



OVERVIEW OF LAND ADMINISTRATION: CONCEPTS AND FRAMEWORKS

A CAPACITY DEVELOPMENT LECTURE IN COOPERATION BETWEEN
ARAB LAND INITIATIVE AND
ARAB ACADEMIC NETWORK FOR LAND GOVERNANCE (ARA-LG)

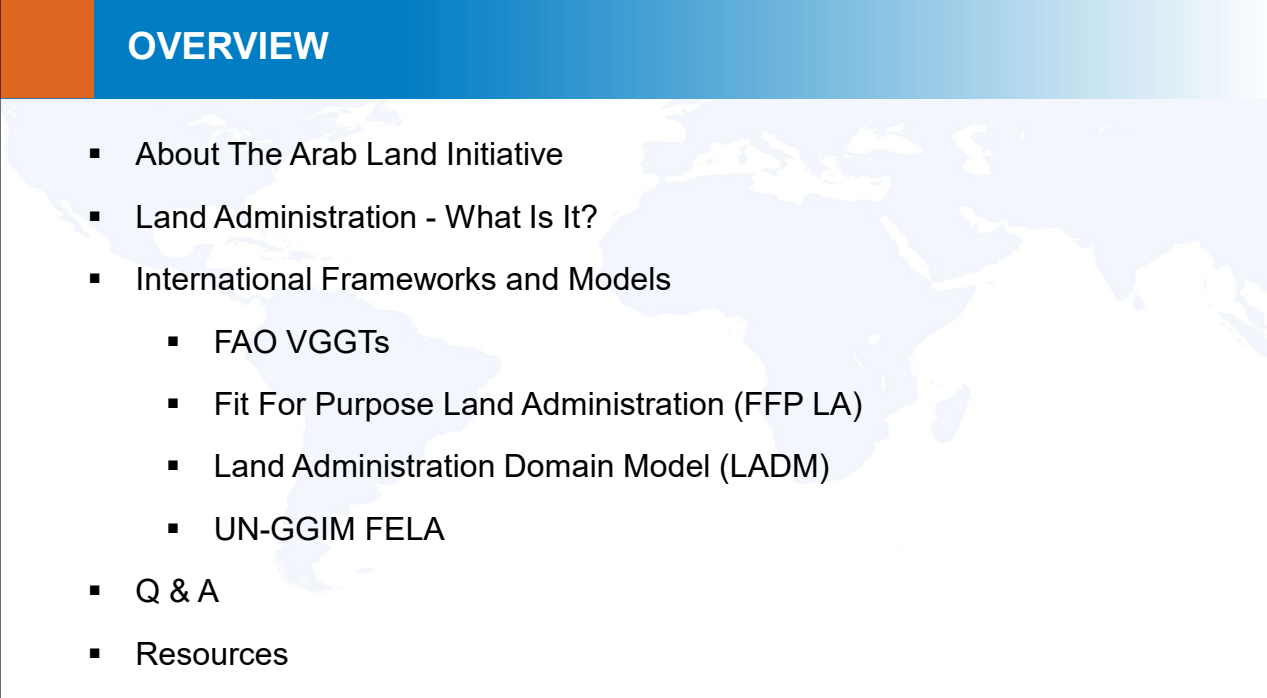
Al-Quds University, 30 April 2025
University of Duhok, 20 May 2025



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OVERVIEW

- About The Arab Land Initiative
- Land Administration - What Is It?
- International Frameworks and Models
 - FAO VGGTs
 - Fit For Purpose Land Administration (FFP LA)
 - Land Administration Domain Model (LADM)
 - UN-GGIM FELA
- Q & A
- Resources

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ABOUT THE ARAB LAND INITIATIVE



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Arab Land Initiative

The Arab Land Initiative, established in 2016 by a group of Global Land Tool Network partners led by UN-Habitat, aims to tackle land governance challenges in the Arab region, promoting sustainable land management and equal access to land for peace, stability, climate resilience, and economic growth.

Since its establishment, the Initiative reached noticeable achievements by increasing the visibility of land issues among decision makers and empowering land governance champions through increased coordination, collaboration, capacity, knowledge and information sharing.

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E-LIBRARY!**

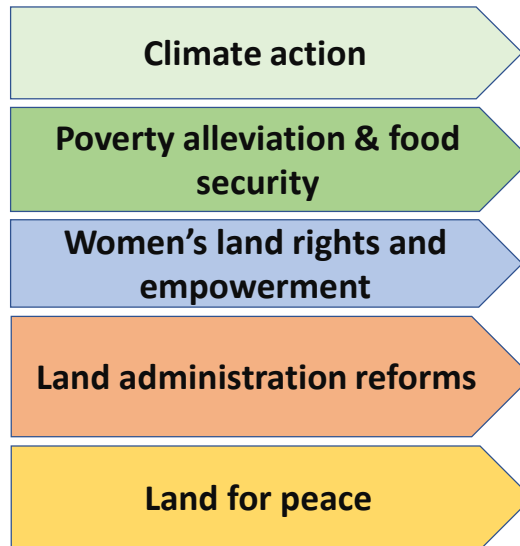


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Arab Land Initiative's vision

“All the people in the Arab countries enjoy **equal and affordable access to land for peace, stability and economic growth**, to be achieved with good **land policies** and transparent, efficient and affordable **land administration**”

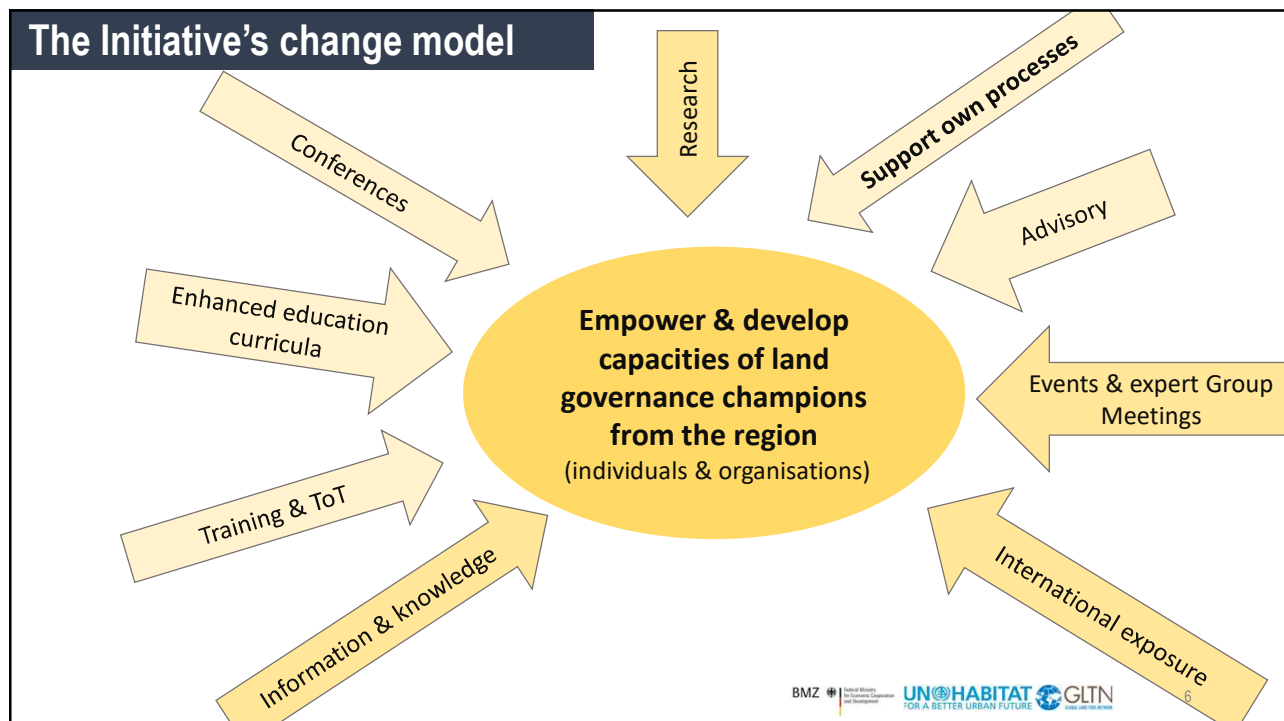


Note: Social change approach is based on soft systems methodology for complex contexts (Checkland: 2000 and Ortiz: 2013), adapted and used by GLTN over 15 years



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The Initiative's change model



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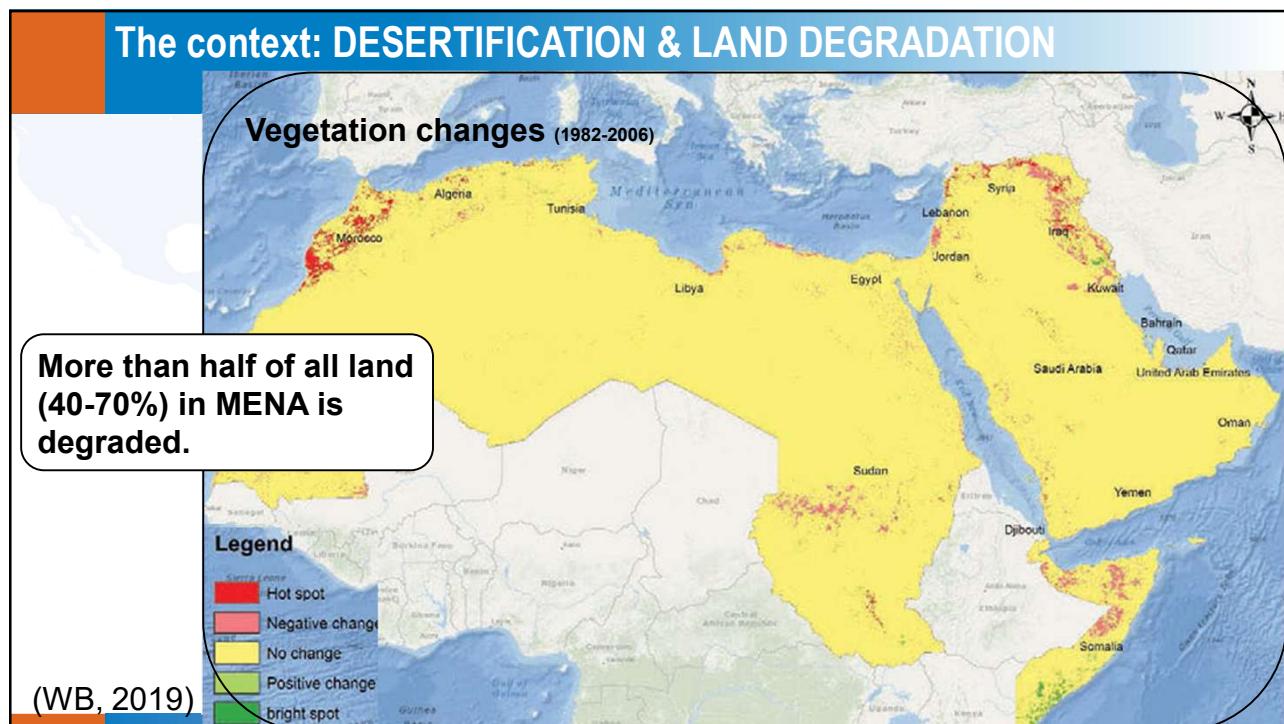
BMZ Federal Ministry for Economic Cooperation and Development

 UN HABITAT
FOR A BETTER URBAN FUTURE

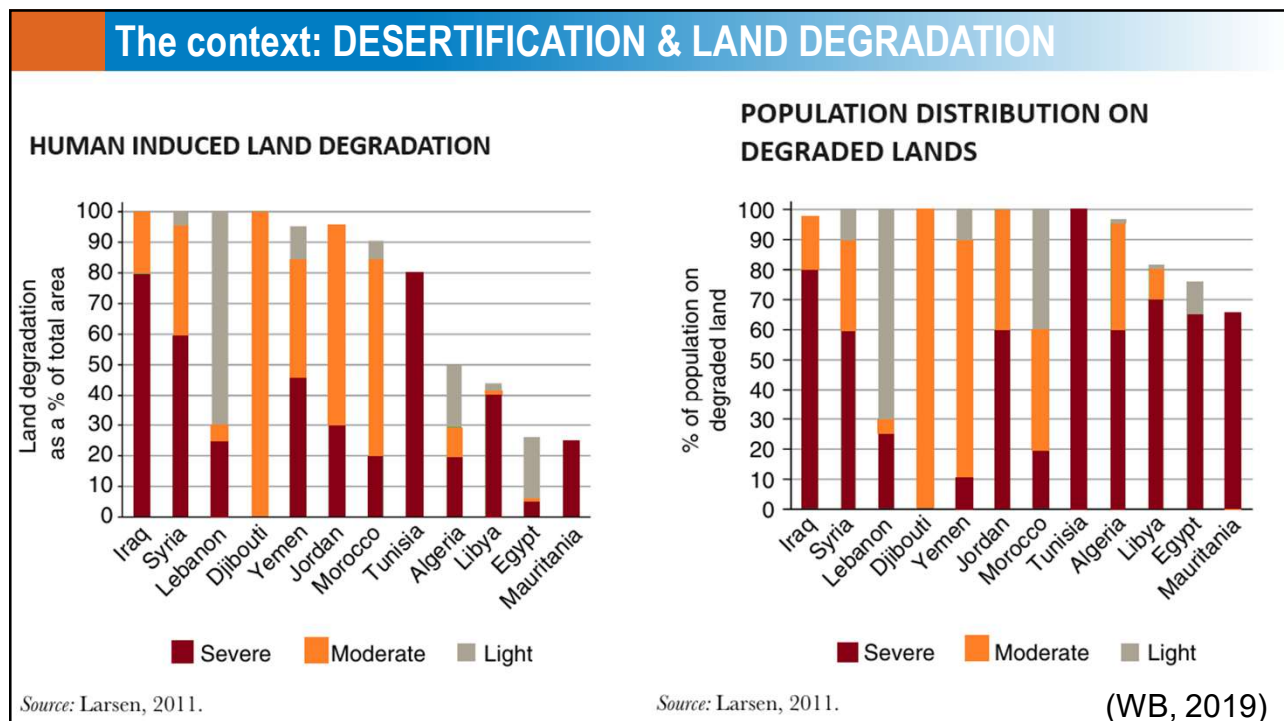
 GLTN
GLOBAL LEAD TALK NETWORK



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LAND FOR CLIMATE ACTION & FOOD SECURITY

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Key findings

- Land degradation and conflict are deeply intertwined: **land degradation fuels conflict** and leads to mass displacement. **Conflict accelerates land degradation** and jeopardizes the LDN investments.
- **Prerequisites to solutions:** national commitment, local leadership, & active participation of communities. Securing land rights of individuals and communities. Fit-for-purpose land administration.



LAND DEGRADATION AND CONFLICT

Case studies from Sudan, Jordan and Niger

SECURING LAND AND PROPERTY RIGHTS FOR ALL



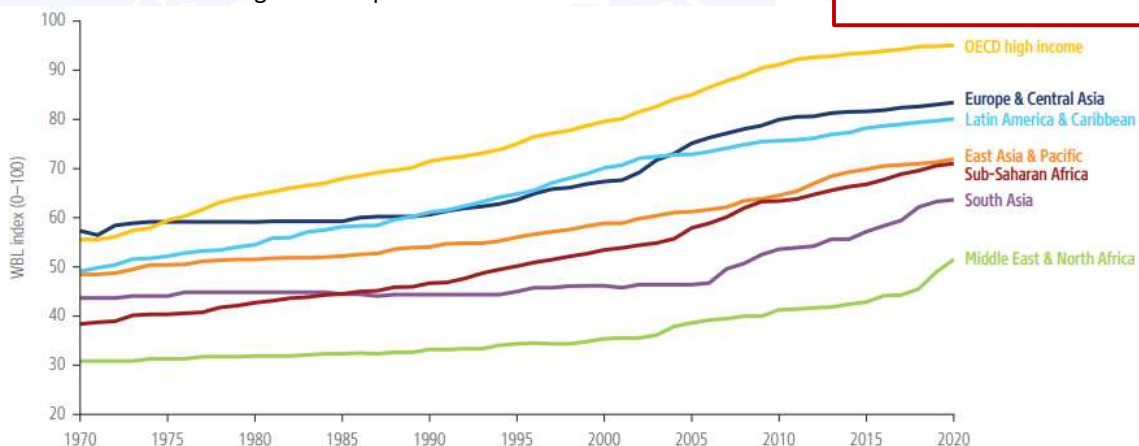
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WOMEN'S LAND RIGHTS

MENA HAS THE highest gender gap globally, with Yemen, Iraq and Saudi Arabia among the least performant countries



142 years to close the gender gap in the MENA region



Source: Women, Business and the Law (WBL) database.

Note: Figure shows change in the average WBL index score across seven regions between 1970 and 2020. OECD = Organisation for Economic Co-operation and Development.



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WOMEN'S LAND RIGHTS: GLTN & the Arab Land Initiative

ISLAMIC PRINCIPLES AND LAND
OPPORTUNITIES FOR ENGAGEMENT

UN HABITAT UEL GLOBAL LAND TOOL NETWORK

2011

2018

2023

BMZ Federal Ministry for Economic Cooperation and Development

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WOMEN'S LAND RIGHTS: Debates, making space for multistakeholder dialogues

Campaigns in:

- 📍 Lebanon
- 📍 Tunisia
- 📍 Libya

- Raising **awareness and knowledge**
- Initiate a **multi-level dialogue** about women's HLP rights
- **Identify discriminatory laws** and policies hindering women's access to land
- **Empower women** to claim their rights

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LAND & CONFLICT – HLP RIGHTS OF DISPLACED PEOPLE

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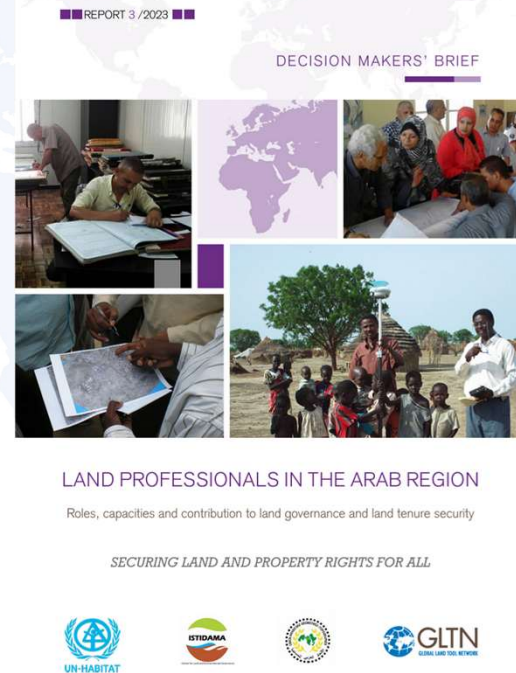




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Land Professionals in the Arab Region: roles, capacities and contribution



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Way Forward in the region

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1. Empowerment and support to organisations / institutions, experts and practitioners through coordination & collaboration, capacity and knowledge development
2. Catalyse and support country / partners' interventions
3. Leaders & decision makers' attention
4. Regional leadership & institutionalization.



Shared Prosperity Dignified Life



ECA



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LAND ADMINISTRATION - WHAT IS IT?



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LAND ADMINISTRATION ISO 19152*

Process of determining, recording and dissemination information about the relationship between people and land

This International Standard deals with **real rights** and **personal rights**. Real rights are rights over or in respect of **spatial units** (e.g. ownership, or usufruct). Personal rights are rights that parties have (e.g. fishing rights, grazing rights, or use rights).

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KEY CONCEPTS IN LAND ADMINISTRATION

Land administration encompasses the processes and institutions through which land rights are recorded, transferred, valued, and managed.

It includes four key functions:

- Land tenure: securing and recording ownership and use rights
- Land value: property valuation and taxation
- Land use: control and regulation of land utilization
- Land development: planning and construction

Actors include government agencies, private firms, and civil society.

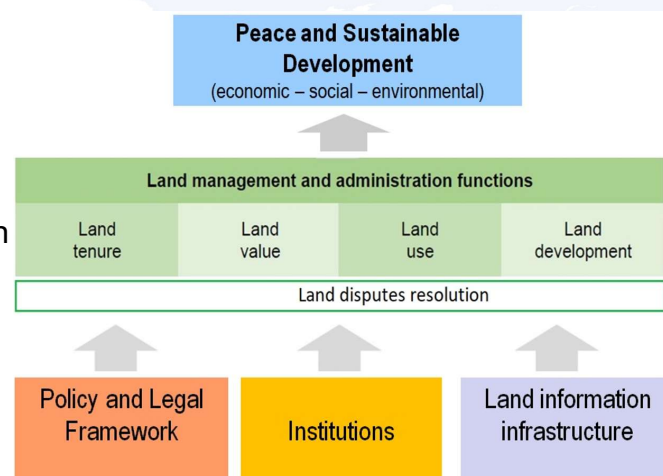
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LAND ADMINISTRATION

A Land Administration System

provides the infrastructure for:

- Securing land tenure rights
- Determining valuation and taxation of land
- Managing the use of land and land development.



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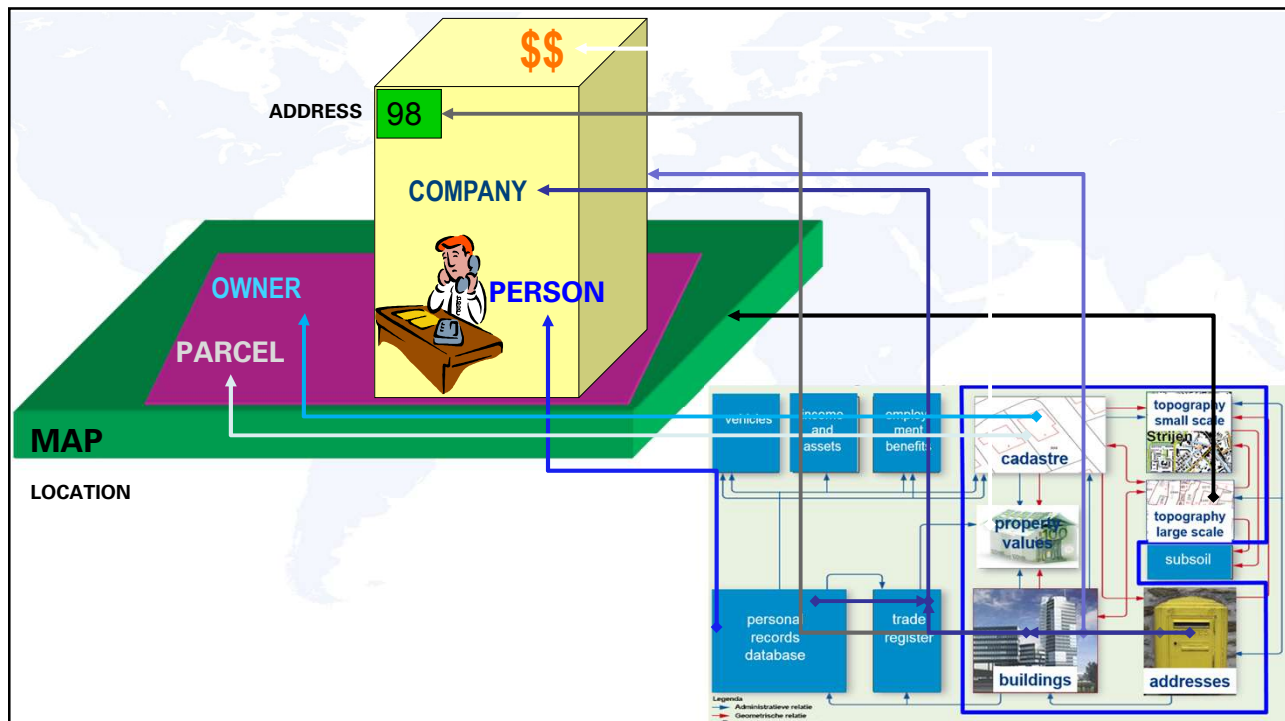
LAND ADMINISTRATION SYSTEMS (LAS)

LAS refer to the infrastructure for implementing land policies.

They manage data on land parcels and rights through cadastral maps and legal registries.

Effective LAS combine legal, spatial, and institutional components. Differences exist between countries in formal vs. informal tenure systems and institutional arrangements.

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GLOBAL CHALLENGES IN LAND ADMINISTRATION

- 70% to be done (worldwide)
- Institutional setting
- Transparency
- Paper based systems
- Legacy
- Information management
- Decentralisation
- Poor and vulnerable
- Gender



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GLOBAL CHALLENGES IN LAND ADMINISTRATION

- Outdated, complex & opaque land systems exacerbate informality
- Lack of modern systems in many countries
- Onerous registration procedures and low registration
- Low coverage of registries
- Governments fail to manage land to generate public revenues
- Land sector disproportionately occupied by state actors / elites
- Shrinking space for civil society engagement
- Little collaboration among sectors (e.g. climate experts, planners, surveyors)

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INTERNATIONAL FRAMEWORKS AND MODELS



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INTERNATIONAL FRAMEWORKS AND MODELS

Land administration is shaped by international standards and best practices developed by organizations like UN-Habitat, FAO, FIG, UN-GGIM.

This section introduces the current major frameworks:

- Food and Agriculture Organization (FAO) Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGTs).
- Fit-For-Purpose Land Administration (FFP LA)
- Land Administration Domain Model (LADM)
- United Nations – Global Geospatial Information Management (UN-GGIM) Framework for Effective Land Administration (FELA)

These models promote transparent, inclusive, and interoperable systems.

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FAO VOLUNTARY GUIDELINES (VGGTS)

The **V**oluntary **G**uidelines on the Responsible **G**overnance of **T**enure of Land, Fisheries and Forests in the Context of National Food Security (VGGTs) provide principles for the responsible governance of tenure. Developed by FAO in collaboration with governments and civil society, they:

- Promote secure access to **land, fisheries, and forests**
- Emphasize transparency, equity, and accountability
- Integrate tenure with food security and sustainable development

FAO. 2022. *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security*. First revision. Rome. <https://doi.org/10.4060/i2801e>

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FAO VOLUNTARY GUIDELINES (VGGTS)

VGGTs are widely used to guide policy reforms. Implementation tools include national assessments, legal reviews, and capacity building.

The VGGTs align with the Sustainable Development Goals (SDGs) and support good land governance.

These Guidelines were endorsed by the CFS at its Thirty-eighth (Special) Session in May 2012

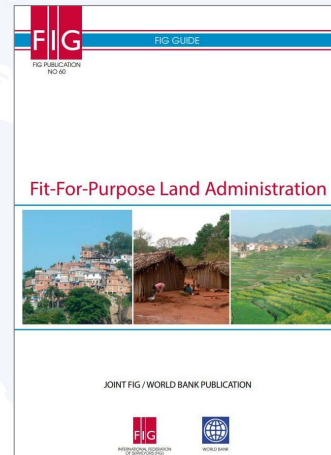


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FIT-FOR-PURPOSE LAND ADMINISTRATION (FFP LA)

A **fit-for-purpose** approach includes the following elements:

- **Flexible** in the spatial data capture approaches to provide for varying use and occupation.
- **Inclusive** in scope to cover all tenure and all land.
- **Participatory** in approach to data capture and use to ensure community support.
- **Affordable** for the government to establish and operate, and for society to use.
- **Reliable** in terms of information that is authoritative and up-to-date.
- **Attainable** to establish the system within a short timeframe and within available resources.
- **Upgradeable** with regard to incremental improvement over time in response to social and legal needs and emerging economic opportunities



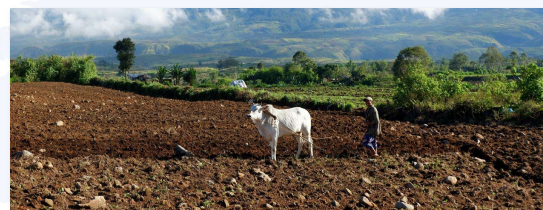
<http://www.fig.net/pub/figpub/pub60/figpub60.htm>



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FIT-FOR-PURPOSE - WHAT IS IT?

- **Fit-For-Purpose** - Designed for serving the basic purposes - provide secure tenure for all, control of the use of land
- **Flexibility** - Scale and accuracy relate to geography, density of development, and budgetary capacity; the legal and institutional framework should be designed to accommodate both legal and social tenure rights
- **Incremental Improvement** - Meet basic needs today, incremental upgrading



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LAND ADMINISTRATION DOMAIN MODEL

LADM is a **detailed data model** that defines the **structure, content, and relationships** between different types of land-related data. It provides a **common language** for describing land administration information and facilitates **interoperability** between different systems

INTERNATIONAL
STANDARD

ISO
19152

First edition
2012-12-01

Geographic information — Land
Administration Domain Model (LADM)

Information géographique — Modèle du domaine de l'administration
des terres (LADM)



Reference number
ISO 19152:2012(E)

© ISO 2012

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LAND ADMINISTRATION DOMAIN MODEL

LADM is the ISO 19152 standard that provides a unified model for describing land administration data. It

- Parties (people, organizations)
- Rights, Restrictions, Responsibilities (RRRs)
- Spatial units (parcels, areas)



International
Standard

ISO 19152-1

First edition
2024-01

Geographic information — Land
Administration Domain Model
(LADM) —

Part 1:
Generic conceptual model

Information géographique — Modèle du domaine de
l'administration des terres (LADM) —
Partie 1: Modèle conceptuel générique

<https://standards.iso.org/standards.html?std=62632&rel=ISO>

Reference number
ISO 19152-1:2024(en)

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LAND ADMINISTRATION DOMAIN MODEL LADM EDITION II MULTIPART

LADM supports software development for land registries. It enables modular systems that are interoperable and scalable. Extensions include:

- Valuation - Marine spaces - Planning and land use

PART 1 – Land
Administration
Fundamentals

PART 2 – Land
Registration

PART 3 – Marine
Space
Geo Regulations

PART 4 –
Valuation
Information

PART 5 – Spatial
Plan
Information

PART 6 –
Implementations

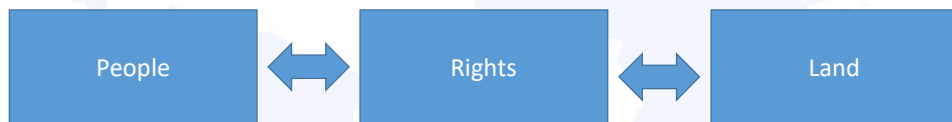
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PEOPLE TO LAND RELATIONSHIPS



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LADM : PEOPLE TO LAND RELATIONSHIPS



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LADM : PEOPLE: RIGHHOLDER-TYPES

Natural Person

- Individual
- Group with non-defined membership/Tribe
- Group/Family
- Group of groups
- Natural Person
- Married couple

Non Natural Person

- Village
- Municipality
- Ministry/State
- Farmers co-operatives
- Company
- Religious Community

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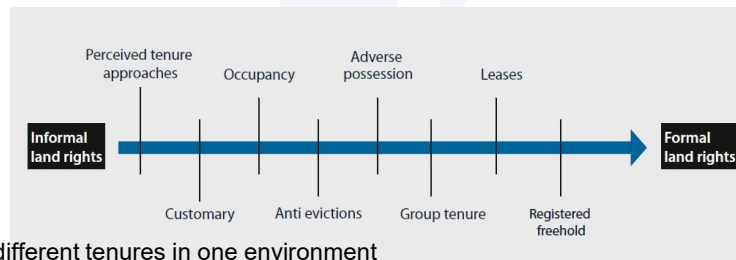
SPATIAL UNITS: TYPES AND WAYS OF REPRESENTATION

- Parcel
- Apartment
- Building
- Customary Area
- One Point - inside polygon
- One point - street axes
- Set of Lines
- Polygon (low accuracy)
- Polygon (high accuracy)
- 3D Volume

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PEOPLE TO LAND RELATIONSHIPS: RIGHT-TYPES

Formal	Marine
Informal	Mining
Customary	Forestry
Indigenous	Road access
Occupation	Restrictions
Land use	Responsibilities
Pastoralist	State, government
Grazing, Fishing	Nature
Cropsharing	Water



LADM supports the management of different tenures in one environment

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LADM RRR CLASSES

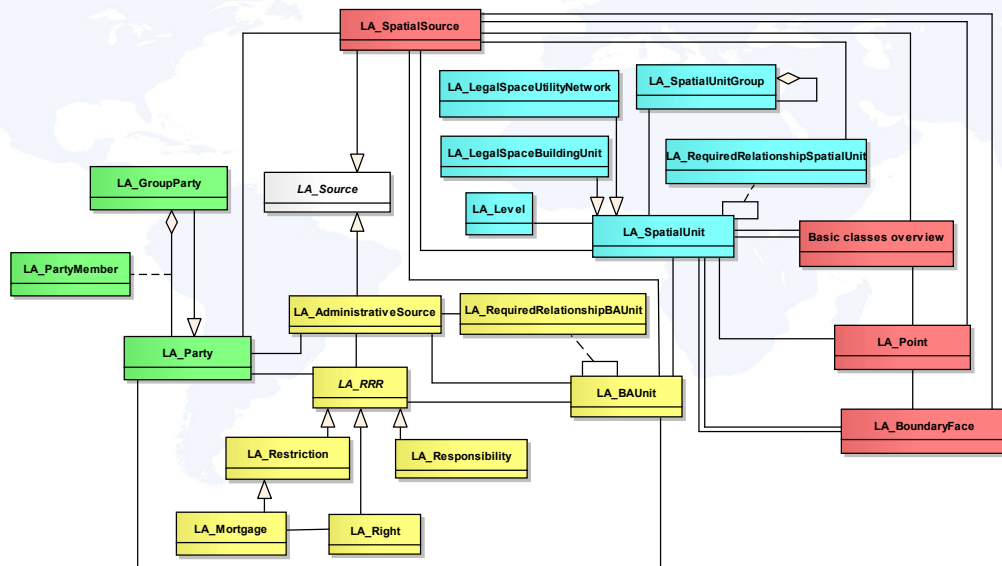
Right: action, activity or class of actions that a system participant may perform on or using an associated resource

Restriction: formal or informal entitlement to refrain from doing something

Responsibility: formal or informal obligation to do something

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LAND ADMINISTRATION DOMAIN MODEL



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UN-GGIM FELA FRAMEWORK FOR EFFECTIVE LAND ADMINISTRATION

Framework for Effective Land Administration (FELA)

A reference for developing, reforming, renewing, strengthening, modernizing, and monitoring land administration. FELA seeks to provide the reference and guidance for Member States when establishing, strengthening, coordinating and monitoring their land administration nationally or sub-nationally.

The Framework is developed for all countries, both developing and developed, all jurisdictions and all other stakeholders.

Prepared by: Expert Group on Land Administration and Management United Nations Committee of Experts on Global Geospatial Information Management
(UN-GGIM) - May 2020

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UN-GGIM FELA FRAMEWORK FOR EFFECTIVE LAND ADMINISTRATION

FELA provides a global reference for designing effective land administration systems. Developed by the UN-GGIM, it emphasizes:

- People-centered and transparent systems
- Strategic pathways for governance, partnerships, and innovation
- Alignment with global development frameworks



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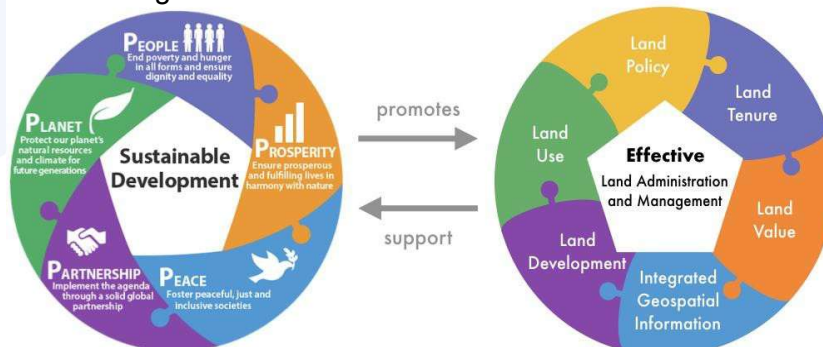
Framework for Effective Land Administration page 1

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FELA FRAMEWORK FOR EFFECTIVE LAND ADMINISTRATION

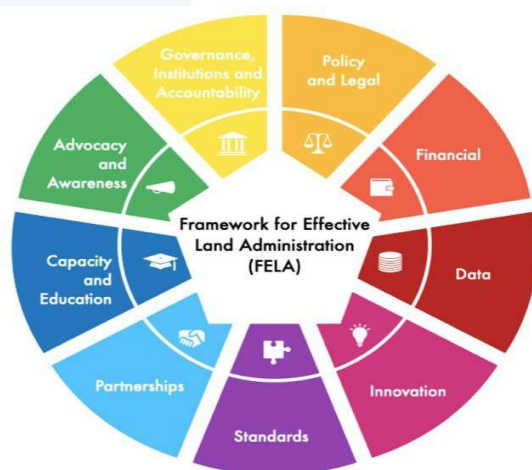
FELA encourages governments to develop modular and interoperable land data infrastructures. Its pillars include:

- Institutional frameworks
- Legal and policy alignment
- Technological innovation and integration



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FELA FRAMEWORK FOR EFFECTIVE LAND ADMINISTRATION



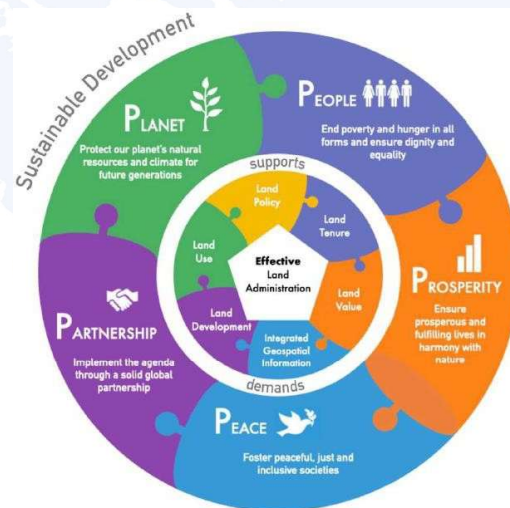
The Framework for Effective Land Administration (FELA), acts as an overarching policy guide, which provides a reference for Member States when developing, renewing, reforming, strengthening, modernizing, or monitoring land administration.

FELA with nine pathways aligned to the nine strategic pathways of the IGIF, seeks to provide the reference and guidance for Member States with regard to administering the relationships between people and land, and when establishing, strengthening, co-ordinating and monitoring their land administration nationally or sub-nationally.

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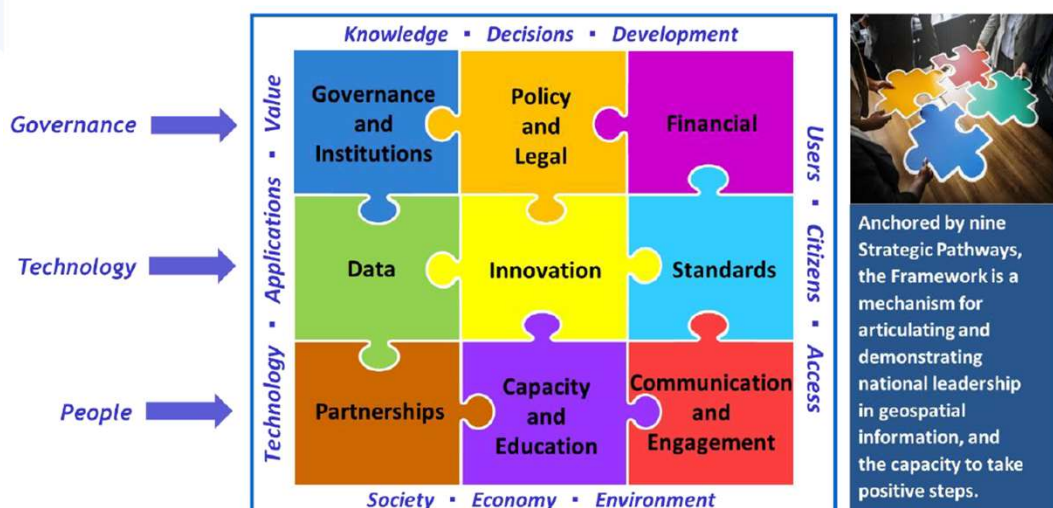
FELA FRAMEWORK FOR EFFECTIVE LAND ADMINISTRATION

FELA Goals	FELA Requirements	FELA Pathways
Transparency and accountability increased	Accountable and transparent governance	Governance, Institutions and Accountability*
Gender-responsive and inclusive of vulnerable groups	Inclusive and recognizes all forms of tenure	Policy and Legal
Affordable investments and economic return assured	Affordable with sustainable business models	Financial
Reliable data and service quality attained	Data maintained, secure and not duplicated	Data
Responsible and innovation oriented	Upgradable systems and approaches	Innovation
Interoperability and integration supported	Considers internationally agreed standards	Standards
Cooperation, partnerships, and participation leveraged	Strengthens partnerships and supports collaboration	Partnerships
Capacity, capability, knowledge transfer and exchange attained	Facilitates capacity development and knowledge transfer and exchange	Capacity and Education
National engagement and communication enhanced	Advocates for effective land administration	Advocacy and Awareness*



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FELA FRAMEWORK FOR EFFECTIVE LAND ADMINISTRATION



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FELA: TRANSLATIONS



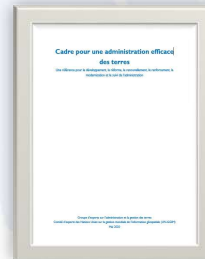
Spanish



Arabic



Chinese



French



Dutch

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RESOURCES

- FAO VGGTs:
<https://www.fao.org/tenure/voluntary-guidelines/en>
- UN-GGIM FELA
https://ggim.un.org/meetings/GGIM-committee/10th-Session/documents/E-C.20-2020-29-Add_2-Framework-for-Effective-Land-Administration.pdf
- Fit-For-Purpose Land Administration -
<https://www.fig.net/resources/publications/figpub/pub60/Figpub60.pdf>
- ISO 19152 – LADM
<https://www.iso.org/standard/51206.html>

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