



India's Digital Land Revolution: Empowering Citizens

Posing Questions, Answers & Beyond

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Presentation Outline

- India's Digital Land Revolution – Schemes/Programs
- Advantages – Empowering Citizens in Land Administration
- Posing Questions to Citizen Empowerment – India's Digital Land Revolution
 - How well do we Understand Land Records Cycle
 - How well do we Understand Secure Land Rights/Clean Title?
 - Old Process New System - Example
- Answers & Beyond for Citizen Empowerment – India's Digital Land Revolution
 - Increase Awareness – Citizens on Land Rights/Administration
 - Data Models & Integrated System – For Citizen Empowerment (Land Systems)
- Conclusion

India's Digital Land Revolution

- Digital India Land Records Modernization Programme (DILRMP) - Status

| S.No. | Activity | Task completed (India) |
|-------|--|--|
| 1. | Computerization of Record of Right (RoR) | 94.76% of villages |
| 2. | Automation of Sub-Registrar Office's (SROs) | 94.64% of SROs |
| 3. | Integration of land records and property registrations | 86.00% of SROs |
| 4. | Record of Rights (RoRs) on web | 80.56% of States/UTs |
| 5. | Survey/Re-survey of land records | 14.21% of villages |
| 6. | Digitisation of cadastral maps | 76.98% of maps |
| 7. | Bhu-Naksha application (mapping software) | 62.71% of villages |
| 8. | Textual and spatial data integration | 68.16% of villages |
| 9. | State data centre setup | 66.67% of States/UTs |
| 10. | Tehsil modern record room | 48.03% of tehsils |
| 11. | Citizen centric services | 51.56% tehsils (RoRs), 18.86% of tehsils (RoR+Map) |

Data as of 18th October 2023; Source: <https://dilrmp.gov.in/faces/common/dashboard.xhtml>

India's Digital Land Revolution

- Survey of Villages Abadi and Mapping with Improvised Technology in Village Areas (SVAMITVA)

| S.No. | Activity | Task completed (India) |
|-------|-------------------------------------|------------------------|
| 1. | Drone survey | 2,71,944 villages |
| 2. | Maps handed over to state | 2,32,552 villages |
| 3. | Parcel digitized | 8,33,01,446 parcels |
| 4. | Maps provided for enquiry | 1,28,572 villages |
| 5. | Cards prepared | 83,910 villages |
| 6. | Cards distributed | 59,257 villages |
| 7. | CORS monumentation | 1,008 |
| 8. | CORS integrated with control center | 744 |

Data as of 18th October 2023; Source: <https://svamitva.nic.in/>

Advantages – Empowering Citizens in Land Administration

Promote Transparency – Reduces Fraudulent Transactions & Corruption

Reduce Information Disparities – Ensure Equal Access

Access, Verify – Secure Property Rights

Informed Decision Making – Land Transactions, Property Investment & Land Use

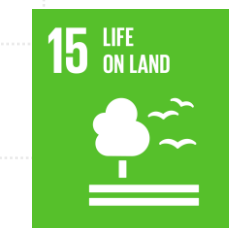
Property as Collateral – Opportunity for Credit Access & Economic Growth

Less Bureaucracy & Time – Streamlined Process Leading to Reduced Paperwork

Contribute Social Equity – Protect Land Rights of Marginalised & Disadvantaged

Businesses Likes Investing – Areas with Clear and Secure Property Rights

Ensure Active Participation Planning & Development – Sustainable Development



Posing Questions to Citizen Empowerment – India's Digital Land Revolution

- Lack of awareness among citizens
- Incomplete and inaccurate data
- Converting legacy to digital formats – time, errors
- Systems still working in Silos
- Lack of standardization
- Disputes and litigation
- Limited funding and resources
- Complex legal terminology

How well do we Understand Land Records?

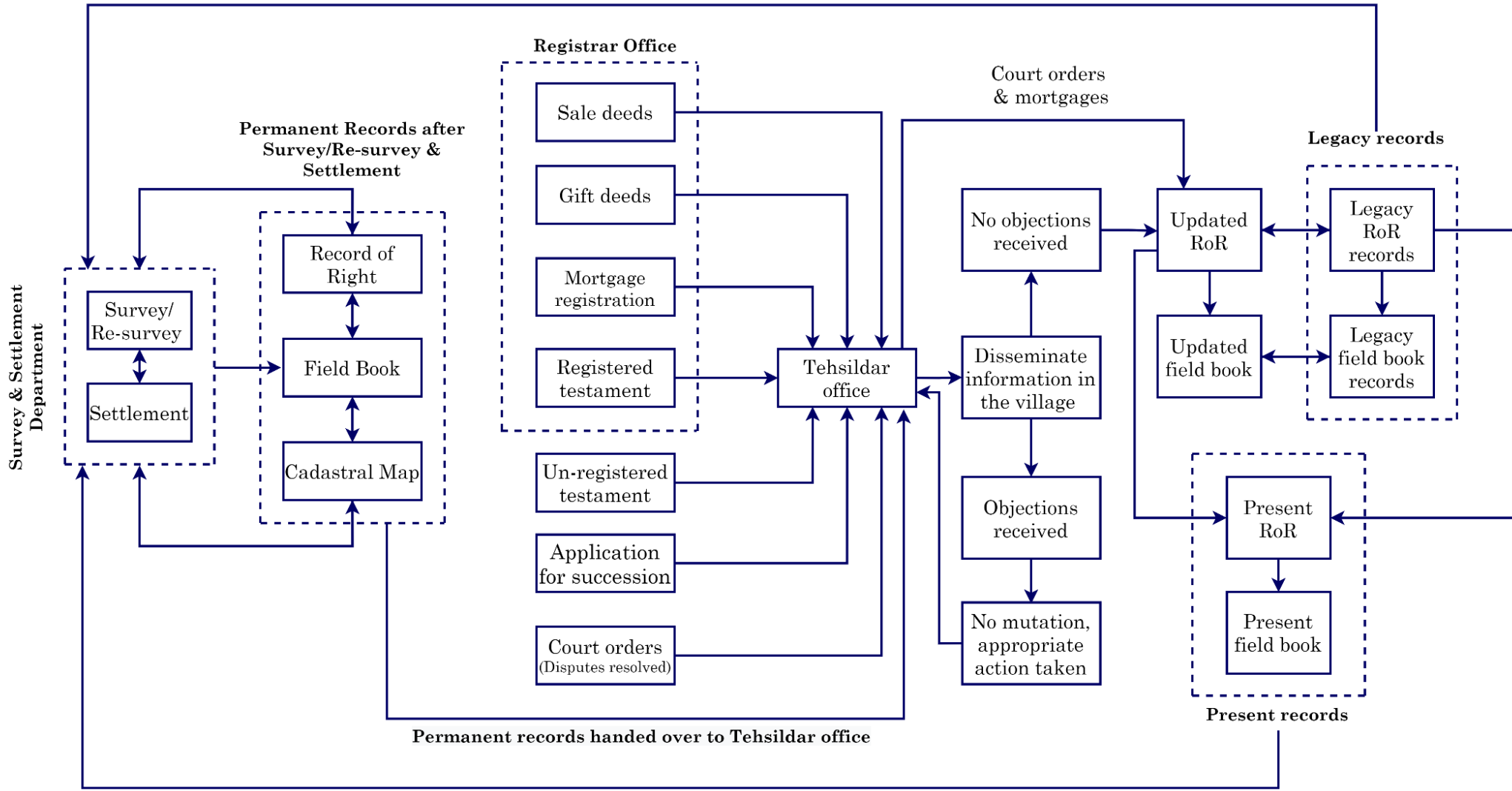


Figure 1: Land Records Management in India - Generalised Framework

How well do we Understand Secure Land Rights/Clean Title?

| Region | Meaning/land title status |
|----------|---|
| Circle A | Having physical possession |
| Circle B | Ownership Documents other than RoR |
| Circle C | RoR |
| Region 1 | Encroachment |
| Region 2 | The title may be proved in court, and subsequently, entry can be made into RoR |
| Region 3 | It may be a fraudulent entry until supported & provided with documents other than RoR |
| Region 4 | Deemed to be undisputed |
| Region 5 | Disputed possession |
| Region 6 | Clear title without possession |
| Region 7 | Undisputed title |
| Region 8 | Landless |

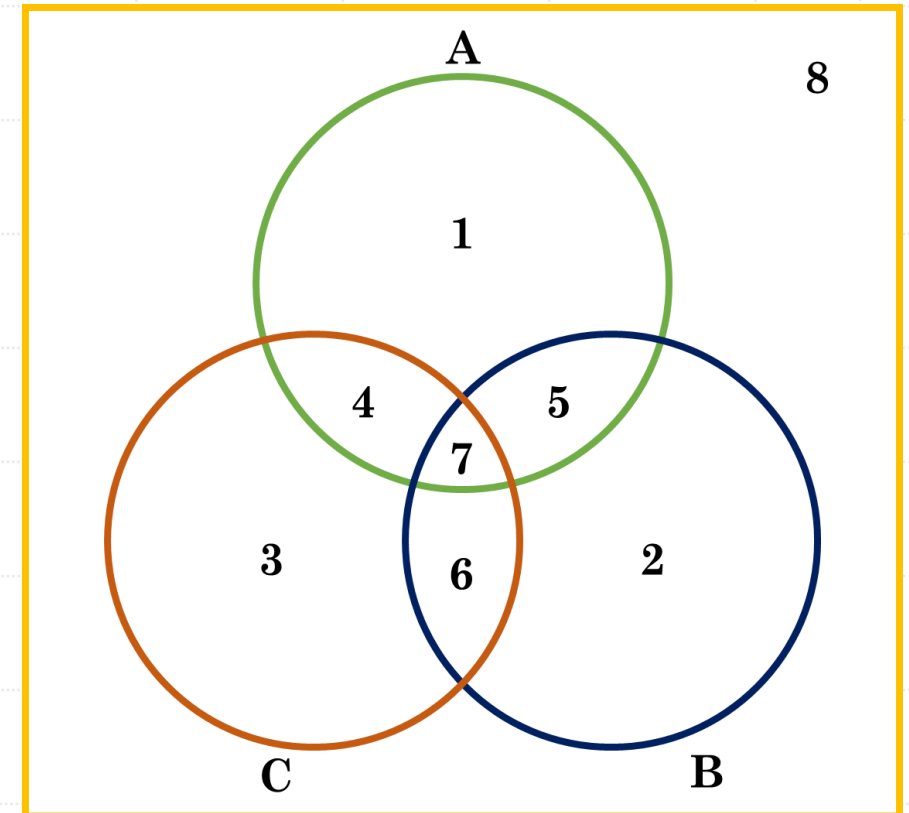


Figure 2: Different scenarios of ownership

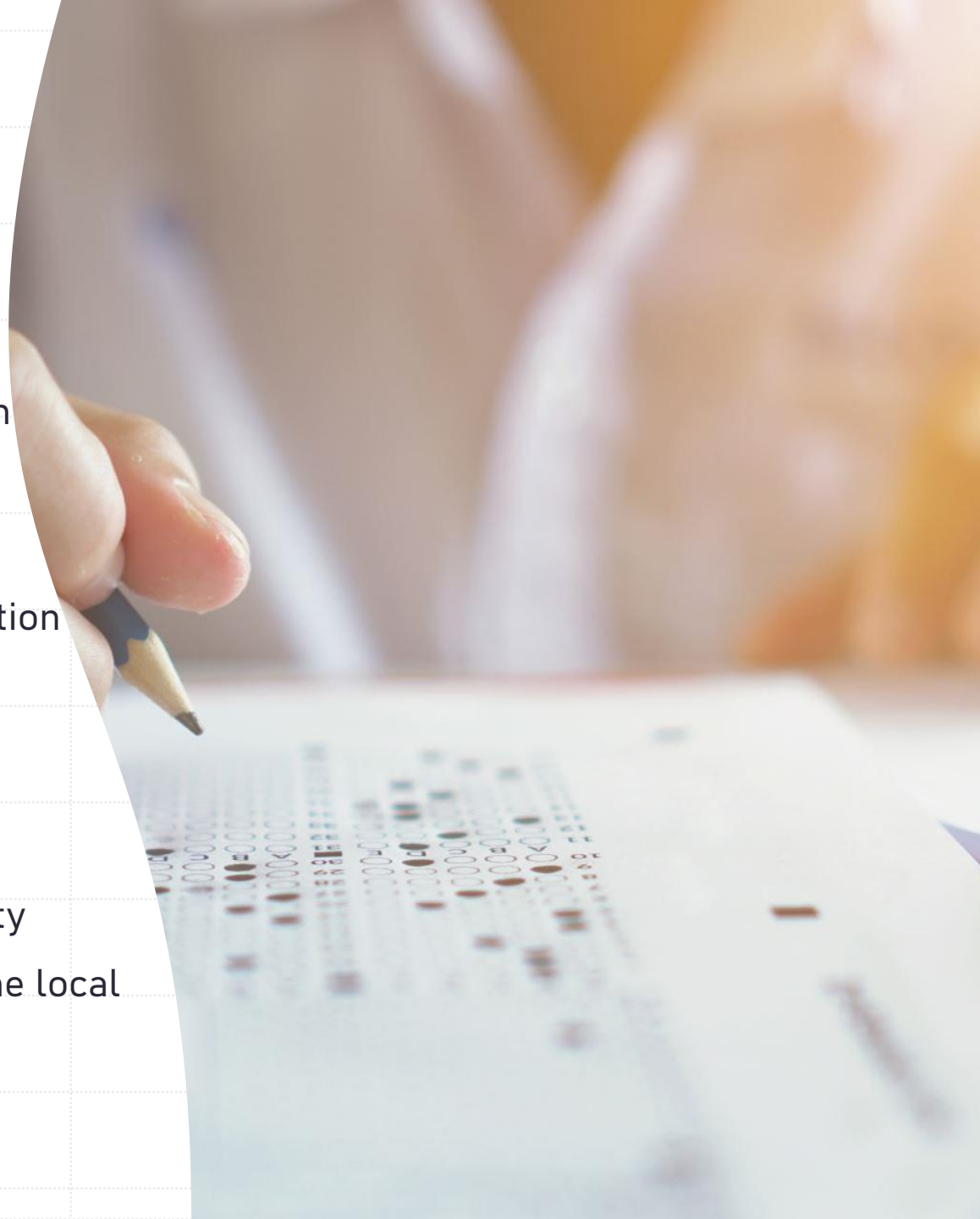
Old
Process
New
System -
Example

| Account details | | | | | |
|---|---------------------|---------------|-----------------|--|-------------------------------|
| Village Name: _____ | Pargana: (Original) | Tehsil: _____ | District: _____ | Crop year: 1426-1431 | Part: 1 Account number: _____ |
| Account holder's name / Father Husband Guardian's name / Residence | Measles number | Area (ha) | Order | Comment | |
| Category: 1-A / Land which is in the possession of transferable landowners. | | | | | |
| Ram Anjor [REDACTED] | 211 | 0.1200 | | Order: - The name of Subhash Yadav, Suresh Yadav, Rajkumar Yadav, son of Ramanjor Nigra Pathakauli should be inscribed on the place of the deceased Ramanjor 11 b [REDACTED] | |
| Yoga | 1 | 0.1200 | | | |
| Account details | | | | | |
| Village Name: / _____ | Pargana: (Original) | Tehsil: _____ | District: _____ | Crop year: 1426-1431 | Part: 1 Account number: 00538 |
| Account holder's name / Father Husband Guardian's name / Residence | Measles number | Area (ha) | Order | Comment | |
| Category: 1-A / Land which is in the possession of transferable landowners. | | | | | |
| Ramnihor / Chaitu [REDACTED] Ram Gajadhar / Chaitu [REDACTED] Ramdas / Jibodh / [REDACTED] Rambahor / Chaitu / [REDACTED] Shryamlal / Jibodh / [REDACTED] | 70 | 0.2410 | | Bank [REDACTED] Ramganj Ramnihor Putra Chaitu Gata 129, 530, 781, 29, 71, 117, 432, 509, 511, 982, 1020, 70, 135, 501, 736 At. 213000 / - is mortgaged [REDACTED] | |
| | 1 | 0.2410 | | | |

Figure 3: Example where land record mutation is done, however, name still in the RoR

Answers & Beyond for Citizen Empowerment – India's Digital Land Revolution

- Increase awareness – citizens on land rights/administration
- Quick resurvey and settlement of land records
- Design and development of Integrated Systems
- Adoption of data models –ISO 19152 – Geographic Information Land Administration Domain Model (LADM)
- Land tribunals – solve disputes & litigations
- PPP – based approach in developing systems for land administration
- One stop (state-wise website) for every land-related activity
- Land laws and regulations shall be in simple English and the local language
- Constituting a single agency to manage land records



Increase Awareness – Citizens on Land Rights/Admin



Educational & awareness programs in schools and communities



Design courses at the College/University level



Develop user-friendly platforms (apps & websites)



Utilize media outlets, NGOs, relevant industries & government portals to spread awareness



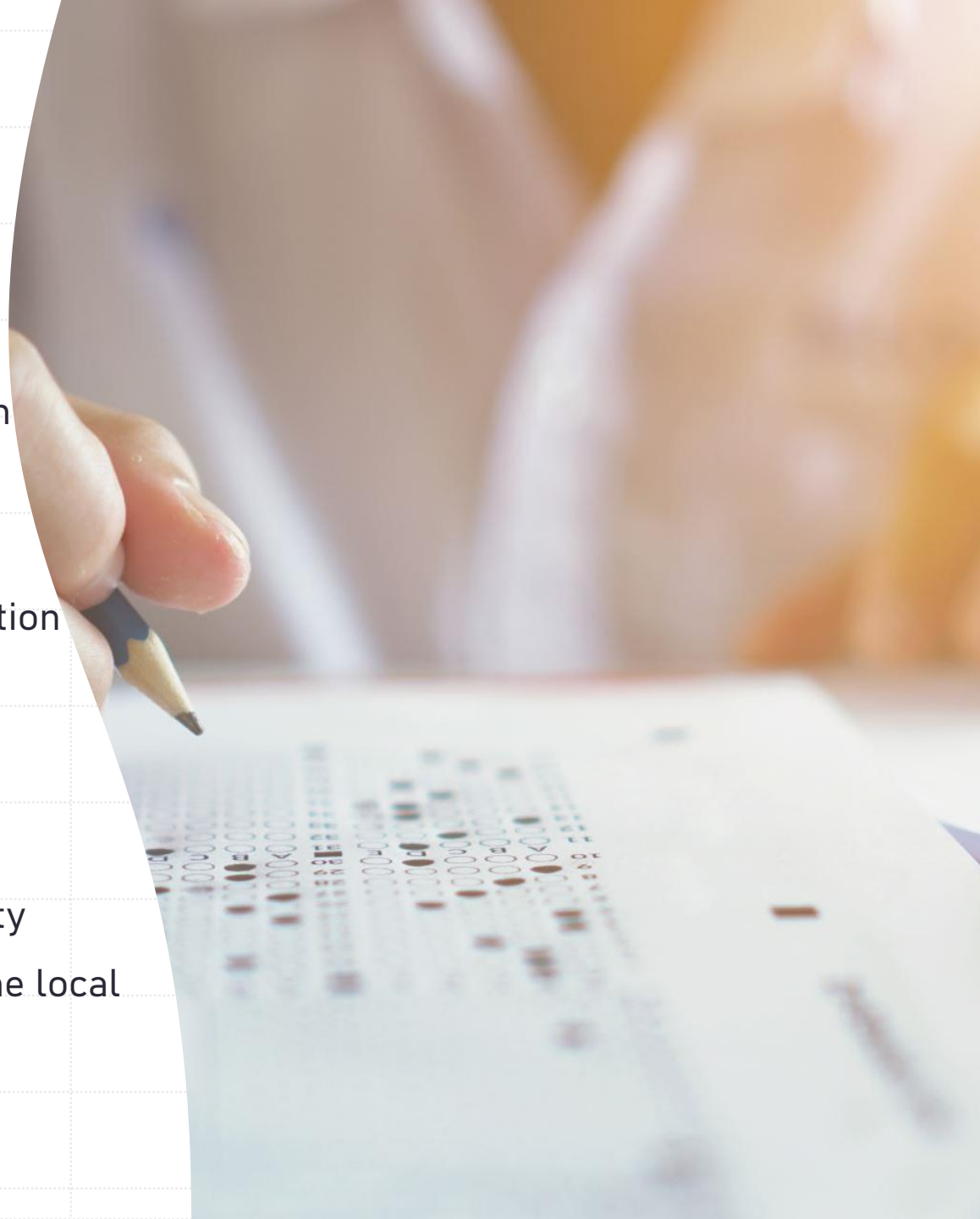
Feedback mechanism challenges shall be established and kept active




Designate a land rights day

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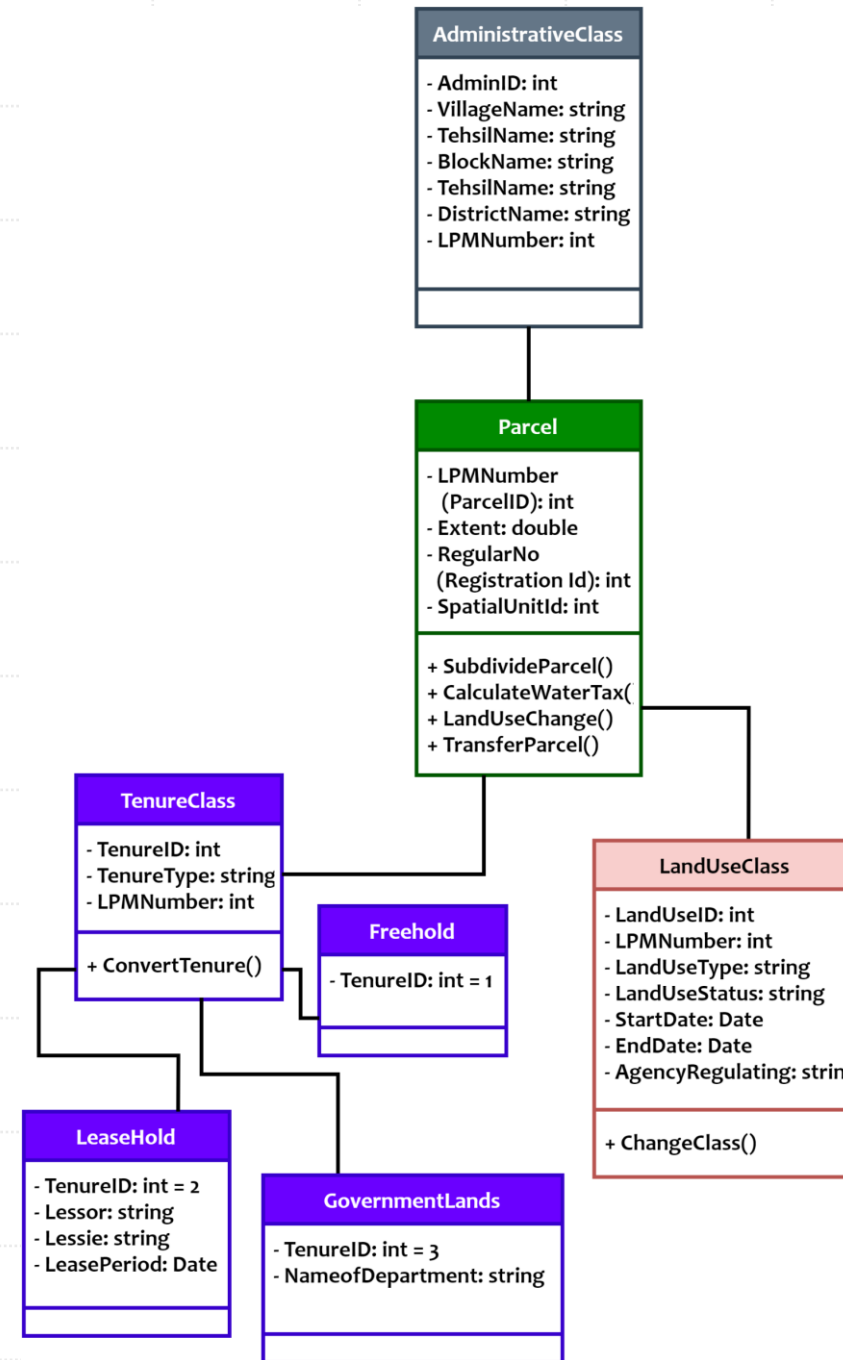


Data Models & Integrated Systems – For Citizen Empowerment (Land Systems)

- Standard data structures, formats, and relationships
 - Efficient & comprehensive integrations of land-related data (cadastral maps, property records, property tax, etc.)
 - Managing and maintaining land records – straightforward
 - Improved data quality, enhanced query and reporting
 - Data models can incorporate legal and regulatory requirements into the data structure
- Workflow automation
- Scalable and cost saving
- Interoperability – allow different software applications and databases to communicate seamlessly within or/and outside the land ecosystem

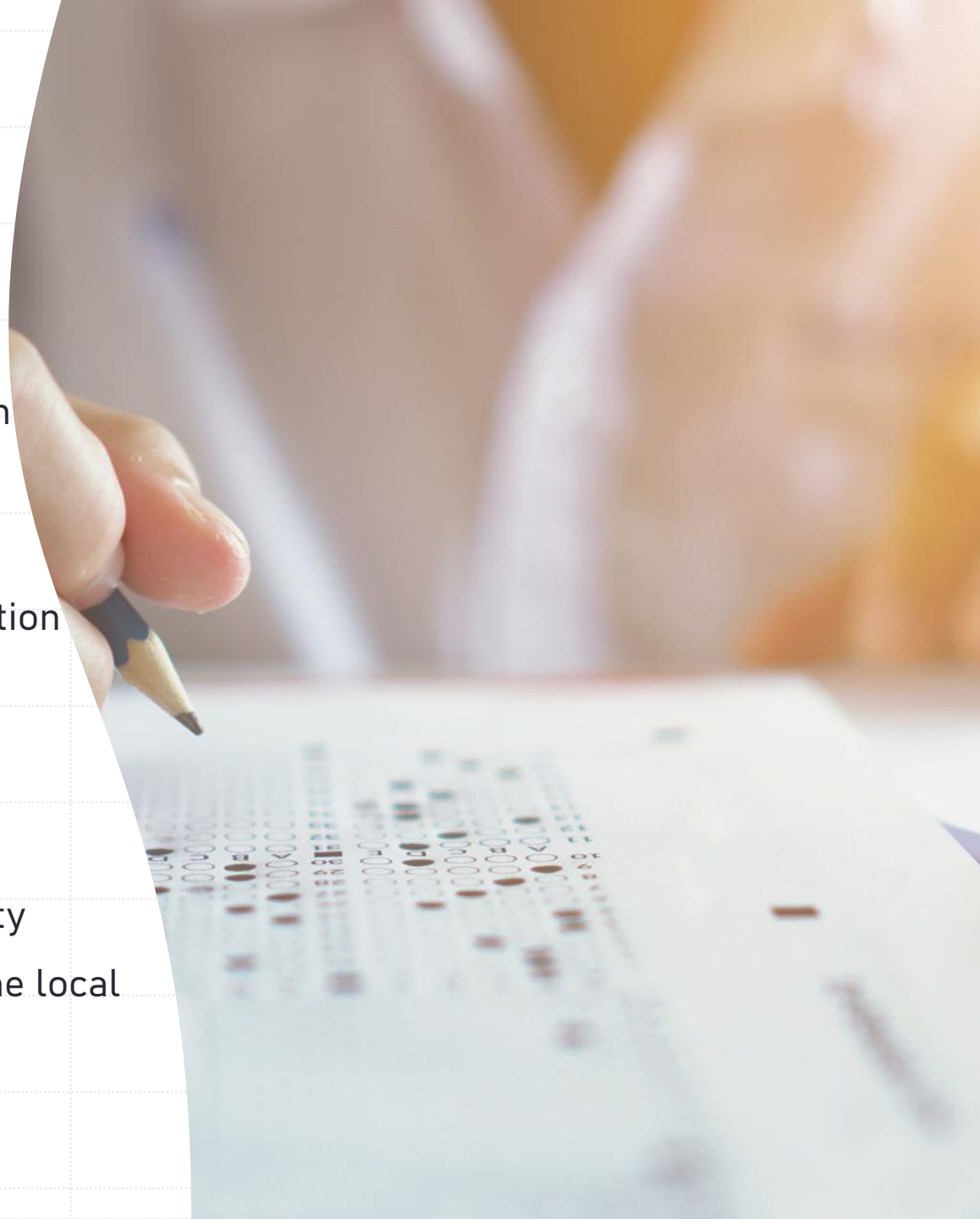
Data Models


Example – Tenure Class & Land Use



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Conclusion

Q&A

Thank you

