 26 | NCT of Delhi | 22.1 | | |
| 27 | Manipur | 21.9 | | |
| 28 | Assam | 19.4 | | |
| 29 | Kerala | 10.7 | | |
| 30 | Chandigarh | 6.0 | | |
| 31 | Sikkim | 5.9 | | |
| 32 | Jammu & Kashmir | 4.3 | | |
| 33 | Ladakh | 2.0 | | |

**Scoring between 60-75 points, Madhya Pradesh, Odisha, Maharashtra, Chhattisgarh, and Tamil Nadu are the five best performing states**

**Source:** N-LRSI 2019-20, NCAER

## Figure 2: N-LRSI 2019-20 by its 4 Components

■ 0-25   ■ 25.1-50   ■ 50.1-75   ■ 75.1-100   Note: All values in a component were rebased to 100, and colors were assigned in four scoring bands.

| States/UTs | N-LRSI Rank | N-LRSI Score (out of 100) | Textual Record (out of 20) | Spatial Record (out of 20) | Registration (out of 20) | Quality of Land Records (out of 40) |
|---|---|---|---|---|---|---|
| Madhya Pradesh | 1 | 74.9 | 19.0 | 16.7 | 15.6 | 23.7 |
| Odisha | 2 | 67.5 | 15.0 | 15.0 | 11.2 | 26.3 |
| Maharashtra | 3 | 65.3 | 18.9 | 7.5 | 15.7 | 23.2 |
| Chhattisgarh | 4 | 64.1 | 19.4 | 15.7 | 4.7 | 24.3 |
| Tamil Nadu | 5 | 63.0 | 18.9 | 11.8 | 12.5 | 19.8 |
| West Bengal | 6 | 61.8 | 13.3 | 11.8 | 14.9 | 21.8 |
| Jharkhand | 7 | 59.2 | 10.5 | 8.6 | 9.0 | 31.2 |
| Rajasthan | 8 | 56.5 | 16.2 | 3.3 | 11.7 | 25.3 |
| Telangana | 9 | 55.3 | 15.0 | 10.0 | 9.3 | 20.9 |
| Andhra Pradesh | 10 | 53.9 | 16.5 | 2.7 | 13.6 | 21.1 |
| Uttar Pradesh | 11 | 52.2 | 18.7 | 1.5 | 11.2 | 20.9 |
| Lakshadweep | 12 | 47.9 | 12.6 | 16.8 | 0.0 | 18.4 |
| Himachal Pradesh | 13 | 47.5 | 15.0 | 5.4 | 5.0 | 22.2 |
| Goa | 14 | 41.3 | 19.2 | 0.0 | 7.7 | 14.4 |
| Karnataka | 15 | 40.9 | 16.1 | 0.0 | 11.1 | 13.7 |
| Punjab | 16 | 40.5 | 15.2 | 0.0 | 10.8 | 14.4 |
| Uttarakhand | 17 | 36.1 | 13.6 | 0.0 | 13.6 | 8.9 |
| Haryana | 18 | 35.3 | 10.7 | 0.0 | 11.8 | 12.9 |
| Gujarat | 19 | 35.0 | 16.5 | 0.0 | 4.7 | 13.9 |
| Tripura | 20 | 33.4 | 16.1 | 0.0 | 4.0 | 13.3 |
| Puducherry | 21 | 32.3 | 16.3 | 0.0 | 5.2 | 10.8 |
| Dadra & Nagar Haveli | 22 | 32.0 | 20.0 | 0.0 | 2.0 | 10.0 |
| Daman & Diu | 23 | 30.1 | 14.3 | 0.0 | 2.0 | 13.9 |
| Bihar | 24 | 28.8 | 6.8 | 2.5 | 7.5 | 12.0 |
| Andaman & Nicobar | 25 | 25.4 | 12.9 | 0.0 | 2.0 | 10.5 |
| NCT of Delhi | 26 | 22.1 | 8.5 | 0.0 | 2.0 | 11.6 |
| Manipur | 27 | 21.9 | 1.8 | 0.0 | 10.0 | 10.1 |
| Assam | 28 | 19.4 | 7.9 | 0.0 | 2.0 | 9.5 |
| Kerala | 29 | 10.7 | 0.0 | 0.7 | 5.5 | 4.5 |
| Chandigarh | 30 | 6.0 | 0.0 | 0.0 | 4.0 | 2.0 |
| Sikkim | 31 | 5.9 | 0.0 | 0.0 | 3.9 | 2.0 |
| Jammu & Kashmir | 32 | 4.3 | 0.0 | 0.0 | 2.3 | 2.0 |
| Ladakh | 33 | 2.0 | 0.0 | 0.0 | 0.0 | 2.0 |

**Source:** N-LRSI 2019-20, NCAER

## Figure 3: N-LRSI 2019-20 by its 14 Indicators

■ 0-25   ■ 25.1-50   ■ 50.1-75   ■ 75.1-100      Note: All values in a component were rebased to 100, and colors were assigned in four scoring bands.

| N-LRSI Rank | | Textual Record | | Spatial Record | | Registration | | |
|---|---|---|---|---|---|---|---|---|
| | | Digitisation of Records of Rights (RoRs) (out of 15) | Availability of legally useable copies of RoRs (out of 5) | Digitisation of Cadastral Maps (CMs) (out of 15) | Availability of legally useable copies of CMs (out of 5) | Public Entry of Data (out of 4) | Availability of Circle Rates (out of 4) | Mode of Payment of Stamp Duty / Registration Fee (out of 4) |
| 1 | Madhya Pradesh | 14.0 | 5.0 | 11.7 | 5.0 | 4.0 | 3.6 | 4.0 |
| 2 | Odisha | 15.0 | 0.0 | 15.0 | 0.0 | 0.0 | 3.2 | 4.0 |
| 3 | Maharashtra | 13.9 | 5.0 | 7.5 | 0.0 | 4.0 | 3.7 | 4.0 |
| 4 | Chhattisgarh | 14.4 | 5.0 | 13.2 | 2.5 | 0.0 | 2.7 | 2.0 |
| 5 | Tamil Nadu | 13.9 | 5.0 | 6.8 | 5.0 | 4.0 | 2.5 | 4.0 |
| 6 | West Bengal | 13.3 | 0.0 | 11.8 | 0.0 | 4.0 | 2.9 | 4.0 |
| 7 | Jharkhand | 10.5 | 0.0 | 8.6 | 0.0 | 4.0 | 3.0 | 2.0 |
| 8 | Rajasthan | 13.7 | 2.5 | 0.8 | 2.5 | 4.0 | 3.7 | 4.0 |
| 9 | Telangana | 12.5 | 2.5 | 10.0 | 0.0 | 4.0 | 3.3 | 2.0 |
| 10 | Andhra Pradesh | 14.0 | 2.5 | 0.2 | 2.5 | 4.0 | 3.6 | 4.0 |
| 11 | Uttar Pradesh | 13.7 | 5.0 | 1.5 | 0.0 | 4.0 | 3.2 | 2.0 |
| 12 | Lakshadweep | 12.6 | 0.0 | 11.8 | 5.0 | 0.0 | 0.0 | 0.0 |
| 13 | Himachal Pradesh | 12.5 | 2.5 | 5.4 | 0.0 | 0.0 | 3.0 | 2.0 |
| 14 | Goa | 14.2 | 5.0 | 0.0 | 0.0 | 4.0 | 3.7 | 0.0 |
| 15 | Karnataka | 11.1 | 5.0 | 0.0 | 0.0 | 4.0 | 3.1 | 2.0 |
| 16 | Punjab | 12.7 | 2.5 | 0.0 | 0.0 | 4.0 | 2.8 | 2.0 |
| 17 | Uttarakhand | 13.6 | 0.0 | 0.0 | 0.0 | 4.0 | 3.6 | 2.0 |
| 18 | Haryana | 10.7 | 0.0 | 0.0 | 0.0 | 4.0 | 3.8 | 4.0 |
| 19 | Gujarat | 14.0 | 2.5 | 0.0 | 0.0 | 0.0 | 2.7 | 2.0 |
| 20 | Tripura | 13.6 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 |
| 21 | Puducherry | 13.8 | 2.5 | 0.0 | 0.0 | 0.0 | 3.2 | 2.0 |
| 22 | Dadra & Nagar Haveli | 15.0 | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 |
| 23 | Daman & Diu | 11.8 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 |
| 24 | Bihar | 6.8 | 0.0 | 0.0 | 2.5 | 0.0 | 3.5 | 2.0 |
| 25 | Andaman & Nicobar | 12.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 |
| 26 | NCT of Delhi | 3.5 | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 |
| 27 | Manipur | 1.8 | 0.0 | 0.0 | 0.0 | 4.0 | 0.0 | 2.0 |
| 28 | Assam | 7.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 |
| 29 | Kerala | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 | 3.5 | 2.0 |
| 30 | Chandigarh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 |
| 31 | Sikkim | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.9 | 0.0 |
| 32 | Jammu & Kashmir | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.3 | 0.0 |
| 33 | Ladakh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

**Source:** N-LRSI 2019-20, NCAER

## Figure 3: N-LRSI 2019-20 by its 14 Indicators

■ 0-25   ■ 25.1-50   ■ 50.1-75   ■ 75.1-100      Note: All values in a component were rebased to 100, and colors were assigned in four scoring bands.

| N-LRSI Rank | | Registration | | Quality of Land Records | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Digital Attestation of Document by Sub Registrar office (SRO) (out of 4) | On-line Delivery of Registered Document (out of 4) | Updating Ownership (out of 5) | Extent of Joint Ownership (out of 10) | Land Use (out of 10) | Land Area (out of 10) | Recording Encumbrances (out of 5) |
| 1 | Madhya Pradesh | 2.0 | 2.0 | 2.5 | 9.2 | 4.9 | 5.1 | 2.0 |
| 2 | Odisha | 2.0 | 2.0 | 1.3 | 9.2 | 9.3 | 5.6 | 1.0 |
| 3 | Maharashtra | 2.0 | 2.0 | 3.8 | 7.7 | 8.7 | 0.0 | 3.0 |
| 4 | Chhattisgarh | 0.0 | 0.0 | 2.5 | 9.4 | 6.5 | 5.0 | 1.0 |
| 5 | Tamil Nadu | 0.0 | 2.0 | 3.8 | 9.4 | 0.0 | 6.6 | 0.0 |
| 6 | West Bengal | 2.0 | 2.0 | 2.5 | 8.6 | 7.7 | 0.0 | 3.0 |
| 7 | Jharkhand | 0.0 | 0.0 | 3.8 | 9.6 | 9.2 | 5.6 | 3.0 |
| 8 | Rajasthan | 0.0 | 0.0 | 3.8 | 8.1 | 7.1 | 5.4 | 1.0 |
| 9 | Telangana | 0.0 | 0.0 | 2.5 | 10.0 | 7.4 | 0.0 | 1.0 |
| 10 | Andhra Pradesh | 0.0 | 2.0 | 1.3 | 9.6 | 0.0 | 8.2 | 2.0 |
| 11 | Uttar Pradesh | 2.0 | 2.0 | 3.8 | 8.3 | 7.9 | 0.0 | 1.0 |
| 12 | Lakshadweep | 0.0 | 0.0 | 0.0 | 9.0 | 0.0 | 8.3 | 1.0 |
| 13 | Himachal Pradesh | 0.0 | 0.0 | 3.8 | 7.0 | 8.0 | 1.5 | 2.0 |
| 14 | Goa | 0.0 | 0.0 | 2.5 | 8.9 | 0.0 | 0.0 | 3.0 |
| 15 | Karnataka | 2.0 | 0.0 | 2.5 | 9.2 | 0.0 | 0.0 | 2.0 |
| 16 | Punjab | 0.0 | 2.0 | 2.5 | 9.9 | 0.0 | 0.0 | 2.0 |
| 17 | Uttarakhand | 2.0 | 2.0 | 2.5 | 5.4 | 0.0 | 0.0 | 1.0 |
| 18 | Haryana | 0.0 | 0.0 | 3.8 | 7.2 | 0.0 | 0.0 | 2.0 |
| 19 | Gujarat | 0.0 | 0.0 | 2.5 | 8.4 | 0.0 | 0.0 | 3.0 |
| 20 | Tripura | 0.0 | 0.0 | 1.3 | 10.0 | 0.0 | 0.0 | 2.0 |
| 21 | Puducherry | 0.0 | 0.0 | 0.0 | 9.8 | 0.0 | 0.0 | 1.0 |
| 22 | Dadra & Nagar Haveli | 0.0 | 0.0 | 0.0 | 9.0 | 0.0 | 0.0 | 1.0 |
| 23 | Daman & Diu | 0.0 | 0.0 | 2.5 | 9.4 | 0.0 | 0.0 | 2.0 |
| 24 | Bihar | 2.0 | 0.0 | 1.3 | 9.7 | 0.0 | 0.0 | 1.0 |
| 25 | Andaman & Nicobar | 0.0 | 0.0 | 0.0 | 9.5 | 0.0 | 0.0 | 1.0 |
| 26 | NCT of Delhi | 0.0 | 0.0 | 0.0 | 8.6 | 0.0 | 0.0 | 3.0 |
| 27 | Manipur | 2.0 | 2.0 | 0.0 | 9.1 | 0.0 | 0.0 | 1.0 |
| 28 | Assam | 0.0 | 0.0 | 1.3 | 6.3 | 0.0 | 0.0 | 2.0 |
| 29 | Kerala | 0.0 | 0.0 | 2.5 | 0.0 | 0.0 | 0.0 | 2.0 |
| 30 | Chandigarh | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 |
| 31 | Sikkim | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 |
| 32 | Jammu & Kashmir | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 |
| 33 | Ladakh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 |

**Source:** N-LRSI 2019-20, NCAER

## Digitisation of Textual and Spatial Records

The extent of digitisation of land records was measured for both the textual records and spatial records (Cadastral Maps or CMs)[1]. The starting point was to understand the extent to which land records exist in relation to the total geographical area of a State/UT. The data collected for this revealed that in four States, land records in a written or digitised form are only available for a negligible proportion of their respective areas. These states are Mizoram, Nagaland, Meghalaya, and Arunachal Pradesh. The land records of Jammu & Kashmir and Ladakh are yet to be digitised and made available on the web. Sikkim and Chandigarh have not made the land records digitised by them available on the web. As a result, these six States/UTs were not assessed on the parameters relating to digitisation of land records. (This Index has been prepared for 28[2] States and 9 UTs, up to the re-organisation of Jammu & Kashmir and Ladakh). Out of the 28 States/UTs that made digitised textual records available for the entire area or some area of the State/UT on the web, digitised CMs were available for 13 States/UTs. In addition, Kerala had CMs on the web that were test-checked.

## Availability Of Legally Usable Copies

A basic service that a digitised land record facilitates is the citizen's ability to obtain copies of the record for various purposes. The information obtained through Knowledge Correspondents (KCs) about the extent to which legally usable copies of the RoRs and CMs can be accessed with ease, yielded the following information:

(i) Nine and three States/UTs make available a legally usable digitally-signed copy of the RoR and CM respectively to anyone accessing the record on the web;

(ii) Ten and three States/UTs make available a legally usable digitally-signed copy of the RoR and CM respectively through e-service centres; and

(iii) Ten and Eight States/UTs still insist on a person visiting a departmental office for a legally usable copy of the RoR and CM respectively.

## Computerisation of Registration

An increase in the computerisation of the registration process is itself taken to be an indicator of improvement in the level of services available to clients since it both cuts down time entailed in availing of the service, and enhances transparency in the process. The N-LRSI measured the computerisation of the registration process with respect to digital availability of the following five stages:Facility for online entry of data with regard to the proposed registration; Online updated circle rates; Facility for online payment of stamp duty/registration fee/e-stamp; Online verification of payment/scrutiny of requisite details and completion of the registration process with digital signature; and Immediate delivery of the digitally-signed registered document.

## Quality of Land Records

In assessing the quality of the land records, the following five elements were analysed: Updating ownership, extent of joint ownership, land use, land area or extent, and recording encumbrances. All these elements bear a relationship with the incidence of dispute and the ease with which transactions in land are effected.

## Ease of Access to Land Records and Services

1. The digitisation of land records is of value only if those whom it is meant to serve can access the record with ease. An exercise was undertaken to assess the ease with which records can be accessed on various parameters. The exercise revealed that repeated attempts were required to retrieve RoRs in seven States/UTs, and to retrieve CMs in three States/UTs. In 12 States/UTs, there were instances of mis-matches in the spellings of village names in the land records portals. Only four States/UTs had an on-screen 'Help/Frequently Asked Questions (FAQs)' facility to assist the users. The balance 25 States/UTs did not have any such on-screen aid, making it potentially difficult for users to figure out which tab to click, and where/how to look for information they wanted to obtain. Site translations (or bilingual, typically in the local State/UT language and English) were available on the portals of West Bengal, Telangana, and Tamil Nadu only (Delhi had a portal with a mix of English and Hindi). Overall, a number of quick improvements for improving improve user access are possible in all the States/UTs.

## Prospects for Improvements

The N-LRSI 2019-20 results highlight the following areas of possible improvement in performance.

(i) States and UTs can make quantum improvements by quickly surveying the unmapped inhabited areas and creating a record for these areas. This must include urban lands, a hitherto neglected category, which records a high intensity of transactions.

(ii) The Government of India needs to consider ways of standardising the terms and indicators against which the States and UTs can upload authenticated data, and whence a central portal like that of the DoLR can pick up real-time data for collation and reporting.

(iii) Other areas where States and UTs can rapidly improve their digitisation include real-time attestation of mutations; linking databases like birth and death registers and genealogical tables (attached to RoRs in some States/UTs); recording tenant possession of rented built-up properties; noting civil court litigation; and reflecting changes in land use or start of acquisition or planned changes in land use.

(iv) Some States and UTs provide leadership in the specific dimensions that others can profitably follow without having to go through the whole process again. These include easily navigable websites and up-to-date portals to assist clients; virtual registration (for example, as

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1   Textual records, commonly known as the Record of Rights (RoRs), are the core land records accorded the greatest weightage in deciding issues of ownership and area or extent of land in India. The RoR can also yield important information on matters like possession, use, and encumbrances affecting a property. The Cadastral Map (CM) is a survey-based representation of the boundaries and extent of individual plots of land.

2   Kerala was a unique case in the CM test-checks, as its portal provides a preview copy and further requests for payment of Rs 750 for the copy. The 'preview only' copy was considered sufficient to indicate availability during the test-checks.

started by Maharashtra); the linkage between RoRs and registration databases to generate a note in the textual records on the registration of a property transaction; recording all ownership in built-up vertical spaces like apartment blocks; and linking records of cooperative societies or drawing on municipal property tax records. States/UTs need to hasten digitisation of the spatial record and giving legal legitimacy to the area actually recorded where it shows greater congruence with the on-ground situation than the area noted in the RoR. Some States and UTs appear to have made progress in linking the institution of revenue court cases with the textual records and other States/UTs can follow this lead. States/UTs that have digitised records and are yet to make these available on the web, need to do this on a priority basis.

(v) For the Government of India, the N-LRSI offers a great opportunity in many aspects. At the minimum, it can help the Government seek better quality while attempting the updation of information on the DoLR websites by States/UTs. The States/UTs can be requested to make updation a real-time exercise by standardising the links to relevant databases. States/UTs can also be requested to carry out more quality checks of their records. Most important, the GoI can explore approaches for rewarding and recognising States/UTs that perform better on this Index so that the others are incentivised to improve and race beyond the front-runners.

## N-LRSI 2019-20 and 2020-21

The first round (2019-20) of construction of the N-LRSI primarily used supply-side data (and proxies for measuring the access for preliminary citizens) for assessing the extent of digitisation and gauging the quality of land-records- related services offered. For the second round (N-LRSI 2020-21), a demand-side survey of citizens is proposed to be added to gauge the level of public awareness and appreciation of the digitisation process, and the services it has enabled, as elicited by a primary survey of users. This may also occasion a change in weightage of the components of the Index since many States/UTs will be able to show rapid progress in increasing coverage and improving accuracy.

The Index is timely and now poised to attract the attention of the relevant stakeholders. If it gains traction from the Government of India, States/UTs and citizens at large, the Index could become a bellwether of improved land governance in India.