

Presented at the FIG Working Week 2017,  
May 29 - June 2, 2017 in Helsinki, Finland

Fit-For-Purpose



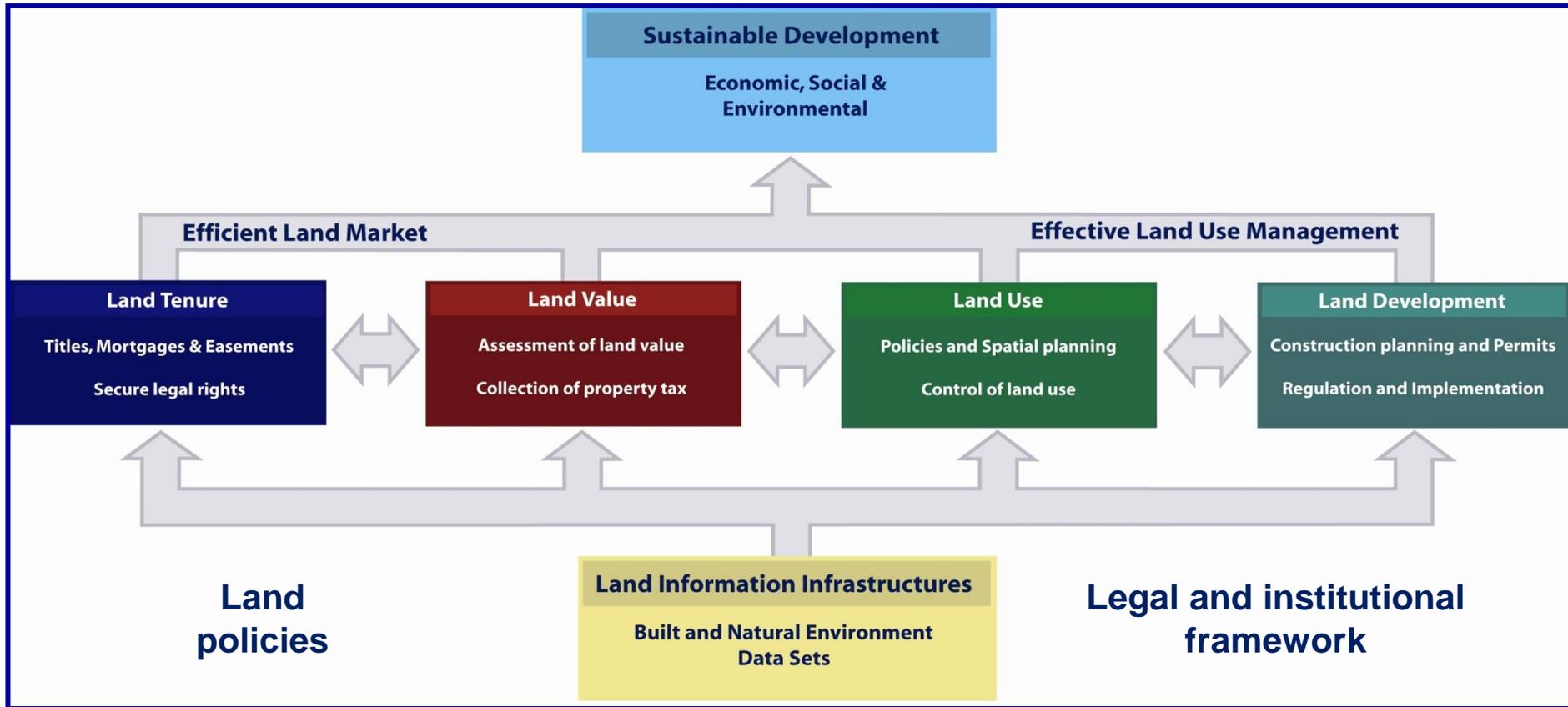
# Land Administration: Developing Country Specific Strategies for Implementation

Prof. Stig Enemark  
 Honorary President  
Aalborg University, Denmark

FIG WORKING WEEK 2017  
HELSINKI, FINLAND, 29 MAY–2 JUNE 2017

# Land Administration Systems

Land Administration Systems provide the infrastructure for implementation of land polices and land management strategies in support of sustainable development.



- Land Tenure:** Allocation and security of rights in lands; legal surveys of boundaries; transfer of property;
- Land Value:** Assessment of the value of land and properties; gathering of revenues through taxation;
- Land-Use:** Control of land-use through adoption of planning policies and land-use regulations at various levels;
- Land Develop:** Building of new infrastructure; implementation of construction works and the change of land-use

# The 2030 Global Agenda

17 Goals, 169 targets, and about 240 indicators



- GOAL 1** **End poverty** in all its forms everywhere
- GOAL 2** **Zero hunger**; achieve food security and improved nutrition and promote sustainable agriculture
- GOAL 3** **Good Health and well being**; ensure healthy lives and promote well-being for all at all ages
- GOAL 4** **Quality education**; ensure inclusive and equitable quality education and lifelong learning for all
- GOAL 5** **Gender equality** and empower all women and girls
- GOAL 6** **Clean water and sanitation**; availability and sustainable management of water and sanitation for all
- GOAL 7** **Affordable and clean energy**; access to affordable, reliable, sustainable and modern energy for all
- GOAL 8** **Decent work and economic growth**; sustained, inclusive economic growth, full and productive employment and decent work for all
- GOAL 9** **Industry, innovation and infrastructure**; resilient infrastructure, inclusive and sustainable industrialization and innovation
- GOAL 10** **Reduced inequality** within and among countries
- GOAL 11** **Sustainable cities and communities**; make cities and human settlements inclusive, safe, resilient and sustainable
- GOAL 12** **Responsible consumption and production**; sustainable consumption and production patterns
- GOAL 13** **Climate action**; combat climate change and its impacts
- GOAL 14** **Life below water**; conserved and sustainably use the oceans, seas and marine resources for sustainable development
- GOAL 15** **Life on land**; protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and biodiversity loss
- GOAL 16** **Peace, justice and strong institutions**; peaceful, inclusive societies for sustainable development, access to justice for all and effective, accountable and inclusive institutions at all levels
- GOAL 17** **Partnerships for the goals**; strengthen the means of implementation and revitalize the global partnership for sustainable development

# Monitoring Progress

The Millennium Development Goals Report  
2014

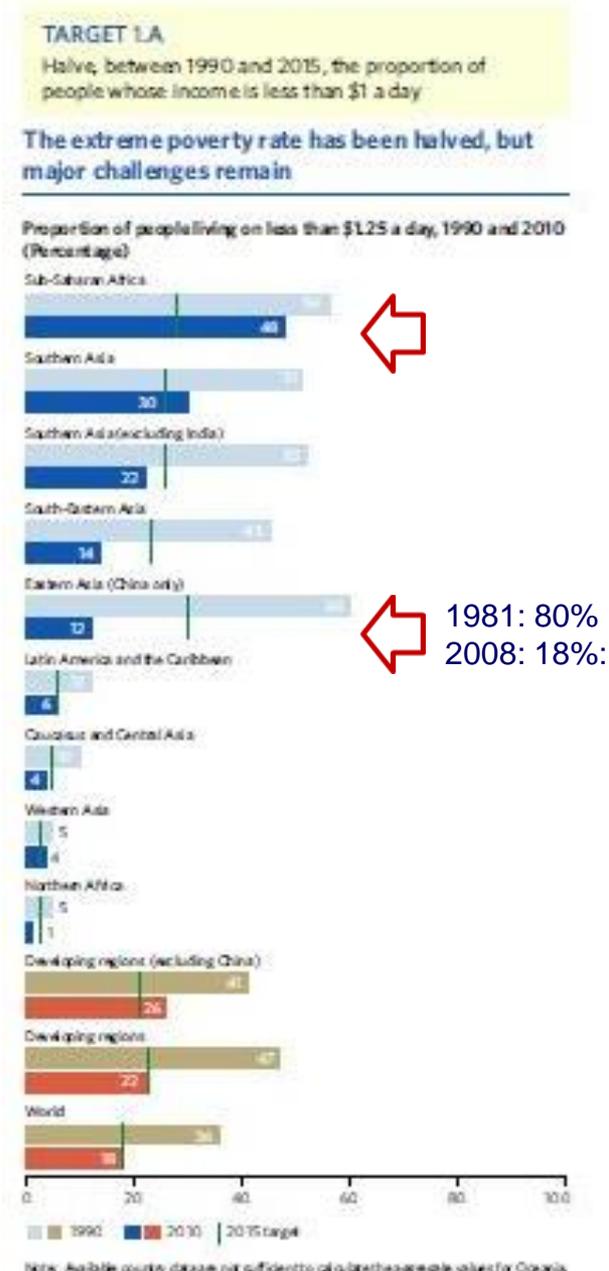
8 Goals  
18 Targets  
48 Indicators




**Goal 1**  
Eradicate  
extreme  
poverty and  
hunger

- LGAF, Land Governance Assessment framework
- WB Doing Business
- Corruption Perception Index

“The monitoring experience of the MDGs has shown that data will play a central role in advancing the new development agenda. We need sustainable data to empower people and support sustainable development. **There is a call for a data revolution**” (UN, 2013, 2014).



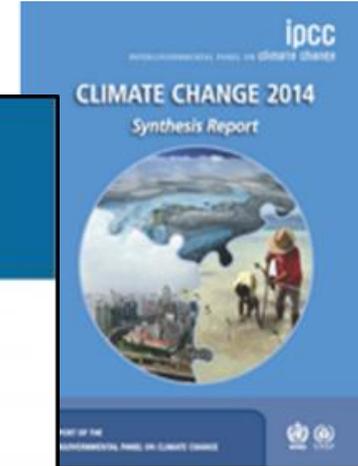
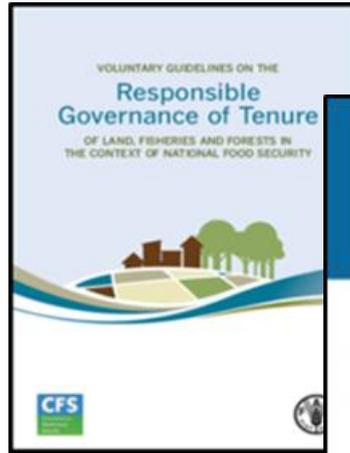


## Goal 1. End poverty in all its forms everywhere

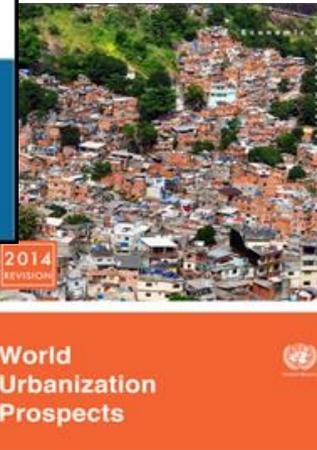
- 1.4** By 2030, ensure that **all men and women**, in particular the poor and the vulnerable, **have equal rights** to economic resources, as well as access to basic services, **ownership and control over land and other forms of property**, inheritance, natural resources, appropriate new technology and financial services, including microfinance
- 1.4.2:** 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

# The Wider Global Agenda

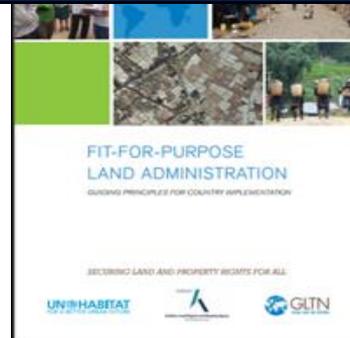
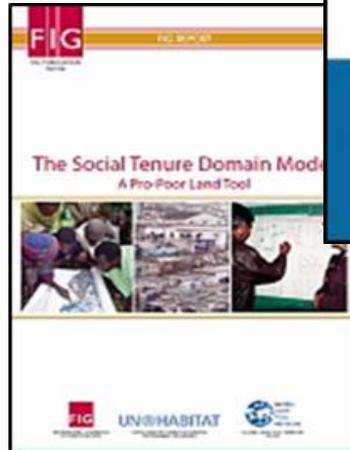
Promoting human rights and gender equity



Climate change mitigation and adaptation



Rapid urbanisation and slum upgrading



Building Fit-For-Purpose LA systems - fast, affordable and upgradeable.

Applying responsible governance of tenure

Applying the social tenure domain model

# Supporting the 2030 Global Agenda

## Meeting the Sustainable Development Goals

**SDGs** post 2015 ...

**Climate Change** 2010's

Natural disasters  
Food shortage  
Environmental degradation

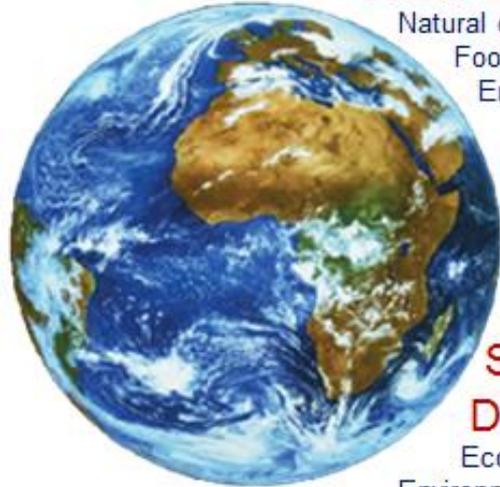
**MDGs** 2000's

Poverty alleviation  
Human health, education  
Global partnership

**Sustainable**

**Development** 1990's

Economic, Social,  
Environmental



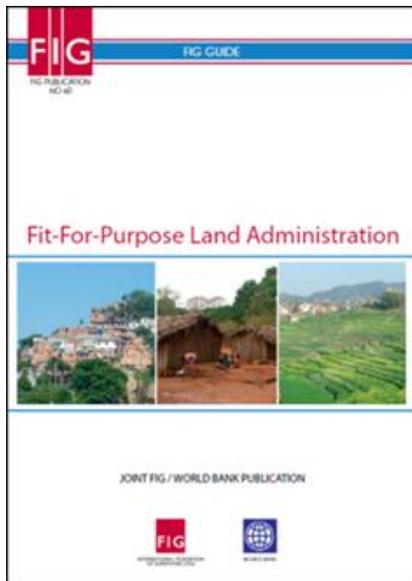
Land governance to underpin the core components of the global agenda

Trustable land information and good land administration is fundamental for:

- Responsible governance of tenure
- Managing the use of land
- Coping with climate change
- Enforcing equity and human rights
- Achieving sustainable development

# Meeting the Global Agenda

- “There is an urgent need to build systems which can identify the way land is occupied and used and provide security of tenure and control of the use of land”.
- “When building such systems the focus should be on a **“fit-for-purpose approach”** that will meet the needs of society today and can be incrementally improved over time”.



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



## FIG /WB Declaration



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.

# Fit-For-Purpose – what is it ?

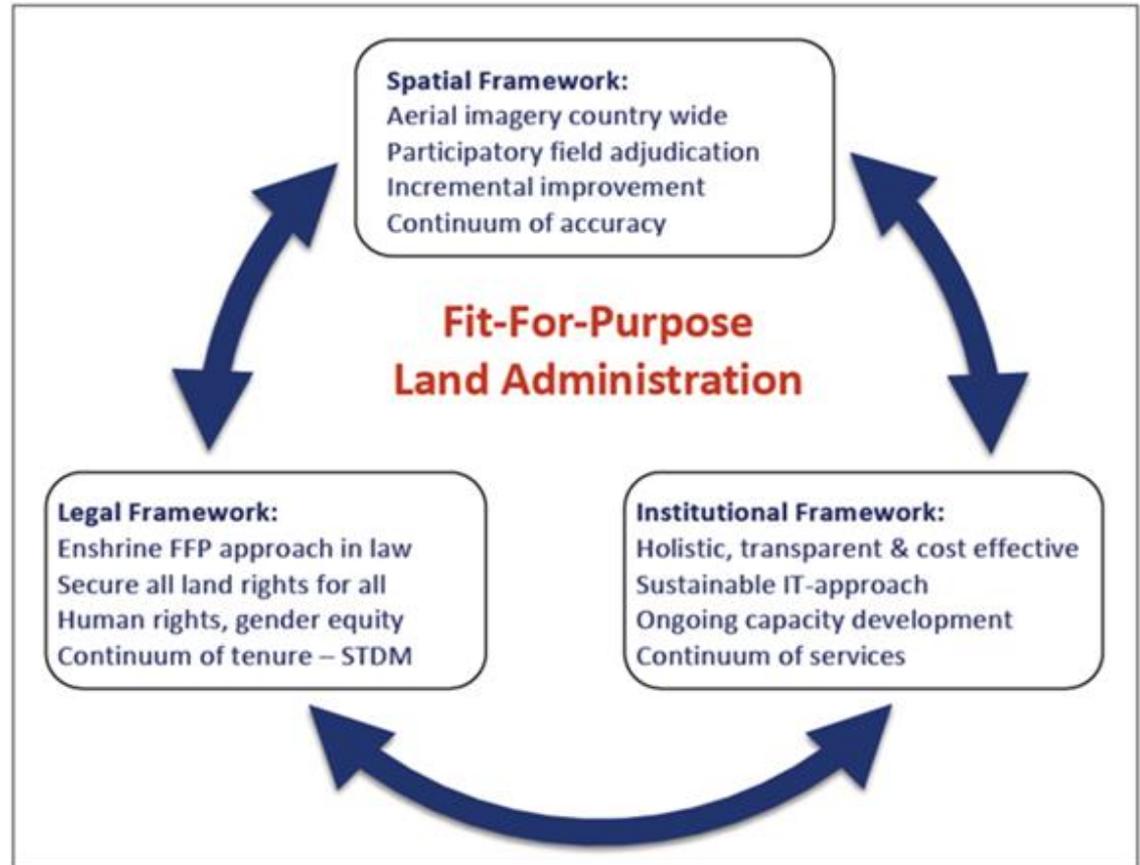
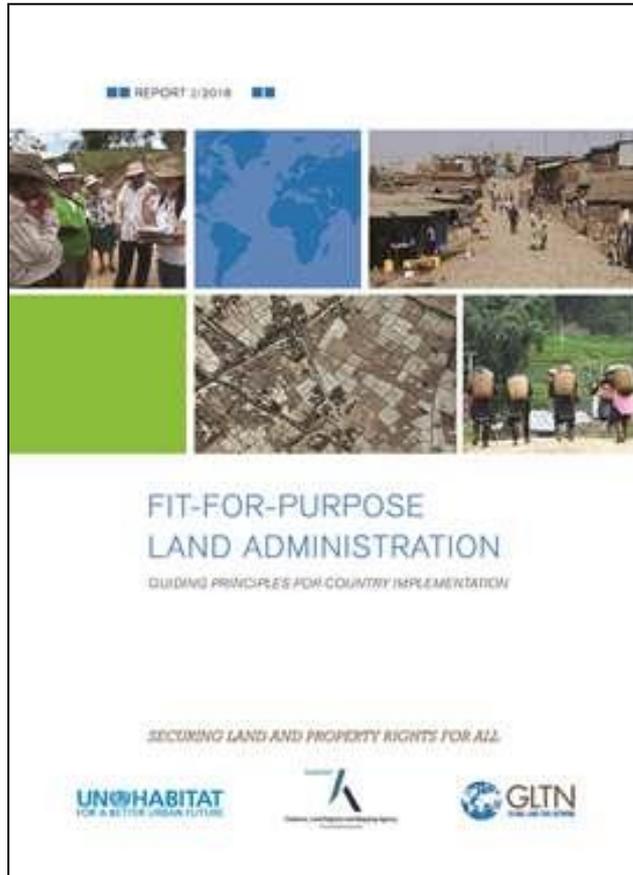
- **Fit-for-purpose:** The systems should be designed for managing current land issues – and not guided by high tech solutions and costly / time consuming field survey procedures.
- **Basic purposes:** Include all land; provide secure tenure for all; and enable control of the use of land.
- **Flexibility:** Scale and accuracy relate to geography, density of development, and budgetary capacity. Include all tenure types.
- **Incremental improvement:** Advanced Western style concepts may well be seen as the end target but not as the point of entry.
- **Good practice:** Rwanda leads the way with about 10 million parcels demarcated and registered in about five years - unit costs of 6 USD per parcel



“As little as possible – as much as necessary”

# Fit-For-Purpose Land Administration

## Guiding Principles for Country Implementation



# Fit-For-Purpose Land Administration

## ***KEY PRINCIPLES***

### **Spatial Framework**

- Visible (physical) boundaries rather than fixed boundaries
- Aerial / satellite imagery rather than field surveys
- Accuracy relates to the purpose rather than technical standards
- Demands for updating and opportunities for upgrading and ongoing improvement

### **Legal Framework**

- A flexible framework designed along administrative rather than judicial lines.
- A continuum of tenure rather than just individual ownership
- Flexible recordation rather than only one register
- Ensuring gender equity for land and property rights.

### **Institutional Framework**

- Good land governance rather than bureaucratic barriers
- Holistic institutional framework rather than sectorial siloes
- Flexible IT approach rather than high-end technology solutions
- Transparent land information with easy and affordable access for all

# Building the Spatial Framework

Using aerial imageries for participatory field adjudication

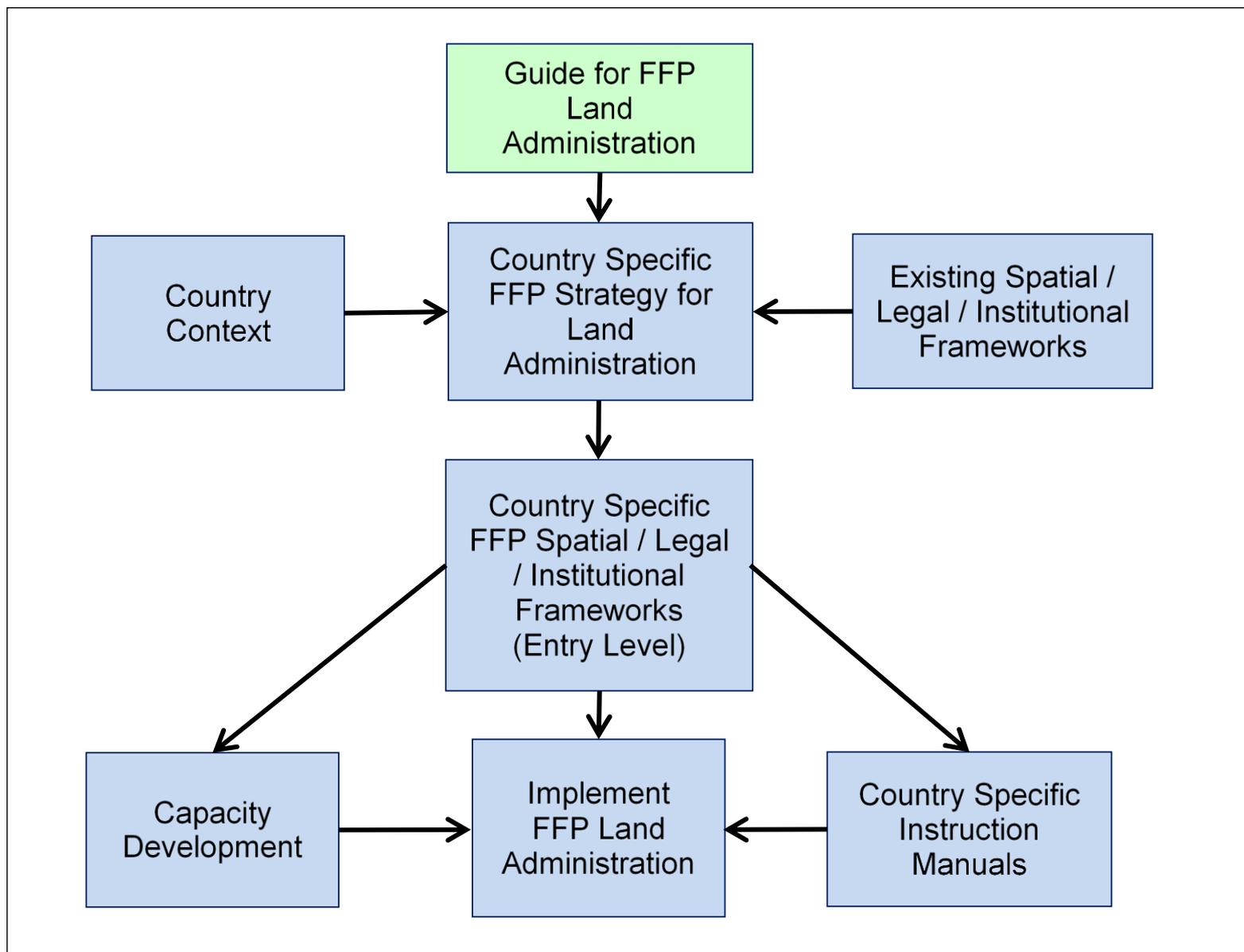


Orthophoto used as a field work map sheet with a georeferenced grid. The map shows the delineated parcel boundaries and parcel identification numbers.



Vectorised field map showing the resulting cadastral map with parcel boundaries and cadastral numbers.  
Source: Zerfu Hailu, Ethiopia

# Developing Country Specific Strategies for Implementation



# Developing Country Specific Strategies for Implementation

## Country context

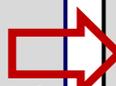
- Baseline conditions, policies, strategies and constraints
- Assessing land sector capacity and stakeholder roles
- Identifying the fundamental purpose of land administration within the country

## Country specific FFP strategy

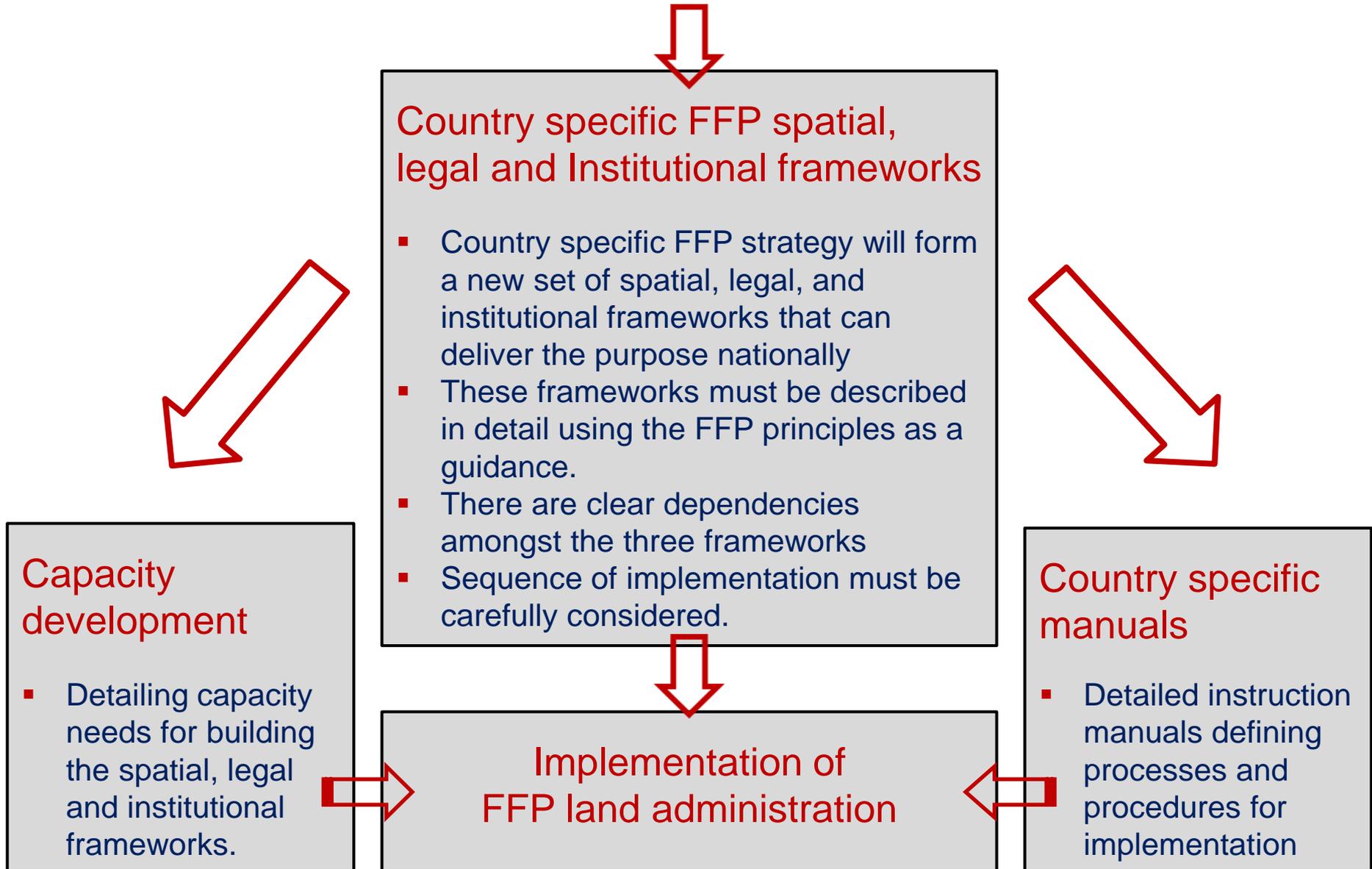
- Strategic vision and purpose
- Land government arrangements
- Entry level components for the spatial, legal and institutional framework
- ICT and information management
- Maintenance arrangements
- Institutional arrangements
- Partnership arrangements
- Change management
- Capacity development
- Risk management
- Business model
- Financial plan
- Implementation plan
- Monitoring and implementation framework
- Sign off by politicians

## Existing Frameworks

- Baseline the current approach to land admin. frameworks
- Functions, capacity and effectiveness
- Constraints and inefficiencies



# Developing Country Specific Strategies for Implementation

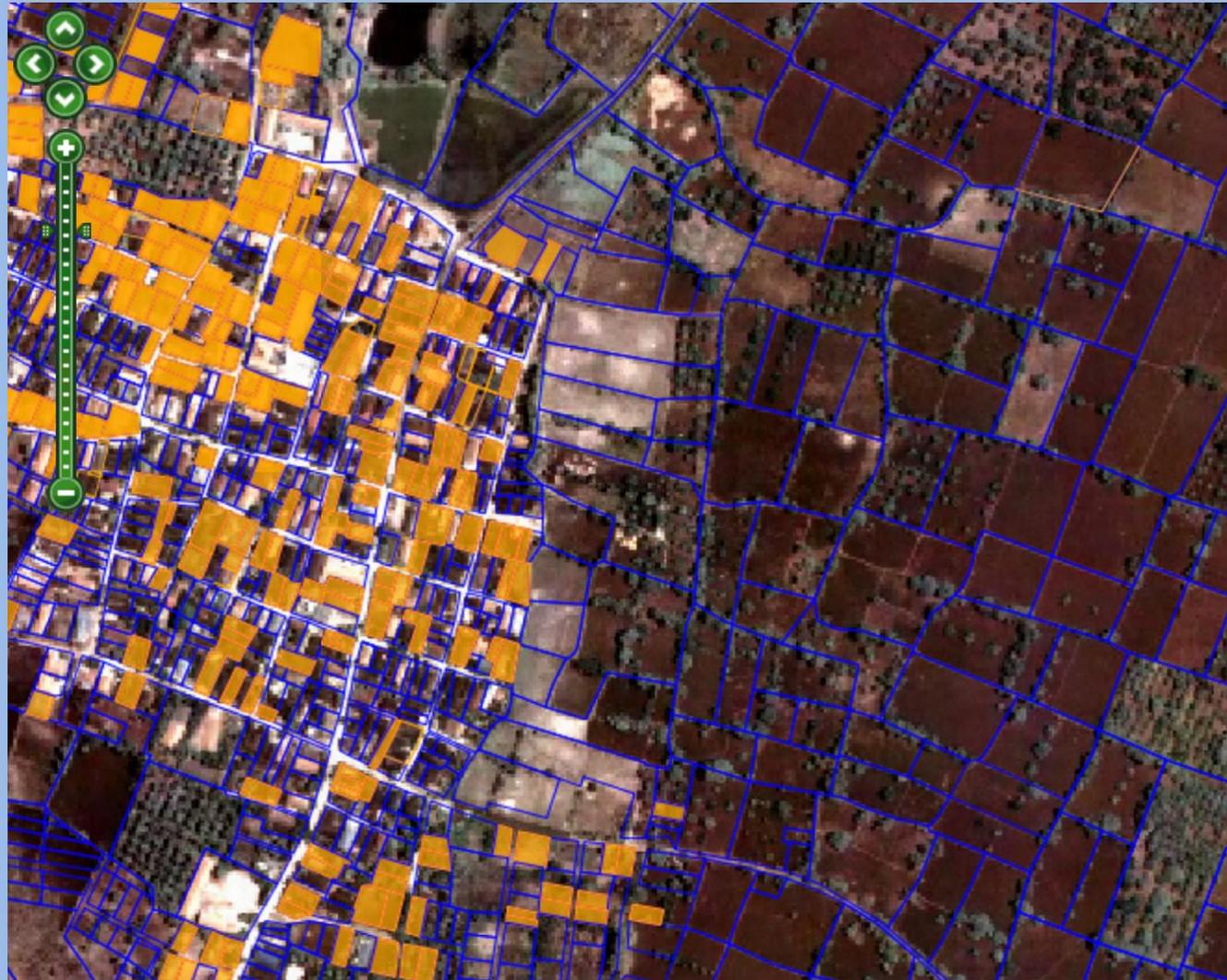


# Indonesia



- **Area:** 1.9 mill km<sup>2</sup> ; Population: 255 mill;
- **Administration:** 36 districts - divided into regencies, districts and villages,
- **Land parcels:** 120 mill of which 40 mill are registered and only 20 mill are mapped.
- **The President:** Registration of 5 mill in 2017, 7 mill 2018 and 9 mill 2019.

# Pilot Project, Gresik District, East Java, Indonesia



- Land parcels boundaries delineated at high resolution imagery
- 3000 parcels mapped and tenure evidence collected by three teams over 12 days using locally trained land officers
- Yellow colour indicates parcels already registered with certificates.

# Indonesia

## Current key issues:

- Sporadic registration with measurement and boundary marking of individual parcels
- Demands for accuracy of measurement and area
- Fragmented sectors for land tenure, land value and land use
- Lack of capacity and land professionals

## FFP solutions:

- Systematic registration with aerial mapping and participatory land adjudication.
- Visual boundaries and areas calculated on the map
- Integrated land management based on a one map policy.
- Use of locally trained land officers acting as trusted intermediaries.



# The Way Forward



- The need for commitment and political will
- The quest for capacity development and provisions for maintenance: "Don't start what you can't sustain"
- Understanding and cooperation between UN-agencies, professional organisations, and national governments
- Effective knowledge-sharing to drive and manage the change process

# Concluding remarks

**Land administration is basically about people.** It is about the relation between people and places, and the policies, institutions and regulations that govern this relationship.

When building land administration systems in less developed countries - focus should be on a **“fit-for-purpose approach”** that will meet the needs of society today and can be incrementally improved over time.



**Thank you for  
your attention**