

# SECURE TENURE FOR ALL MEN AND WOMEN

Presented at the FIG Working Week 2019,  
April 22-26, 2019 in Hanoi, Vietnam

Dr. Mikko-Petteri Törhönen, Lead Land Administration Specialist



**The World Bank's *Land and Geospatial Program* with a  
Reference to Achieving Sustainable Development Goals**



# **The World Bank Land and Geospatial**



International Bank for Reconstruction and Development (IBRD) **1944**



International Development Association (IDA) **1960**



- > 10,000 employees
- > 5,000 consultants
- 120 country offices



International Finance Corporation (IFC) **1956**



International Centre for Settlement of Investment Disputes (ICSID) **1966**



Multilateral Investment Guarantee Agency (MIGA) **1988**

### 2017 WBG Financing

- US\$ 59 billion

### Land Projects

- US\$ 3 billion
- 70 projects
- 42 countries (since 1980)

# The World Bank Group Twin Goals



THE WORLD BANK

## End Extreme Poverty

Reduce the percentage of people living on less than \$1.90 a day to 3% by 2030

## Promote Shared Prosperity

Foster income growth of bottom 40% of the population in every country

### Achieving the Goals in a Sustainable Manner:

Securing the long-term future of the planet and its resources, ensuring social inclusion, and limiting the economic burdens on future generations underpin efforts to achieve the two goals.

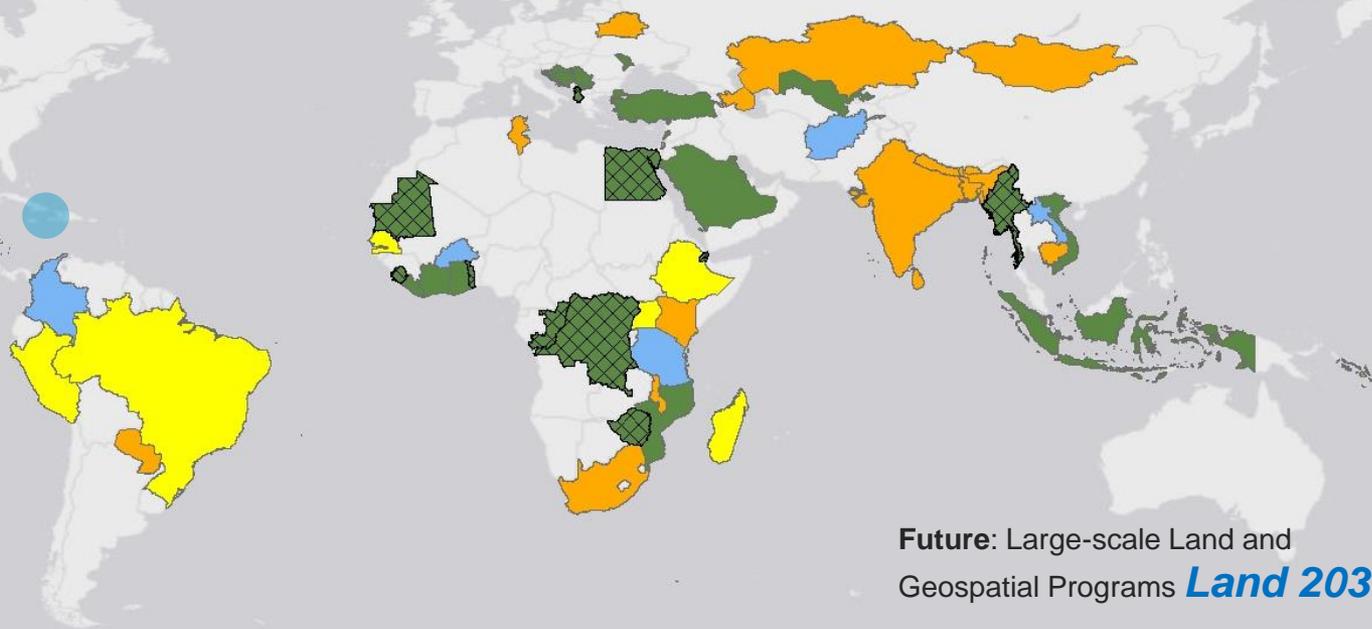
***The goals are aligned with the 2030 Sustainable Development Goals.***

# Our Land and Geospatial Program

## GSULN Portfolio FY19 - FY20

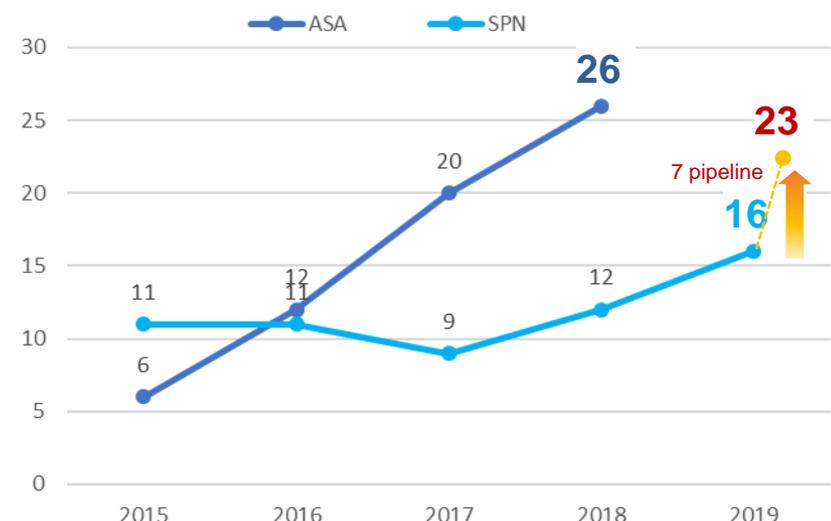
### Status/Type

-  ASA
-  Active
-  Pipeline
-  Prospective
-  Land Component

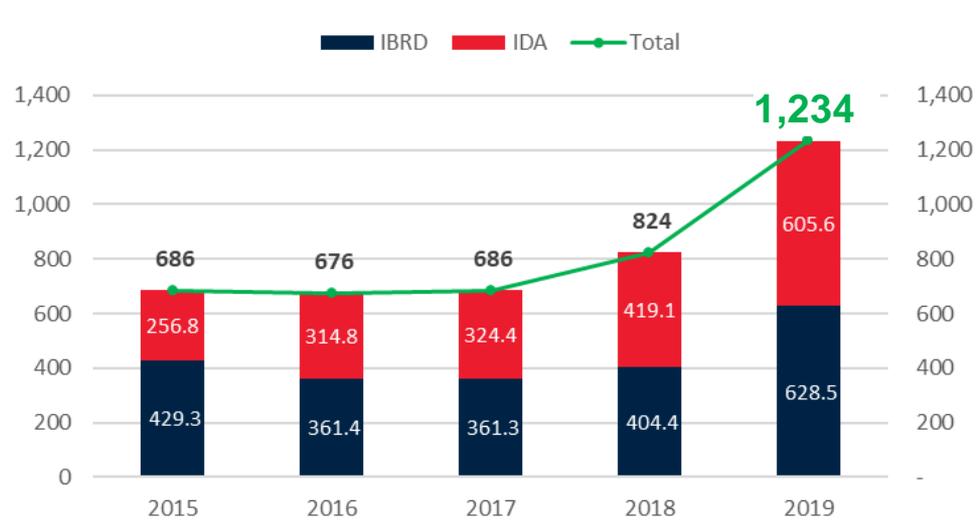


Future: Large-scale Land and Geospatial Programs *Land 2030*.

GSULN Portfolio - Number of Projects



GSULN Portfolio Size in US\$ (million)



# Challenges

**Global**

**Sectoral**

# Global Challenges by 2030



Population growth

**8.5 billion**

*\* Population projection*

Urbanization

**60%**

*\* Share of urban population*

Climate change

**23 cm**

*\* Global sea level rise*

Extractives & forests

**1.7 million km<sup>2</sup>**

*\* Deforestation (2010-2030)*

Renewable energy

**3 billion**

*\* People who lack of access to clean cooking solutions relying on wood, coal, charcoal for cooking and heating (current)*

Conflicts

**50%**

*\* Share of global poor living in FCV situations*

Insecurity of tenure

**28%**

*\* Percentage of people in 10 African countries who feel their right to property is insecure (current, Prindex)*

Political economy, corruption

**US\$ 1.3 trillion**

*\* Corruption cost for developing countries per year (current)*

# Global Trends: Food Production Needs to Increase

## Global food demand

To meet global food demand in 2050, agricultural production must be 60 percent higher by weight than in 2005.

*Alexandratos and Bruinsma, 2012*



*F. Fiondella, IRI/CCAFS*

## Population Increase

2 to 3 billion by 2050

60% increase in agricultural production

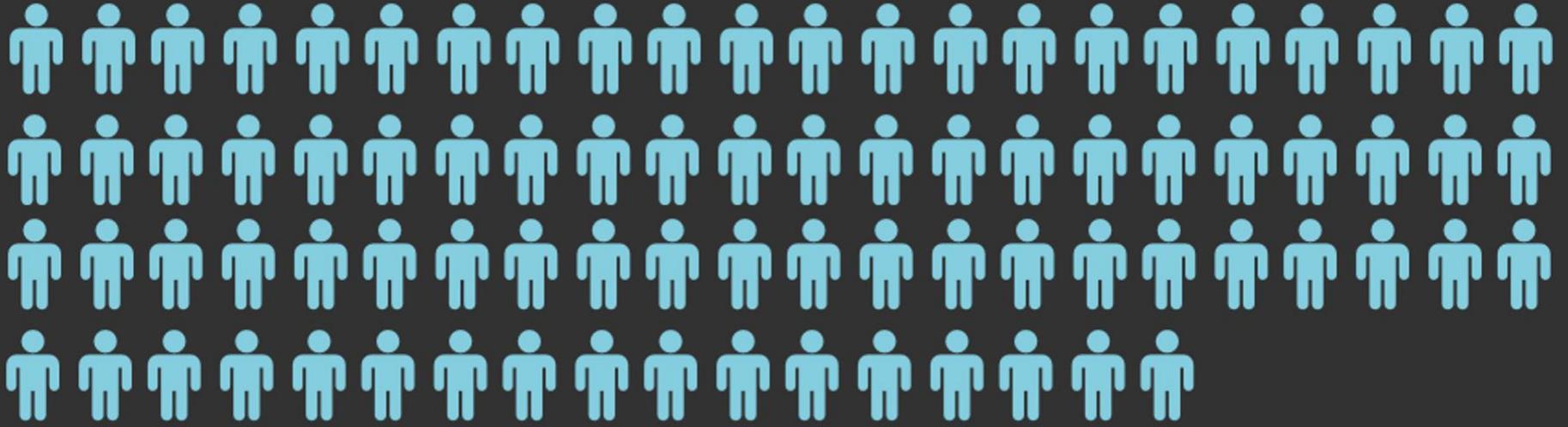
## Needs

another 2 billion tons of cereals

another 200 million of meat

another 130 million of oilseeds

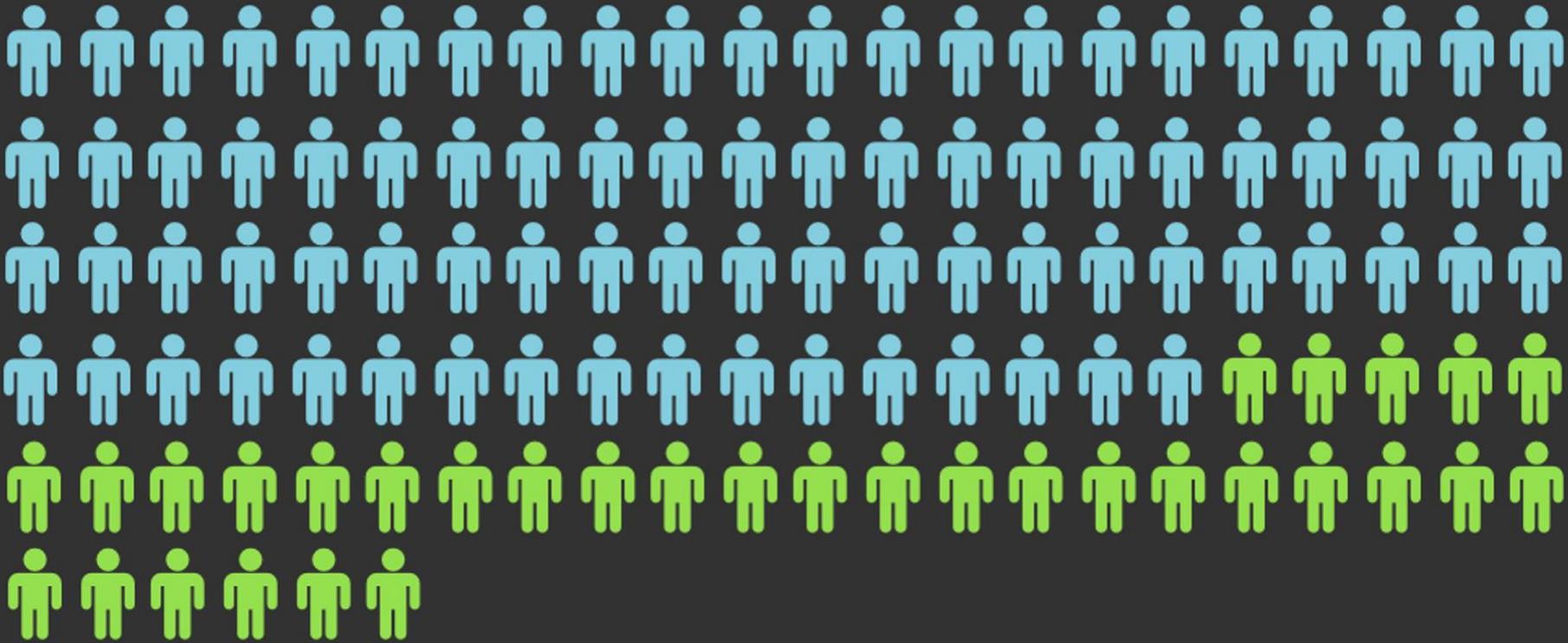
# Population



World urban population

**4.2 billion today**

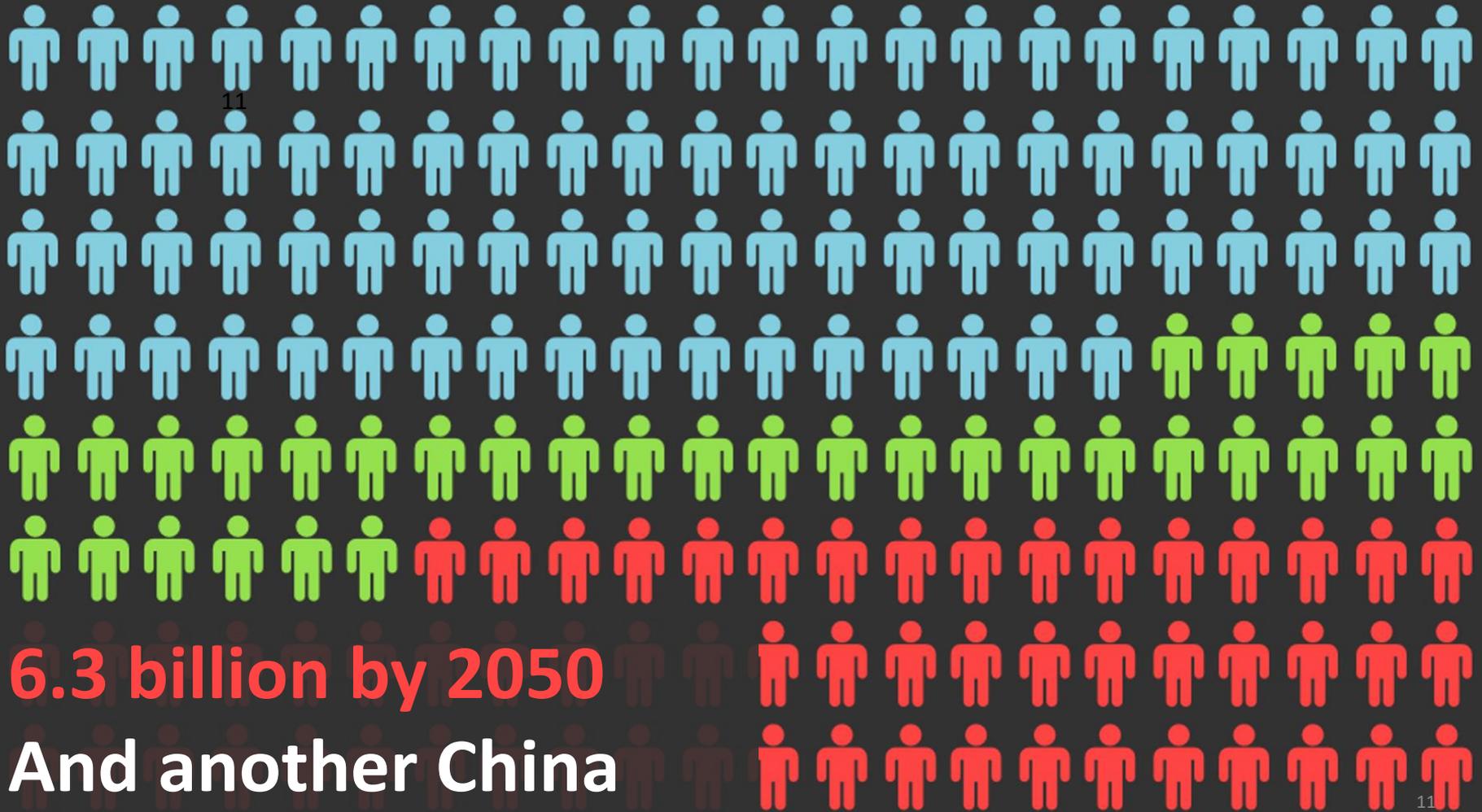
# Population



**5 billion by 2030**

**Adding three Brazils**

# Urban Population





# Demographics



## Aging Population Growth

### Old-age dependency ratios

Number of people aged 65 and over  
As % of labour force (aged 15-64), forecasts

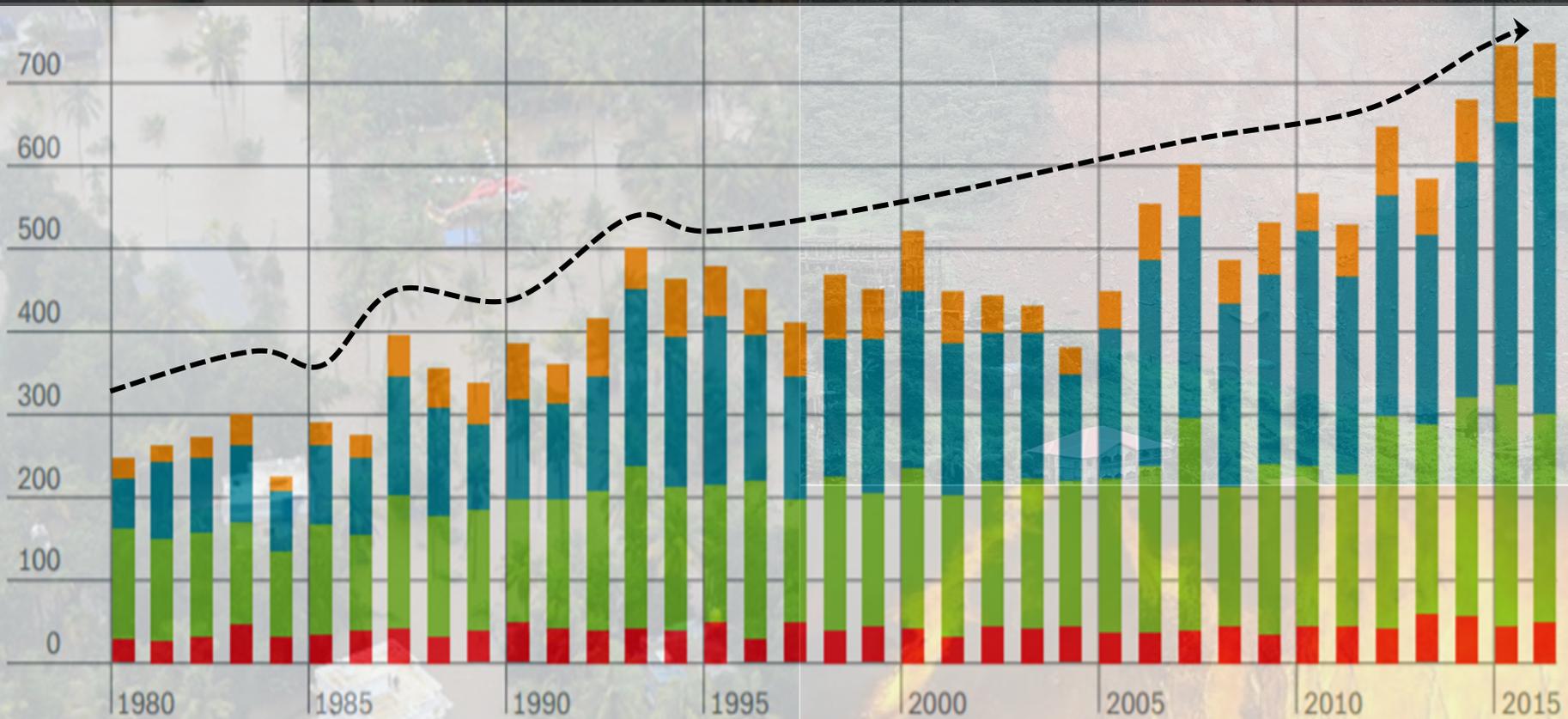


Source: European Commission



# Natural Disasters

Caused loss 1980 - 2016

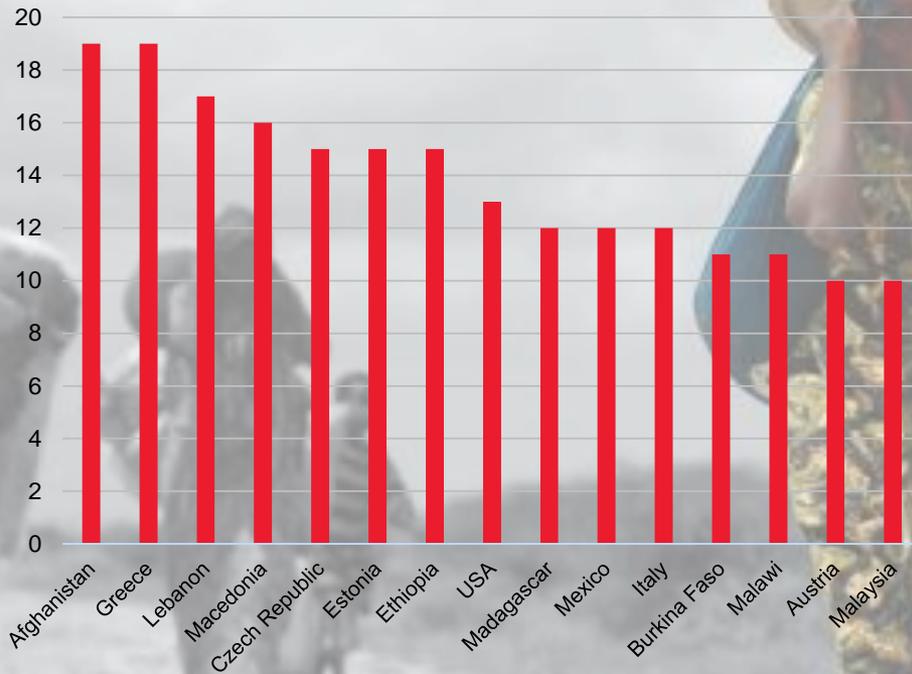


■ Climatological events ■ Hydrological events

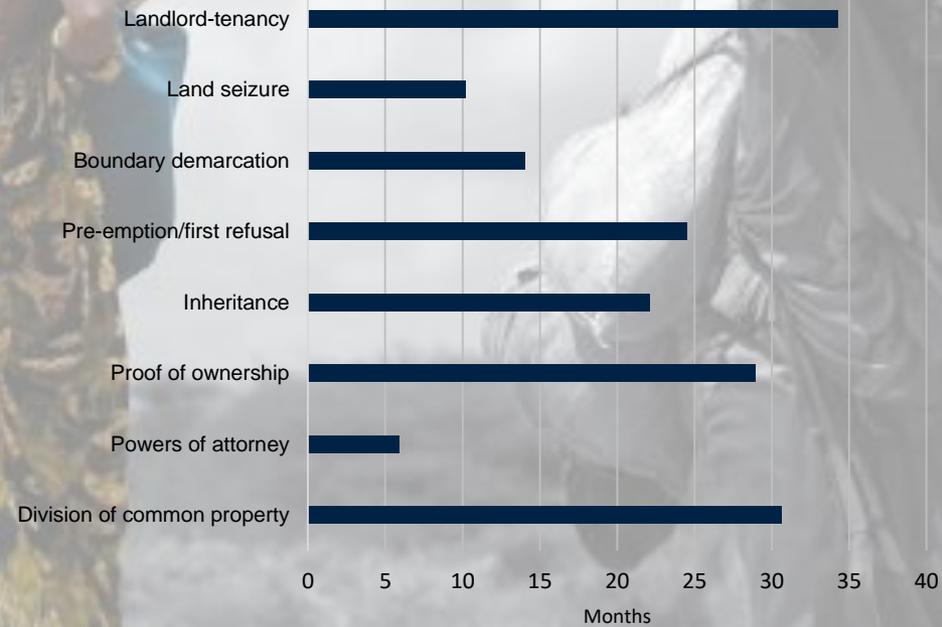
■ Meteorological events ■ Geophysical events

# Land Disputes, Conflicts and Violence

Land-related disputes, as % of overall legal problems



Time needed to resolve cases



Source: WJP General Population Poll 2017, Dispute Resolution Module

Source: Source: Palestine High Judicial Council statistics

# Displacement



**65.6 million** Displaced.

**22.5 million** Refugees, over half under the age of 18.

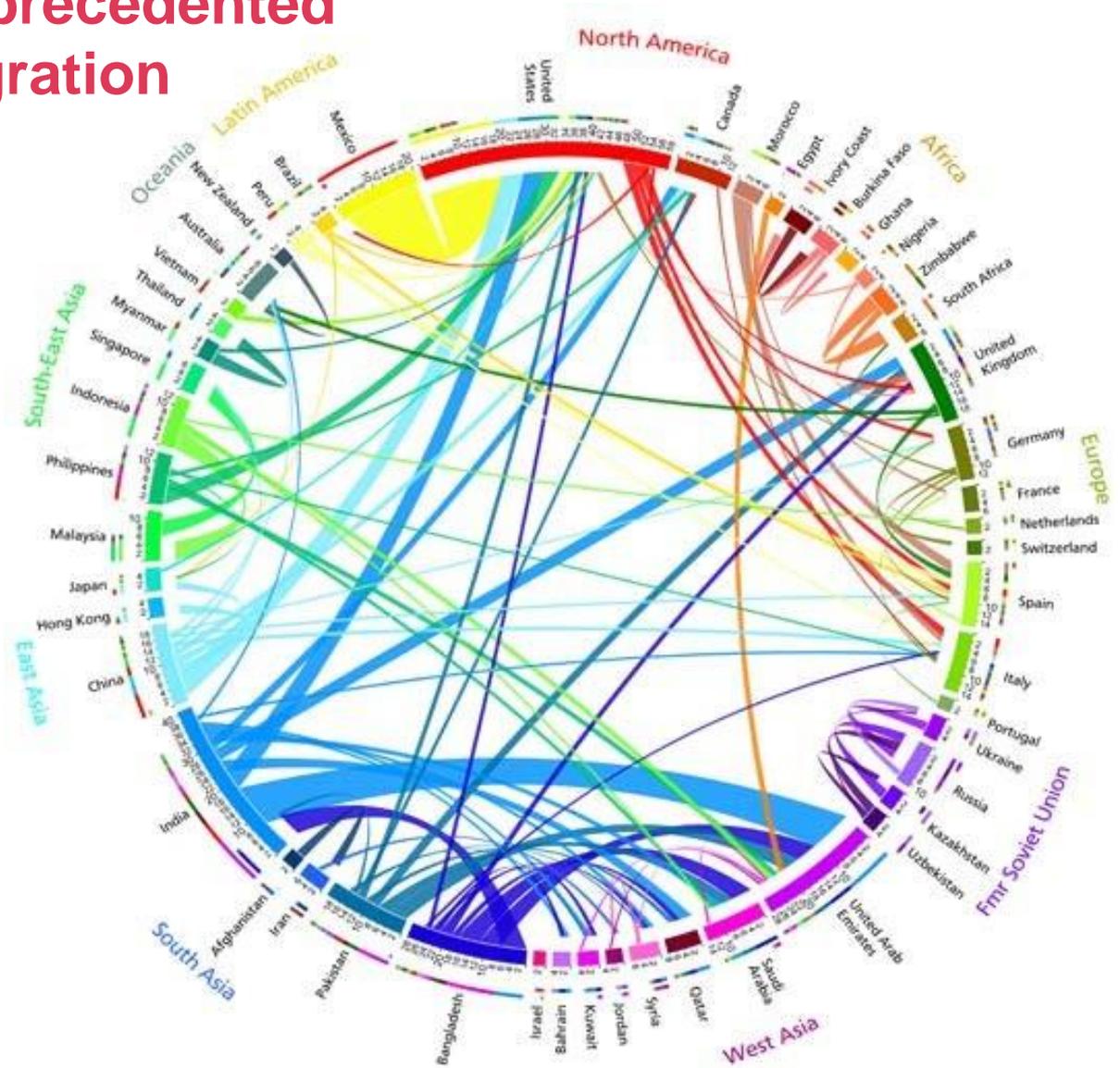
**10.0 million** Stateless people.

# People on Move



**Global  
Citizens**

**Unprecedented  
Migration**



# Fundamentals

**Tenure**

**Location**

# Impact of Tenure

1 Poverty Reduction

2 Economic Growth

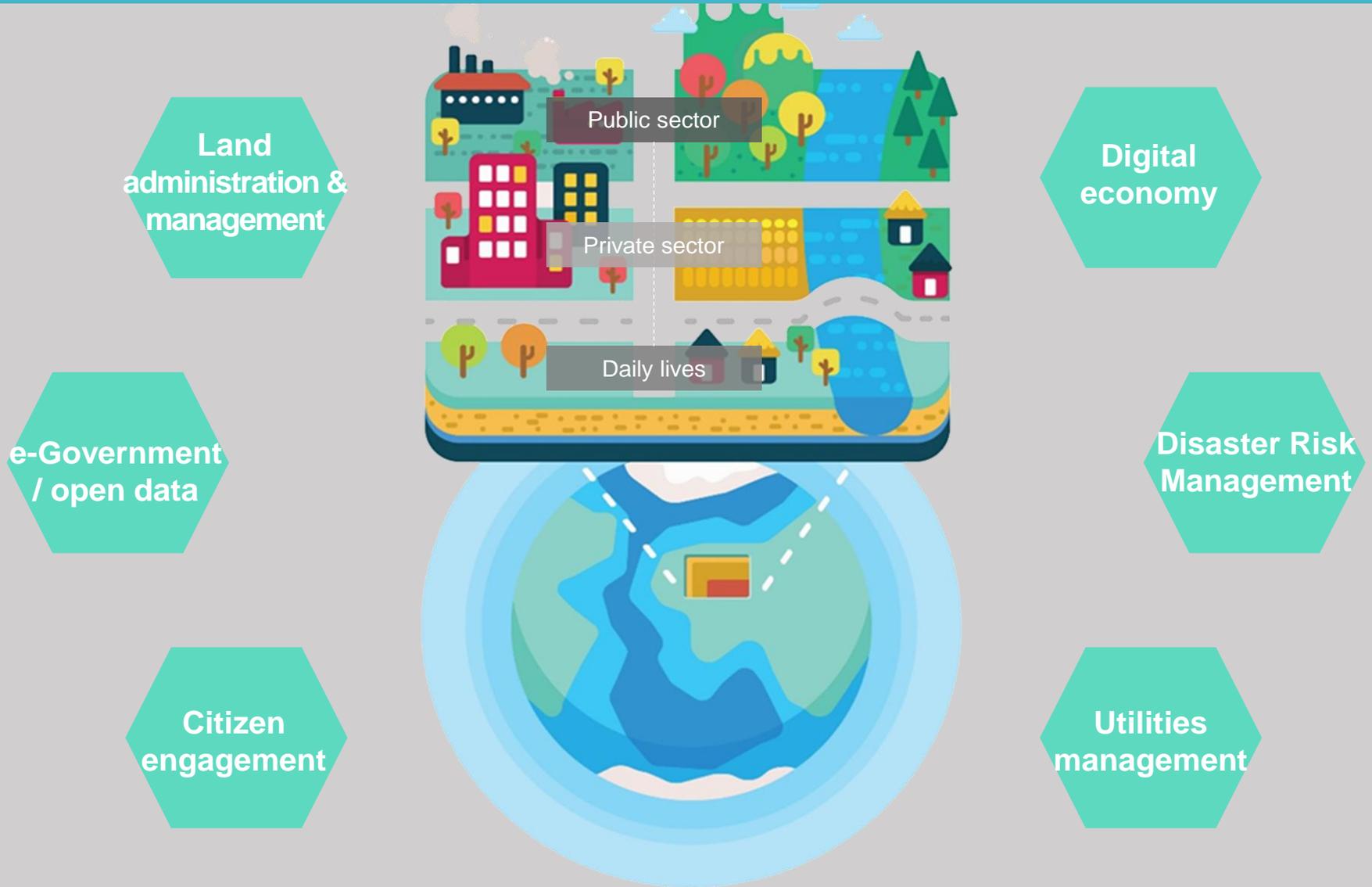
3 Improved Resilience

4 Environmental Sustainability

5 Social Stability

# Land and Geospatial Systems

## Land Records and Spatial Data Infrastructure



# Sectoral Challenges

## LAND



Incomplete  
land records



No records on  
public lands



Land acquisition  
delays



Widespread  
Litigation



Informality



Concessions  
vs small holders



Loss of revenues



Weak governance

## GEOSPATIAL



Limited access to  
geospatial data



Lack of infrastructure  
and standards



Weak institutional  
and legal framework



Limited capacity



# **Drivers for Change**

# Global frameworks and themes



## SDGs on Land, Sustainable Cities

- Target 1.4: Equal rights to land
- Target 2.3: Secure access to land
- Target 5.a: Women equality
- \* *Global campaign for women's land right*
- Target 11.1: Adequate housing



## VGGTs

- Voluntary Guidelines on the Responsible Governance of Tenure (VGGT)

## Joint Action Plan

- Partnership with GIZ / NELGA



## Public Private Partnerships

- Leverage knowledge and capital for land systems and services



## IGIF

- Integrated Geospatial Information Framework (IGIF)
- Endorsed by member states in July 2018 for countries to develop SDIs

## Global Partnerships



UN-GGIM  
UNITED NATIONS UNIT ARABIAN  
GLOBAL GEOSPATIAL  
INFORMATION MANAGEMENT



# The SDGs present a major opportunity for transformation



	MDGs (2000-2015)	SDGs (2016-2030)
Goals/ Targets/Indicators	8/21/60	17/169/~230
Priority Areas	Human Development	Holistic: Economic, Social, Environmental
Scope	Developing Countries	Universal

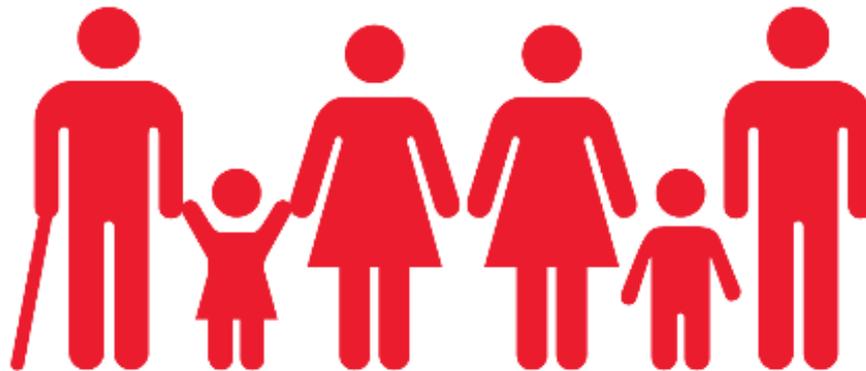
Global development agendas serve as a guide for countries to determine their national development path



# SUSTAINABLE DEVELOPMENT GOALS



## 1 NO POVERTY



Target 1.4: “By 2030, ensure that **all men and women ... have equal rights to ... land** and other forms of property ...”

# Security of Tenure for SDGs

English



## Why Strengthening Land Rights

- ending poverty
- eliminating hunger
- achieving gender equality and
- sharing prosperity.

Aug 16, 2018

Today, only 50% of the world's population has legally registered rights to their land and home, with the poor and politically marginalized especially likely to suffer from insecure land tenure. Unless this changes, the 2015 United Nations Sustainable Development Goals will be impossible to achieve.



# SUSTAINABLE DEVELOPMENT GOALS



## 2 ZERO HUNGER



Target 2.3: “By 2030, **double the agricultural productivity** Including through **secure and equal access to land...**”





# SUSTAINABLE DEVELOPMENT GOALS

Target 5.a:

“Undertake reforms to

**Give women equal rights to**

economic resources,  
as well as access to  
ownership and control

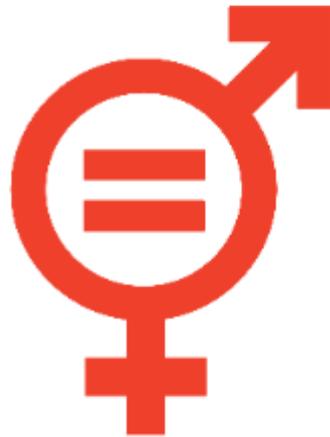
over **Land** and

other forms of  
property...”

5

GENDER  
EQUALITY

5 GENDER  
EQUALITY



# Women Need Access to Land

## Women's

formal rights to land impact household decision making, income pooling, and women's role in economy.

## Land

is key factor of production, home/shelter, and community

Land and homes provide

## Direct Income

Through rent, trading, and collateral for loan

## Identified by the World Bank's Gender Strategy

Contributing to women's economic empowerment



# Barriers to Women's Land Rights

## Cultural

- ✓ Not just land laws, but also **civil code and family law**.

Laws can prevent women from acquiring land rights through markets, marriage, inheritance, transfer, or gift.

- ✓ Or if laws are gender neutral, then poorly drafted regulations and procedures **don't do enough to implement**.

## Legal

- ✓ **Custom and tradition** create barriers to rights particularly when family circumstances change (divorce and inheritance).

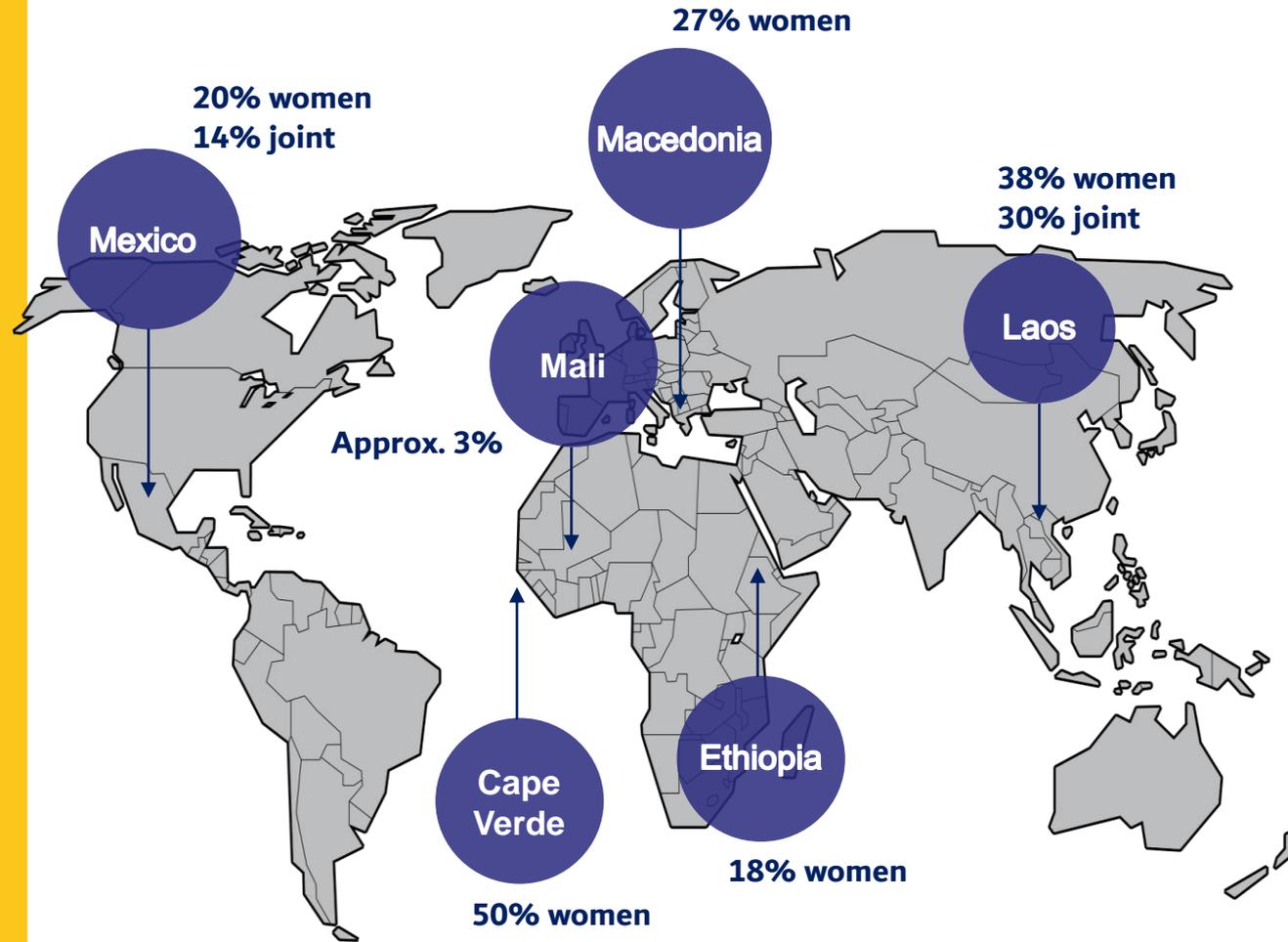
- ✓ **Lack of knowledge, information** of women, men and institutions.

# Data Is an Issue

## SDG 1.4.2

will help:

Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure.



# What can you do?

**H** Help to educate both men and **women** on their land and property rights.

**STAND FOR HER LAND**  
HER RIGHTS. HER LAND. A BETTER FUTURE FOR ALL.

**J** Join the campaign – [Stand For Her Land](#)

**Her rights.**

**Her land.**

**A better future  
for all.**



Main objective of the campaign is to drive real change on the ground. It is the first advocacy campaign of its kind to merge both global and local level efforts to strengthen land rights for women from the ground up.



# SUSTAINABLE DEVELOPMENT GOALS

Target 11.1:  
“...ensure

**Access for all to adequate, safe and affordable housing** and basic services and upgrade slums.”

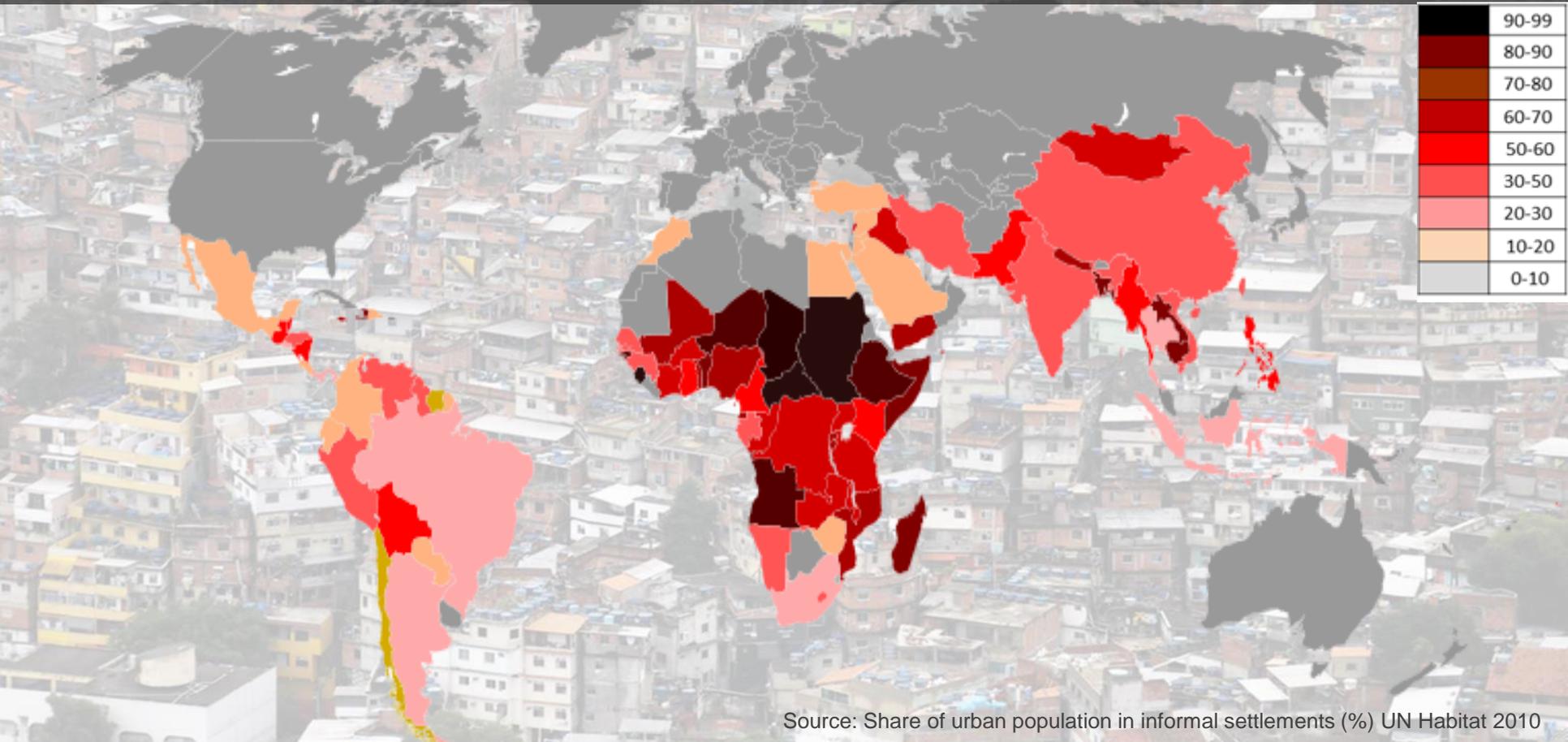
## 11 SUSTAINABLE CITIES AND COMMUNITIES



# Poor Livability in Cities

**A third**

of the world's urban population live in informal settlements.



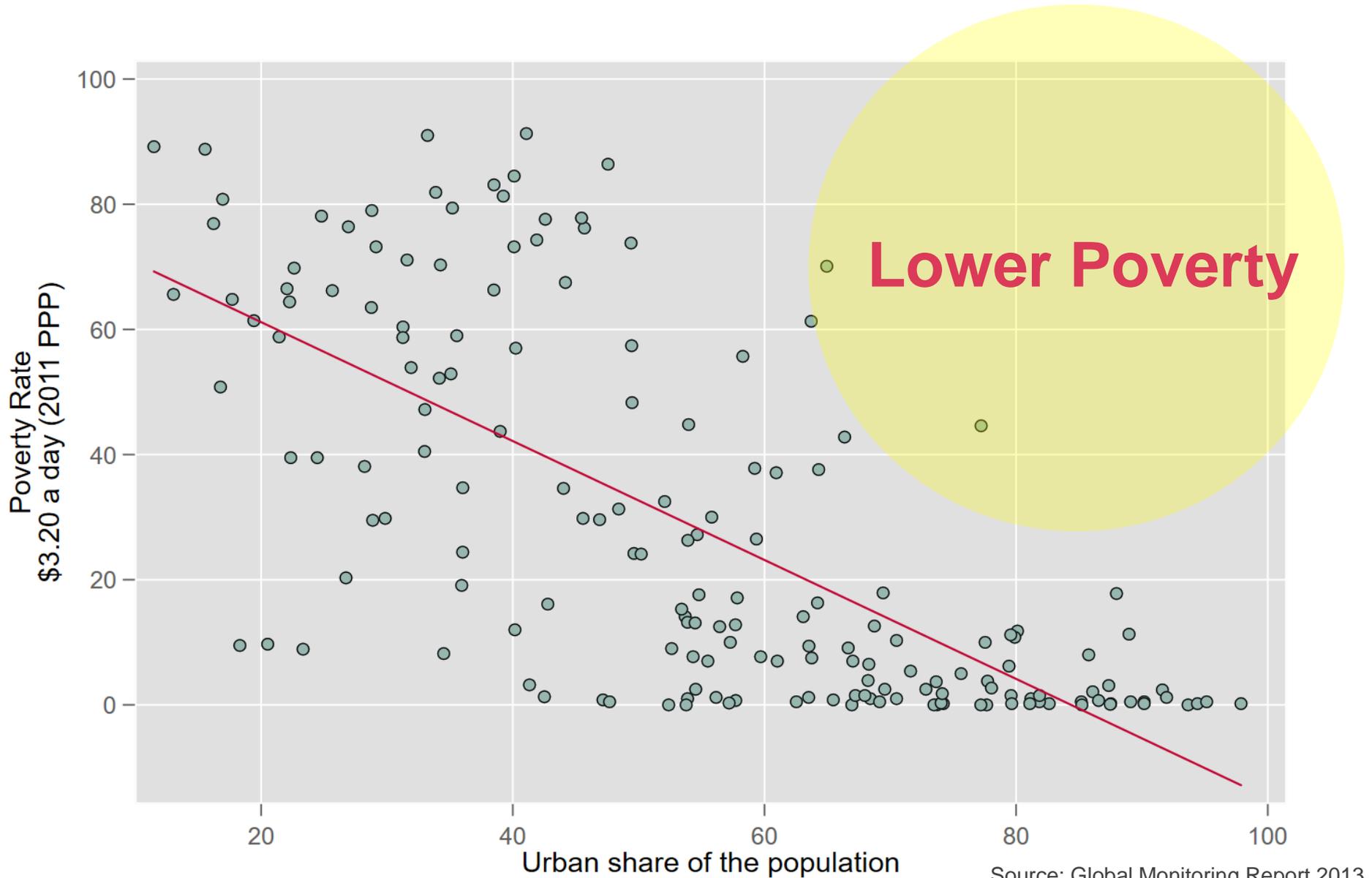
# Cities, Growth and Poverty Reduction

**80%**

**Global Economic  
Activity in Cities**

**Job Creation &  
Growth**

# Cities, Growth and Poverty Reduction



A satellite view of Earth at night, showing the illuminated continents and oceans. The text "Our Job" is overlaid in the center in a bold, yellow font.

**Our Job**

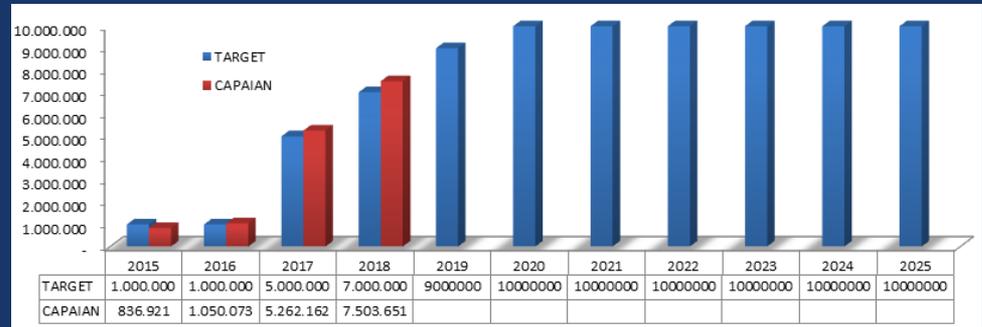


# Comprehensive Land Records



Indonesia has a mass program for securing tenure.

How many other countries do?



Source: The Ministry of Spatial Planning and Agrarian Reform, Indonesia



Taluk - Thiruvananthapuram  
Village - pangappara.

TALUK : THIRUVANANTHAPURAM  
VILLAGE : MELTHONNAKKAL  
Village - madathuvilazom  
Traverse field book

TALUK : THIRUVANANTHAPURAM  
VILLAGE : PALLIPPURAM

Taluk - Thiruvananthapuram  
Village - Chengazha

Taluk - Thiruvananthapuram  
Village - Pallatungara

Taluk - Thiruvananthapuram  
Village - Pallatungara

OLD BOOKS

↑ THIRUVAN



നാമം: "ആലം"  
പരിഷ്കരണം .

ചിത്രങ്ങൾ  
(8)



MADAVOOR

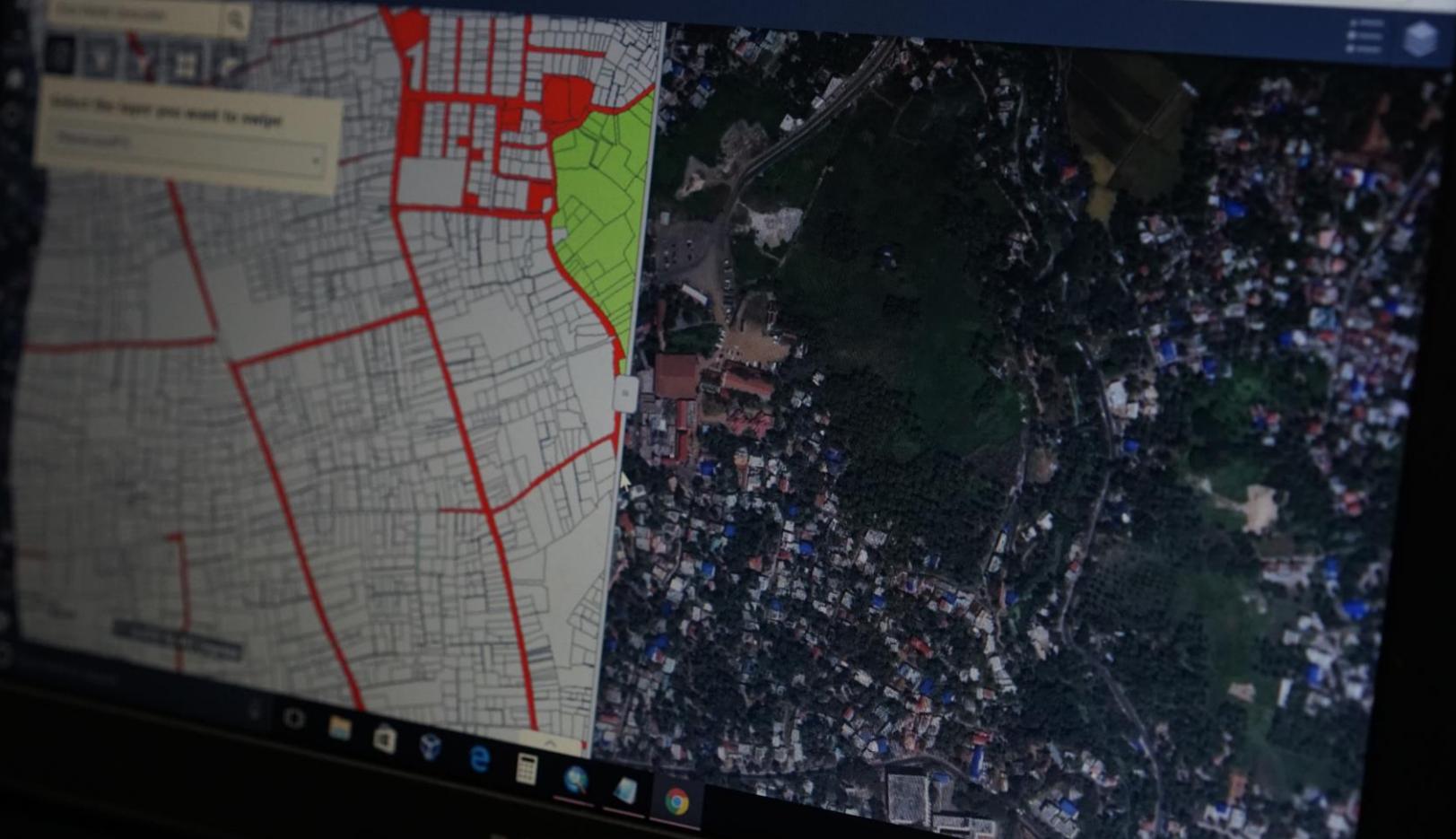
KIZHUVILAM Vol.II

NAVAYIKULAM Vol.II

AYIROOR Vol.I

EZHU





Search for a location

Select the layer you want to view

Layers



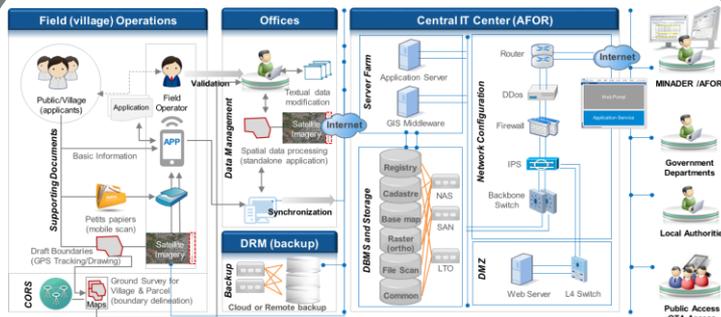
DELL

# Electronic Land Administration System

- ✓ Digital Land Registry
- ✓ Electronic Services
- ✓ Joint Geospatial Platform

SERVICE
Land Register
Land Transaction
Valuation
Taxation
Planning
Statistics
e-Conveyance
Map Service
Web Map Viewer
Open-map
Web Map Editor
Web Mapping
Discovery Service
Service Search
Data Search
Data Download
Statistical Analysis
Results Mapping
Dynamic Query

## Modern Land Information System



DIGITAL  
MAPS

CONNECTED

ACCESSIBLE  
&  
TRANSPARENT

Updated  
and  
Maintained

Innovative  
Technologies

# European/Central Asian Successes

## Land Administration System Modernization

### World Bank Support on Land

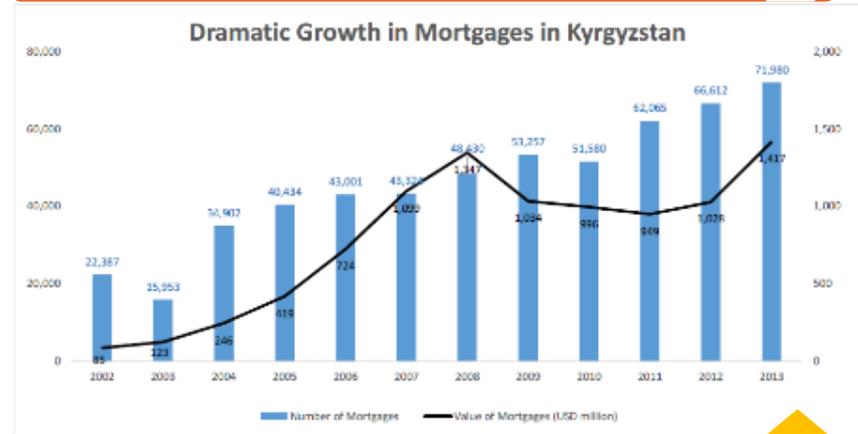
- Recognition of **property rights**
- **Land reforms** and anti-discrimination
- **First registration** and cadastral mapping
- Digitalization and **web-based services**
- Land and geospatial records and **eGovernance**
- Sustainable **business models** for land agencies

### Eastern Europe and Central Asia

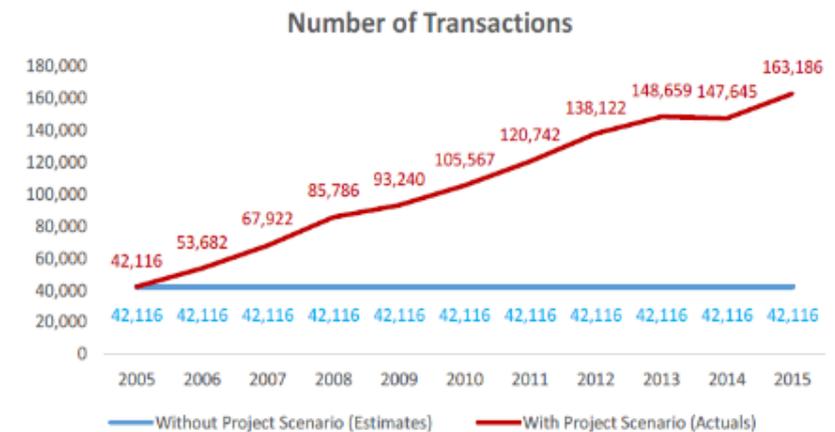
#### Doing Business 2016; Registering Property

- |                      |                         |
|----------------------|-------------------------|
| 1 New Zealand        | 11 United Arab Emirates |
| 2 Lithuania          | 12 Denmark              |
| 3 Georgia            | 13 Armenia              |
| 4 Rwanda             | 14 Norway               |
| 5 Belarus            | 15 Iceland              |
| 6 Estonia            | 16 Switzerland          |
| 7 Slovak Republic    | 17 Taiwan, China        |
| 8 Kyrgyz Republic    | 18 Kazakhstan           |
| 9 Russian Federation | 19 Singapore            |
| 10 Sweden            | 20 Finland              |

### Kyrgyz Republic



### Macedonia



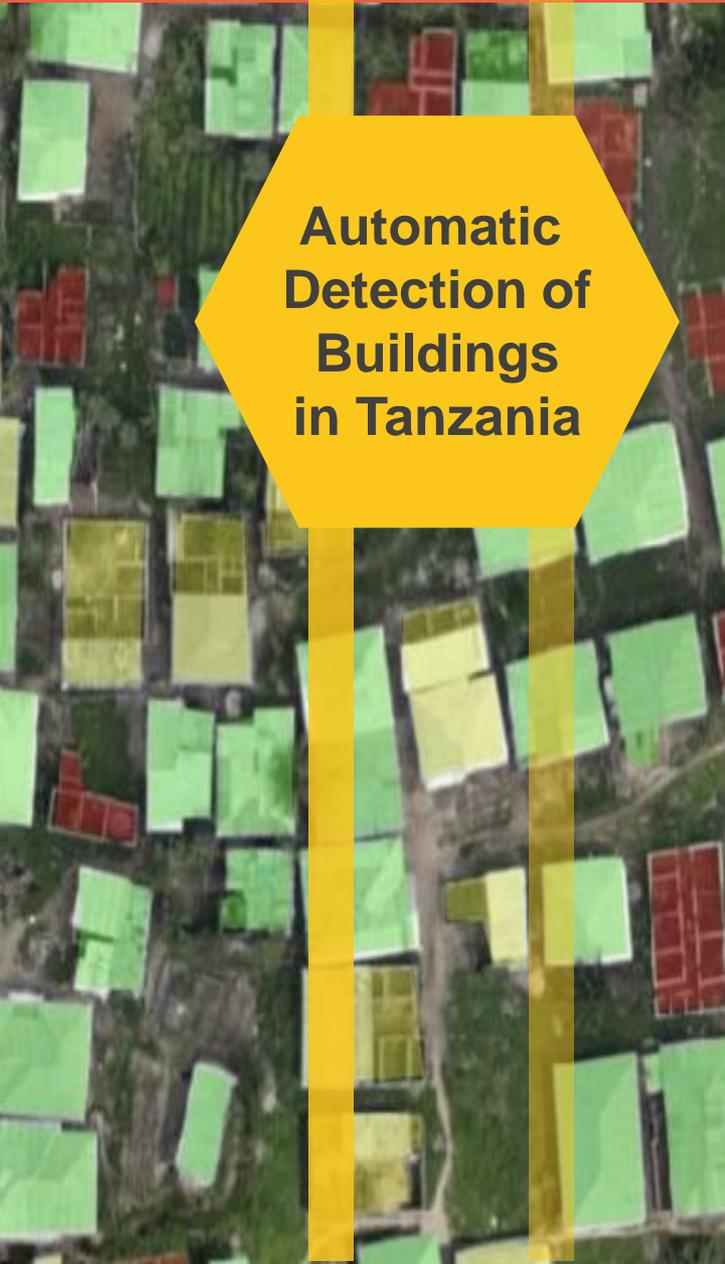
# Tax Records and Valuation for Better Services

## Investment in Tanzania

Property  
Taxation

**30%**

Average Increase



Automatic  
Detection of  
Buildings  
in Tanzania

# Geospatial Platforms of Sustainability

## Joint Base, Standards and Sharing



# World Bank and UN-GGIM Partnership



**UN-GGIM**  
UNITED NATIONS INITIATIVE ON  
GLOBAL GEOSPATIAL  
INFORMATION MANAGEMENT

## Global Geospatial Framework

Geospatial  
Framework



Country-level  
Action Plans

Endorsed by member states in July 2018 for countries to develop national and sub-national spatial data infrastructures (SDIs).

Operationalize the Geospatial Framework.

# Data is to this Century what oil was to the last one

The Economist, 2017



# Land and Geospatial Systems Resilience

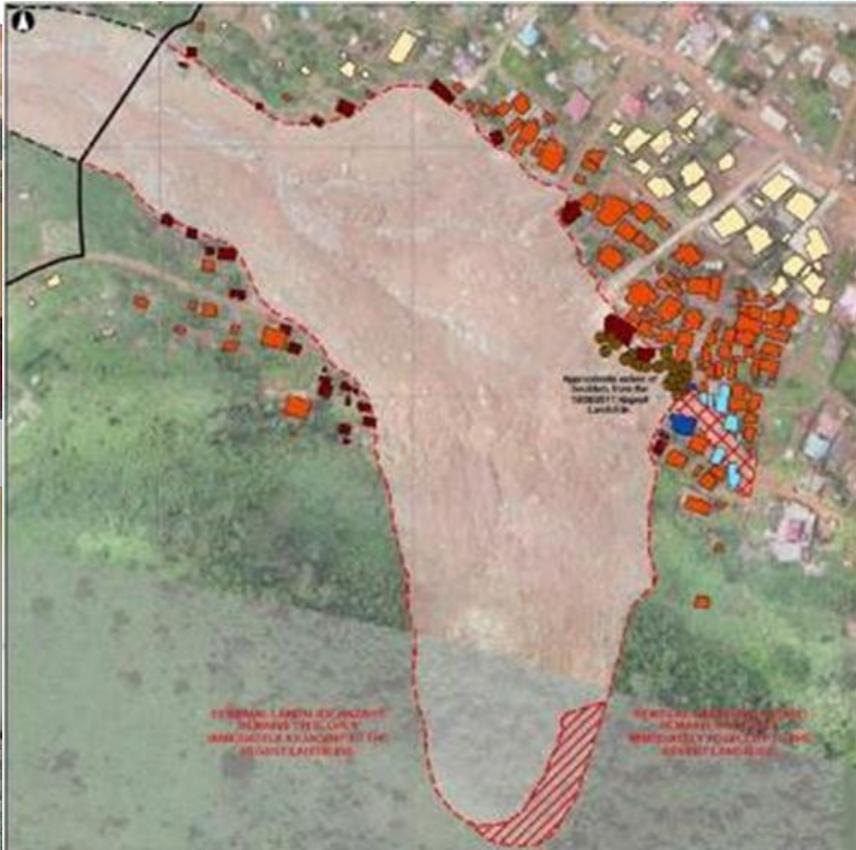
## Land Administration Systems

provide secure tenure reducing vulnerability, and the baseline for estimating disaster damages and eligibility for support.

## Geospatial Framework

provides the common location platform for identifying the impact, directing responses, reconstituting the pre-disaster land use, identifying areas for temporary shelter, and facilitating planning and Reconstruction.

# Land and Geospatial Systems' Resilience



**Properties at risk  
after Landslide**

## Sierra Leone Landslide 2018

Intense deforestation, informal holdings and irregular buildings in the Western Area National Park's disaster-prone hilltops.

The 2018 landslide affected 6,000 people and caused 1,200 casualties and 36 million USD of losses.

# Land, Fragility, Conflicts and Violence

PILOT  
in SYRIA



Administrative Data

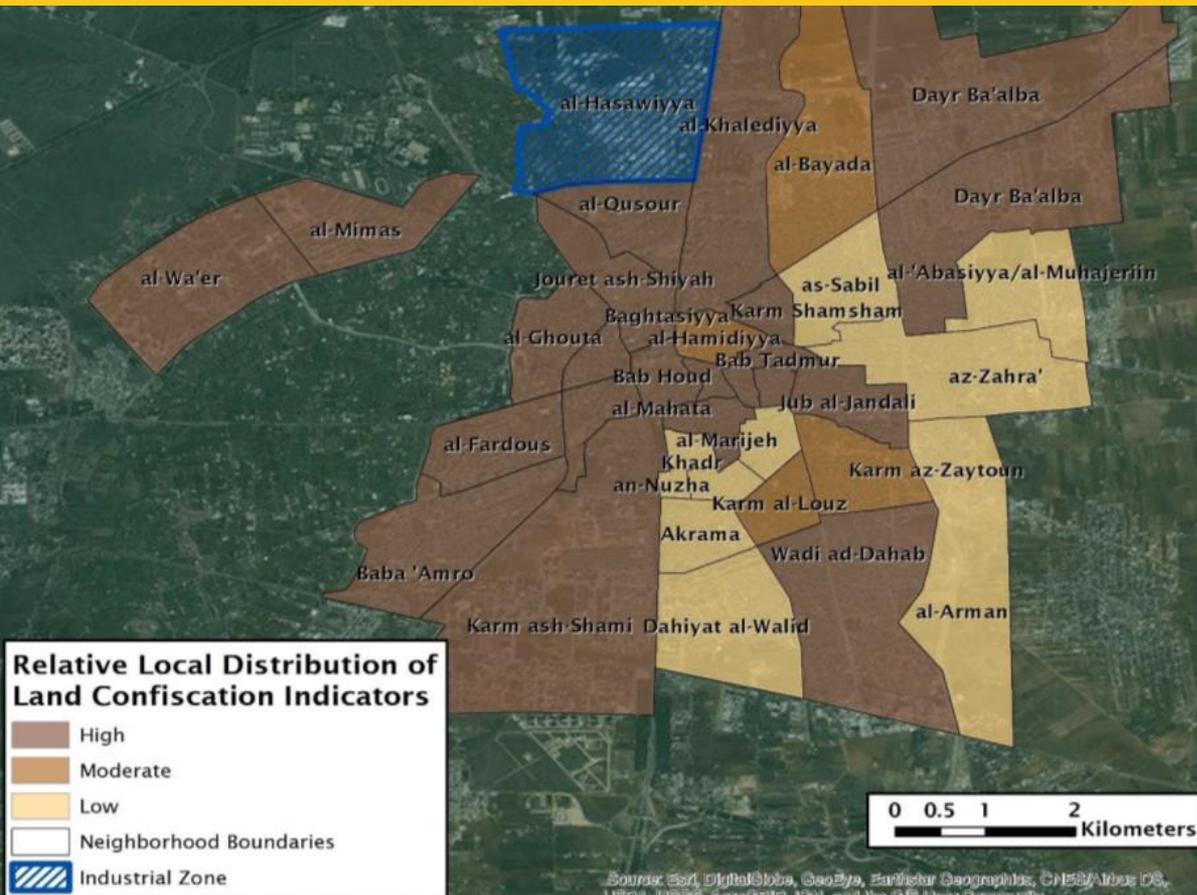


Big Data + Social Media

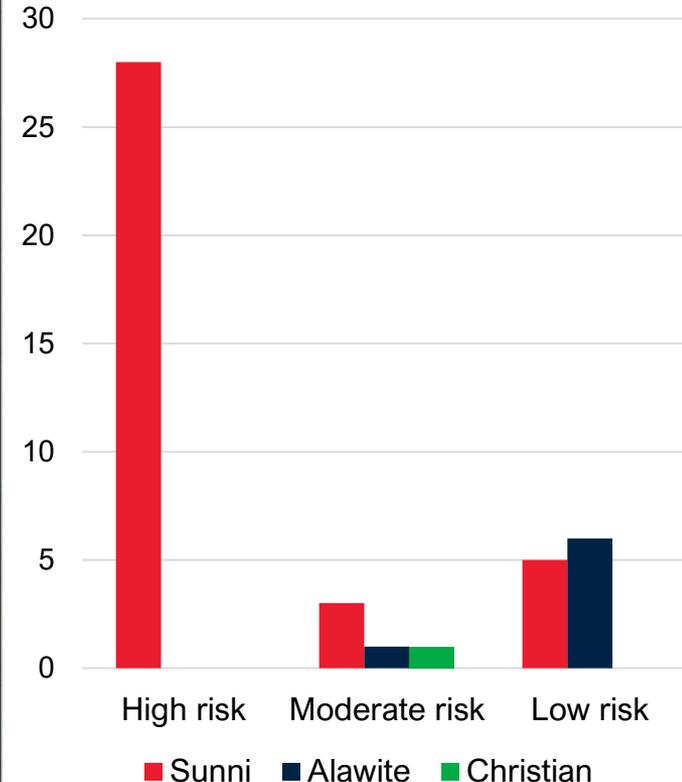


Geospatial Data

Land Confiscation Indicator Presence in Homs City, March 2017



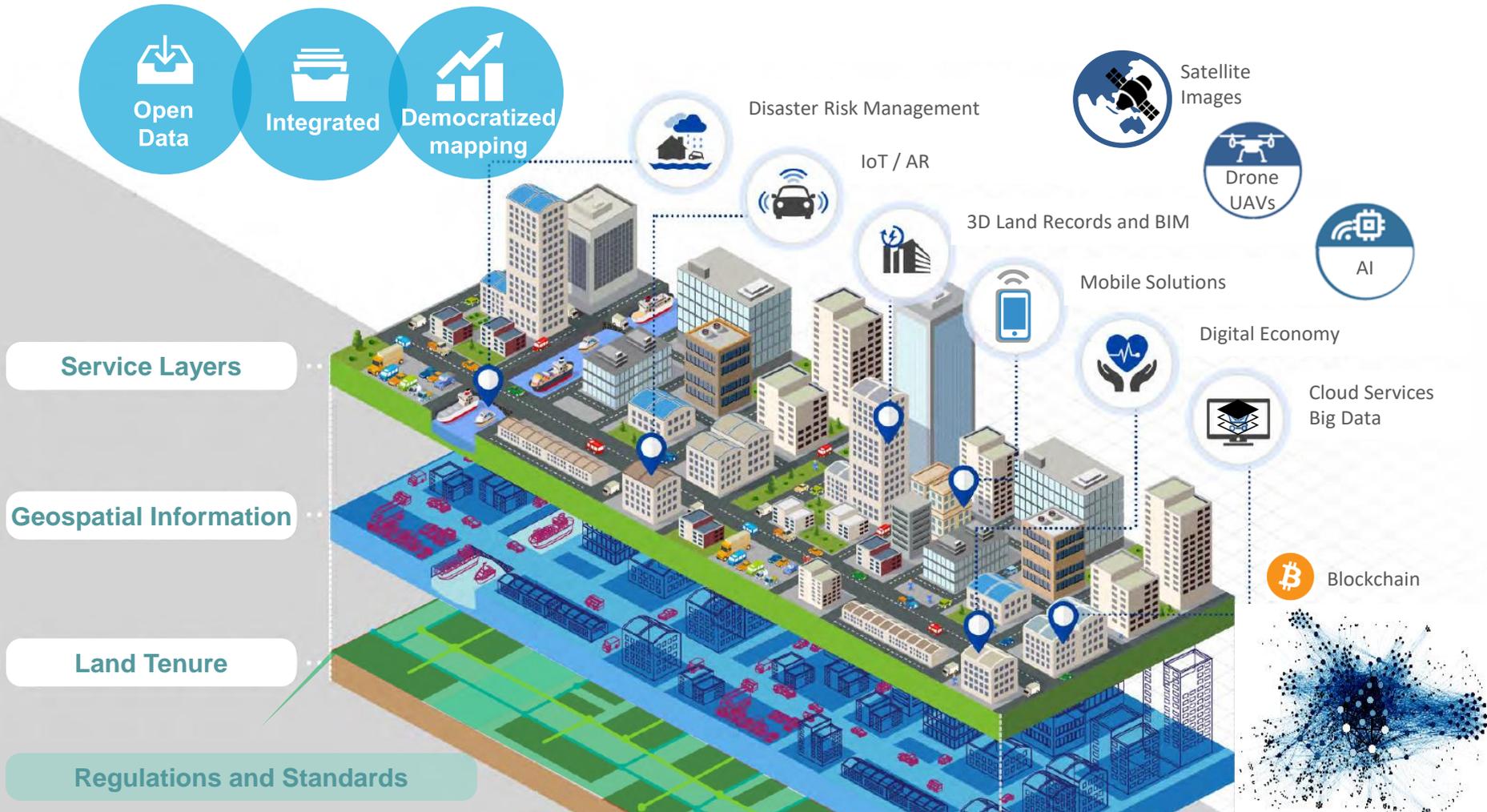
Land Confiscation Index by Sect



Source: Courage Services (2016)

# Smart 3D Cadastre, Big Data, Disruption!

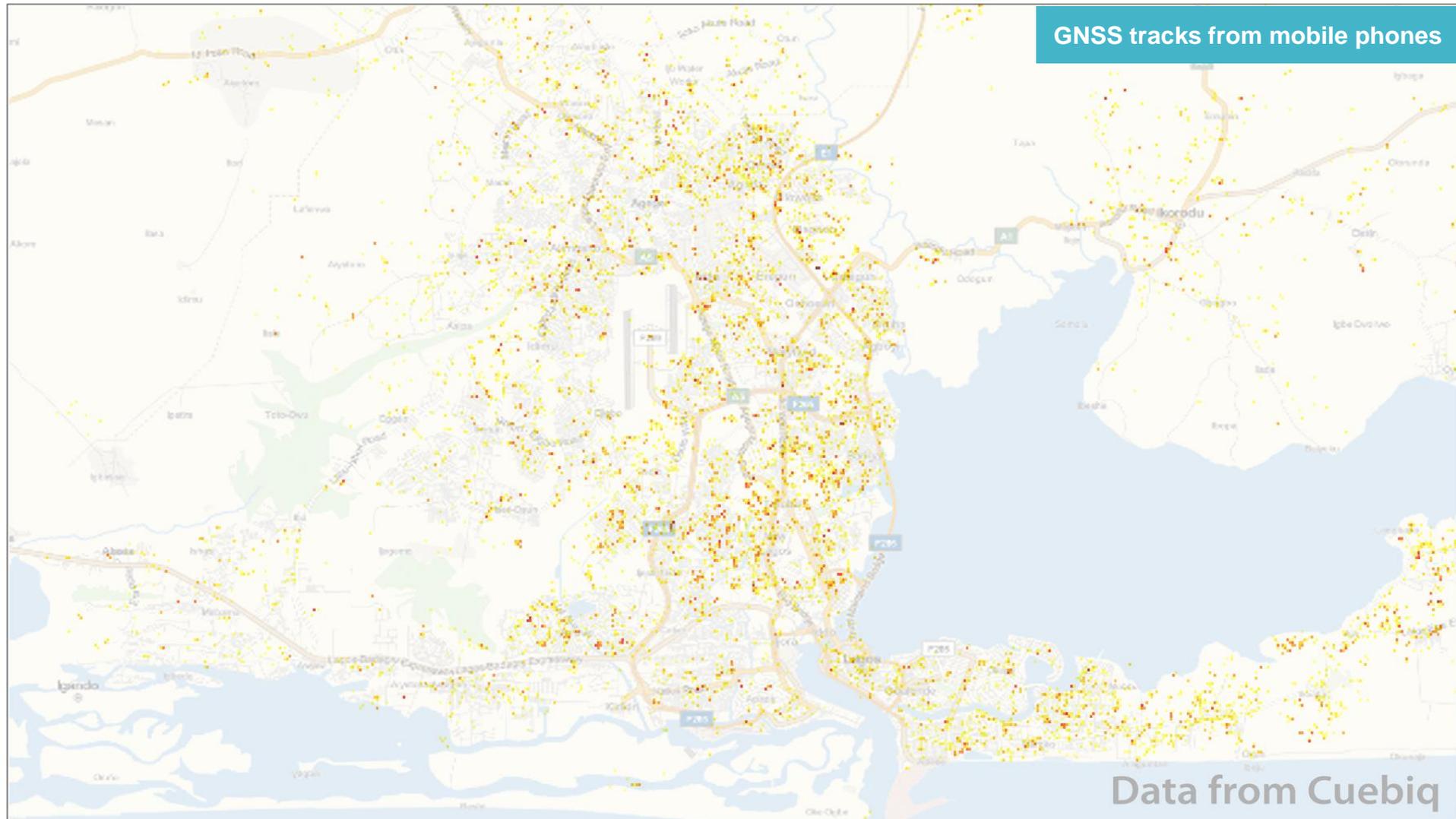
Empower Realtime Location Awareness and Models



# Geospatial Big Data

Hour 1:00

## Sensing Human Mobility (Lagos, Nigeria)

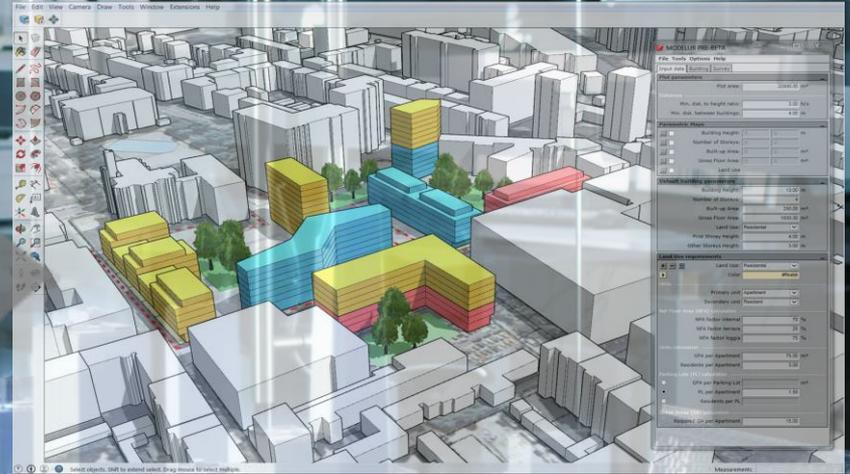


# 3D Data, Platforms and Processes

Form paper to digital, plans to models



GIS  
BIM  
3D  
PLATFORM





# Artificial Intelligence for Land Rights Registration

“Machine learning and computer vision for improving efficiency - detecting buildings and land parcels.”

# Thank you for listening

[mtorhonen@worldbank.org](mailto:mtorhonen@worldbank.org)

