Merits and Benefits of Effective Land Administration

Paula Dijkstra
Director Kadaster International
Mexico, 9 April 2024
The Netherlands

12 Provinces
342 Municipalities
21 Water Authorities
\(~40,000~\text{km}^2\)
\(~17.8~\text{million inhabitants}\)

**Country:** e-Government spatial data infrastructure

**Provinces:** Spatial planning, environment and conservation

**Municipalities:** land management, zoning, local development

*Key partner in e-Government and SDI*
System of Key Registries

Key register = Authentic registers

Single registration of authentic data

Mandatory re-use of the data by all governmental bodies

Citizens do not have to supply data over and over again

Known quality and source of data
Mission
Kadaster

As an independent body, Kadaster provides certainty with transparency regarding ownership and the use of property and space. This provides an important basis for economy and contributes to prosperity. On a daily basis, we provide overview and support in decision making. In the Netherlands and abroad.
Information from the Key Registry Cadastre

Average housing price per municipality - 2023
Combining Mortgage data with income

Percentage of transactions attainable with average income (€60,000) in 2023

- < 10%
- 10%-20%
- 20%-40%
- 40%-50%
- > 60%
- <10 transactions
Kadaster information hub in eGovernment

Customers just like to know ‘everything’...
Advocacy & Application of FELA
Advocacy Research EuroSDR on FELA

A project to raise awareness of the merits and benefits of Effective Land Administration

Share knowledge and experiences about leveraging FELA as an overarching policy guidance

▲ Stage one: focus on pathways Governance, Law and Finance

▲ Stage two: focus on Data, Innovation and Standards (18 questions)
Implementing the Framework for Effective Land Administration

Sustainable development demands effective land administration

The selection of participants was restricted to European countries, with an existing relationship with EuroSDR and/or UN-GGIM Europe.

Participating countries:

- Austria,
- Belgium,
- Bosnia & Herzegovina,
- Bulgaria,
- Cyprus,
- Czech Republic,
- Denmark,
- England and Wales,
- Estonia,
- Finland,
- Germany,
- Italy,
- Latvia,
- Luxembourg,
- the Netherlands,
- Portugal,
- Scotland,
- Slovenia,
- Spain,
- Sweden,
- Switzerland,

In total 21 countries participated

The participating countries represent all regions of Europe: Central and Eastern, Northern, Southern and Western Europe.

Source: https://www.eurosdr.net/sites/default/files/uploaded_files/eurosdr_publication_ndeg_74.pdf
Implementing the Framework for Effective Land Administration

Sustainable development demands effective land administration

- Online survey approach aimed to create an overview of the different stages of awareness and uptake of the FELA by the Members of EuroSDR and/or UN-GGIM Europe

- Done by converting the FELA framework into a series of questions

- Each FELA strategic pathway question set would allow for a mix of quantitative and qualitative data to be collected

- Questions were created based on insights provided through the development of the FELA, as well as the specific context and discussions during the various EG-LAM meetings

- Survey included both closed and open-ended questions
  Closed-ended question provided multiple choice answer option, therefore a set of answers was offered
  (Whilst this might be considered a constraint, it was felt the benefits of enabling comparison between countries outweighed the prescriptive nature of the responses provided)

  Open-ended questions provided for more in-depth insights at a country-specific level to be provided

Source: https://www.eurosdr.net/sites/default/files/uploaded_files/eurosdr_publication_ndeg_74.pdf
Implementing the Framework for Effective Land Administration

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This question relates to the FELA Pathway I ‘Governance, Institutions and Accountability’ – FELA calls for clear governance models, leadership, institutional structure and a clear value proposition. FELA describes the importance of the political endorsement to strengthen the institutional mandate.

Which option best describes leadership in the land administration sector in your jurisdiction?

- Autocratic/commanding (i.e., centralized to a single body,...)
- Bureaucratic/transactional (i.e., multiple agencies lead via rules...)
- Collaborative/cooperation (i.e., multiple agencies work together...)
- Laissez-faire/market driven (i.e., limited formal overarching leadership...)
- None of this options
- I am unsure

Both bureaucratic and collaborative leadership styles were the two most frequently mentioned, (collaborative way being the main trend). Going further, qualitative answers revealed there is cases of mixed leadership with some tasks being defined through laws (most of the time the overall mandate) and others by collaboration with other key stakeholders.

Source: https://www.eurosdr.net/sites/default/files/uploaded_files/eurosdr_publication_ndeg_74.pdf
Implementing the Framework for Effective Land Administration

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Appears to be a level of homogeneity in the surveyed countries with respect to governance structures, leadership, laws, and finance. Perhaps expected due to historical origins of systems and the recent influence of European Commission.

There are outliers though. These could indicate different interpretations of the question, or that a given jurisdiction is taking a substantially different approach to land administration – therefore in-depth interviews.

In general, it could be assumed that most countries are (or until now) have been moving towards a more collaboration and diversification in land administration decision making and mandate.

Need to analyze thoroughly the qualitative data, and assess its alignment with the quantitative results, the need to refine the survey further, apply inferential statistics.

It has been shown that it is possible to convert FELA into a tool for assessment and awareness raising.

This work is part of a broader activity/collaboration between UN-GGIM Europe and EuroSDR. It is positive to see this kind of policy transfer work taking place.

Source: https://www.eurosdr.net/sites/default/files/uploaded_files/eurosdr_publication_ndeg_74.pdf
Partnership with FIG

- Joint Publication FAO, UNECE, FIG
- Includes country examples
- FELA used to identify recommendations
Indonesia: Improving modern land administration

Kadaster supports the Indonesian National Land Agency, representing the Ministry of Agrarian Affairs and Spatial Land Planning (ATR/BPN) with institutional and technical change. This is needed to deliver a modern land registration system in Indonesia by 2024.

In this way, Indonesia is moving towards a land administration system that meets the social, economic and environmental needs. The agency has been undertaking continuous improvement initiatives, particularly relating to increasing map coverage and digitalisation over recent decades.
Aim of Cadastre Committee to be have a transparent, secure, unified and citizen-oriented cadastral system.

The 5-year plan takes a broad FELA-like perspective, involving:

- legislative
- administrative
- institutional
- technological activities

Armenia: digitizing archives

Armenia is moving towards a more transparent, secure, unified, and citizen-oriented cadastral system. A core activity of this transition, which is manifested in the 5-year reform plan of Cadastre Committee (CC), is the digitalisation of the cadastral archives in Armenia.

Digital cadastral archives facilitate the creation of modern online, streamlined self-services, and a paperless environment for the CC. In addition, it supports land allocation, including qualitative and quantitative analysis, monitoring, land appropriation and the management of other types of property rights on land.
Land at Scale Programme Chad

Improved land tenure security for all (including vulnerable groups like women and youth) and reduced conflict over land in the intervention regions.

- Statistical Information
  - Population: app. 17 million (app. 2 million in N'Djamena)
  - Landlocked country (desert north - Sahara, Sahelian belt – center, Sudanian Savanne south)
  - Chad's land legislation dates back to 1967 and the body of law is poorly applied
  - Reflected in no. of land conflicts in both urban and rural and also reflected in low no. of existing land titles
  - Instable political situation – change of leadership

<table>
<thead>
<tr>
<th>FELA Pathway</th>
<th>Opportunities and Challenges in Chad</th>
</tr>
</thead>
</table>
| **Governance, Institutions and Accountability** | • Political stability is needed for a holistic transformation towards a sustainable land administration;  
  • Unclear mandates and changing leadership in ministerial posts;  
  • Political will is existing and can be leveraged  
  • Networks amongst different ministries established; |
| **Law and Policy**                | • Absence of Land Policy causing lengthy processes;  
  • Legal framework to be in place for piloting/a complete role out in Chad;  
  • Int. examples on successful land policies can support developments;  
  • Development of policy can consider lessons learnt from case study; |
| **Finance**                      | • Sustainable business model for land administration is not existing;  
  • Donor support in the future is likely;  
  • Governmental interest to explore Public Private Partnerships is given; |
| **Data**                         | • Available data is segmented and paltry;  
  • Lack of vision for data governance and geospatial data strategy across ministries;  
  • Developing and implementing data quality and open data standards;  
  • Establishment of a robust IT infrastructure; |
| **Innovation**                   | • Combination of different methodologies to address the various land realities on the ground envisioned;  
  • Innovation limitations based on hardware, electricity, connectivity, etc. |
| **Standards**                    | • Lack of data standardisation program;  
  • Capacity around standards;  
  • Enthusiasm of the local team; eagerness to learn;  
  • Agreement on the need to involve the local team in the implementation of future initiatives; |
| **Partnerships**                 | • Donor-working groups coordination;  
  • Extension of the network of partners (NGOs, CSOs, private sector etc.);  
  • Gender responsive approach and particular attention to vulnerable Awareness at all ministerial/governmental level that community involvement is imperative; |
| **Capacity and Education**       | • Capacity and level of literacy in specific areas;  
  • Capacity development programs will be needed for piloting;  
  • Communication and awareness programs need to consider differences  
  • Monitoring and evaluation indicators may vary for the pilots |

Source: https://www.fig.net/resources/proceedings/fig_proceedings/fig2023/papers/be011/78011_unger_bennett_et_al_12242.pdf
Strengthening land administration in Nepal amidst climate change

March 26, 2024

From February 27 to 29, 2024, the workshop "Effective Land Administration in Nepal: Navigating Governance, Legal and Financial Pathways within the Climate-Change – Land Nexus" took place at the Land Management and Training Center (LMTC) in Dhusikhel, Nepal. It brought together 20 participants involved in land issues from various sectors, including federal and provincial land ministries, NGOs/ CBOs, academic institutions, and UN-Habitat. Experts from Kadaster, UN-Habitat, the training center, the Ministry of Land Management, Cooperatives and Poverty Alleviation, and local NGOs provided insights on national and international strategies for land administration within the context of climate change.
### Example of Group Work on Land – Climate Nexus Supported with FELA

<table>
<thead>
<tr>
<th>2030 Agenda - FELA 5 Ps</th>
<th>Climate Objective</th>
<th>Evidence from Policy</th>
<th>Land Administration theme</th>
<th>FELA Pathway</th>
<th>Stakeholders in Nepal</th>
<th>Success Indicator for Nepal</th>
<th>Supporting (New) Initiatives</th>
<th>Means of Verification in Nepal</th>
<th>Action/Project Idea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partnership Planet</td>
<td>Build the climate resilience of vulnerable communities in rural and urban sectors (p.23)</td>
<td>NAPA2020</td>
<td>Climate Change – Land Nexus</td>
<td>Governance, Institutions, and Accountability</td>
<td>...</td>
<td>Degree of inter-agency and cross-sectoral collaboration</td>
<td>...</td>
<td>Number and nature of collaborative initiatives or platforms established for coordinating the climate land nexus across different sectors and levels of government</td>
<td>Task Force for inter-agency and cross-sectoral collaboration ...</td>
</tr>
<tr>
<td>Partnership Planet</td>
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<td>NAPA2020</td>
<td>Climate Change – Land Nexus</td>
<td>Legal and Policy</td>
<td>...</td>
<td>Number of climate policies or action plans revised to include land.</td>
<td>...</td>
<td>Count of national, regional or local climate policies or action plans that have been updated to integrate land explicitly</td>
<td>Legal Framework Harmonization Nepal Expert Group Meeting ...</td>
</tr>
<tr>
<td>Prosperity</td>
<td>Build the ...</td>
<td>NAPA2020</td>
<td>Climate Change – Land Nexus</td>
<td>Finance</td>
<td>...</td>
<td>Level of ...</td>
<td>...</td>
<td>Increase in the ...</td>
<td>...</td>
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Renew our Vision Key Registry Cadastre (BRK)

Why?

- Increasing pressure on public access to BRK & public records
- Assessment of our role within the system of keyregistries and real estate sector
- Quality improvements to adapt to the needs of society to tackle complex societal issues

- First round is with consultations and a needs assessment
- FELA provides a structure for the approach and is helpful to compare with other countries
Highlighting FELA Parthway VI: Standards
Standards assist in cost reduction and support removal of duplication and maintenance efforts.

The Land Administration Domain Model (ISO 19152) provides an ISO endorsed data model.

The Social Tenure Domain Model (STDM), in Annex I of the LADM, provides a concept and data model to record all people to land relationships.

Source: UNGGIM. Framework for Effective Land Administration. Available online: https://ggim.un.org/meetings/GGIM-committee/10th-Session/documents/E-C.20-2020-29-Add_2-Framework-for-EffectiveLand-Administration.pdf Figure adapted by Unger EM
Land Administration Domain Model (LADM) Parts

- Part 1 – Generic Conceptual Model (published)
- Part 2 – Land Registration
- Part 3 – Marine Georegulation
- Part 4 – Valuation Information
- Part 5 – Spatial Plan Information
- Part 6 – Implementations (OGC March '24)

News in 2024

Publication of the first part of LADM Edition II

February 2024

The Land Administration Domain Model (LADM) is an internationally recognised ISO standard (ISO 19152) that provides and supports responsible innovation and partnerships, for effective land administration.
LADM v2 Part 6: Implementation Aspects

• OGC SWG Land Administration standard components:
  1. Methodology for developing a country profile
  2. Technical model / encodings (JSON, XML, INTERLIS, RDF, IFC, ..)
  3. Management and maintenance of semantically rich code list values (SKOS)
  4. Procedures / workflows (land registry, marine georegulation, valuation information, spatial plan information)

• OGC SWG LA standard(s) will become ISO LADM part 6

• ISO TC211 standards become CEN TC287 standards by parallel voting (Vienna agreement)
STDM

The Social Tenure Domain Model (STDM) is an approach to compliment conventional approaches in land administration.

STDM is a normative annex in LADM.
Under development ...
Proposal STDM ‘Valuation of Unregistered Land’
Based on discussion during LADM Workshop 11th October 2023

Participants @ event:
Abdullah Kara, Chris Body, Dubravka Sladic, Eva-Maria Unger, Jaap Zevenbergen,
Peter van Oosteroom

Participants @ e-mail discussions:
Abdullah Kara, Chrit Lemmen, Eva-Maria Unger, Jaap Zevenbergen, James Kavanagh,
Kwabena Asiama, Peter van Oosteroom

Protect our planet’s natural resources and climate for future generations. The changing climate and growing population increases the number of natural disasters, affects the resilience of the vulnerable and marginalized, who are typically not addressed through any land administration and land management system. The increasing pressures on communities, and on natural and built environments, including marine areas, challenge the achievement of the SDGs. Current approaches to the delivery of land-based ecosystem services are often poorly managed and planned. **Effective land administration systems should play a role in supporting improved land-based services, contribute to mitigating climate change, and supporting both integrated ecosystem and landscape based approaches. Effective land administration ensures preparedness and resilience, participatory and inclusive land use planning, monitoring of land-cover change, sustainable resource management, building back better, and the protection of our planet’s natural resources and environment for future generations.**

The Framework for Effective Land Administration

Sustainable development demands effective land administration

Climate Change 2022
Impacts, Adaptation and Vulnerability
Summary for Policymakers

Increased weather and climate extreme events have exposed millions of people to acute food insecurity and reduced water security, with the largest impacts observed in many locations and/or communities in Africa, Asia, Central and South America, Small Islands and the Arctic (high confidence).

Terrestrial and aquatic ecosystems and species are often less degraded in land managed by indigenous peoples and local communities than in other lands (medium confidence).

Vulnerability of ecosystems and people to climate change differs substantially among and within regions (very high confidence), driven by patterns of intersecting socioeconomic development, unsustainable ocean and land use, inequity, marginalization, historical and ongoing patterns of inequity such as colonization, and governance (high confidence).


Source: presentation by Unger, FIJI, UN-GGIM Conference
International Office for Cadaster and Land Records (OICRF)

OICRF is a permanent institution in FIG

Kadaster is hosting OICRF since the start in 1958

A repository for FELA
To conclude
Merits and Benefits of Effective Land Administration

FELA has since its adoption been recognized as a comprehensive framework for countries to strengthen their land administration systems, promote sustainable land management practices, and support inclusive and equitable development.

By using the structure of FELA as described in the document, countries can unlock the potential of their land resources to drive inclusive and sustainable development.
BE THE CHANGE
Take the Challenge