Benefits of a more sustainable approach to land administration transitions.

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Contents

About this report

This Implementation Support Programme (ISP) study is being undertaken by the Land Facility Decision Support Unit (DSU) to investigate the potential benefits and supporting arguments for adopting a more sustainable financing approach for the establishment and operation of land administration systems in developing countries. It builds on earlier work undertaken by the UK Foreign and Commonwealth Development Office (FCDO), the Netherlands Enterprise Agency (RVO), and Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) over the period 2023-2025.

This ISP extends earlier work undertaken on financial sustainability by FCDO, RVO, GIZ and aims to establish the direct and indirect benefits of developing a sustainable finance approach that can also help to convince governments to invest time and resources in developing their land administration systems It explores the linkages to land market development and wider economic and social benefits, thereby providing a convincing argument for investment and change. This ISP also provides a rapid assessment tool that can be used to assess the readiness of country partners to adopt such an approach at national or subnational level.

The report is presented as a short Executive Summary, a Policy Brief focused on policy- and decision-makers, supported by a deeper analytic study synthesising evidence and building the case for a sustainable finance approach. The Policy Brief is available separately.

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Preface - some definitions

This study is concerned with **Land Administration**. There are several related terms which are sometimes confused.

- L**and Administration** - the process of determining, recording, updating and disseminating information about ownership (and other rights), value and use of land and its associated resources. https://www.fao.org/in-action/herramienta-administracion-tierras/introduction/concept-land-administration/en/

- **Land Tenure** - Land tenure rules and laws define the ways in which property rights to land are allocated, transferred, used, or managed in a particular society. There may be different tenure systems within any one country that co-exist https://www.land-links.org/what-is-land-tenure/

- **Land Governance** - concerns the rules, processes and structures through which decisions are made about access to land and its use, the manner in which those decisions are implemented and enforced, and the way in which competing interests in land are managed. https://www.fao.org/land-water/land/land-governance/en/

There are many different types of **Land Tenure** systems which set out what property rights exist, how they can be held by citizens, groups, other legal entities, and how they can be transferred, inherited, etc. These rights are attached to an object – normally a piece of land, a building, an apartment, etc. and held by a rights holder.

It is the **Land Administration** system that manages information about the property object, the rights holder and the kind of rights that apply. There can be several different kinds of tenure, different categories of landholder, and objects can exist singly, in groups or in more complex forms. Rights typically include rights of any interest – could be ownership, use right, promissory right, access right, etc. Scale this up by considering the complexity and number of property objects that exist in a city or within a country, then the system to manage this data quickly becomes very large and complex.

Land Governance is the phrase used to describe the overarching governance and political framework and this is closely associated with land policy. Countries will make decisions about what kind of tenure system they will have, for example, some countries have very strong, clearly identified individual ownership structures, others have systems based on leasing land, with ownership vested in the state. In many countries, both individual rights and customary rights co-exist within the same governance framework. Land Governance also impacts how decisions are made about land, for example, systems can be highly centralised or decentralised, and this will heavily impact how the land administration system is organised.

Acronyms and abbreviations

CCRO	Certificate of Customary Right of Occupancy (Uganda)
CORS	Continuing Operating Reference Stations
CoFLAS	Costing and financing of land administration
CRISP	Cadastre Register Inventory Saving Paper (Uganda)
CSO	Civil Society Organisation
DFID	Department for International Development (UK)
DP	Development Partners
EICV	Integrated Household Living Conditions Survey (Rwanda)
EU	European Union
FFP	Fit For Purpose
GDP	Gross Domestic Product
GIS	Geographic Information System
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GNSS	Global Navigation Satellite System
ILMIS	Integrated Land Management Information system (Tanzania)
IRR	Investment rate of return
ISO	International Standards Organisation
ISP	Implementation Support Programme (UK FCDO)
LADM	Land Administration Data Model (ISO 19152)
LAS	Land Administration Services
LIFT	Land Investment for Transformation (DFID, Ethiopia)
LIP	Land Inventory Protocol (GIZ))
LTR	Land Tenure Regularisation
LTRSP	Land Tenure Regularisation Support Programme (Rwanda)
LIMS	Land Information Management System (Malawi)
MAST	Mobile Application to Support Tenure (USAID)
MCC	Millenium Challenge Corporation
MLHUD	Ministry of Lands, Housing and Urban Development
MOFPED	Ministry of Finance, Planning and Economic Development (Uganda)
MOL	Ministry of Lands (Malawi)
MZO	Ministry Zonal Office
NLA	National Land Authority (Rwanda)
NLIC	National Land Information Centre (Uganda)
NLIS	National Land Information System (Uganda)
NRLAIS	National Rural Land Administration Information System (Ethiopia)
NSDI	National Spatial Data Infrastructure
MLHUD	Ministry of Lands Housing and Urban Development
MZO	Ministry Zonal Office (Uganda)
OECD	Organisation for Economic Cooperation and Development
RLAS	Rural Land Administration system (Ethiopia)
RLAUD	Rural Land Administration and Use Directorate (Ethiopia)
RLMUA	Rwanda Land Management and Use Authority
RVO	Netherlands Enterprise Agency
SAR	Systematic Adjudication and Registration (Ethiopia)
SDI	Spatial Data Infrastructure
SIDA	Swedish International Development Agency
SLA	Sustainable Land Administration
SLLC	Second Level Land Certificates (Ethiopia)
TRUST	Technical Register to Support Tenure (Tanzania)
UK FCDO / DFID UK	Foreign and Commonwealth Development Office / Department for International Development
UN FAO	United Nations Food and Agriculture Organisation
USAID	United States Agency for International Development
VGGT	Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security
WB	World Bank

Executive Summary - Sustainable finance for land administration

The Challenge

Developing countries have struggled for decades to build effective, nationwide land administration systems. Traditional donor-funded models—characterised by heavy upfront investment, limited cost recovery, and under-resourced institutions—have repeatedly failed. Systems deteriorate after donor exit, pilots rarely scale nationally, and land-based revenues remain drastically underutilised. While OECD countries collect 1–3% of GDP through property taxation alone, developing countries often collect below 0.3%, representing one of the largest untapped opportunities for domestic revenue mobilisation.

Evidence shows that, by adopting a sustainable finance approach, **well-designed land administration systems can pay for themselves and generate broader economic benefits that far exceed their costs.** The transition to this approach requires political commitment, strategic planning, and systemic thinking—but the potential gains are transformative. Adopting a sustainable finance approach offers a realistic pathway for developing countries to:

- Mobilise significant domestic revenue
- Complete land registration
- Operate land administration systems effectively
- Empower landholders
- Support land markets
- Strengthen economic development.

Adopting this approach requires a shift toward financing models that mobilise domestic revenue, leverage land-based assets, ensure cost-effective operations, and generate tangible benefits for governments and landholders.

Objectives and Approach

This study explores the benefits of adopting a sustainable finance approach and how this approach can build land administration systems that are equitable, efficient, and financially sustainable. The study was commissioned by the UK Foreign, Commonwealth and Development Office (FCDO)-funded Land Facility Decision Support Unit. It examines evidence from development partner funded programmes and provides practical tools to support adoption and implementation. The study adopted the following methodology:-

- Explore the linkages and attempt to quantify the benefits of well-functioning land administration systems, demonstrating the linkages between land market development, land administration and advancing cost recovery.
- Identify and quantify tangible benefits of sustainable operational cost recovery for revenue enhancement and wider economic and land market development.

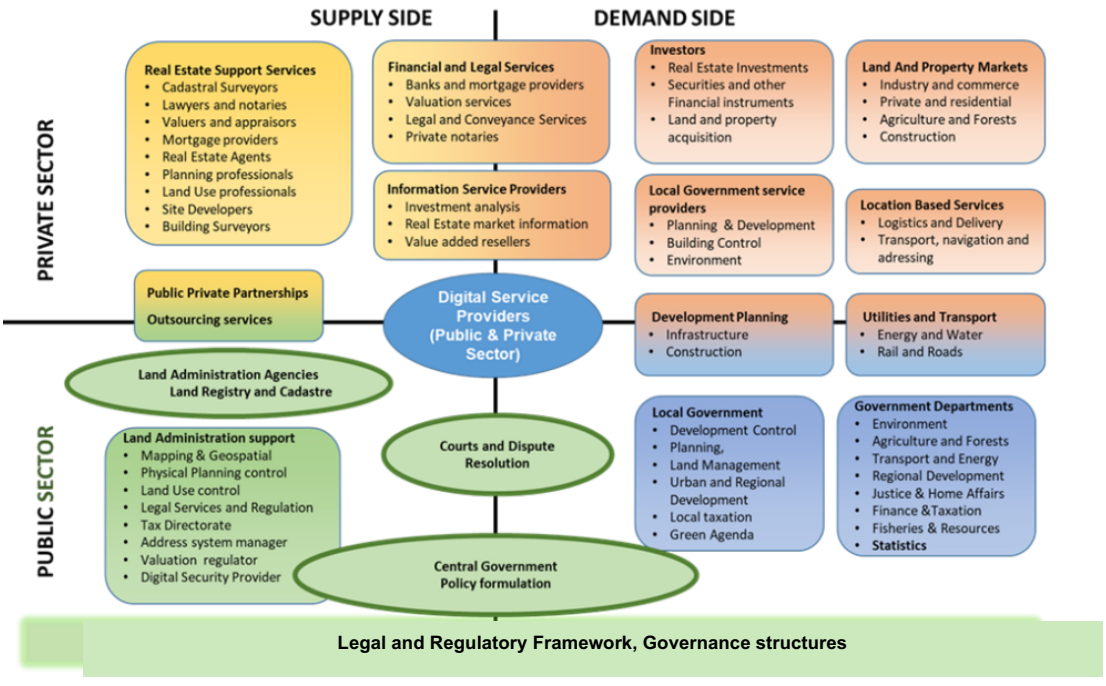
- Set out a Theory of Change that shows how applying a sustainable finance approach can a) develop concrete arguments for reform, and b) support the transition to a more financially sustainable solution.
- Set out an implementation methodology including simple tools for a) assessing state of readiness and b) quantifying the benefits of the sustainable financing approach that can be applied at national or subnational level.

Drawing on evidence from Rwanda, Uganda, Tanzania, Ethiopia, Malawi, and Burundi, as well as more developed economies, the sustainable finance approach seeks to embed financial sustainability into programme design from the outset rather than treating it as an afterthought.

Developing a Sustainable Finance Approach: understanding the wider land administration sector

Effective land administration is frequently viewed as a technical or sectoral issue - something for land ministries, survey departments and donor programmes to manage. However, from a fiscal and macroeconomic perspective, land administration is one of the most powerful yet often underutilised instruments for domestic revenue mobilisation, economic growth and long-term public financial sustainability.

Figure 1. Land Administration stakeholders – mature economy (source: *World Bank. 2020*)



In almost all countries, land administration is not the sole responsibility of the state. In most countries the land administration services are provided through the state bodies or in conjunction with licensed private professionals, or both. Land administration underpins all real estate developments, and transactions, consequently within an advanced economy

there is an enormous real estate industry that is entirely dependent on the land administration system operating well. Figure One sets out a stakeholder mapping of the wider land administration sector which clearly shows how the public and private sector combine to supply land administration services supporting real estate transactions, valuation services, land use, development control and environmental regulation. These services are provided in response to demand from the citizens, public. businesses, legal entities for land administration services, and also in response to the needs of other government, public sector bodies, who need such information in order to carry out their own functions. Figure One can also be used to understand the relative costs and revenue flows across the land administration sector, and a key part of the current study and analysis has been looking at the funding flows across the sector including other public bodies as well as private service providers, for both developed and developing economies.

The **Demand side** is largely driven by land market activity, and so a key element in this study has been to look at land markets and how they influence and drive land administration development through increasing the demand for services.

The study has also considered the costs of developing and operating land administration systems and advocates an approach based on firstly determining the actual operational costs of the existing land administration arrangements, based on budgetary and financial analysis. While many land administration systems are highly incomplete and lack national coverage, their operational costs; the actual service delivery outputs and the associated revenues are often not well understood or documented. Adopting a *Business Plan* approach connects the financial and operational performance through activity-based costing, tracks outputs costs, revenues and allows operational and financial performance to be assessed and monitored, thereby controlling costs and understanding the actual delivery costs of different services.

The study has also looked more widely at land-based revenues, where the basic land administration infrastructure is used to underpin other activities. Consequently, the study has looked not just at fees for land administration services, but also other kinds of revenues generated including state land lease income, property tax, duties, development charges etc. In many cases these other land-based revenues are significantly higher then the revenues generated by the land administration services themselves.

Key Findings of the study

Sustainable financing for land administration is now a real possibility

- **Land Administration is a foundational economic element.** Land administration underpins secure tenure, land markets, investment, tax systems, and economic growth. In advanced economies, land and property sectors underpin up to 25% of GDP, can generate over 3% of total tax revenues, operate with more than 90% operational cost recovery for land agencies, and generate extremely high private-sector economic flows linked to transactions. In developing countries, land markets are weak, informal transactions dominate, and land-based revenues are underperforming—largely due to incomplete registration and underdeveloped systems**. A modern land administration**

system is therefore an economic enabler, not simply a legal or administrative tool. It creates the fundamental conditions for efficient land markets, investment and revenue growth.

- **Traditional donor-funded models are no longer viable**. Land administration faces significant financial constraints in developing countries, including limited government budgets, declining donor funding, long timelines and high costs for establishing land systems, weak cost recovery, and poor financial planning. Further, systems are often not maintained after donor exit, and countries struggle to scale from pilots to national coverage because no planning for financial sustainability is built in. A new, financially sustainable approach is required—one that reduces reliance on external funding and enables systems to pay for themselves.

- **Land Administration can finance itself.** Evidence from countries such as Rwanda, Tanzania, and Uganda shows that land administration systems have the potential to generate significant domestic revenues. Even partial improvements can generate returns that fully cover operational costs and, over time, offset initial investments. For example, Rwanda now effectively recovers 80–100% of operating costs through transaction fees and duties, and cumulative revenue since 2011 matches the original investment and rollout of the nationwide land administration system, including the nationwide registration programme. Malawi is proposing a new programme in which nationwide land administration reforms can be financed solely from increased ground rent collection, and Tanzania collects over US$40 million/year in urban land rents—twice the ministry's operating budget. There is significant unrealised revenue potential from land-based revenues, including property taxes, land rents/ground rents, transfer duties, development charges, land administration service fees and value capture from urban growth.

- **Land-based revenues in developing countries are underperforming sources of domestic finance.** Compared with global benchmarks, developing countries collect only a fraction of the revenue their land sector could generate. In OECD countries, property taxation alone equals 1–3% of GDP. In developing economies, it is often below 0.3% of GDP, even where land values are rising quickly. This gap represents one of the clearest opportunities for expanded domestic resource mobilisation. A complete and up-to-date land register—linked to valuation, billing and collection systems—allows:

  • A broader, more accurate property tax base
  • Higher compliance and reduced leakage
  • Predictable and sustainable local revenue streams
  • Fairer, more progressive tax structures
  • Administrative efficiencies through digital systems

  Countries such as Rwanda, Uganda, and Ethiopia demonstrate that once the underlying land information improves, revenues increase rapidly without raising tax rates.

- **Active land markets strongly drive revenue flows.** A key element in adopting a financially sustainable strategy is understanding the demand side and its role in generating revenue flows for land administration agencies, other government and municipal entities and the private sector. In mature land and property markets, for every US$5 spent on land administration services, more than US$95 is generated in the private sector and more than 200 times generated in other government revenues. As an example, in the UK (England and Wales), the £400 million in financing for the land administration bodies is essentially underpinning very high revenue flows to the private sector (real estate professionals) and other public service bodies generating revenue (tax, planning, development, etc). See Figure Two below,

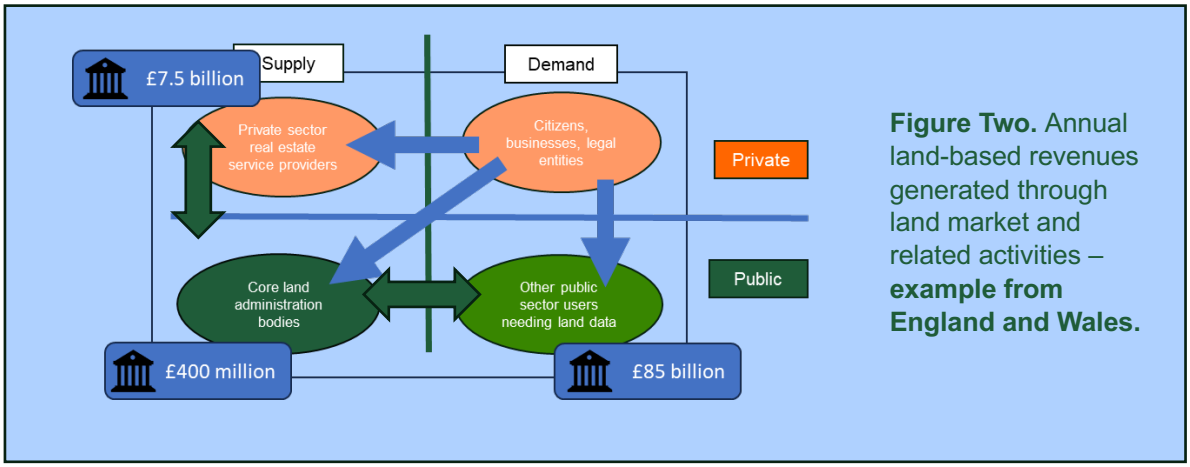


Figure Two. Annual land-based revenues generated through land market and related activities – **example from England and Wales.**

A similar analysis can be applied to developing countries, showing actual and potential revenue flows. The study includes estimates of the revenue flows for Malawi and Rwanda (See Figure 3 for Rwanda). These revenue flows can be determined by land market analysis.

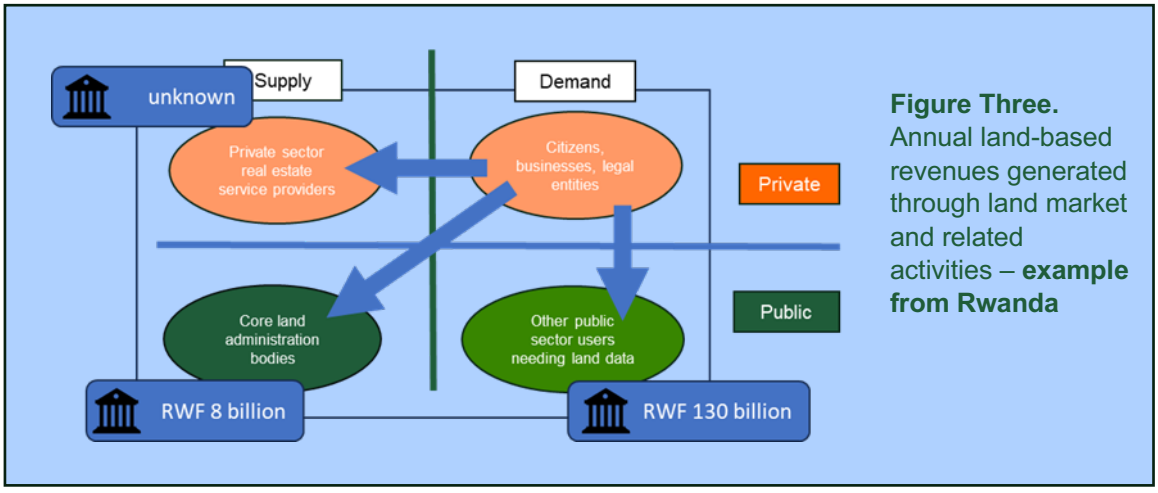


Figure Three. Annual land-based revenues generated through land market and related activities – **example from Rwanda**

In all cases, the leverage principle applies. The key is building public trust in the systems and evaluating willingness to pay; typically, users are willing to pay if they are incentivised and can see real benefits.

- **A sustainable finance approach creates direct benefits for landholders.** Landholders gain economic advantages when documentation is improved, including increased land values (10–20%+); access to microfinance and mortgages; stronger participation in rental markets; reduced disputes and improved climate resilience (through greater investment in climate resilience practices). In Ethiopia, the FCDO Land Investment for Transformation programme (LIFT) has registered more than 20 million parcels, realised over US$42 million in loans backed by Second Level Land Certificates, and significantly enhanced land mobility through increased land rental markets, enabling landholders to directly benefit from land administration being in place. In Tanzania, a willingness-to-pay survey showed landholders were willing to pay around US$13 to obtain a certificate of occupancy, which underpinned the rollout of the beneficiary model. In all cases, where the benefits are clear, the public is interested and motivated to engage. Where benefits are not clear, then the public is less interested, has less trust, and is unwilling to contribute to costs.

- **New approaches can reduce costs and expand coverage.** Large-scale first registration can be conducted affordably using Fit-For-Purpose methodologies, with unit costs as low as US$10 per parcel repeatedly achieved in rural contexts, while significant reductions with modern technology have also been achieved in urban areas. Emerging contributory/self-financing models in Uganda and Tanzania demonstrate that beneficiaries are willing and able to pay modest contributions (US$10–20), significantly reducing public financing needs.

- **A holistic approach is required, building in sustainable finance at an early stage.** Sustainable financing is not simply putting systems in place and then adjusting fees or taxes. It requires integrating land market analysis, understanding the actual costs of service delivery, revenue modelling, business planning, understanding and building demand-side incentives and navigating the political economy of reform and institutional complexity.

Wider benefits become a possibility and strengthen the case for reform

- **A sustainable finance approach can unlock wider economic benefits.** Strengthening land administration produces second-order economic impacts that improve the national investment climate, including:
  - Increased land market activity
  - Higher levels of private investment in housing and agriculture
  - Greater mortgage issuance and financial sector deepening
  - Reduced disputes and more efficient land allocation
  - More predictable and inclusive urban growth
  - Greater resilience to climate shocks through improved tenure security

  These benefits drive economic productivity and reduce pressure on public finances by supporting livelihoods, improving agricultural output, and enabling private sector-led development.

- **The political and fiscal case for reform is strongest when benefits are quantified.** Ministries of Finance often lack visibility of the full value chain of land-based revenues and the benefits that modern land systems create. A sustainable finance approach addresses this by capturing, quantifying and projecting:
  - Current vs. potential land-based revenues
  - Cost recovery possibilities
  - Fiscal gains from reduced disputes or faster transactions
  - Value-added impacts on investment, mortgage uptake and productivity
  - The long-term macroeconomic benefits of secure tenure

There are clear benefits for policymakers and partners

For policymakers, development partners, and ministries, including the key Ministries of Lands and Finance, the case is clear: adopting a sustainable finance approach to land administration is one of the most cost-effective ways to unlock new revenue streams, strengthen fiscal performance, and accelerate economic development. With modern methodologies, realistic costing, and clear sequencing, land administration systems can be built and sustained at scale—financed increasingly by the revenues they help generate.

Table A. Benefits of adopting a sustainable finance approach: key stakeholders

Policymakers	**Development Partners**
• Reduces dependency on donor funds • Allows systems to pay for themselves over time • Unlocks major domestic revenue sources • Supports economic growth, investment and formal land markets • Empowers citizens through secure rights and access to finance • Builds efficient, modern land institutions • Accelerates national development goals	• Leverages investments and strengthens coordination functions • Improves value for money • Strengthens sustainability of investments • Reduces need for repeated large-scale funding cycles • Aligns with global agendas on domestic resource mobilisation, urban resilience, and secure tenure • Enables scalable national solutions, not pilot projects • Supports country ownership and accountability
Ministry of Finance	**Ministry of Lands**
• Domestic revenue mobilisation activates underperforming tax bases. • Fiscal consolidation shifts land administration from a cost centre towards a self-financing system • Debt sustainability reduces reliance on external funding for land sector reforms • Economic transformation strengthens property markets, investment and credit systems • Governance and accountability improve transparency and reduce informal payments • Enhances efficiency of public spending	• Strategic importance in government due to revenue generation role • Potential long-term sustainability with systems that pay for themselves • Potential financial independence from donor funding and budget constraints • Public legitimacy through demonstrable value delivery • Operational excellence through better cost management and efficiency • Performance measurement capability for continuous improvement • Modernisation through technology and process improvements

For Ministries of Finance, adopting a sustainable finance approach to land administration is a strategic investment that delivers measurable returns to the national economy. For

Ministries of Land and development partners, traditional land administration reforms rely on large upfront capital investments, typically funded through external grants or loans. These programmes often fail to reach national scale, and systems deteriorate once donor funding ends. A sustainable finance approach changes this trajectory by:

• Reducing upfront costs through Fit-For-Purpose methodologies
• Spreading costs via contributory models for first registration
• Using land-based revenues to finance operations
• Embedding business planning and activity-based costing
• Ensuring that systems can pay for themselves over time

Adopting a sustainable finance approach means that investments in land administration do not become long-term fiscal liabilities—they evolve into self-sustaining revenue-generating assets.

Developing the approach – the Sustainable Land Administration Theory of Change

In most developing countries, land administration systems are only partially established and implemented. Every country has its own unique state of development, and rather than invoking a linear development model focused purely on the legal, institutional and technical aspects of building land administration systems, **the study proposes a Theory of Change** that allows for a more flexible approach, recognising key interventions that must take place to create pathways to sustainability.

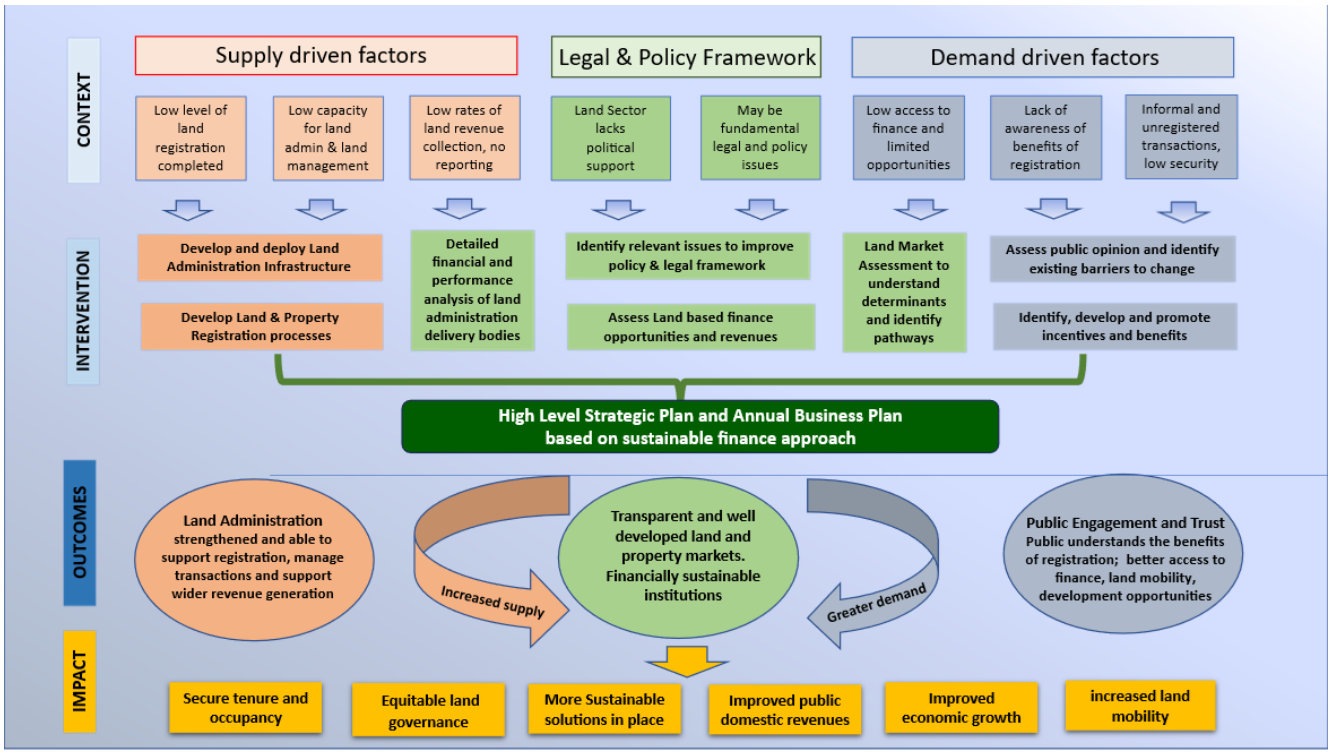
The Sustainable Land Administration (SLA) Theory of Change (Figure 4 below) explicitly includes consideration of **demand** factors; developing land administration infrastructure, registration, service delivery, and **supply** factors; providing incentives and benefits for land holders while also including rigorous analysis of existing sector costs; land-based revenues; identification of land market trends and linkage to wider domestic revenue generation potentials.

The overall aim is to have positive outcomes that:

- Strengthen land administration institutions and service delivery, complete registration, and provide cost-effective and secure land services and support stronger domestic revenue mobilisation.
- Support more transparent and well-developed land and property markets that are able to meet the needs of citizens in a secure and equitable manner.
- Ensure public engagement and trust in the land institutions, a better understanding of the benefits of registration, and access to finance and land mobility.

The approach involves applying business analysis principles to understand the costs of service delivery and land-based revenues (in the widest sense) that can be generated. This places a spotlight on the financial aspects at an early stage and helps develop arguments that can increase political support by increasing domestic revenue generation and delivering both direct and indirect financial benefits for governments, citizens and enterprises.

Figure Four. The Sustainable Land Administration Theory of Change



The Theory of Change proposes a series of Initiatives can take place and contribute to the overall sustainability outcome; for example, a specific initiative focused on a better understanding of the land market dynamics, or a programme focused on cofinancing for customary land registration. By ensuring these initiatives are captured in the overall strategic and annual business plans, they will contribute to the overall sustainability objective.

A key element in the SLA Theory of Change is adopting an approach at an early stage based on a **high-level strategic plan and an annual business plan** that includes financial and operational aspects, providing a continuous focus on developing a financially sustainable solution. This strategic plan and business plan are informed by detailed costing and revenue analysis across the wider land sector and land market trends, as well as the more traditional land administration functions and costs.

The Theory of Change can be used as a guide for implementing a sustainable finance approach, and more detailed notes are contained in the supporting study, along with tools, including a readiness assessment tool and a benefits calculator, to determine transition pathways to a more sustainable future.

Recommendations for action – Implementing the sustainable finance approach

Countries should begin with a comprehensive diagnostic of current systems, costs, and revenue flows. Sustainable finance strategies must be embedded early, integrating cost-

recovery modelling, revenue projections, and business planning. Ministries of Finance and revenue authorities should be engaged from the outset to ensure alignment with national fiscal policy. Governments should prioritise strengthening land-based revenues through improved property taxes, updated valuations, and digital integration with tax systems. Institutional capacity must be built using activity-based costing and performance monitoring, while demand-side incentives—including access to finance and clear communication of benefits—should foster public participation.

Key recommendations for action include:

1. **Develop a clear understanding of the current situation**
   Countries should begin with a diagnostic that identifies the existing legal, policy and institutional framework,; gaps in land information, coverage and system functionality; current revenue flows (fees, taxes, duties, rents, etc.); operational costs across national, district and local levels; condition and capacity of existing land agencies and local authorities; and state of land markets (urban, rural, agricultural). This forms the baseline for planning and identifies political economy constraints that may influence reform. In many cases, much of this information will already be available.

2. **Adopt a sustainable finance strategy early**
   Countries should embed financial considerations in programme design from the outset, including cost-recovery modelling, realistic revenue projections, business planning, and long-term operational budgeting. This ensures that reforms move beyond donor dependency at the outset and sustainability is ‘baked in’ to the transition process. The **Theory of Change**, **Benefits Calculator** and **Readiness Assessment** will assist with identifying actions and what must be done.

3. **Involve Ministries of Finance, revenue authorities and development partners early**
   Sustainable finance requires whole-of-government commitment. Collaboration ensures alignment with national fiscal policy; improved coordination between land and tax agencies; access to domestic financing options; integration with decentralisation and urban planning reforms; and support for credible long-term investment planning. Early involvement strengthens both financial and institutional sustainability and fosters political support.

4. **Strengthen domestic revenue mobilisation through land-based revenues**
   Governments should prioritise improved property tax systems, updating of valuation rolls, integrating land information with tax authorities, reforming ground rents and leasehold payments, and introducing progressive transfer duties and fees. These are powerful, underutilised revenue streams and create compelling arguments for reform.

5. **Undertake a detailed land market assessment**
   Governments need to understand land market dynamics and trends, as these will inform revenue intentions and help identify targeted interventions to stimulate land markets, incentives, and benefits, and improve service delivery. The land market study will include assessment of transaction volumes and types; formal vs. informal markets; valuation patterns; market bottlenecks and distortions; and investor incentives.

6. **Develop a national strategic plan and annual business plan**
   This is the key overarching mechanism to structure, guide and track the overall transition of land administration bodies to a more financially sustainable basis. This plan evolves over time, according to the state of overall development of the land sector ecosystem. There is no single solution; the particular combination of priorities and actions is likely to differ for each country and will also evolve over time. The Strategic Plan (three to five years) sets out the vision for sustainable financing and identifies transition pathways that align investments with revenue opportunities, integrate institutional, legal, and financial reforms, and coordinate national and local responsibilities. The Annual Business Plan then operationalises this by specifying output targets, tracking costs, monitoring revenue and agreed financial and operational performance indicators.

7. **Build institutional capacity for cost-effective service delivery**
   Land agencies should implement a stronger 'business management' approach, including the use of activity-based costing, service delivery and revenue allocation as set out in annual business plans with financial and operational performance indicators that provide both operational and financial reporting. This strengthens management and transparency and improves efficiency, while focusing on cost and service delivery.

8. **Foster demand-side incentives for citizens**
   Public acceptance and engagement increase when the public sees clear benefits. Governments should promote access to finance (mortgages, microfinance); clear communication on benefits; stronger rental markets; improved dispute resolution; and a focus on standardisation of processes and service standards.

9. **Establish or strengthen the land administration infrastructure**
   This includes ensuring that the necessary legal frameworks are in place; organisational structures and institutional mandates are established; and national or local digital land information systems exist or are under development with defined service delivery points (national, district, municipal). It also implies that standard operating procedures exist and there are reliable data models and quality standards. Infrastructure need not be built all at once. Countries may start with local registers, lightweight systems or phased deployment, as long as data can later migrate to national platforms.

10. **Identify and quantify benefits for landholders and the economy**
    It is necessary to determine the direct and indirect benefits arising from land administration reforms, including potential increases in land values; the number and value of loans issued using documented land; productivity gains in agriculture; reductions in disputes and improvements in land market activity. Also required is determining the flow of funds to and from the private sector through additional land services such as valuation, legal, financial, notary, brokerage, and surveying purposes. This directly quantifies the benefits, strengthens political support and makes the economic case for support.

Recommendations for further research

The following recommendations for further research work will help to build the global evidence base and advance the state of knowledge. The recommendations are grouped as follows and are described in more detail in Table B below.

1. Standardised Measurement and Evaluation
2. Political Economy and Behavioural Factors
3. Land Markets and Economic Linkages
4. Equity and Inclusion
5. Technology and Digital Transformation
6. Sectoral Integration
7. Comparative Studies and Evidence Creation

It is recommended that the suggestions below are discussed and coordinated with partner governments and other development partners.

Table B. Recommendations for Further Research Work

Focus	Research Priorities	Key questions
1. Standardised Measurement and Evaluation	**Develop standardised methodologies for costing and impact measurement** • Create universal costing frameworks that allow true comparison across countries and programmes • Develop standardised indicators for financial performance, cost recovery, and sustainability • Establish methodologies to track long-term revenue impacts (5–20 years) • Design tools to capture indirect economic benefits and multiplier effects • Research optimal data collection intervals and monitoring frameworks	• What are the true full-cycle costs of establishing land administration systems? • How can we accurately attribute revenue increases to land administration improvements? • What are appropriate benchmarks for different country contexts?
2. Political Economy and Behavioural Factors	**Understand demand-side dynamics / willingness to pay** • Investigate determinants of citizen willingness to pay for land services across different contexts • Study behavioural triggers that increase voluntary registration and service uptake • Analyse the political economy of revenue retention vs. centralisation • Research how to build and maintain public trust in land institutions • Examine the role of social norms and peer effects in registration decisions	• What drives variation in willingness to pay across communities? • How do political cycles affect land administration reform sustainability? • What messaging and incentives most effectively drive voluntary registration?
3. Land Markets and Economic Linkages	**Quantify land market impacts and feedback loops** • Establish clear causal links between land administration improvements and market outcomes • Research the relationship between registration coverage and market formality thresholds • Study urban vs. rural market dynamics and their revenue implications	• At what registration coverage level do formal markets become self-sustaining? • How do improved land administration systems affect agricultural productivity and rural incomes?

		• Investigate the impact on credit markets, agricultural productivity, and investment • Analyse gentrification and displacement risks from formalisation	• How do we quantify the benefits of functioning land markets for landholders?
4.	**Equity and Inclusion**	**Ensure sustainable finance approaches are pro-poor and gender-responsive** • Research differential impacts on women, youth, and marginalised groups • Study how fee structures affect participation of poor households • Investigate models for subsidising vulnerable groups without undermining sustainability • Analyse the intersection of customary and formal systems in financial sustainability • Research how to prevent elite capture of benefits	• How can contributory models avoid excluding the poorest? • What are the gender-differentiated impacts of different financing approaches? • How do we balance customary authority with sustainable formal systems?
5.	**Technology and Digital Transformation**	**Assess technology's role in reducing costs and improving sustainability** • Evaluate cost-effectiveness of different digital solutions (central versus local registers, cloud, proprietary vs. open source) • Research the potential of AI and machine learning for automated registration • Study mobile technology's role in service delivery and payment systems • Investigate interoperability standards and data sharing protocols • What standards can be developed for data sharing across land administration systems	• What is the true cost reduction potential of different technologies? • How to build in interoperability at early stage? • What are minimum viable digital systems for different contexts?
6.	**Sectoral Integration**	**Explore linkages with other development sectors** • Research integration with national ID systems, civil registration, address systems • Study connections to agricultural extension, credit, and insurance programmes • Investigate links to urban planning, infrastructure investment, service delivery • Analyse integration with climate adaptation and disaster risk management • Research connections to social protection and poverty reduction programmes• •	How can land administration systems leverage and support other sectoral investments? • What are the efficiency gains from integrated approaches? How do we avoid duplication across sector programmes?
7.	**Comparative Studies and Evidence Creation**	**Build the global evidence base** • Conduct systematic reviews and meta-analyses of existing evidence • Develop typologies of sustainable finance approaches for different contexts • Create decision-support tools for selecting appropriate models • Build a global database of costs, revenues, and performance indicators • Establish communities of practice and knowledge-sharing platforms	• What patterns emerge from cross-country comparisons? • Which approaches work in fragile and conflict-affected states? • How do we adapt models across different legal frameworks?

Conclusion

A sustainable finance approach offers a transformative pathway for developing countries to complete land registration, operate systems effectively, mobilise significant domestic revenue, and unlock broader economic development. The evidence clearly shows that well-designed systems can pay for themselves while generating economic benefits far

exceeding their costs. Practical tools provided in the full study—including a Theory of Change, Benefits Calculator, and Readiness Assessment—give countries the means to begin this transition toward land administration systems that are equitable, efficient, and financially sustainable.

1. Introduction to the study

1.1. Objectives

Governments often see effective land administration as something which is an aspiration, or long-term aim, rather than a necessary prerequisite or enabler for wider national and economic development objectives. While there are extensive land governance reform guidelines available, such as the Voluntary Guidelines on Governance of Tenure (VGGT[1]), they are necessarily at a high level and do not resonate well with practical decision makers in Government nor translate easily into tangible actions with clearly visible benefits. These guidelines are aspirational in nature and they are largely silent on matters of how their implementation can be financed. In many developing countries, the lack of available finance is seen as a key constraint in their establishment and operation and this is an issue which is consistently not adequately addressed. Development partners and governments have provided considerable investment funds but these have not resulted (in most cases) in countrywide land administration systems able to offer effective countrywide land administration services.

Given the key role that land administration systems play in supporting land and property markets, domestic revenue generation through land-based revenues and also the wider economy, the question arises as to whether we can find more financially sustainable ways to fund the establishment and sustainable operation of these systems. And what would the benefits of such an approach be and why should governments support such an approach?

This ISP extends earlier work undertaken on financial sustainability by FCDO, RVO, GIZ and aims to establish the direct and indirect benefits of developing a sustainable finance approach that can also help to convince governments to invest time and resources in developing their land administration systems It will explore the linkages to land market development and wider economic and social benefits, thereby providing a convincing argument for investment and change. This ISP will also provide a rapid assessment tool that can be used to assess the readiness by country partners to adopt such an approach at national or subnational level.

1.2. Why a sustainable finance approach is important

Establishing land administration systems

All countries have a particular combination of law, practice, culture, history, and “sense of place”, that creates a unique set of circumstances that shapes how their citizens relate to land and property. In most developed countries the basic property rights are clear, assigned, and systems are in place to allow the legal creation, definition, transfer, pledge, inheritance and leasing of these assets. In most cases there are clear regulatory frameworks in place supporting land and property markets, and in these economies, the

[1] See https://www.fao.org/tenure/voluntary-guidelines/en/

land and property sector is acknowledged as a key engine of economic growth underpinning up to 25% of GDP (*World Bank, 2005, 2025*).

In developing countries, there are very few cases where countries have been successful in establishing country wide land administration systems that clearly identify and assign all property rights nationwide (irrespective of tenure types). The result is that there is still a high degree of uncertainty of occupancy rights with high levels of informality, tenure insecurity; high likelihood of disputes, and most developing countries have a limited and often dysfunctional land and property market with high levels of informal transactions and inconsistent valuations, lack of transparency.

It is important to recognise that any one country already has an established land sector with supporting laws, regulations, institutions, actors and an operating model. In most cases, these systems are substantially underdeveloped, have limited financial support with weak oversight and inherent inefficiencies. Addressing the transition to a more financially sustainable solution requires the recognition of the complexity of the problem, its long-term nature, and that multi-actor processes and solutions are likely to point to structural changes across various societal dimensions like technology, institutions, and culture, rather than just incremental adjustment. of the existing situation.

Financing land administration

It is normally a task of government to establish and then operate the land administration system, and the ability to provide adequate financing has consistently been identified as a core constraint in their establishment and operation, with governments often relying on external funds such as grants and loans to finance the basic reforms.

Financing is required to both establish a functional, complete land administration system and also its subsequent operation. Establishment costs include setting up and staffing the organisational structures; the development and deployment of the infrastructure (including IT systems); and the identification, description and registration of properties and the rights, rights holders, i.e., populating the land registers. Once operational, it will then provide land administration services to manage changes to the registers as well as wider land-related services. The establishment is often seen as an up-front investment that requires direct investment from development partners or government, and usually requires investment of tens or even hundreds of millions of USD over many years. Once operational, the land administration system is usually financed from the annual government budget, however most systems are under-resourced, understaffed, poorly equipped and have limited coverage and effectiveness. In most developing countries, income from land administration services goes to treasury, though some portion may be retained by the responsible institution.

Today, there are increasing pressures on financing in the development sector. Development partner funds are reducing at the same time as new priorities are emerging and national governments also have increasing budgetary pressure. There needs to be an alternative approach, not relying on massive up-front development partner or government funding. The persistent lack of operational financing also must be addressed.

A more sustainable approach

Effective land administration systems can generate very significant direct and indirect financial flows and other economic benefits. Land based revenues are significant sources of domestic revenue but require that properties are clearly described and identified. Revenues sources include fees for land administration services, property tax, ground rents and leases, development charges, usage, etc. However, these revenues are only realistic once the systems are established. Recent developments in carrying out the initial registration process offer pathways to overcoming the critical funding barrier to increasing tenure security through initiatives such as contributory models. For operational systems, revenue enhancement (especially in the urban sector) and cost recovery through appropriate understanding of service delivery costs and revenues offers a more sustainable approach, balancing revenues and expenditures.

A key element in developing a more financially sustainable approach, is to adopt a more systematic *business plan* approach to the operation of systems. In many cases the land administration agencies carry out their mandated tasks without considering the real underlying costs and linking this to the actual outputs delivered. Often, additional institutional structures are involved in front-line delivery of services (for example, decentralised local administration bodies), which also need to be included and financed.

1.3. Outline of approach

Th e approach adopted in this study included the following steps:

- Undertake a short review to draw lessons from recent experience including from partners such as RVO, GIZ and the World Bank.
- Examine the linkages and attempt to quantify the benefits of well-functioning land administration systems, demonstrating the linkages between land market development, land administration and advancing cost recovery.
- Identifying and quantifying tangible benefits of sustainable operational cost recovery for revenue enhancement and wider economic and land market development.
- Set out a Theory of Change that shows how applying a sustainable finance approach can a) develop concrete arguments for reform, and b) support the transition to a more financially sustainable solution.
- Based on the Theory of Change, set out an implementation methodology including simple tools for a) assessing state of readiness to engage with sustainable financing and b) quantifying the benefits of the sustainable financing approach that can be applied at national or subnational level.

In developing this approach, we need to explicitly identify actual costs of establishment and operations; recognise service delivery-level needs, potential revenue generation, and also wider incentives and benefits.

The study draws on experience from Rwanda, Uganda, Tanzania, Ethiopia, Malawi, Burundi and others, and provides practical tools to support adoption and implementation.

2. Analysis

2.1. Introduction and short review

Land Administration reform

FAO defines land administration as

> *"…the process of determining, recording and disseminating information about ownership (and other rights), value and use of land and its associated resources. These processes include the determination (sometimes called ´adjudication´) of land rights and other attributes, surveying and describing these, their detailed documentation, and the provision of relevant information for supporting land markets"*[2]

This definition is largely based on that established by the *UNECE Guidelines on Land Administration (UN ECE 1996),* which was a landmark publication that set out many of the legal, institutional, economic and policy related basics that underpin land administration systems and was highly influential in guiding land administration reform, especially in Eastern Europe. This publication focused on the necessary building blocks and procedures for introducing a land administration system. At that time, in Eastern Europe, there were clear economic, social and political arguments in favour of quickly re-establishing functioning land administration systems to support the economic and political transition and the measures enjoyed broad political and public support. Consequently, most EU accession countries were able to establish modern, functional land administration systems over the last 25 years or so. However, this is not the case elsewhere in the world, where the same arguments do not easily apply, and in many cases, there are valid questions about such matters as the basic tenure form, what rights should be defined, who should hold them, how they can be transferred, and what is the role of the state and other traditional power structures.

Land Governance reform

There is a long history and extensive literature covering the general area of land governance reform in developing countries. This includes consideration of basic systems of rights, tenure types, legal and administrative structures, and the laws and regulations relating to land use, natural resource management, development control, etc. There is a much more limited literature devoted to sustainable financial solutions in the land administration sector (see *Baldwin and Sanjak, 2025,* for recent review).

A key aspect of undertaking any kind of reform is understanding the existing situation, the possible pathways for change and willingness for action. It is well known that to establish a functioning land administration system that provides complete country coverage and has up-to-date records can take many years and this is beyond the timeline of most programmes that can be easily financed by Development Partners.

[2] See: https://www.fao.org/in-action/herramienta-administracion-tierras/introduction/concept-land-administration/en/

Many developing countries have experienced periods of colonialism that have put in place legal and administrative systems that in many cases continue to influence and shape the land governance framework today. Since independence, these countries have introduced new land laws and land policies over the last 30 years or so that seek to reconcile traditional land management practices, with a more formalised system of property rights.

Traditional land governance systems in many developing countries are largely based on customary arrangements, and over time, other tenure systems have been introduced and today most countries have a mixture of tenure types, including traditional customary, formal freehold and other forms (e.g., long-term lease). In many countries, customary land is increasingly being effectively formalised through documenting customary rights (as is the case in Malawi, Namibia, Tanzania, Uganda for example). Some jurisdictions have established separate rural and urban tenure rights (e.g., Tanzania, Ethiopia) while others have moved towards an alternative tenure form (e.g. emphyteutic leases in Rwanda).

In 2014, the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT) were published with the aim of promoting "secure tenure rights and equitable access to land, fisheries and forests with respect to all forms of tenure: public, private, communal, indigenous, customary and informal". These generated powerful arguments aimed at ensuring food and tenure security, improving livelihoods and sought to embrace all tenure forms; however, the guidelines are largely silent on the matters of financing and the mechanics of land administration implementation.

Sustainable financing of Land Administration

Earlier work on the financing of land administration has largely focused on efforts to a) reduce the costs of establishing ***land administration infrastructure***, and b) reduce the costs of carrying out ***identification and registration of properties*****,** with much less attention on the ***sustainable financial and operational performance of*** land administration systems themselves. This is understandable as in most developing countries (and especially those in Africa) there are few countrywide systems in place (Rwanda being a notable exception) and so the focus has been on the establishment stage.

- **Land administration infrastructure** includes establishing the legal and regulatory basics, setting up the organisational structures, recruitment, training, and also developing and putting in place systems to manage property records, and establishing the service delivery networks. The costs of establishing this countrywide service include up-front costs such as legal and regulatory reform and the design and development of IT systems to identify properties and support land administration services. In reality, these processes often take place across many years with parts financed by different programmes and total costs are difficult to establish; though there is better information available on specific parts – e.g., the cost of designing and pilot testing the IT systems (see for example, *Burns and Fairlie, 2018; Byamugisha and Dubosse, 2023).* Other costs are highly variable and dependent on the size of country, organisational structure, level of devolution and number of offices, number of staff and overall functionality and scope of the land administration services. While there have been significant reductions

in the costs of designing and deploying land administration IT systems, the land administration services are delivered through customer-facing offices, and so the number and staffing of these offices continues as the major cost factor. The dominant modality is still one where the state, through the relevant Ministry, Agency and supporting organisations, is responsible for the establishment and operation of the land administration infrastructure. Financing has almost always been a combination of government and development partner funds and/or loans.

- **Identification and registration of properties**. There have been significant reductions in the costs of identification and registration of properties through the adoption of the FFP[3] (Fit for Purpose) approach, where properties are recorded with less expensive and less precise surveying techniques. Combining this with a mass systematic approach, allows very significant cost reductions in terms of the cost per parcel of carrying out registration (see *Indufor, 2014; English, et al, 2019; Byamugisha and, Dubosse, 2023)*[4] The aim is to have all properties identified and registered, and citizens, business entities, etc., all able to easily obtain land administration services countrywide – covering all tenure types. Costs of urban registration are typically higher than rural, though new technology is also offering ways to reduce costs considerably.

- **Sustainable financial and operational performance of land administration systems.** Even within developed countries, there has not been a great deal of time and literature devoted to this. In terms of benchmarking different countries, surveys such as the World Bank "Doing Business"[5] survey attempted to benchmark the delivery of land administration services; however, this dealt with a very specific case – the transfer of an urban commercial real estate object in the capital city. *Byamagushi and Dubosse (*2023) looked at the total running costs divided by number of parcels for a number of countries, however there is wide variation (1-46 USD per parcel) and so it is difficult to draw lessons from this without understanding the country context in more detail.

Towards more financially sustainable solutions

To date, the dominant form of financing has almost always been a combination of large-scale government and development partner funds and/or loans. Recent work by GIZ, FCDO, RVO has focused on developing more sustainable approaches to land administration development, both in terms of building the initial systems and in their operationalisation. *Baldwin and Sanjak* (2025) provided a summary of recent developments as of early 2025 and identified some approaches that do not necessarily rely on massive up-front investment (see Annex A and Table One for examples and case studies).

[3] See https://www.fig.net/resources/publications/figpub/pub60/Figpub60.pdf

[4] Though note caution should be used when directly comparing reported costs as there is no standard methodology and not all cases include the same cost base.

[5] See https://archive.doingbusiness.org/en/rankings

Table 1. Recent experience of sustainable finance approaches (ref: *Baldwin and Sanjak,* 2025)

Approach	Examples
Adoption of contributory models or "self-financing" approaches for first registration of property.	Examples include village land registration in Tanzania *(Issa, 2024),* customary land registration in Uganda (Eriaku, 2024). In this approach an area is declared as open for registration and land holders request participation and pay a small contributory fee to offset part of the registration costs (normally the field costs) which is carried out systematically.
Cost recovery of land administration reform through transaction fees and other revenues	Rwanda largely completed its countrywide registration in 2012-14 at an estimated cost of $70 million USD. Recent analysis (*Nishimwe, Muyombano,2025*) shows that by January 2025, an equivalent sum has been generated through transaction fees and the recently introduced transfer tax. Further, annual operating revenues are equivalent to 80% of operating costs for the last three years and are expected to exceed 100% in 2025.
Revenue led and Business Plan approach	Examples include Malawi, Burundi and Somalia. In Malawi, *(Chilonga, 2025*) a rigorous evaluation of existing costs, revenue structures and service delivery underpinned the financial analysis and optimisation of the land administration and service delivery. This included a revenue-led approach to kick-start and progressively fund land administration reform/upgrade with a more market-based approach to ground rents. In Burundi, a Business Plan was developed and tested based on revenues from registration activities. In Somalia, the potential of land value capture and property tax revenues to fund increased tenure security is being explored.
Demand side incentives and benefits.	In Ethiopia (*Hailu, 2024, Tadesse, 2025*), rural land registration is now approaching 30 million parcels with more than 20 million entered to the National rural Land Administration Information system (NRLAIS). Mobile land offices and more flexible working have been introduced. In parallel with the registration process, a system whereby landholders with SLLC certificates has been progressively introduced and by March 2025, a total of 3 billion ETB (~20 million USD) has been disbursed through over 300 microfinance branches to 70,000 applicants. Loan amounts vary, ranging from a minimum of 50,000 ETB to a maximum of 200,000 ETB. There is also now more emphasis on the monitoring of costs and revenues and the emphasis is moving to sharing of urban/rural land administration services and the adoption of a more Business Plan led approach.

To summarise, there are new approaches to registration being adopted that include financial contributions by beneficiaries; more focus on the revenue potentials of land administration service delivery; greater focus on business planning and the need for client incentives and benefits to encourage service uptake. This constitutes something of a paradigm shift, compared to the traditional focus on registration and a "business as usual" approach to the more operational matters.

In each of the cases above, the need for a more financially sustainable approach is being factored into the overall reform programme, though it is manifest in different ways as each country has its own particular characteristics and state of development. This is now being reflected in updated Theories of Change that are trying to explicitly include sustainable finance within overall land administration reform programmed design (see *Baldwin, Obaikol and Allebachew, 2024., Baldwin and Sanjak, 2025*).

The following sections aim to show how land administration plays a crucial supportive role within our economic and social systems and advances arguments for their support, why governments should invest and how they can use an approach based on a greater understanding of sustainable financing to achieve more successful reform.

2.2. Land administration stakeholders and participants

> *"…economic institutions must feature **secure private property**, an unbiased system of law, and a provision of public services that provides a level playing field in which people can exchange and contract,*

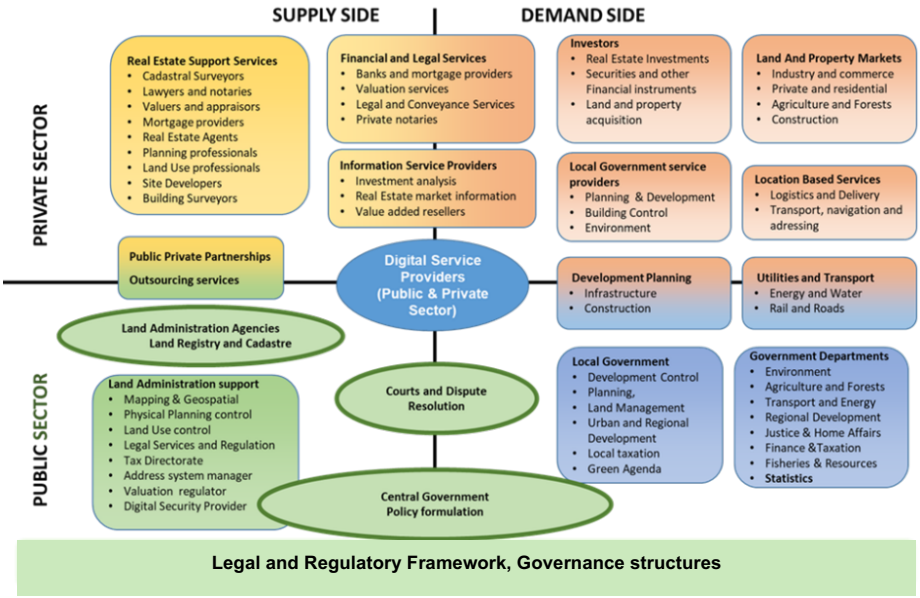
Acemoglu and Robinson[6] in their seminal publication "**Why Nations Fail"** argue that secure property rights form one of the cornerstones of "inclusive economic institutions" which are essential for long term development as they provide a level playing field for all citizens and not hold resources, including land rights, purely in the hands of the political governing elite. It is the land administration system consisting of the institutional structures and delivery frameworks that provide the secure registers that underpin those property rights.

It is important to recognise that land administration systems are designed to merely implement the agreed land policy and land governance frameworks within any given country. Consequently, there is tremendous variation between countries in how a land administration system is organised; what entity is legally responsible for land administration; what are the objects being registered; what are the detailed procedures; who has access to data; what other information is also recorded, how are systems updated and even what kind of transactions are allowed. Some land administration bodies focus narrowly on the registration of rights, right holders and the object of registration only, others include such functions as valuation, planning control, mapping and geoinformation services. In some jurisdictions, the land administration body is established as a semi-autonomous entity such as an Agency, in other cases the responsibility relies with a line ministry. Nationwide service delivery can be through devolved local administration bodies, or may be through a countrywide network of dedicated land administration offices directly

In almost all countries, land administration is not the sole responsibility of the state. In most countries the land administration services are provided through the state bodies or in conjunction with licensed private professionals, or both. Land administration underpins all real estate developments, and transactions, consequently within an advanced economy there is an enormous real estate industry that is entirely dependent on the land administration system operating well. Figure One sets out a stakeholder mapping of the wider land administration sector which clearly shows how the public and private sector combine to **supply** land administration services supporting real estate transactions, valuation services, land use, development control and environmental regulation.

[6] See: Acemoglu, D., Robinson, J., 2012. *Why Nations Fail, The origins of power, prosperity and poverty*.

Figure 1. Land Administration stakeholders – mature economy (source: *World Bank. 2020)*



These services are provided in response to demand from the citizens, public. businesses, legal entities for land administration services, and also in response to the needs of other government, public sector bodies, who need such information in order to carry out their own functions. It is clear that the real responsibility for a well-functioning land administration sector does not lie solely with the responsible government body. Figure Two shows a stakeholder segmentation that is generally applicable to most countries, irrespective of the actual implementation modality.

Figure 2. Land Administration stakeholders – segmentation ***(Source: own analysis)***

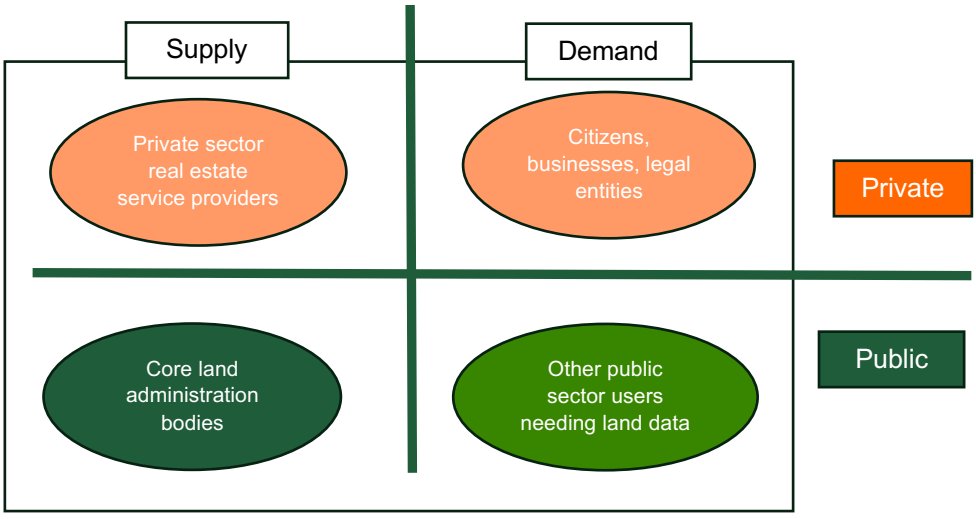


Figure Two is a useful way of viewing the sector and the following observations can be made: -

- The "*who does what?"* question dictates the split between the private sector real estate service providers and those functions reserved by the state. For example, private surveyors may be permitted to undertake surveys instead of government staff; private notaries may handle routine transactions, thus reducing the reliance on the core land administration body.

- Most land administration reform programmes traditionally have focused on the bottom left corner – developing the basic capacity of the core land administration body, and on raising land rights awareness amongst citizens (top right corner).

- In some countries, while the core land administration responsibility lies with a single (usually central) designated body, the service implementation can be through other government or decentralised local government bodies.

- In a country with a mature land administration system, there can be considerable flows of services (and funds) between the four sectors, and it is a matter of government policy as to the setting of responsibilities for service delivery and the applicable fees and duties. There will be a considerable flow of funds from the top right corner (citizens, businesses, legal entities) to the core land administration bodies and the private sector real estate service providers in the form of fees and other charges to support land market transactions and the security of tenure. Other public sector users may or may not be required to pay for land administration related data, according to government policy.

- In a country with a poorly developed land administration system, the funds flow will be weak, and independent sources of finance (such as government or donor funds) are required to develop the system and support its operation, as the demand side is too weak to support the basic land administration services to any extent.

From a governance perspective, it is the particular legal and regulatory framework, institutional framework, land policy, and underlying legal system that determine governance. The Institutional arrangements will vary from one country to another, as will the level of outsourcing / partnership with the private sector and these are variable in the overall financing model.

As explained by *Acemoglu and Robinson (2012),* having a system of secure property rights, properly maintained and updated on the one hand provides legal protection and a more level playing field (central to their idea of prosperity), but also allows transactions to occur and to support a vibrant active land and property markets.

2.3. Land markets

Real Estate is a key economic and social asset

A nation's real estate reflects the social, cultural and economic profile of a country. Economically, real estate will usually represent the single largest investment in fixed assets

within a country. Socially, real estate is utilised and enjoyed at all levels of society, both in public and in private. Culturally, each country will place its own special stamp on appearance, sizing, patterns of use and how land and built-up property create a fabric to be used and enjoyed by its citizens.

How a nation exploits its real estate resource will have a huge impact on how a country develops. Land (and property) markets exist in one form or another in most countries. In a market economy the emphasis is upon creating the right conditions to allow a land and property market to develop. In such a market all kinds of individuals, entities, organisations can participate, invest, develop, create new assets and trade existing assets, suited to their own particular needs but respecting some basic norms about the public good and the need to regulate developments. It has been reported that: -

Box 1. The UK Land Market.

A well-functioning property market significantly benefits a nation's prosperity. Properties in England and Wales are valued at nearly £9 trillion, making up over half of the nation's wealth, with around £1.66 trillion of lending secured against it. The UK has one of the world's largest property markets with annual sales surpassing £360 billion.

In 2024.HMLR processed over 27 million requests for information per year, and made more than 17,000 changes to the register each working day.

Source: UK HMLR Strategy 2025+

- According to a recent global market survey by Savills[7],total world-wide real estate value was $393.3 trillion at the end of 2024 which is greater than all other asset classes plus debt combined. Of the total, residential property forms almost 73%, agricultural land 12% and commercial property 15%, showing that housing needs and population growth are key determinants. Over 44% of all property wealth is held by the US and China, and over 71% is accounted for by just the top 10 global markets.
- At the country level, real estate can represent up to 50% of the value of a country's GDP and can be responsible for up to 25% of economic activity within a country (see Box 1 and *EPRA, 2012*[8])
- According to the World Bank (2005), those countries with secure tenure and a well-functioning registration system are up to 25-40% more likely to attract foreign investment than a country with a poor record of title security.
- On average within Europe, every $5 spent on land administration within the public sector generates $95 of economic activity in the related private sector (*Baldwin et al, 2015*)

From the viewpoint of sustainable financing of operational land administration, a well-functioning land market is the key source of operational revenue. Land transactions and other services in most countries incur fees and stamp duties on land transactions. A buoyant land market will typically have an annual (residential) turnover of 3-5% of the total

[7] See: https://impacts.savills.com/market-trends/how-much-is-global-real-estate-worth.html

[8] See EPRA: https://www.epra.com/media/Real_estate_in_the_real_economy_-_EPRA_INREV_report_1353577808132.PDF

number of properties, which generate significant fee and duty income, including the registration of transfer and restrictions or caveats such as mortgages or other rights or restrictions. It also directly funds (on demand) the real estate professionals (banks and mortgage providers, valuers, lawyers, estate agents, conveyancers, notaries etc.), and will also generate requests for other public sector services, such as planning permission requests, environmental searches, requests for change of use, building approvals, etc. As such, it is the “powerhouse” driving the demand / supply model shown in Figure Two.

Mature, well-functioning land markets

A mature and well-functioning land and property market allows citizens and investors to participate in the market through various investment mechanisms, conveying different types of property assets and with a range of terms and conditions suited to a whole variety of purposes. There is a range of different assets available, information about these assets is easy to access, and the regulatory environment should not pose significant barriers. Investors also have access to a range of financial instruments to support the investment process. The investors themselves can be recognised as operating in a segmented market, e.g. residential, commercial, and large-scale developments. If the market is operating smoothly, then supply and demand are matched over the economic cycle and real estate is seen as a safe and secure investment.

There are different categories of real estate objects which include residential property, commercial (including industrial) property and agricultural land (including forests, vineyards etc.). A well-functioning land market is characterised by an availability of assets; ease and transparency of information flows, a stable and secure legal system with a variety of tenure models and supported by a well-functioning administration system, a range of financing mechanisms suitable for domestic and also large-scale commercial use, and a healthy demand and turnover within the market, which is closely related to the general state of the economy.

Supply and Demand

In Land Markets, the supply side is usually subject to constraints. Constraints arise as land is finite and is usually already occupied and set to some purpose; land (and property) may change hands with the same purpose or the land (and property) may be redeveloped, with or without a change of owner / occupier. From an economic perspective, active land markets allow assets to be redistributed and repurposed so that the best overall rationale for economic use is made of the asset. In practice, numerous constraints apply; one group of constraints are linked to the land unit itself; its size, location, level of infrastructure; physical and environmental characteristics, development potential; a second group of constraints arise due to the legal and regulatory regime (tenure security, legal ownership rights, development and use rights etc.), and a third group can arise if the regulatory environment does not support suitable financial instruments and if taxation regimes are punitive or uncertain. Underlying all of this is a requirement for transparency and the ability of the land administration institutions to support these activities.

On the demand side, demand is driven strongly by demographic and economic growth. Expanding urban economies draw in more land resources and densify existing neighbourhoods. Demand also follows infrastructure growth and is heavily influenced by locational and transport factors. Residential expansion is fuelled strongly by population growth, urban migration and results in increased demand for rental and owner-occupied dwellings and densification of existing plots in urban communities. We can distinguish quite clearly between residential, commercial, industrial and agricultural/rural developments and while these can overlap, development controls will try to identify and control development through zoning controls. Getting balance for the availability of these different asset classes is a challenge. Access to finance is key in all these markets; the state of the local and national economy; local development policies; taxation regimes can all have significant effects and sometimes have unintended consequences.

Incentives and security

There may be barriers or a lack of incentives on the demand side that inhibit formal market development. Investors need security over the asset and confidence that the land will not be unreasonably removed or expropriated; they need the ability to undertake transactions, either through buying or selling, or long-term leasing with secure development and use rights. They need access to finance, simple processes for approving construction and use, transparency of information and ideally low transaction costs so these do not provide impediments. Investors will engage other professionals in property development: lawyers, surveyors, valuers, architects, construction companies and house builders and also rely heavily on transport and local infrastructure to support site development or densification. For agricultural enterprises, including both large-scale and small-scale food producers they need routes to market. The public also needs confidence in the property sector and there is a high correlation between real estate investment and general economic growth – both locally and nationally

Informal markets

Land Markets have their own peculiarities and while they incorporate both formal and informal characteristics – the land market itself is generally considered to include all land related activity (*UN-Habitat, 2010*). While we may distinguish in our analysis between “formal” land market” and an “informal market”, in reality this may not be the most important consideration for those living, for example in urban / peri urban areas and it is entirely possible for the two to co-exist (*Adam, 2020)* with some market participants dealing with formal properties and some with informal, or indeed, mixing and matching over time.

In rural areas with customary tenure that is not fully documented, informal land markets exist, and land transfers can be approved by customary authorities. Land can be subject to change of use; transfers may be limited to those regarded as having a close relationship or kinship with landholders, and rentals are often restricted to known and trusted parties. This market is typically highly localised and operates informally without formal reporting, though may be picked up in household-level surveys (e.g. ECIV, Rwanda).

Where the customary or formal arrangements are not well defined or break down, then we end up with a situation where there is legal uncertainty, and where this is common place, then we may have a situation where land (and property) is being occupied in a manner inconsistent with either customary arrangements or formal law – this land is then defined as being held informally or illegally. This is often the case where the land administration systems are not functioning; land use and land development are not enforced, or there are structural reasons as to why formal land ownership degenerates into informal occupancy.

Land Markets and Land Administration

> *A well-functioning formal land market is characterised by a well-functioning land administration system (**supply side**), transparency and market support functions (**demand side**)*

Where a land administration system is not functioning, then there is a lack of security in the property title; information flows are weak; prices are volatile and loans cannot be raised using the property as collateral. There is a reluctance to invest or mobilise the land for development. Once the institutional structure is established, land starts to be registered and service delivery mechanisms established, then formal transactions can take place. Initially, as evidenced in Eastern Europe (*Dale and Baldwin, 2000*), these markets are weak, immature and highly speculative, with a lack of transparency of valuations and sales data. Demand is stimulated by access to capital, economic growth, demographics, labour movements and local, national development policies. The market then drives demand and land market activities increase even more. Most markets reach a kind of equilibrium and we see this in residential markets for instance, with an annual turnover of 3-5% of total stock, at this stage the land administration institutions and services are well advanced and able to meet the demands of citizens.

In order for a formal land market to develop and mature there is a need for both supply side and demand measures to be in place: A six-nation land market study focused on Eastern Europe *(See Dale and Baldwin, 2000,and Case Study #1 overleaf),*) concluded that the following are necessary requirements to support mature well developed property markets.

- Clear legal basis of ownership and ease of transfer of ownership rights;
- Institutions have adequate human, technical and financial resources;
- Land Administration data held by the institutions is largely complete and has high integrity and is accessible;
- Service Delivery network in place and able to serve all physical and legal persons
- Balanced supply and range of property types;
- Adequate security for leasing including protection of landlord and tenant interests;
- Transparent information flows relating to property prices and availability of assets;
- Range of investors exist;
- Adequate financing for investment including access to capital secured by mortgage;
- Clear regulation of the planning and development process for property development.

It appears this model, originally developed for application in the post transition economies of Eastern Europe is equally applicable to developing countries.

Case Study #1: Experience from Eastern Europe – the Land Market Paradigm 1992-2000

Background

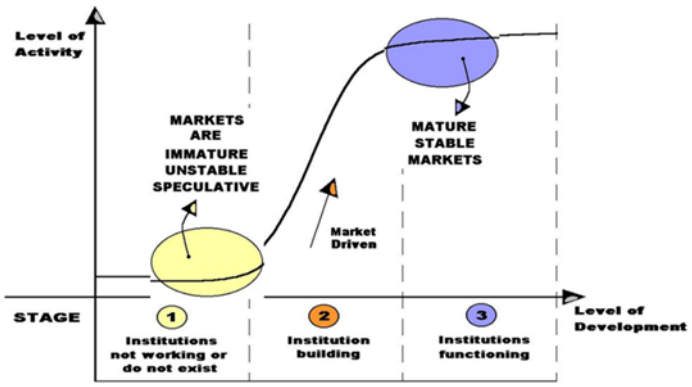
Land Reform and the re-establishment of land administration systems emerged as one of the key reform areas for the Eastern European Transition states, and the EU, WB and bilateral funders channelled enormous sums into those countries to re-establish a system of property rights following the nationalisation and expropriation by the socialist governments of Eastern Europe during the post WWII socialist era.

The World Bank alone channelled $1.2billion USD into some 40 land tenure projects between 1994 and 2014 in the ECA (Europe and Central Asia) region. It is estimated that this leveraged x10-20 this investment by national governments and other donors in this region.

From Land Administration to Land Markets

Initially the focus was very much on the re-establishment of the legal environment, technical systems and infrastructure supporting land administration. By the later 1990's in Eastern Europe the emphasis shifted to land markets, with a growing understanding that the role of land administration was to underpin and support the land tenure system and allowing the real estate market to function transparently and efficiently as an element of a market economy. This promoted a service-based approach and e-government and "joined up" services with efficiency, value for money and quality of service as key drivers. By 2014, the majority of Eastern European states have land tenure and property rights systems that are equivalent, or in advance of the traditional Western European countries.

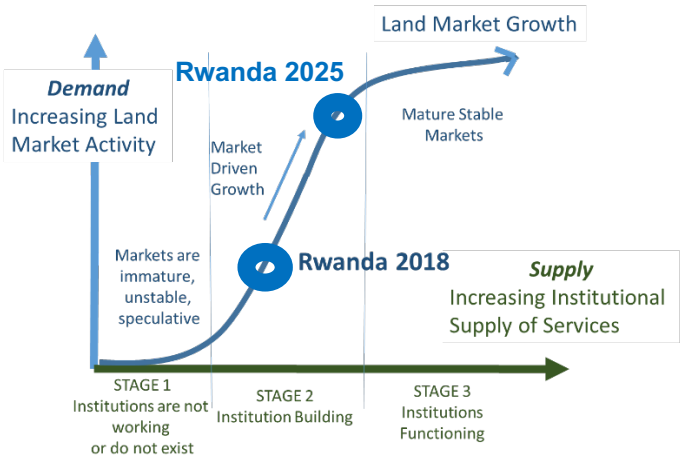
The land market paradigm is based on the rationale is that a well-functioning land and property market is a necessary element of a market economy, and central to the "four freedoms" of movement of goods, people, services and capital which sits at the core of the European Union ideal.



At the time of the political changes of 1992, the East European countries did not have land administration systems supporting private property, so there was effectively no land market activity and no institutional structures or private sector services supporting transactions. The EU, World Bank and other donors embarked on an intensive institution-building programme which also supported property privatisation, restitution, compensation and the creation of land registries and cadastral systems and massive data creation programmes. As it became possible to transact, and financial instruments such as mortgages became available, the market itself started to take off and the land market activity increased dramatically. The result is that within 15 years, most East European countries had built land administration systems supporting more mature stable markets, with transaction levels at the same kind of level as western Europe. The creation of open, transparent and functioning Land Markets came to be seen as a key indicator of the transition process, with most countries passing through several phases, eventually arriving at more mature land markets with almost complete registration, and all required supporting structures in place *(Ref Dale and Balwin, 2000)*

Figure Three (below) shows the model applied in the case for Rwanda, according to a land market assessment carried out in 2018 and revisited briefly in 2025.

Figure 3. There can be no formal land market without well-functioning land administration ***(Source: Dale and Baldwin 2000)***



In Rwanda, institution building began in earnest with the passage of the Organic Land law and the start of the systematic registration programme around 2008-2011. By 2014, most of the initial registration work was completed, but systems were not yet in place to manage transactions, and this started to be addressed from around 2016 with the introduction of sector land managers and the coming on stream of the Land Administration Information System (LAIS). By 2018, land transactions were around 270,000 per year, a third of which were transfers, and these figures increased to over 450,000 transactions including around 250,00 transfers by 2025[9] (*Nishimwe and Muyombano, 2025).*

Summary

Land Markets exist everywhere in some from or other both in developed economies and in the developing world. In the developed economies, most land market transactions are formal and there is a well-established legal and regulatory framework underpinned by a well-functioning land administration system. There are processes for land valuation, conversion, development, transfer and collateralisation. Ownership and occupancy are clear. Restrictions and burdens can be placed or removed on properties. Local planning frameworks, usually enforced at the local level but developed according to national policies and regulations are in place and enforced. Land Information is widely available and much of it is in the public domain.

In many developing countries these frameworks and supporting structures are often not in place, information is scarce, ownership and occupancy are not clear or may even be

[9] If funds permit, there exists the possibility at a later point of deepening the existing Rwanda analysis to show the linkages with more advanced land market development, revenue enhancement and cost recovery.

undefined. In these circumstances it is too often true that the majority of properties are held informally and developed and transacted accordingly. Functioning land administration systems are therefore crucial to the establishment and operation of open, transparent land markets; however, they are often underdeveloped and under-resourced. A key constraint that is repeatedly raised in the establishment of land administration systems is the cost and the time taken to establish functioning systems.

2.4. Costs of establishing land administration systems

Introduction

There is an enormous literature concerned with the establishment of land administration systems in developing countries over the last 20-30 years arising as a result of national government initiatives and programmes supported by the World Bank, UK FCDO, RVO, GIZ, SIDA, MCC, USAID. Many of these publications focus on the legal and regulatory reform, policy formulation, institutional and technical aspects as well as wider social and governance aspects *(Deininger and Goyal, 2024; English, et al, 2019; Lawry, et al, 2014;, Byamagushi, et al, 2013, Payne, et al, 2015; Adlington, et al 2009)* and have reviewed recent programme experience and while there is extensive analysis and recommendations for more effective land administration interventions, until recently there has been relatively little attention paid to the financial aspects, though most reviewers identify financing as a key constraint.

There have been attempts to develop costing tools to estimate the financial costs of developing and then operationalising land administration systems, notably the CoFLAS methodology of *Burns and Fairlie (2018),* later incorporated into the MCC Land Records and Transaction systems Technology Toolkit[10] which also provides some guideline for different sizing of systems. These approaches are useful in that they provide estimates of future costs for programme planning purposes, however there is little reporting on the **actual costs** incurred as land administration reform takes place over a long period of time, involves multiple programmes, donors and may also involve multiple institutions, and typically these have not been systematically reported. These costing exercises are very much embedded in conventional thinking about the required investment costs– centralised systems serving a network of decentralised service delivery centres and limited functionality focusing on registration and mapping, with limited optimisation or adaption.

Byamagushi and Dubose (2023), carried out an extensive analysis looking at the issues, complexities and possible solutions for scaling up land reforms and investments across Africa. This included completing land registration (of both customary and formal rights) and establishing functioning land administration systems across the countries. *Potts (2020)* has also worked on a detail assessment using an approach similar to that of Burns and Fairlie for a group of East African countries. Alongside this, various authors have made estimates

[10] See https://www.mcc.gov/resources/doc/toolkit-land-records-and-transaction-systems-technology/

for individual countries though they are based on different approaches and assumptions. *Byamugushi* arrived at a figure of $4.5 billion for the SSA region, though the underlying assumptions are not known. *Potts (2020)* has a figure of around $3.5 billion for a select group of East African countries. The National Scale Up Plan for Tanzania *(Government of Tanzania,2019a)* calculated a figure of $630 million for Tanzania alone ($380 million rural, $250 million urban). Continuing the costing exercise for SSA, yields a preliminary figure of $15-20 billion just for the SSA regions alone (*Baldwin,2021*).

Costs of land administration services can be considered to include: -

a) the **investment costs** of establishing the host systems; including all supporting infrastructure including IT systems, offices, communications infrastructure, data conversion, registration, etc.
b) the annual **recurrent costs** of the operation of the land administration services by the mandated government bodies (may include more than one organisation).

In most cases, the establishment of the land administration system also requires that some kind of systematic first registration of property is carried out and this is normally considered as an investment cost and financed by government or development partners. However, there are new approaches being established where the systematic registration is cofinanced by the beneficiary who makes a contribution to the costs and there is interesting recent experience of this in Tanzania and Uganda (see Table One).

Recurrent costs relate to the annual cost of running the land administration system. These will vary enormously country by country, considering the size of the country, population, number of land parcels registered, organisational and institutional structure, staffing, mandated functionality of the land administration body, etc. In most developing countries, the land administration agencies have chapters on the state budget and agency costs (both recurrent and investment) are reported there according to guidelines established by the relevant Ministry of Finance. Internationally, there is no standardised reporting of the performance of land administration bodies, though many agencies in developed countries do report on their financial and operational performance in their annual reports[11].

Investment costs

Investment costs are generally considered to include the costs of establishing the working national land administration infrastructure and the costs of populating the registers through systematic initial registration programmes.

Setting up the land administration infrastructure

National scale land administration systems and supporting IT infrastructure are still very expensive to develop and take several years to design, test, adapt, roll out and make operational (*see Adlington and Tonchovska 2012, Burns and Fairlie 2018*).

[11] See for example Dutch Kadaster, UK HMLR annual reports,

In most countries there is usually some existing land administration infrastructure and organisational structure in place (which may not be complete); existing paper based and digital records; legacy IT systems, etc. and so costs will vary widely according to scale, current status of the records, required functionality, etc. For example, the National Scale Up Plan for Tanzania *(Government of Tanzania, 2019a)* calculated a figure of $30 million for the roll out of the Integrated Land Management Information system (ILMIS) to support rural land across all regions (approximately $215k per district; $1.2 million per region) and this does not include any operational or system development costs (estimated separately as $5-10 million). Converting existing records can also incur very significant costs.

Burns and Fairlie (2018) in the CoFLAS (costing and financing of land administration systems) methodology quote system development costs for national land administration systems up to $10 million and this broadly fits with central and eastern European experience (*Torhonen, et al,2015*) which has many lessons for developing countries. *Torhonen (2016)* provides an overview of the lessons learned from 42 of the WB's programmes supported in the ECA region which include the necessity of legal reform. *Adlington and Tonchovska* (2012) provide an excellent summary of the ECA experience of modernisation from an IT viewpoint, emphasising the difficulties of large centrally driven IT projects and advocating smaller step by step solutions. *Burns and Fairlie (2018)* extended these ideas which are further developed by *Baldwin and Sanjak (2025)* and summarised in Box Two.

Box 2. Establishing a national comprehensive Land Administration System (LAS) includes: -

***Complete the registration**:*

- *First registration in the field where necessary*
- *Migrate data from existing electronic and paper- based systems*
- *Data quality and quality improvements*
- *Resolve problems and disputes*

Establish the spatial framework for Land administration

- *Single national coordinate system*
- *Continuous Operating Reference systems (CORS) or other tools for positioning spatial data*
- *Standards and metadata for use*

Establish physical infrastructure to support LAS

- *Physical offices resourced, equipped and operational*
- *ICT infrastructure specified and operational*
- *Service delivery networks in place*

Implement ICT to support LAS

- *ICT strategy sets out plan for whole development and implementation*
- *User requirements and technical specifications*
- *System build / operational testing*
- *WB ECA experience is smaller sequential projects more successful*

Capacity development

- *Long term strategy for staff development*
- *Work with local providers including universities, private sector*
- *Professionalise private sector*

Project management

- *Ensure sufficient PM capacity*
- *Use independent QA/QC*

Sustainability Planning

- *Business Model developed with cost recovery, financial sustainability*
- *Annual Business Plan, reporting KPI*

Source: Baldwin and Sanjak, 2025, Adlington, et al, Torhonene, 2022, Burns and Fairlie, 2018)

Other recent examples of national systems include the development and deployment of NLIS in Uganda ($5-10 million) and LAIS in Rwanda, estimated as $2-4 million, and NRLAIS in Ethiopia incurred development costs of $2-3 million, though deployment costs are unknown. Each of these systems have different functionality and the costs given above are principally development and initial deployment. In the case of Uganda, it includes the National Land Information Centre and 22 MZO (Ministry Zonal Offices) Rwanda includes

Headquarters, Province and 30 District One Stop Centres, while the NRLAIS costs are development and initial central deployment only.

Land administration systems can take many years to complete and may involve multiple partners. While attention focuses on the system development and implementation, this can only be done once the relevant legal and institutional arrangements are in place and this can take many years and usually involves the iterative development of an agreed policy and institutional framework. This will typically involve various authorities with different responsibilities and managing different but related data sets, which provides an additional layer of complexity and may increase costs. Further, while the central bodies may be responsible for system regulation and technical oversight, the customer-facing element may be provided through local administration bodies, showing that there are in fact multiple levels and systems within any "national land administration system".

Another approach is to use a local register solution. Instead of designing, building and implementing a countrywide system with all the complexity and cost, a digital local register solution can offer an entirely different entry level as it can be designed, developed, tested and put in place relatively quickly. Typical local register solutions costing around EUR 200,000 (e.g., TRUST, Tanzania; MASSREG, Ethiopia)[12]. They are cheaper and quicker to develop but require a different governance structure *(Baldwin, et al, 2018*), and only cover a relatively small defined area (village, community, district). They also have risks, especially if there are no national standards agreed for data content, structure, rules for updating etc. They are limited in scale and functionality but can provide local secure records management and transaction processing subject to clear governance and accountability. They can provide a useful interim solution pending the arrival of national systems, but it's essential they are built to an agreed data model and standard business rules so that data can be migrated in the future to a national system when that is eventually deployed.

The key issue is to ensure that land administration systems do not become "digital islands", as the real benefits start to accrue when systems have interoperability and linkages across ministries / business units – e.g. being able to use land administration data to support tax or ground rent payments.

First Registration costs

There has been much literature around the process of first registration of land rights under various tenure regimes especially in African countries (see *Baldwin and Sanjak,2025* (*English, et al, 2019, Indufor, 2014*). Attention has focused increasingly on adopting more mass systematic approaches and using the FFP (Fit For Purpose) principles which advocates the use of imagery, reduced accuracy requirements for mapping and a general strategy of improving quality of registration over time.[13] This has been successful in enabling large rural and semi-rural areas to be covered by registration programmes at relatively little expense per parcel. For example, the Rwanda LTR programme is generally

[12] For Ethiopia, see *Hailu, 2024, Tadesse, 2025*, for Tanzania, see *Sullivan et al, 2018,2020,….*

[13] See Enemark, s., Lemmen,C., Mclaren, R., 2016. *Building Fit-For-Purpose Land Administration Systems: Guiding Principles.* FIG Working Week, Christchurch, New Zealand, 15 pages

quoted as $5-10 per parcel, and later work under the LIFT programme in Ethiopia quotes costs of the order of $5-6 per parcel *(UK FCDO 2021)* for very large-scale systematic work. However, as pointed out by *Baldwin and Sanjak, 2025*, it is not always clear what is included or excluded in these costs and they proposed a standardised methodology for costing to allow comparison across programmes and countries. Urban registration is normally more expensive, though high resolution drone imagery is now a recognized alternative and providing the required accuracies at lower cost than traditional field survey work (see for example, recent cadastre creation work in Kosovo). Costs are also highly dependent on whether monumentation in the field is carried out and what kind of survey methods are used. Table 2 summarises some recent experiences.

Table 2. Recent estimates of costs of completing systematic registration in selected countries *(source: authors compilation)*

Programme	Cost per parcel	comment
Rwanda LTRSP (2009-2013)	$7.50	Actual calculated cost. Using FFP image methods, no monumentation (source RNRA, DFID)
Ethiopia LIFT (2015 -2020)	$5.00	Actual calculated cost, using FFP image methods, no monumentation (Source DFID LIFT AR)
Tanzania LTSP (2014-2019)	$10.00	Includes land use planning? using FFP image methods, no monumentation (source DFID PCR LTSP)
Madagascar CASEF 2016+	$10-12	For Land Certificate under decentralised system (less than 1/20th of former cost). No monumentation
Tanzania LTA (2016-2020)	$8.00	Uses FFP and image methods but costs not include imagery., no monumentation (USAID LTA project)
Proposed Tanzania urban programme	$100	MLHHSD calculated cost. Uses precise GPS field survey data collection
Nigeria GEMS 3	£8	Not including imagery (UK DFID). No monumentation
Benin programme 2019	$200	Estimated cost, Includes monumentation, high precision survey methods
Madagascar (WB) 2019	$12	Estimated costs for Land Certificate, under new legislation, no monumentation
Lesotho (MCC)	$60	Used GPS, includes some parcel adjustment

These large-scale mass registration programmes have typically been financed by development partners through grants or loans in addition to national government funds. There are many smaller initiatives at the local level focused on customary rights and these are typically being implemented with the assistance of local NGOs and CSOs and the focus has been on land rights awareness, participation and social inclusion, rather than any focus on costs, and here the registration costs can be considerably higher.

Costs over the full investment cycle

Rwanda (***Case Study #2*** overleaf) provides an example where most costs are known over the whole lifecycle of multiple projects and programmes carried out over the last 25 years...

Case Study #2 – Establishing nationwide land administration system -Rwanda

Rwanda (Box 3) has undertaken a comprehensive land sector reform following the conflicts of the 1990's, establishing a new tenure regime, land laws, land policy and institutional framework, and completing a country wide systematic registration programme covering more than 11 million land parcels and putting in place a nationwide system *(Buckle and Gillingham, 2014).* The reform costs are quoted as £52.7 million, though this does not include the annual operational costs of the land administration body. The whole investment programme took more than 25 years and involved multiple phases, donors, and institutional arrangements (Figure Four)

By December 2025 the nationwide system was in place supported by a national network of land notaries at sector level, with on line digital application processing and digital payment system in place. Transactions in 2025 are running at over 450,000 per year and fee and stamp duties totalled almost $6 million for 2024 representing a cost recovery rate of over 85%.

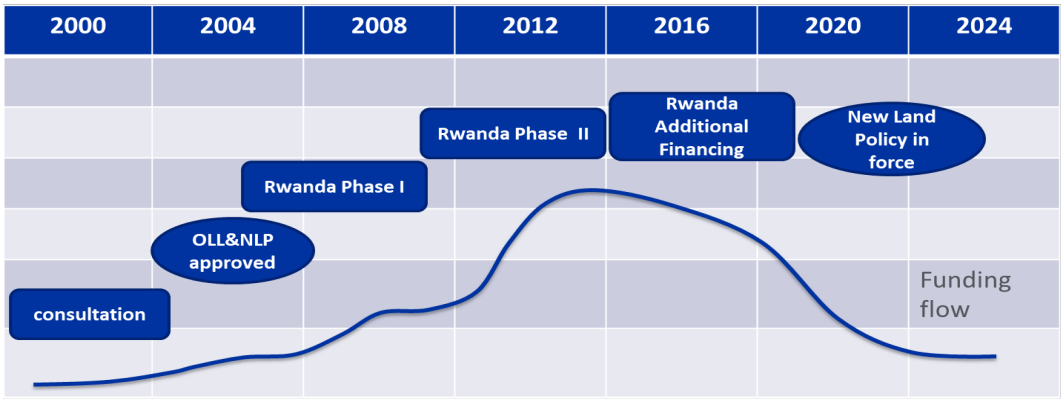
Total fee and stamp duty income over the period 2011-2025 is estimated as almost $70 million (at 2018 historic exchange rates) which is equivalent to the overall cost of the land administration investments *(Nishimwe and Muyombano,,2025).*

Box 3. Rwanda Land Tenure Regularisation project – timeline and investment costs-

- **Late 1990's** – following consultation - national long term development strategy – Vision 2020 – set out the principles of good land governance and security of tenure for all Rwandan citizens
- **2002-2004** consultation on National Land Policy. Limited Technical Assistance from UK DFID in form of resident technical adviser
- **2004.** National Land Policy approved
- 2005 Organic Land Law – set out the framework and principle that all Rwandans citizens should have secure tenure.
- **2005-2008** Rwanda Phase One (UK DFID £3 million) – developed and tested field methodologies and prepared Strategic Road Map (SRM) for land tenure reform
- **2009-2013** Rwanda Phase 2 (£36.7 million) completed registration of almost ten million land parcels, establish national IT system
- **2013-2019** Rwanda Phase 2 – Additional financing - Direct support to RNRA (later RLMUA) of ~ £16 million for completion of registration and finalisation of LAIS
- **2020.** Revised and updated Land Policy in force.
- **2024.** Private Notaries, on line applications, digital title and over 80% cost recovery, in terms of fees and duty revenue

Total development partner funding of £52.7 million since 2005, provided by UK DFID, SIDA, Netherlands, EU, Additional legal and policy support USAID

Figure 4. Phasing and funding flow of the overall Randa land reform programme ***(Source: own analysis).*** *OLL – Organic Land Law, NLP- National Land Policy.*



These costs include the establishment costs of office and IT infrastructure, registration, setting up and roll out of systems, developing operational procedures, staff training etc. In developing countries there are few cases where the land administration system has been fully developed, put in place and the majority of properties registered. Most counties are on that development path.

Other examples can be drawn from programme preparation documents, however in most cases the total cost of the establishment of the nationwide system is spread over multiple programmes and these costs are not tracked across programmes. The National Scale Up Plan for Tanzania (*Government of Tanzania, 2019a)* calculated a figure of $380 million for establishment of the nationwide systems to support and complete village land registration across all of the estimated 13,000 + villages and more than 180 districts. Similar estimates in Uganda, to complete customary land registration across the whole territory arrived at a figure of EUR 130 million (*Baldwin, Obaikol, 2022)*

Recurrent costs

For national land administration systems, *Burns and Fairlie (2018)* provide a model to estimate operational costs based on personnel, space requirements and direct costs (which are broken down), however these are estimated values and entirely dependent on the assumptions fed into the model but can be useful for planning purposes.

Actual operational costs at the national level can also be determined from the agency budget using an income statement and balance sheet approach which classifies income, expenditure and allows financial and operational performance analysis and reporting which can also be split out at the lower business unit level using salaries and “overhead” per person. It is normal to look at the budget and normalise any figures over a 3–5-year period and also to identify trends. Actual costs will depend upon the organisation size and structure, number of employees, outsourced activities and payments for services and direct expenses (transport, office accommodation, utilities, IT systems, other staff payments). This approach has now been used in a number of countries including Rwanda, Malawi, Uganda, and partly, Ethiopia

Table Three provides a summary and comparison for Rwanda, Malawi, Tanzania and Uganda using analysis carried out over the period 2021-2024. For Malawi, Tanzania and Uganda, it is noticeable that the bulk of the Ministry budget is not actually related to land administration – rather it is concerned with housing. For the lands sector, the recurrent budget including total salary costs in Malawi, Rwanda, and Uganda are around the same amount. For Rwanda, the recurrent budget is slightly larger, there is no significant investment budget, and while the Rwanda NLA itself only has a small staff of around 95 persons, the total salary budget is over 70% of the sector costs (though only estimated costs are available for the district and sector staff)., while in Malawi and Uganda it is around 40%. In Uganda it is believed the total staff numbers are similar to Rwanda and Uganda (including districts), For Tanzania, operational costs of the MLHHSD *(Government off Tanzania, 2019a)* averaged $23 million, with staff cost around 37% over the period 2016-2018. In some countries the costs are borne directly by the state, in other countries land

administration agencies do have some own source revenues and this will count to the overall cost recovery performance of the agency.

Table 3. Estimates of recurrent costs of operating land administration systems in developing countries *(source: authors compilation)*

Ref	Budget item (annual average expenditure)	Malawi ($million)	Uganda ($million)	Rwanda ($million)	Tanzania $million)
1	total host Ministry budget	$18.409	$34.661	not known	$23.030
2	total lands sector budget	$4.521	$14.211	$5.321	not split out
3	total investment budget	$0.069	$9.993	$0.104	unknown
4	total recurrent budget	$4.452	$4.217	$5.321	$23.030
5	salaries (No of staff in sector)	$1.761 (est 700 staff)	$1.666 (386 + district staff))	$3.644 (est 786 staff in total)	$9.731 (est 1,400+, includes district staff)
6	Goods and services	$2.692	$2.551	$1.432	$5.972

In Malawi, the Ministry of Lands is in the process of implementing its new 2016 land laws and putting in place a fully devolved system in line with the National Devolution Policy. For a more detailed explanation of how this kind of analysis was used to estimate costs for various devolution strategies see *Chilonga, et al 2025*. For more discussion on how the Rwandan cost recovery calculations see *Nishimwe and Muyombano (2025).*

Good practice is to prepare an annual report detailing operational costs and reporting on financial and performance indicators and KPI for the year. In Malawi, the Ministry of Lands provides output KPI as part of its programme-based budget to Ministry of Finance annually, however these are not structured to monitor detailed operational or financial indicators or consider revenues generated, and consequently there is no focus on revenues generated or cost recovery.

Annual Business Planning

An Annual Business plan sets out the operational performance objectives on an annual basis and allocates funds on the basis of the activities to be supported and services to be delivered. In most developing countries, land administration bodies rely on budget allocations made in the annual Ministry budget, by department and type of expenditure (salaries, goods and services etc.), and not linked to the actual outputs generated by the various departments. An annual work plan is produced, but it is not used to control costs, and revenues. The result is that there is little awareness of actual delivery costs of different services, and departments are simply unaware of what revenues are generated as a result of their services. Adopting a Business Plan approach connects the financial and operational performance through activity-based costing, tracks outputs costs, revenues and allows operational and financial performance to be assessed and monitored, thereby controlling costs and understanding the actual delivery costs of different services.

2.5. Land-based revenues

What are land based revenues and how are they classified?

Most land-based revenues are not regarded as income of the land administration body itself; however, the revenues are critically dependent on the land administration system having up-to-date, complete records that correctly describe the reality on the ground. Land related revenues can be classified as tax revenues, non-tax revenues and own source revenues (*Table 4).*

Table 4. Land Based Revenue Sources ***(source; based on OECD classification[14])***

Revenue Source	Categories
Tax revenues	• Annual land or property tax • Capital gains • Land value increment tax • Transfer taxes or duties
Non-Tax Revenues	• Sales of public land[15] • Sales of development rights • Lease payment and land rent
Own Source Revenues	• Fee income for transaction and related services • Income from information services • Other services (e.g., valuation, CORS)

- **Tax revenues** are not normally regarded as income of the land administration agency but are critically dependent on the land and property market and land administration data as they require accurate and up to date information about land and property objects and property transactions.

- **Non-tax revenues** include revenues associated with public land or permitted usage / development of land. Again, they are not normally considered as part of land administration agency income.

- **Own source revenues** include fee income for services (registration, providing official extracts, etc.); income from providing information services (where these are charged), and also other income from other kinds of services (for example: cadastral surveys, valuation services, surveying services).

[14] See: OECD Revenue statistics; https://www.oecd.org/en/publications/revenue-statistics-2025_3a264267-en/full-report/the-oecd-classification-of-taxes-and-interpretative-guide_c852c459.html and : https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/global-tax-revenues/oecd-classification-non-tax-revenues-interpretative-guide.pdf

[15] Strictly speaking, a sale of public land Is not a revenue as it does not increase net worth of the enterprise, however it is often counted this way in domestic accounts

Land administration bodies normally focus mostly on their own-source revenues, and in most developing countries, these are very small in the land sector, as the land administration systems are undeveloped and so the volume of services is small. Notably in developed countries with strong land and property markets, these revenues can generate very high levels of cost recovery or even a surplus as the demand for services is high.

In many developing countries where the functions of public land management are included within the remit of the land administration body, then there may be very significant funds flow from public land utilisation. For example, in Tanzania, the annual revenue land rent (levied on urban properties) generated over $40 million USD in the years 2016-2018 which is almost double the total annual operating cost of the host Ministry of Land, Housing and Human Settlement Division *(Government of Tanzania, 2019a).* In many jurisdictions (e.g. Ethiopia, Uganda) the responsibility for collecting land-based tax revenues is placed with local administration bodies or the revenue authority under a decentralised structure and supervised by Ministry of Finance, though again they are critically reliant on having up to date information about the real situation on the ground.

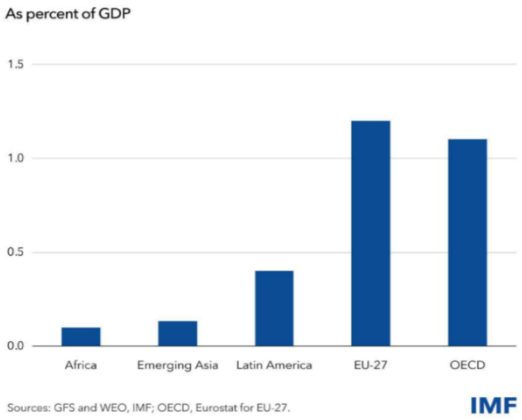
In each country it will vary as to what tax revenues, non-tax revenues and own-source revenues exist and whether the payments go to the land administration body or direct to the treasury. However, they are normally reported in the government accounts so they can be identified and quantified. It is important to identify and quantify these different sources and their trends over time as they provide significant arguments for having a well-functioning land administration system and can generate significant sources of revenue.

What is the significance of annual property tax revenues?

From the viewpoint of tax revenues, annual property taxes generate very considerable sums in the developed world, but are relatively less significant in developing countries as the systems are underdeveloped. Figure 3 provides some comparative figures for developed and developing countries. While property taxes typically account for only 0.1% of GDP in developing countries, they account for on average over 1% in developed countries and can account for up to 3% in some advanced economies. There are multiple authors who have studied and commented on this difference (*Deininger and Goyal, 2024, Grote, Mansour, Wen, 2024),* all concluding that increasing the property tax base and having efficient billing and collection systems is a relatively straightforward way to significantly raise domestic revenues.

In reality, many countries struggle to establish the necessary supporting infrastructure to support efficient and fair property tax. While property taxes have the advantage that they are progressive in that the more affluent taxpayers will pay the greater share, their introduction can be unpopular with the public and resisted by local elites if they do not see direct benefits. Where there is a clear link between property tax and local municipality financing, citizens see the direct benefits and money is shielded from national politics

Figure 5. Property tax revenues are much higher in advanced economies ***(Source: IMF 2024[16])***



While decentralisation can impose a high level of accountability on local bodies, such an approach is generally considered more acceptable to citizens than other broader based national taxes. There are several reported success stories at city level across Africa, with well publicized examples such as Lagos[17] and Kampala (see Box 4).

In many cases, annual property taxes form the principal source of revenue for local administrative bodies and are used to support local services, urban infrastructure, waste management, roads and also social purposes. In all jurisdictions, it is the urban sector that is the chief contributor to annual property taxes. Table 5 summarises some of the positives and problems associated with introducing immoveable property-based tax systems. In all cases, a basic up to date inventory of the tax base (real estate objects) is required and this can be drawn from the land administration system records.

Box 4. Kampala tripled its property tax income as a result of establishing a digital property register.

Property tax

- Property tax in Kampala is levied on rental or business income of property located in the five urban divisions of the city which contain 121 parishes and an estimated 350,000 properties; 64% of which are liable to tax (125,000 are owner occupied and so not liable to tax). Most of these properties are residential (55%) and commercial (33%). Taxpayer data is managed by the digital platform (eCitie).

Volumes

- IGC calculate the potential tax revenues have risen from 14 billion UGX (Euro 3.5 million) in 2013/14 to 38 billion UGX (Euro 9.6 million) in 2018/19 as a result of the WB CED project that established a digital property register / information system to identify and manage eligible properties.

Compliance and collection

- Compliance is still low and cite the example of central division (Kampala) where only 22% of billed properties actually pay, resulting in a 50% shortfall of tax income.
- Overall compliance rates for commercial properties are only 34%, while only 11% for residential; however, this generates 35% of the own source revenues of Kampala city in 2018/19.

(Source: International Growth Centre, 2019)

[16] See Grote, M., Mansour, M., Wren, J-F., 2024. How Property Taxes can help low-income countries to develop. IMF. https://www.imf.org/en/blogs/articles/2024/11/11/how-property-taxes-can-help-low-income-countries-to-develop

[17] See https://www.theafricareport.com/3393/lagos-proves-africas-property-tax-potential/

Table 5. Annual Property Tax: positives and problems (*source; own analysis)*

	Positives	Problems
Annual Property tax	• Tax base is clear (property is immovable) • Progressive (taxes wealth) • Supports accountability between citizens and local governments • Less distortionary than income or trade taxes	• Many properties are not identified or registered. • Valuations are outdated or missing • Collection rates are very low. • Local governments often lack administrative capacity.

Capital gains

Capital gains taxes (CGT) are levied on the increased value of an investment between acquisition and dispersal and the rules around what is subject to capital gain and its application are highly variable across different jurisdictions. In most countries, the prime residential property of a taxpayer is not subject to capital gains tax, however in others it may well be. Generally speaking, where the prime residential property is not subject to CGT, then capital gains on real estate transactions are not a huge source of income, typically 75-80% of all CGT arise from financial dealings alone. In some countries capital gains count towards personal or corporate income tax and so are difficult to separate out. In some countries, e.g., Tanzania, the CGT is 10% of the value gain paid on property sale.

Land Value Increment taxes and Betterment taxes

Land Value Increment tax or Betterment taxes are local taxes which arise when public improvements have taken place that improve land value to the benefit of existing land holders. They are widely adopted as land value capture taxes, and can raise significant sums. For example, in Colombia, the *contribución de valorización* is reported to have generated significant revenues over time resulting in over $1 billion USD of investment arising from the introduction of a betterment levy[18].

There are many different ways that such tax arrangements are enacted. The basic idea is that the tax funds public service infrastructure, and the community then receives a financial benefit from the increased value of land in the betterment area. In some cases, it is purely levied on land, in other cases on the land and its developments. They are normally very local in their conception and application. Data on these taxes is not always collected systematically and reported at national level.

Transfer taxes or duties

[18] See: Borrero Ochoa, Oscar, Esperanza Durán, Jorge Hernández, and Magda Montaña. 2011. *Evaluating the practice of betterment levies in Colombia: The experience of Bogotá and Manizales*. Working Paper. Cambridge, MA: Lincoln Institute of Land Policy. https://www.lincolninst.edu/es/publications/articles/betterment-levy-colombia/

Transfer tax or stamp duty on real estate transactions is normally set at a percentage of the sales contract value and is often progressive, increasing in percentage with the value of the sale. In the national accounts, they may or may not be clearly identified, often being summed with other stamp duties, such as duties on share trades etc. In the UK (see Box 5), almost £14 billion of stamp duty was generated on transfers representing around 4.5% of average property sale value and 1.6% of all UK tax revenues. Market activity was around 4% turnover (1.1 million transfers annually and 27 million registered properties in total), which is fairly consistent over recent years[19].

Box 5. Stamp Duty on land transfers (SDLT) in England and Wales almost £14 billion in 2024-25

- In 2024-25 total stamp duty land tax (SDLT) collected was £18,205 million, of which £13,885 million was stamp duty on land transfers (76%).
- 75% of the SDLT collected was on residential sales
- There were 1.162 million transactions in 2024-25, and average SDLT per transaction was £8,960 representing 4.5% of the average property sale value of £220.000.
- 44% of transactions are £250,000 or less and this generated 6% of residential SDLT receipts, while properties over £1 million accounted for 3% of all transactions but 41% of revenue.
- Residential sales under £125,000 are exempt from SDLT. First time buyers can also have exemptions under certain thresholds.
- Minimum SDLT rate is 2% over £125,000, rising to 12% over £1.5 million

(Source: HMRC, 2025)

By comparison, Table 6 summaries recent stamp duties in some developing countries, as reported in their annual accounts. It is noticeable that in each of these countries, only a small percentage of the properties that actually exist are properly identified and recorded in the official land registers.

Table 6. Stamp Duty / Transfer tax on property sales (*source; own analysis)*

	Stamp duty / transfer tax on real estate sales	As % of all tax revenues (estimated)	Notes
Rwanda	No stamp duty but 2% duty on transactions with a value greater than RWF 5 million (£2500)	Land transfer duty = 8.3 billion RWF Local Government (LG) taxes in 2022/23 totaled 86.5 billion RWF (£44.2 million)	Transfer tax introduced in 2025 (replacing fees). Paid by seller. Collected by the Rwandan Revenue Authority on behalf of decentralised entities
Malawi	1.5% of the purchase price	Stamp duty = 80 million MWK (20/21) Total tax revenue was MWK 1.678 billion in 2022	Paid by buyer, other rates may also apply, collected by the Registrar Generals Department
Tanzania	1% of the market value or sales price (whichever is higher)	Stamp duty = unknown Total tax revenue was TZS 32.26 trillion in	Paid by the buyer, collected by Tanzania Revenue Authority (TRA)

[19] See https://www.gov.uk/government/statistics/uk-stamp-tax-statistics/uk-stamp-tax-statistics-2023-to-2024-commentary

		2024/25 (approx. £9.68 billion)	
Uganda	1.5% of the sales price or market value (whichever is higher)	Stamp duty generated UGX 5.18 billion in 2024/5. Total tax collection was UGX 25.752 trillion (£5.29 billion) in 2024/25	Paid by the buyer, collected by the Ugandan Revenue Authority
Ethiopia	2% of the valuation plus 4% property transfer tax	Total stamp duty Unknown Total tax collection in 2018/9 was ETB 268.5 billion (£8 billion)	Stamp duty is split between buyer and seller. Property tax is the responsibility of the buyer, collected by the Land Administration Office at city or regional level

Transfer taxes or stamp duties vary considerably from one country to another, varying from 1-7% of transfer price typically. Collection is usually by the relevant revenue authority, though in some cases it is through local land administration offices, which have limited capacity. In many cases the amounts due to stamp duty / transfer tax are not easily identifiable at national accounts level, being subsumed into local revenues. In this respect they are often hidden. In developed countries, stamp duty / transfer taxes are seen as policy levers for making adjustments on the real estate markets as well as important revenue sources. *Deininger and Goyal (2024)* make the case that for developing countries, where property markets are weak, there are inherent advantages of progressive duties and minimum thresholds over flat fees, as flat fees may be barriers for poor rural land holders. Table 7 sets out some of the positive and negative aspects of stamp duty / transfer taxes and shows the critical interlay with property markets.

Table 7. Transfer Tax / stamp duty: positives and negatives (*source; own analysis)*

	Positives	Problems
Stamp Duty / Transfer Tax	• Relatively simple to collect and hard to evade • Progressive (taxes increased housing wealth) • Can make adjustments according to policy aims • Can be significant and consistent stream of funding	• Can have a significant impact on the property market • Will deter transactions if rates are high and may incite avoidance / corruption • Can pose an entry barrier – it is an upfront cost • Can reduce labour mobility

Non-Tax revenues

- *Sales of public land and property*

Strictly speaking, **sales of public land and property** are not revenue from an accounting perspective, however they do represent capital receipts that become available to fund other capital investments and can be highly significant. In most countries, sales of public land are highly political and the general underlying principle is that such sales must be in

the public interest. Public land ownership is vested in the state and/or local authority bodies and there may be different arrangements for urban and rural land, depending on the legal and institutional arrangements. Where land administration is weak and opaque, there is clear opportunity for corrupt and fraudulent activity. Public land sales normally imply some change of purpose, and this then becomes linked with development rights and valuations become more difficult. Even within more advanced economies, public land sales are often questioned, with allegations of cronyism, conflicts of interests, potential corruption and a lack of transparency in decision making[20]. Such risks are magnified where the governance structures and supporting infrastructure are weak or absent.

The transfer of land can also trigger more fundamental changes in the basic tenure arrangements of individual properties. For example, in Ethiopia, a change from a rural land holding to an urban lease requires the land is firstly expropriated and then auctioned or otherwise assigned which has unintended consequences (Box 6). Urban land lease revenue is supposed to be earmarked for public infrastructure and related improvements.

Box 6. In Ethiopia, urban expansion triggers public land auctions and fuels informal settlement

In Ethiopia, rural land is converted to urban land through an expropriation and public auction process, with the auction winner obtaining long-term lease rights to develop the land in accordance with the prescribed purpose. Once an area is declared as falling under the expanded urban zone, then the existing rural landholders know their land will be expropriated at some point in time, with a low valuation, consequently they sell small plots illegally for low-income informal housing to gain some temporary advantage. When expropriation takes place, the official land holder receives some low-level compensation, however the informal occupant receives nothing. To some extent, this forced conversion of rural -urban land is actually promoting informal development. (

Source: Frew et al, 2024)

- *Sales of Development rights*

Development rights pertain to the legal permission to allow a property (public or private) to be developed in a specific manner, and so are strictly controlled by planning and development controls normally exercised through local planning bodies. Development contributions are paid in support of applications and include fees and possible other payments for building permits, community infrastructure or other local charges. These are normally paid to the local planning or development control body (which may be part of a decentralised land administration body). Public bodies can also sell development rights on public assets (as in the Addis example), and these are sold in line with the principle of “best value for the public”. As an example, in the UK, local councils received more than £5.5 billion in total development contributions in the year 2022-23.

- *Lease payment and land rent*

[20] See, for example: https://www.yorkshirepost.co.uk/news/politics/teesside-freeport-was-valuable-land-sold-to-developers-for-just-ps1-per-acre-4139474, and https://www.transparency.org.uk/publications/permission-accomplished

Lease holders will typically make annual lease payments or “land rents” for properties that they hold under long-term lease agreements and these are paid to the local administrative bodies which may or may not be part of the decentralised land administration structure (see Ethiopia, Malawi, Tanzania for examples). Leasehold payments on public lands and properties by leaseholders are often referred to as “ground rents”, “land rents”, “land lease income” or similar terms. Payments are collected by local administration bodies, national corporations (e.g. Housing Corporations) and also by the designated land administration bodies who register and maintain leases on public land. These revenues can be very significant, for example in Ethiopia, urban leases generate annual revenues of more than 2.3 billion ETB ($40 million at historic exchange rates) for Addis Ababa city in 2020/21 and they are managed by the city level administration bodies who are responsible for city level land administration (*see Baldwin and Allebachew 2022*). In Tanzania, in the 2018-2020 period over 38 million USD is collected per year which is twice the operating cost of the Ministry and x 10 greater than the other fee income *(Government of Tanzania, 2019a)*. While these revenues may be facilitated by the relevant land administration body, they are not considered as land administration body income, however the passage of these sums through the relevant Ministry bodies completely dwarf other revenue forms.

Own source revenues and cost recovery

Own source revenues are generally considered to include fee income for transactions, providing information services, and other services of a professional nature such as surveying and valuation services, access to technical infrastructure, various approvals, etc. Fee income may be paid directly to the land administration body, or direct to treasury. In many countries monies are paid straight to the treasury via the revenue authority and the land administration body may not be actively tracking revenue of its services. In the case of the UK (England and Wales), fee payments are passed to the HMLR trust, and the HMLR is funded directly from Government (See Box 7) with revenues covering over 92% of operating costs

Box 7. Income for land registration services – England and Wales.

- *Total revenue for the UK HMLR services in 2024-25 was £399 million off which £260 million was for register updates and £94 million was information services and official extracts), 90% of which were delivered digitally.*
- *Over 4 million register changes took place, including around 1.2 million property transactions.*
- *In the UK, income goes directly to the Government who then funds the HMLR according to an agreed annual budget plan. Income covered over 93% of operating costs.*

Source: UK HMLR Annual Report 2025

Table 8 lists some example land administration service fee income for selected developing countries as supplied as part of the earlier GIZ/FCDO studies.

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Table 8. Land Administration fee income and cost recovery

Ref	Total annual fee income for services	Level of activity (number of transactions)	No of transactions / total number of parcels	Income as % of estimated delivery costs	Land Market coverage (% registered)
Rwanda (2025)	8.28 billion RWF (est) $5.658 million	Around 450,000	3.9%	80-100%	90% +
Malawi (2020)	247 million MWK ($247k)	4,000	Less than 1%	5.5%	Less than 5%
Tanzania (2019)	7.791 billion TZS ($3.52 million)	unknown	unknown	14% ??	10-15%?
Uganda (2021)	14.9 million euro	34,618	3.5%	100% (non-customary land only	15%? (no customary land)
England & Wales (2024)	£399 million	1.2 million	4.5%	93%	95%

Summary- land based revenues

Land-based revenues essentially fall into one of the following categories:

- Land and property services supporting basic land registration and security and transfer of title (as fee income for delivery of land administration services and supporting cost recovery of service delivery.
- As an essential instrument of taxation and an important instrument of fiscal policy critically important for local authority revenues (land and property taxation).
- As fee income for other government and administrative bodies delivering essentially land-related services (planning, development, building control).
- As an instrument for implementing land and property market policy (e.g. stamp duty).
- As a way to capture land value increases for public purpose from land improvements.

As such, land-based revenues are as much concerned with active land management as they are with land administration, and deeply connected with the performance of the land and property markets, especially in the urban domain. Secondly total land-based revenues are highly significant sources of public revenue. As the regulation and responsibility of land administration, land management and land use is fragmented across different institutional delivery organisations, and the revenues are often accrued separately at local and national level and by different bodies, it can be difficult to see the full picture. There is also a huge difference between such revenues in developed advanced economies and those of developing countries. Table 9 below seeks to summarise this and shows that land-based revenues in the widest sense, can generate very significant revenues – up to almost 3% of GDP in an advanced economy.

Table 9. Summary of Land based revenues (*source; compilation. own analysis)*

Revenue source	Advanced economy UK as an example)	Developing country examples
Land administration fee income	£399 million (0.014% of GDP)	Not easily reported or separated • Rwanda RWF 8.28 billion (£4.13 million) • Malawi MWK 247 million (£0.18 million) • Uganda 14.9 million EUR • Tanzania 3.52 million USD
Stamp Duty / Tax on transfers	£13.9 billion (o.48% of GDP)	Not easily reported or separated
Annual Property Tax	£65.7 billion (2.2% of GDP)	0.3-0.5% of GDP on average • Malawi MWK 9 billion (£6.6 million) • Rwanda RWF 22 billion RWF (£10.9 million)
Development contributions	£5.5 billion	Not easily reported or separated • Malawi 2.28 billion MWK (£1.6 million)
Public ground rents / lease income	Not reported centrally	Not easily reported or separated, • Ethiopia, Addis Ababa, ETB 2.7 billion £38 million 2018/19 • Malawi 570 million MWK (£416,000) • Tanzania 86.9 billion TZS ($38.7 million) • Rwanda – not separated out
Value capture examples (usually context specific)	No central figures, up to £2 million annually per local council (Community Infrastructure Levy)	Specific examples – e.g. • Bogota – $ I billion • Rio de Janeiro - $1.8 billion
Rental income tax and others	Not applicable in UK	Usually not separately reported but examples are • Ethiopia 2018/9 ETB 2.14 billion (0.8% of all tax revenues) • Uganda 331.21 billion UGX (2024/5), more than doubling since 2021/22 (1.1% of all tax revenues collected)
Total estimated revenues	land based revenues are at least £85-90 billion (2024) This is equivalent to 2.9% of GDP and .5-9% of all tax revenues	• Malawi total land lease revenues MWK 11.4 billion (£8.4 million), equivalent to ~1% tax revenues and 0.3% of GDP • Rwanda total land lease revenues estimated as 100 billion RWF

Finally, many of the functions described above are dependent on active private sector participation – banks and mortgage brokers, development professionals, valuers, real estate agents, notaries, and so it is important that a qualified and professionally competent sector is established able to meet the needs of citizens and business.

2.6. Political economy considerations

Many land administration initiatives have struggled to gain traction, and this has often been attributed to a lack of sufficient concern about the political economy aspects of the reform process. Why should a sustainable finance approach be any different?

Transitioning to a financially sustainable model for land administration is not simply a technical or financial exercise—it is a deeply political process involving institutions, interests, incentives, power structures and social norms. The success of such reforms depends on understanding and managing these political economy dynamics.

The key difference when adopting the sustainable finance approach is that the approach looks at land administration as a business with costs, direct revenues, and a whole raft of other land-based revenues (as described in this chapter) that, in one way or another, are predicated on an operational land administration base. This immediately draws in the interest of other parties; notably the Ministries of Finance and the Revenue Authorities, and managing this engagement and securing support will be key to any success. Additionally, the approach explicitly consider what are the benefits for land holders, how can they access real benefits and what are the incentives for their engagement? By engaging with these parties at an early stage, this increase the support and provides real incentives for the parties to cooperate.

There will still be considerable political economy potential impediments to address, and thinking through how these may be impacted by the sustainable finance approach would be an important piece of research to be carried out. Potential impediments include the following:

- Institutional coordination presents ongoing challenges. Coordination failures between central and local government, or between land agencies and revenue authorities, can completely derail initiatives. Early engagement with partners such as the Ministry of Finance, national Revenue Authorities, local authorities is necessary. Clarification of costs and identification of land-based revenues and potential revenue increases can help to establish credibility and gain support.

- Elite resistance is a significant risk. Where the changes disturb elites, threaten their dominance or require them to pay more, then there will be resistance (see the Somalia case study in Annex A ,where wealthier landowners currently benefit from unregulated land markets). Public officials may hesitate to enforce regulations due to political alliances. Similarly, informal actors such as land brokers may resist formalisation and clarity in land markets if it impacts their business.

- Local leaders can enable or obstruct reform, especially where land administration is heavily decentralised as in Malawi, Tanzania, Uganda. In Tanzania, village leaders play a central role in mobilising communities but some may exploit the initiative for political gain. Local leaders can be highly influential encouraging or preventing

public participation and may seek rents or favours for cooperation. Local political incentives can completely undermine sustainable finance initiatives.

- Public trust and managing fears are critical. Communities may resist reforms due to lack of understanding, concerns about potential tax increases and fear of misappropriation and misuse of these revenues. Public attitudes to registration and land administration, tenure security and the willingness to pay for services need to be understood, as well as existing barriers to change, including fear of expropriation, tax increases, and land use controls. Addressing these concerns through transparent communication is essential; people will also respond if they can see clear benefits and are even more likely to engage if they can see other successful examples where the reforms have worked.

To summarise, securing political buy-in is essential from the outset. The Uganda case study emphasised that initial consultations with political and administrative heads to secure buy-in were paramount and also highlighted issues such as obtaining consensus on land fees to be charged by the district local authorities. Without this early engagement, reforms may stall or face active resistance. Table 10 below sets out some of the political economy risks and mitigation actions to be considered when adopting a sustainable finance approach.

Table 10. Summary of Political Economy risks and mitigation actions

RISK CATEGORY	SPECIFIC RISKS	LIKELHOOD	IMPACT	MITIGATION STRATEGY
Elite Resistance	• Political elites benefit from opaque systems • Traditional authorities lose control • Land brokers resist formalisation	**HIGH**	**HIGH**	• Early engagement with influential stakeholders • Create roles for traditional leaders in new system • License/regulate brokers rather than exclude
Public Opposition	• Fear of increased taxation • Distrust of government intentions • Fear of eviction/expropriation	**HIGH**	**HIGH**	• Clear communication: registration ≠ automatic tax increase • Demonstrate tangible benefits (loans, services) • Legal protections against arbitrary eviction
Institutional Conflicts	• Overlapping mandates between ministries • Central vs. local government tensions • Weak inter-agency coordination	**HIGH**	**MEDIUM**	• Inter-ministerial committees with clear ToRs • Revenue-sharing agreements • Joint planning and monitoring frameworks
Exclusion of Vulnerable Groups	• Poor cannot afford fees • Women lack documentation	**MEDIUM**	**HIGH**	• Sliding scale/progressive fees • Exemptions for poorest households

	• Informal settlers marginalised			• Gender-sensitive procedures • Regularisation programmes
Fiscal Resistance	• Ministry of Finance opposes earmarking • Short-term budget pressures • Competition for resources	**HIGH**	**MEDIUM**	• Demonstrate revenue potential with pilot data • Phased investment approach • Allow partial revenue retention initially
Corruption Risks	• Diversion of new revenues • Manipulation of registers • Rent-seeking in service delivery	**MEDIUM**	**HIGH**	• Digital systems with audit trails • Transparent fee schedules • Community oversight mechanisms • Regular independent audits
Market Disruption	• Land speculation increases • Gentrification and displacement • Market freeze due to uncertainty	**MEDIUM**	**MEDIUM**	• Gradual rollout in pilot areas • Anti-speculation measures • Clear transition timelines • Grandfather existing transactions
Political Timing	• Reforms stall near elections • Changes in government reverse progress • Local political capture	**HIGH**	**MEDIUM**	• Build cross-party consensus • Embed in legislation not just policy • Quick wins before election periods • Decentralised implementation
Capacity Constraints	• Weak local government systems • Insufficient technical skills • Poor data management	**HIGH**	**MEDIUM**	• Phased capacity building • Technical assistance partnerships • Start with capable districts • Outsource where appropriate
Historical Mistrust	• Colonial land grievances • Past failed reforms • Ethnic/regional tensions	**MEDIUM**	**HIGH**	• Acknowledge historical issues • Community-led processes • Independent oversight bodies • Conflict-sensitive approach

Political Economy Lessons

1. Reform is political—power, interests and institutions shape outcomes as much as technical design.
2. Incentives must be aligned for citizens, local governments, land agencies and revenue authorities.
3. Transparency and communication are critical to maintain public support and avoid resistance.
4. Revenues must flow visibly to support services, strengthening trust and sustainability.
5. Sequencing matters—successful reform starts with early wins and builds gradually.
6. Equity and safeguards are essential to ensure inclusion and avoid backlash.

3. Benefits of a sustainable finance approach

> *Secure real estate title not only provides security of tenure for occupancy (ownership or rental), but can support food security, fosters investment and better land management and can serve as security for loans, while protecting against unlawful eviction of expropriation. It is also a foundational institutional element of nation building.*

3.1. Introduction and Overview

The idea of adopting a more sustainable financial approach is that the wider financial and economic benefits (and costs) are considered as part of the overall land administration reform programme, rather than concentrating on the specific land tenure issues such as land rights, registration or security of tenure aspects. While these are all essential elements of any large-scale land governance reform programme, failure to consider the financial aspects at an early stage will result in missed opportunities to develop supporting arguments and to identify and generate land-based revenues which can be significant sources of domestic revenue mobilisation and also can offset investments and support operations. Following on from the earlier analysis. The benefits from adopting a more sustainable finance approach can be grouped as shown in Table 11.

Table 11. Benefits of sustainable finance approach

Focus	benefit	Summary
Land markets	Land market growth generating stronger land-based revenues for public and private sector	Land administration is critical in underpinning the development of viable land and property markets, and driving economic growth
Domestic Revenue Mobilisation	Can be very significant source of public revenue	Property tax revenues are highly underdeveloped in developing countries and are critically dependent on up to date and complete property information
Cost Recovery	Direct and indirect Cost Recovery of delivery of land administration investments and services	Transaction fees and duties arise directly as a result of land administration services, and can generate significant levels of cost recovery over time which can pay for investments and operational services
First registration	Co financing first registration through contributory models	Identifying ways to spread the costs of carrying out the first registration of land including field operations with contributions from beneficiaries
Economic Empowerment of land holders	Economic Empowerment including Access to Finance for land holders and increasing land mobility	Providing direct, accessible benefits for land holders based on registration of property, thereby encouraging take up and participation in registration, increased rental market participation. Includes mortgage and microfinance loan access
Added Value	Identifying Added Value and fostering wider economic benefits	Identifying the added value arising from tenure improvements including increased tenure security, investment, productivity; reduction of disputes.

There are also additional indirect benefits related to stronger national spatial data infrastructure for other public sector bodies, including civil registration, security, addressing, location-based services, etc.

Most benefits will fall in one or other of the groups listed above. Applying the sustainable finance approach implies that there is a search for alternative ways of financing development, not relying on massive up-front donor financing, but leveraging on the land-based revenues flows that come from land administration improvements. In the following sections we explore the possibilities and implications of a sustainable finance approach drawing on the earlier analysis, and try to draw on examples from developed and developing countries, where relevant.

3.2. Land Markets

> *Land administration is critical in underpinning the development of viable land and property markets, especially in urban settings, and these are a major engine for economic growth, contributing over 20% of GDP.*

The importance of land markets was highlighted in section 2.5 showing how land administration is critical in underpinning the development of land and property markets, especially in the urban settings. A key finding in the current research is that there is a general lack of appreciation of the important link between land markets and the underlying land administration system and its role in wider social and economic development. This has also been highlighted by the World Bank Internal Evaluation Group in their recent evaluation of the role of land administration in supporting urban spatial growth *(World Bank, 2021)* who concluded "(*The World Bank) … "should also improve the collection of land market data, including mainstreaming land market assessments in World Bank investments in urban areas."* Land Market development is a key aspect of developing a financially sustainable approach as it is the key driver of demand.

Figure 6. Overall annual land-based revenues generated through land market and related activities – example from England and Wales ***(Source: own analysis)***

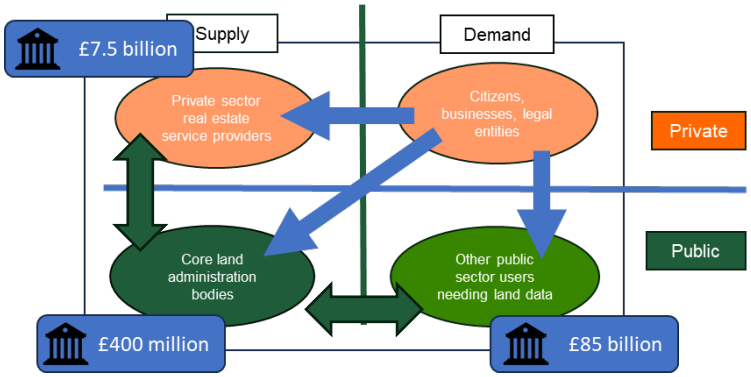


Figure Six is an attempt to quantify and show the funds flow across the land sector in a developed economy (using data from England and Wales), based on the stakeholder analysis shown in Figures One and Two and the revenue analysis of section 2.5.

Essentially it is the land and property market that is driving these revenue sources, with the basic supply of “new money” originating with the demands and obligations of citizens, businesses, legal entities. The following direct financial benefits can be identified.

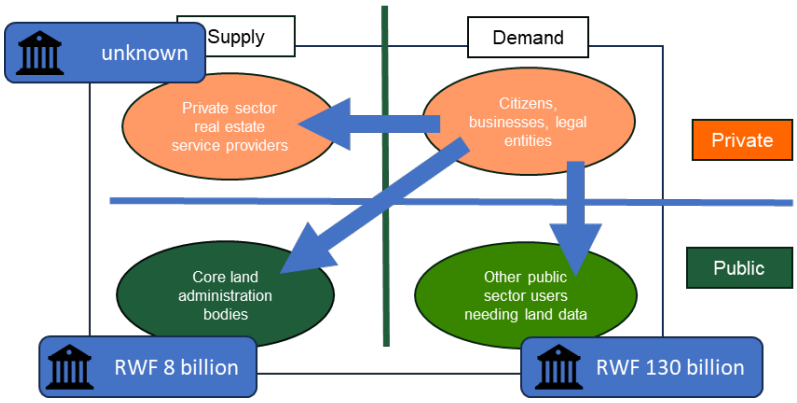
- The Land Registry transaction fee income of £399 million represents over 90% of the annual operational costs of the land registry, providing a high level of financial self-sufficiency.
- This activity indirectly underpins other public sector land-based revenues of £85-90 billion, generating almost 3% of GDP and equivalent to £8.5-9.0% of total tax income.
- In the private sector, while the total income of all real estate related private sector revenue is difficult to estimate precisely, a rough estimate based on annual transfers of around one million properties and average transaction costs of 3% of property value, suggest a total figure of $7.5 billion. This includes only costs associated with professional fees related to property transfer, and excludes any building or development, relocation or other costs.

Figure 6 shows that for every £5 spent annually on land administration services, £95 is spent in the private sector real estate professional sector in connection with these transactions. Further, the land administration system is underpinning wider land-based revenues of £85 billion (includes property tax) which equates to x200 the direct income of the land administration institution.

Another way of looking at the UK example, is to say that as the cost recovery level is over 90%, then every £5 spent in providing land administration services is generating £95 of economic activity in the private sector and underpinning further land-based revenues of up to £1000 annually.

While there is limited data that is available to support similar analysis in developing countries, Figures 7 and 8 are an attempt to show similar analysis for Rwanda and Malawi.

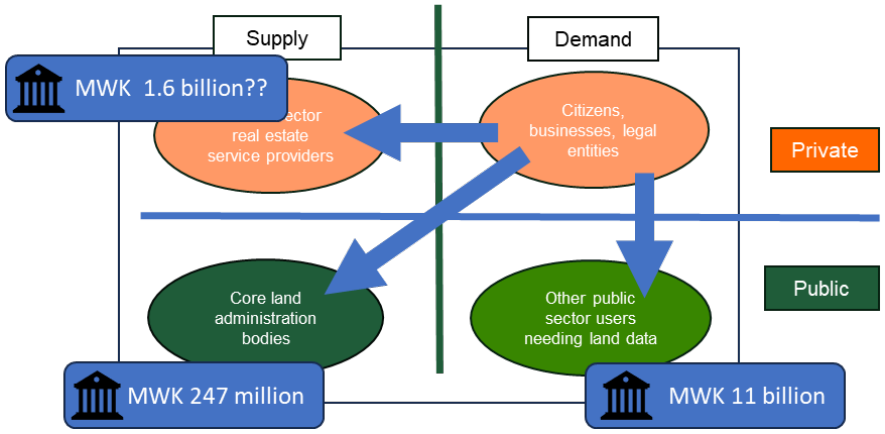
Figure 7. Overall annual land-based revenues generated through land market and related activities – estimated example from Rwanda ***(Source: own analysis)***



In the case of Rwanda, the following direct financial benefits can be identified (based on 2024 data):

- In Rwanda, the annual transaction duty (replacing fees) for 2025 is expected to be equivalent to almost 100% of the annual operational costs of the NLA
- This activity indirectly underpins other public sector land-based revenues of 130[21] billion RWF (including property tax and estimated lease income) equivalent to almost 0.4% of GDP.
- It is very difficult to estimate the total income of all real estate related private sector professional revenues, as there is no systematic monitoring or assessment. Applying the 5%/95% rule (as in the Europe model) would generate around 160 billion RWF, however this is subject to confirmation.

Figure 8. Overall annual land-based revenues generated through land market and related activities – estimated example from Malawi ***(Source: own analysis)***



In the case of Malawi, the following direct financial benefits can be identified (based on 2021 data):

- The Ministry of Lands (MOL) transaction fee income of MWK 247 million which is equivalent to 5.5% of the annual operational costs of MOL land administration costs.
- This activity indirectly underpins other public sector land-based revenues of MWK 11 billion (including property tax and ground rents) equivalent to almost 0.3% of GDP.
- It is very difficult to estimate the total income of all real estate related private sector revenues, as the system operates highly informally. Potential revenues, based on the number of transfers is estimated as 1.6 billion MWK, however this figure is very uncertain.

[21] Note: this figure is highly preliminary and is subject to confirmation.

A key recommendation of the current work is the need to have simple, standardised mechanisms in place for reporting land market activity allowing these revenues to be quantified.

Note that these land market findings are highly preliminary, and it would be good to test this hypothesis further by examining other mature and developing country real estate markets

3.3. Increasing Domestic Revenue Mobilisation

> *Land-based revenues can be major sources of Domestic Resource Mobilisation, but are highly underdeveloped in developing countries. Improving the land registration and cadastre systems and ensuring all properties are covered will significantly increase revenue flows.*

From a Government viewpoint, increasing domestic revenue mobilisation (DRM) is a core macroeconomic objective as it strengthens public finance, financial sustainability, reduces government debt and supports development and investment. It is an essential tool of fiscal policy. This is particularly important in developing countries yet the possible contribution from land-based revenues is seriously underdeveloped (*Deininger and Goyal, 2024*). In the UK, for example, property tax generates revenue equivalent to 2.2% of GDP (Table 10), while in developing countries such revenues are typically 0.1-0.3% of GDP.

Property tax systems can exist without direct recourse to the core land administration system, in which case they have their own valuation rolls[22] based on historic data and keep updated at a local level. Even where these exist, they are still cross referenced to land administration data to confirm property details, ownership, etc. Property tax usually falls under the mandate of Ministry of Finance, though responsibility for the tax roll and billing is usually a local municipality function or a duty of a devolved local administration office. It is often neglected compared to other tax income (income tax, corporation tax, consumption taxes) as it is seen as more difficult, expensive to set up and organise – and requires that there is good quality information available about land, property (buildings and other real estate objects). Hence the more successful systems are those where there is good quality, up to date information available

Ground rents [23]are also seen as strong sources of local public finance, though these funds are normally supposed to be allocated to infrastructure development. Both property tax and ground rents can draw basic information from the core land

[22] Valuation rolls are typically local tax registers maintained at a local level with details about properties, tax payers, valuation etc.

[23] Ground rents are regular contractual payments by a leaseholder for the right to use and occupy land. They are common in countries where state or public land is leased to occupiers (Ethiopia, Malawi etc) They also exist on private land.

administration registers and then use this as the base data in their assessment, billing and collection activities. The following are some examples: -

- **Malawi** has low property tax income and currently has an outdated system to manage Ground Rents, with low collection and billing rates and uneconomic base rates. Malawi is now using potential Ground Rent income increases as the justification for substantial investment in the land sector. (see *Chilonga, et al*, 2025). A nine-year development plan shows that revenues of 67.3 billion MWK will be generated, of which around 16 billion MK is used to support the revenue enhancement and collection over the nine years, leaving a net contribution of 50 billion MWK. Interestingly, this is the same amount as the expected cost of the establishment of the country-wide land administration system according to an optimal deployment model. This means the total cost of the implementation of the devolution strategy will be equivalent to the ground rent income collected during the nine-year period.
- **Rwanda** introduced a new property tax system in 2019 drawing on the NLA Land Administration Information System (LAIS) that generates 20 billion RWF in Rwanda – which is around three times greater than the fee/transfer duty revenue and around three times the total operating costs of the land sector *(Nishimwe, Muyombano, 2025).*
- **Tanzania.** Property tax revenue is collected by the TRA (Tanzanian Revenue Authority) and was estimated at TZS 907 billion (£255 million) in 2024/5.Ground rent is collected by the Ministry of Lands and was around 87 billion in 2019 (£28.6 million) which is more than twice the operating costs of the Ministry.

In each of these cases. There are additional non-land sector costs in the collection and billing of property tax as this responsibility is normally that of the Ministry of Finance / Revenue Authority and the local administration offices. For Ground Rent, the costs are contained in the Ministry budget, though collection can be via local authority, or land administration body.

3.4. Cost Recovery and financial performance

> *Land administration agencies can operate at high levels of operational cost recovery, directly or indirectly as a result of transaction fees and duties arising directly as a result of land administration services.*

Cost Recovery

Cost recovery is an essential way of looking at operational and financial efficiency of an organisation as it compares the revenues generated with the costs of the service provision, In developed economies, many of the land administration agencies operate at a high level of cost recovery (for example, UK HMLR is over 90% based on transaction fees alone) and this demonstrates a high level of financial sustainability with little reliance on the state budget. In many developing countries, this is not the case, and cost recovery rates are low, income is restricted as land market activity is low, and typically only 25% of urban properties and less than 10% of rural properties are registered and incurring transaction

fees and duties (*Deininger and Gouyal, 2024*). Fees are set by regulation and need to be affordable and progressive.

In many cases the fee income does not come directly to the land administration body, but passes directly to a Treasury account, and the Treasury separately funds land administration. Nevertheless, the revenue is still directly attributable to the land administration service provision and the cost recovery calculation is valid. In many cases the costs of service provision include local administrative offices as well as the land administration body and so the cost recovery analysis will include looking at costs across several institutions and levels. On the revenue side, it is normal to consider transaction fees and fees for other kinds of services ("own revenue") generated by accessing data and technical services. Stamp duties on transfer are not normally considered as land administration revenue.

Cost recovery is a powerful way of gauging the performance of public service bodies and is a key part of an institutional business plan, as it directly tracks the financial performance of an organisation and allows comparison and benchmarking with other agencies. It normally applies only to recurrent costs. and accurate costs and revenues are available from Ministry budgets. The data is usually of high quality. The following are some examples:

- **Rwanda.** A land market assessment and annual business plan in 2018determined that the cost recovery in the and sector was running at around 62%, based on fee income alone and including district and sector costs, with transactions at around 270,000 annually, By 2024, the number of annual transactions had risen to over 450,000 and the cost recovery was over 85% and expected to exceed 100% in 2025/6 with the replacement of flat fees by a progressive transfer duty (revenues go straight to the Treasury, not passing through the land agency).
- **Tanzania.** Analysis undertaken in 2018 as part of the national scale up plan for land registration *(Government of Tanzania, 2019)* showed the land sector had a cost recovery level of around 14% based on fee income alone, though rising to over 200% if ground rents are included.
- **Malawi.** Analysis undertaken in 2022/23 showed that land sector had a cost recovery level of around 5% of the operating costs of the Ministry of Lands and districts at that time, considering fee income only. Including ground rent collected by MO raises the Cost recovery rate to 18%
- **Uganda.** Uganda has a digital national land information system in place with 22 regional ministry zonal offices processing land transactions. There are an estimated one million freehold, leasehold and Mailo titles, and over two-thirds are registered. Uganda, The fee and stamp duty income from transactions is greater than the operational costs of the land administration sector, however there is no coverage in place for customary land which makes up 80% of the properties.

Monitoring performance and benchmarking

One of the benefits of having a sustainable finance approach is that it is possible to calculate performance indicators and then compare these across countries and so provide a level of benchmarking. It provides insight into how funds are used and what is the level of

efficiency, relative cost per transaction, per staff member employed, etc., Table 12 provides a comparison across Malawi, Uganda, Rwanda (using 2018 figures for Rwanda),

Table 12. Estimates of recurrent costs of operating land administration systems in developing countries *(source: authors compilation)*

Ref	Comparative indicators	Malawi (2023)	Uganda (2021)	Rwanda (2018)
1	operational cost per registered known title (USD). (total annual costs / total estimated no of titles)	$11.13	$4.22	$0.88
2	cost per transaction (based on total lands budget (USD) (total annual lands budget/ no of annual transactions)	$1,130.37	$410.51	$33.64
3	recurrent cost per transaction (USD) (total annual recurrent costs / no of annual transactions)	$1,113.12	$121.84	$27.24
4	overall staff cost per transaction (USD) (total annual costs / no of staff)	$440.17	$48.14	$18.61
5	overhead per staff member (USD) (annual non-salary costs / no of staff)	$3,845.46	$6,609.59	$3,415.96
6	no of annual transactions per member of staff per year	5.71	89.68	395.78
7	annual no of transactions / estimated number of titles in the registration system	4000 400,000	34618 1,000,000	271111 8,367,263
9	annual transaction %	1%	3.46%	3.24%

Table Notes

1. *The Malawi figures are derived from the Malawi budget and Chilonga, et al, 2025.*
2. *Uganda currently has around one million leasehold and freehold titles registered and had 34,618 transactions (of all types) in 2020, with 386 staff at the HQ and MZO level. There are additional lands staff employed by local government at the district level (the actual number is not known.*
3. *The Rwanda figures are from a Land Market and Business Plan undertaken for UK FCDO in 2018. At that time, Rwanda had around 8,367,263 titles across the country and recorded 271,111 transactions of all types with a staff of 685 (HQ, Region, district, and sector).*

The indicators reflect the differing stages of development of the three countries. Rwanda has a country-wide system in place, a high degree of automation and an active land market, resulting in far lower transaction costs. Uganda is in an intermediate position. Malawi has high perunit costs (comparatively) and processes many fewer transactions per head. The following conclusions can be drawn

- Land administration services in Malawi seem to be high compared to the comparison countries. The costs for maintaining the basic system are 11 times higher than Rwanda on a per title basis, and four times that of Tanzania,

- Annual expenditure per transaction processed In Rwanda is under $28 per transaction, while the cost in Uganda is 5 times greater and in Malawi is x40.
- Average number of transactions processed per staff member (using the total staff complement) is 6 in Malawi, 90 in Uganda, and 400 in Rwanda.

3.5. First registration

> *Identifying ways to spread the costs of carrying out the first registration of land including field operations with contributions from beneficiaries and ensuring linkage with national land administration systems.*

It is now well accepted that low-cost Fit-For-Purpose techniques can be used to rapidly identify, demarcate and register rural and semirural land parcels at the relatively low cost of the order off $10USD per parcel or less within mass systematic programmes. However, even at this low unit cost, the costs at country level are enormous. Uganda for example has an estimated 8-10 million parcels meaning the cost of registration will be of the order of $100 million or so for registration alone For Malawi, it will be a similar figure. IT is unlikely that national governments or development partners would be willing to undertake such investments.

A more sustainable finance approach is to look at spreading the cost by looking for a contribution from the landholder as the key beneficiary. Recent initiatives in Uganda and Tanzania, initially supported by USAID and GIZ have been exploring models where communities are offered the opportunity to have parcels registered and certificates of occupancy issued on a co-financing basis (See Case Study #3 overleaf and Annex A). In the case of Tanzania, a flat fee of TZS 30,000 is set as the contributory element (around £8.50) and in Uganda, a similar fee of UGX 50,000 (around £10) was initially adopted but later changed to a more progressive sliding scale based on parcel size. In the case of Tanzania, almost 48,000 CCRO have been issued generating almost $400,000 in this contributory scheme.

An open issue is what happens after the certificate has been issued, ideally it will be entered to a digital land registry and then transactions can be processed and the register updated. Uganda has established a standardised data model for the CCRO and intends to ensure that all CCRO are uploaded to the national land information system, however this is not yet fully in place and is difficult to apply countrywide simultaneously.

GIZ has proposed an approach that matches with the decentralised structure and supports land transactions, revenues and costs at the district level, thereby linking the first registration directly to the operational land administration system but focusing on how the financing and costs work at the district and subdistrict level *(see Baldwin and Obaikol, 2023).*

A key issue here is willingness to pay, and any such sustainable finance approach needs to ensure affordability and does not exclude poorer community members with measures in place to help the most disadvantaged.

Case Study #3 – Contributory models for first registration - Tanzania

In Tanzania, village land covers an estimated 70% of the territory of Tanzania, and is home for up to 80% of the populace, with perhaps 10-15% of the land registered across 13,000 villages *(Sullivan et al, 2019. Issa, et al 2024).*

The registration of village land involves a number of well-documented steps and results in the issue of a CCRO (Certificate of Customary Right of Occupancy). The process includes boundary verification, village land use planning, awareness and sensitisation, demarcation and adjudication process, data processing, objection and correction, printing and final issuance of the CCRO. Over the period 2015-2018, the USAID LTA (Land Tenure Assistance) programme developed a computer-assisted registration process (MAST) and applied this in more than 40 villages registering more than 54,000 CCRO.

Following a UK DFID-supported Baseline Survey (see Box 8) the programme then developed a beneficiary contribution model that requires beneficiaries to contribute TZS 30,000 (approximate 12 USD) per parcel to the cost of the registration of their customary village land. This model was then tested by the LTA programme in 24 villages in the Mbeya and Iringa regions include more than 33,000 parcels. Following the completion of the LTA programme, the Tanzanian Land Tenure Assistance NGO (TLTA-NGO) was then established to continue the work using he contributory model and a further 56,770 land parcels were demarcated and over 47,763 CCROs issued to 9,552 householders involving villagers' contributions of USD 398,304 *(Issa, et al, 2024).*

Box 8. Tanzania – willingness to pay for CCRO registration-

The Baseline survey

- The UK DFID supported LTSP (Land Tenure Support Programme) commissioned a baseline survey in 2017 in the Kilombero, Ulanga, and Malinyi districts
- The survey included almost 50,000 households across the three regions, of which 75% were male headed, 25% female headed.
- Over 97% had no prior documentation
- Most land parcels are demarcated simply by trees or paths and used for agricultural or residence purposes
- LTSP proceeded to register over 270,000 parcels in three districts and issue CCRO

Willingness to Pay

- The survey found a strong willingness to pay for registration across the three districts, with little difference by gender
    - Kilombero 82%
    - Ulanga 81%
    - Malinyi 67%
- Of those willing to pay, respondents indicated they were willing to pay the amounts below
    - Up to TZS 20,000: 20%
    - TZS20,000 – 40,000: 40%
    - Over TS 40.000: 20%
- There was little difference by gender, except in Malinyi where significantly fewer female headed households were willing to pay ((60% female, 70% male)

*Refe*rence: National Bureau of Statistics, 2018

A study commissioned by USAID in 2023 *(Persha, et al, 2024)* examined data from the USAID project to understand determinants for involvement in the programme and the reasons why. The study involved a sample of 360 respondents across 6 of the original 24 LTA villages. It found that people wanted to purchase a CCRO to ensure tenure security; reduce the likelihood of disputes, and access economic benefits. The economic benefits include access to finance, simpler transfer processes, and an expectation that land with a CCRO would appreciate more quickly. In the sample villages, levels of engagement in the scheme varied from 24-84% and those who did not proceed with a CCRO cited lack of financial support as the reason, though the survey also found the TZS 30,000 fee was considered reasonable.

3.6. Economic Empowerment of land holders

> *Providing direct, accessible financial benefits for land holders based on registration of property, thereby encouraging take up and participation, increased rental market participation and strengthened resilience.*

This group of benefits is aimed at providing direct, tangible benefits to those landholders who have completed some level of land certification, which may be a simple Land Inventory Protocol (as in Uganda), or a registered certificate of customary right of Occupancy (CCRO, Uganda). A Second Lavel Land Certificate (SLLC, Ethiopia), emphyteutic lease (Rwanda), freehold title or other land documentation attesting to occupancy and use rights.

The phrase “Economic Empowerment” is used as there are a range of benefits that can be grouped together as they all provide a direct economic benefit to the land holder

- **Access to Finance.** Access to finance is often quoted as one of the main benefits of land registration and land administration programmes. Security of tenure and formal registration enables the property to be used as collateral for a loan, allowing the borrower to access funds through a mortgage or secured loan. While mortgages can be issue for typically up to 60% or so of the value of the property (or higher), they still depend on the ability of the borrower to finance the repayments, so tenure security by itself will not kick start a mortgage system. Interest rates, the attitude to risk, and the ability of holders to make repayments mean that in many countries mortgages are usually only accessible by the more affluent part of society or those in secure employment with well-paying jobs.

  There is interesting experience from Ethiopia where the LIFT programme (and the follow on GIZ / World Bank programmes) are supporting Second Level Land Certification (SLLC) and the issue of documented holding rights. LIFT included an economic empowerment component that provided small scale loans predicated on the possession of SLLC certificates (which reduced risk). Hailu (2024)[24] reports that over 42 million USD had been disbursed to over 53,000 land holders under this programme by May 2024. This represents additional added financial value directly generated as a consequence of the $100 million LIFT programme

- **Increased land values.** Possessing land documentation provides greater clarity of ownership significantly de-risks land purchases and reduces the likelihood that the land may be subject to disputes. Anecdotal evidence suggests this is reflected in higher land and property values for those with documentation. In Uganda, landholders in possession of a Land Inventory Protocol (LIP) which is a technical description of the property report increased land values of 10-20%, while possession of a CCRO increased by more than 20% *(Baldwin and Obaikol, 2021).*

[24] See Hailu, R., 2024. *Land Registration Incentive and Benefit Mechanisms & Improving Urban Cadastre: Experience from Ethiopia*. World Bank Land Conference 2024

A study on villagers' willingness to pay for registration in rural Tanzania reports villagers expect higher land prices for documented land *(Persha, et al 2024)*

- **Increased rental markets.** In Ethiopia, the LIFT programme has developed standardised contract documents and established a network of rental service providers which has increased land mobility and allowed rural land holders to derisk renting of land to non-traditional tenants.

- **Strengthened resilience.** A consequence of access to credit has been greater resilience in that the availability of additional financial resources has allowed landholders to invest in wells to mitigate the effects of climate change and changes in rainfall patterns.

3.7. Added Value

> *Identifying the added value arising from tenure improvements including increased tenure security, investment, productivity; reduction of disputes, improvements in agricultural productivity and other gains.*

It is well recognised that well-functioning land administration systems provide additional benefits that can not immediately be quantified in real monetary terms, or can only be estimated through a proxy variable. These "added value" estimates are often used to help justify an investment by a development partner or government contributing to the overall calculated Investment Rate of Return of the programme. They can be difficult to quantify and the benefits may not appear until after the conclusion of the programme, and as such, may not resonate well with government partners.

Added Value for landholders

In the context of sustainable financing, quantifying clearly the benefits to the landholders, and putting in place systems to identify and track this is important, as the benefits are also land market determinants and are influential in convincing the public of the importance of investment in land administration systems. Added Value may include the following, and where it cannot be directly assessed, we suggest a proxy to try and quantify the added value of that particular initiative (see Box 9 for example).

- **Increased tenure security**. A suggested proxy is the cost to the beneficiary of obtaining the title deed or certificate of occupancy, as this is the opportunity cost.

Box 9. Tanzania – Added Value for village land certification

As an example of calculating Value Added, in the case of the Tanzania Scale Up Plan (Government of Tanzania, 2019), the appraisal case considered

- *tenure security*
- *the value of loans that would be secured against registered CCRO (Certificate of Customary Right of Occupancy)*
- *and agricultural value added (5% increase in productivity). The proxy for tenure security was the value that landowners were willing to pay to secure the CCRO.*
- ***These benefits were calculated to have a net present value (NPV) which was more than double the $380 million estimated cost of the national rural scale up programme.***

*Refe*rence: Government of Tanzania 2019

- **Reduced disputes.** A suggested proxy is the cost of being unable to use the land for the intended purpose, e.g. agricultural production, or a reduction in productivity

- **Improved agricultural productivity.** This can be estimated by assuming a percentage increase in agriculture output applied to the production value.at household level.

- **Increased Investment.** There is some evidence that landholders with secure title are more likely to invest in improvements such as multi-year crops, irrigation, storage and processing facilities, better quality seed, etc.

In the rural sector, landholders with secure tenure are likely to be more resilient and be able to mitigate some of the effects of climate change, through additional well boring; renting in and out of land; more willingness to cooperate in farming as land rights are secure.

As an example, in the case of the Tanzania Scale Up Plan *(Government of Tanzania, 2019),* the appraisal case considered tenure security; the value of loans that would be secured against registered CCRO (Certificate of Customary Right of Occupancy), and agricultural value added (5% increase in productivity). The proxy for tenure security was the value that landowners were willing to pay to secure the CCRO. The total benefits were calculated to have a net present value (NPV) which was more than double the $380 million estimated cost of the national rural scale-up programme.

Added Value for the private sector

Private sector professional services are especially interesting as they can foster a strong public/ private partnership relationship; for example, surveyors accessing geodetic systems and controls; valuers accessing sales data; banks accessing mortgages, etc. There is also a potential demand for additional real estate information services and third-party private entities will take base land administration data and enrich it, paying for access to the base data. We can include the following additional contributors to overall Added Value:

- **Contribution to the economy by the real estate sector.** The private sector can include notaries, surveyors, valuers, lawyers, development professionals, real estate agents, and land market activities are dependent on a professional and well-resourced real estate sector. The value of the services commissioned here is directly linked to the level of land market activity and is a key economic contributor and employer.

Added Value for the Public

There are also added value public benefits that arise from having a well- functioning land administration system. These are usually calculated at the national level and are posited on the basis that there is a well-developed national spatial data infrastructure that is largely complete and a well-functioning land administration system. These benefits are considered to be more in the line of “Public Good”.

- Digital national spatial data infrastructure
- Availability of geospatial data to other government bodies
- Location-based digital infrastructure
- Addressing system, emergency response security, linkage with civil and tax registry, company registry
- House price index data published monthly
- Impact on industry and commerce of well-developed geographic infrastructure

These benefits are usually grouped together and considered as the added value contributed by the geographic infrastructure within a country.

Rate of Return on Planning Investments – rate of return on investment

From a programme development viewpoint, the additional benefits become a “Value Added” consideration and help to justify the investment in the programme and are often based on economic or social value considerations. All Development Partners have particular ways of assessing this at programme design. The World Bank, MCC, FCDO will calculate an IRR (Investment Rate of Return) based on the expected financial benefits of the programme and it is this that is used to help assess project viability (there will be other factors too). This may be based on return on the land administration investment itself, increased agricultural productivity, decreased disputes, increased investments, greater land mobility through land market development, or access to finance. Box 9 provides an example for a proposed countrywide programme in Tanzania.

Need for holistic approach

To summarise, it is clear that to achieve sustainable financing of land registration and land administration there needs to be a more holistic approach to improving land governance. This means including planning and thinking about how the registration process can be sustainably financed; how land administration agencies can operate financially; how landholders can realise benefits and so be willing to bear a portion of the cost, and how land-based revenues can be used for community and public benefit, as well as the wider value-added benefits.

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4. Adopting a Sustainable Finance approach

4.1. Introduction

Developing the approach

There is an extensive literature dealing with programme design and underlying development theory which is widely adopted by development practitioners. It can be a challenge to bridge the gap between development theory and practical interventions and map out the causal pathways influencing opportunities for change. One way of doing this is to set out a Theory of Change which shows how to move from the existing context and situation on the ground to a desired outcome, identifying interventions and showing how a desired impact can be achieved.

In this section we set out a Theory of Change that is designed to achieve a more sustainable land administration result – both financially and operationally – the **Sustainable Land Administration (SLA) Theory of Change.** We then show how to apply this SLA Theory of Change and use it to develop arguments and supporting rationale for land administration interventions and support the transition to a more sustainable land administration operating model.

All countries will have a different starting point, there is no “blank sheet of paper”, and so having a realistic understanding of the actual situation in the sector within country is a critical starting point. The SLA Theory of Change needs to accommodate different perspectives, requires a more nuanced, political economy understanding and also requires a clearer articulation of the financial or business model that will underpin the land administration transition.

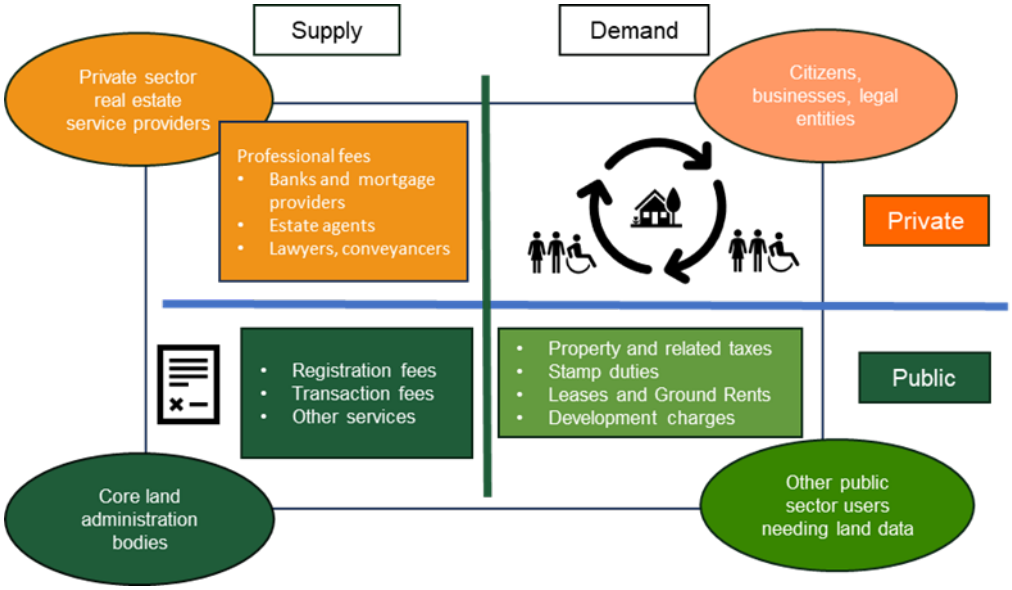
The aim is to have a Theory of Change that is flexible enough to accommodate different scenarios, but support the transition of the existing land administration system to a more sustainable solution.

Achieving Sustainable Land Administration

The earlier analysis has focused on existing approaches and also highlighted the importance of land markets, recent advances in lower cost and more efficient methods of registration, setting up the land administration infrastructure, service delivery and emphasised that the land administration bodies operate as part of a wider land sector ecosystem. Within this wider ecosystem there is both a *demand side*, and *a supply side* which involves both public and private sector entities and there are various financial flows through fees for services, duties, taxes, commissions, rents which provide the liquidity driving the ecosystem (Figure 10). As shown in section 2.3, in developed countries there can be very large financial flows supported by much less costly land administration operations. Even in most developing economies, the overall land-based revenues are higher than the land administration costs, but there is huge potential for increasing those revenue flows through improvements to the land administration infrastructure and

operations. This is a powerful argument for investment into the basic land administration infrastructure and operations.

Figure 10. The land sector ecosystem: segmentation and revenue sources



To transition to a more financially sustainable land administration set up any Theory of Change needs to include the possibility of introducing change across the entire land sector ecosystem of Figure 10 and not focus only on the core public sector land administration bodies.

4.2. The SLA (Sustainable Land Administration) Theory of Change

Theory of Change

The starting point is to recognise that land administration is the essential foundational structure that supports the security of rights and underpins all land and property transactions through land markets. Well-functioning land administration systems are essential **inclusive institutions** as defined by Acemoglu and Robinson (2014) and forms one of the foundational structures that underpins economic development and wealth creation.

In most developing countries, land administration systems are only partially established and implemented. Every country has its own unique state of development, and rather than invoke a linear development model, focused purely on the legal, institutional and technical aspects of building land administration systems, the Theory of Change allows for a more flexible approach; recognising key interventions that must take place to create pathways to sustainability.

The SLA Theory of Change (Figure 11) explicitly includes consideration of **demand** factors; developing land administration infrastructure, registration, service delivery, and **supply**

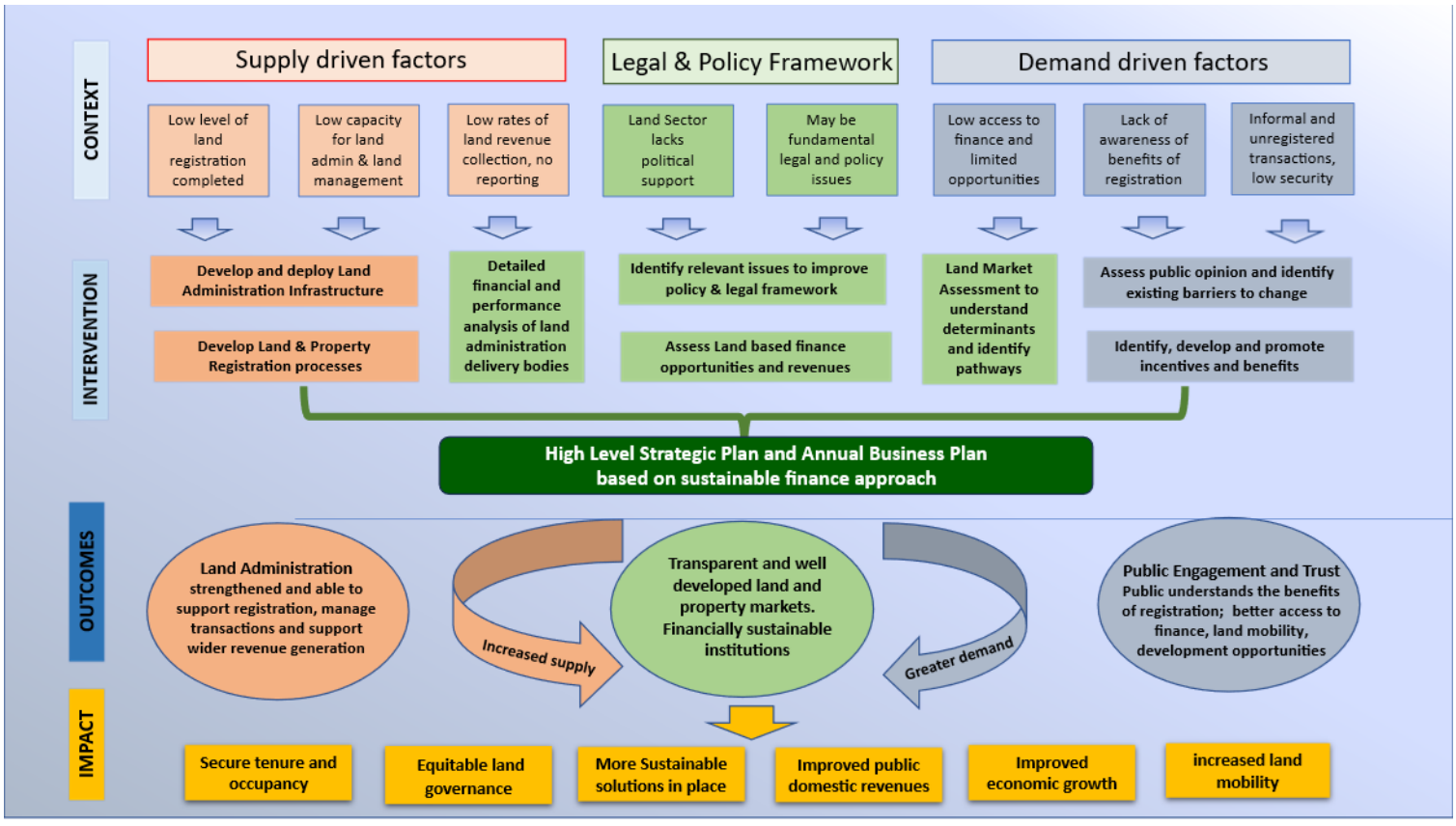
factors; providing incentives and benefits for land holders while also including rigorous analysis of existing sector costs; land-based revenues; identification of land market trends and linkage to wider domestic revenue generation potentials.

The overall aim is to have positive outcomes that:

- Strengthen land administration institutions and service delivery, complete registration and provide cost effective and secure land services and support stronger domestic revenue mobilisation.
- Support more transparent and well-developed land and property markets that are able to meet the needs of citizens in a secure and equitable manner.
- Ensure public engagement and trust in the land institutions; better understanding of the benefits of registration; access to finance and land mobility.

The approach involves applying business analysis principles to obtain an understanding of the costs of service delivery and land-based revenues (in the widest sense) that can be generated. This places a spotlight on the financial aspects at an early stage and helps to develop arguments that can increase political support through increased domestic revenue generation and both direct and indirect financial benefits (see chapter 2) for government, as well as citizens and enterprises.

Figure 11. The Sustainable Land Administration Theory of Change



The Theory of Change (Figure 11) proposes a series of interventions to address contextual issues which may include a lack of political support; inadequate or ineffective land registration and administration, weak land markets; lack of access to finance and poor capitalisation on the benefits of registration by individuals. The key constraint of lack of finance for reform is directly addressed by looking at actual establishment and delivery costs, and the potential revenues that can be generated.

Initiatives can take place and contribute to the overall sustainability outcome; for example, a specific initiative focused on better understanding of the land market dynamics, or a programme focused on cofinancing for customary land registration. By ensuring these initiatives are captured in the overall strategic plan and annual business plan, they will contribute to the overall sustainability objective.

A key element in the SLA Theory of Change is adopting at an early stage an approach based on a high-level strategic plan and annual business plan which includes financial and operational aspects this providing a continuous focus on developing a financially sustainable solution. This strategic plan and business plan is informed by detailed costing and revenue analysis across the wider land sector and land market trends, as well as the more traditional land administration functions and costs.

Implementing the Theory of Change

At the Impact level, the SLA Theory of Change seeks to generate and ensure greater security of Tenure and occupancy, more financially sustainable and administration bodies helping to generate stronger domestic revenue streams; equitable and gender-sensitive land governance; increased land mobility, resource management and contribute to positive overall social and economic development.

In reality. It is highly unlikely that any single proposed project will generate all of the impacts above, or even support the range of interventions set out in the SLA TOC. This is perfectly fine; it is perhaps better to think of the SLA ToC as a framework within which different

It is also relevant to consider the overall footprint of the proposed programme. While some actions necessarily take place at the national level (policy, legal and regulatory matters), it may be advantageous to undertake reform work in a decentralised manner at the city or district level, thereby concentrating accountability, resourcing and the linkages across the land sector ecosystem, including revenue enhancement.[25]

The SLA Theory of Change calls for the following interventions:

Identify relevant issues to improve policy & legal framework

This intervention is a fundamental initial activity that will provide understanding of existing legal, policy and regulatory matters and identify key issues, building on existing work and political economy understanding. For sustainable

[25] see for example, the proposed Revenue Enhancement and Cadastral Improvement (RECI) programme for Bahir Dar where the sustainable finance initiative focused on the city level.. See GIZ, 2023. *WP7 Revenue and Cadastral Model, GIZ : Study on sustainable financing for land registration*

finance initiatives to work, there needs to be a supporting legal and regulatory framework, including a commitment from Government to enhance domestic revenue mobilisation and a shared vision across relevant government departments.

Assess Land based finance opportunities and revenues

This activity will focus specifically on land-based financing and revenues, examining all relevant forms of tax and non-tax revenues including fee income, duties, property tax, development rights, ground rents and lease payments (see section 2.4). Where possible, trends and constraints should be identified. One of the outputs will be an estimate of the potential increase of such revenues with better quality and ore complete land administration data.

Develop and deploy Land Administration Infrastructure

This involves the establishment of the land administration infrastructure, data management and updating systems and their deployment, including offices, roll out and staffing. What is important is that there is some structure in place, a system exists to manage registration data and support transactions and other services, and that there are known rules and standard operating procedures. It maybe that the service delivery points are operated by another body such as a local administration body, while the Ministry retains legal and technical oversight. In most cases, this will only be partially in place and operational. Alternatively local register solutions are also possible (see section 2.3).

Develop Land & Property Registration processes

This involves the establishment, testing and adoption of processes to undertake first registration of all land including customary, freehold, leases, etc. There is now a lot of experience with contributory models and similar initiatives where costs are spread and shared with the beneficiary (see section 2.3). Again this can be implemented by district or region, administrative unit rather than country-wide, however it is strongly recommended that digital output is generated and there is a system (local or national) that can receive the digital registration data.

Identify relevant issues to improve policy & legal framework

This intervention is a fundamental initial activity that will provide understanding of existing legal, policy and regulatory matters and identify key issues, building on existing work and political economy understanding. For sustainable finance initiatives to work, there needs to be a supporting legal and regulatory framework, including a commitment from Government to enhance domestic revenue mobilisation and a shared vision across relevant government departments.

Assess Land based finance opportunities and revenues

This activity will focus specifically on land-based financing and revenues, examining all relevant forms of tax and non-tax revenues including fee income, duties, property tax, development rights, ground rents and lease payments (see section 2.4). Trends and constraints should be identified. One of the outputs will be an

Assess public opinion and identify existing barriers to change

estimate of the potential increase of such revenues with better quality and more complete land administration data.

Any activity that considers introducing fees or contributions from the public must be based on a clear understanding of affordability and must not disadvantage poorer landholders and members of the public. Public attitudes to registration and land administration, tenure security and the willingness to pay for services need to be understood, as well as existing barriers to change (e.g. access to services, gender sensitivity, inheritance, disputes, fear of expropriation, tax increases, land use controls). Successful engagement with the public and ensuring their buy-in is a fundamental success factor.

Identify, develop and promote incentives and benefits

Identify and quantify incentives for landholders and quantify benefits, including access to finance, increased rental markets, increased property valuations, investments, infrastructure improvements reduced disputes, land market transparency, etc. In an urban context it may also include measures to reduce or regularise informality, undertake lot readjustment, simpler development processes. At the land sector level, it also includes looking at the availability and quality of professional service providers.

Detailed financial and performance analysis of land administration delivery bodies

This activity involves a detailed analysis and breakdown of the costs of the existing service provision by the land administration bodies. It will include financial analysis at the Ministry or Agency level, as well at the decentralised city or district (or lower level) as needed. It needs to consider costs of all involved in the land services delivery chain. In almost all cases there will be some level of service delivery and an existing network of some kind. The activity also needs to break down costs by department / output and this will provide a benchmark against which future development can be monitored. The costs data can be obtained directly from the official budget of the body (Ministry, city or district authority) and are normally analysed over a 3–5-year period to understand the trend.

Land Market Assessment to understand determinants and identify pathways

This activity involves undertaking a land market assessment – commercial, agricultural, smallholding, residential, commercial and industrial. These are different markets with different participants, assets, participants and financing mechanisms. The land market assessment will include indicators tracking the state of development of the market versus the institutional capacity to identify trends and maturity (see Figure Two for example). This will also inform the expected level of transactions, identify hot spots, track valuations and provide useful information to stabilise and ensure transparency in market dealings.

High Level Strategic Plan and Annual Business Plan based on sustainable finance approach

This is the key overarching mechanism to structure, guide and track the overall transition of the and administration bodies to a more

financially sustainable basis. This is a plan that evolves over time, according to the state of overall development of the land sector ecosystem. There is no single solution, and the particular combination of priorities and actions is likely to be different in the case of each country and this will also evolve over time. At any one time, it is likely that only some of the interventions set out above are ongoing, however they will reinforce and inform each other over time, and the strategic plan and business plana re the place where they are set out, implanted, monitored, costed, output tracked, and overall KPI for system improvement consistently updated. By producing the annual plans with supporting materials, it becomes the "corporate memory" of the sector. The High-level strategic plan typically has a 3–5-year life cycle, and is revisited and updated accordingly.

4.3. Using the Benefits Calculator and Readiness Assessment tool

Introduction

In this section we suggest a strategy for engaging with a more sustainable finance approach which is based on the Theory of Change outlined above as a general approach and mapping out the existing status programmes and possible approaches, To assist with the process, there are two "tools" which may be useful:

a) a Benefits calculator
b) a State of Readiness tool

The **State of Readiness Assessment tool** (see Annex B) is a way of approaching and prioritising things that need to be in place before the approach can be scaled up. This could focus on legal or regulatory matters to allow a sustainable finance approach to be implemented, an in-depth understanding of land and property markets, detailed analysis of costings, ways of reporting and aggregating data, processes and procedures for tracking activity-based costs, revenues, developing and testing models, etc. The Readiness Assessment will help to identify areas that need to be addressed.

The **Benefits Calculator** (Annex C) will provide a very rough estimate of the potential revenues and other benefits that can arise from adopting a sustainable finance approach. This can be refined and adapted over time iteratively, as greater understanding and clearer views of possible ways of working emerge. It provides some early direction and can expose powerful arguments to influence decision makers and gain support. This kind of approach is likely to resonate well and be more successful rather than an approach based on a more abstract appraisal approach as it deals with the particular reality in the country at that time.

Getting Started

The starting point is to move from a narrow focus on land administration and activities focused on the institution itself or increasing registration, to a more holistic viewpoint where the land administration sector is seen as a foundational element supporting a much wide ecosystem (Figure One).

The second point is to understand that systems and structures already exist in one form or another, maybe not well functioning, and what we are looking for is to find a ***transition*** to a more optimal arrangement where a better understanding of the financial aspects across the ecosystem will help guide actions and provide positive economic and social benefits.

Thirdly, recognising explicitly that increasing financial sustainability of the land administration institution and enhancing domestic revenue mobilisation are key aims of the reform process.

Fourthly, early engagement with the Ministry of Finance, National Revenue Authority, National Development bodies will help to navigate some of the political economy challenges of the transition.

Finally, it is never too early to start, just as shown with the overall Rwanda programme (Figure 4), any successful reform is going to take a long time and involve a number of separate initiatives that are aligned to a common objective, and it will also take time to build the case for reform and win collective support.

Introducing the sustainable finance approach

We propose a three-step project cycle for introducing a sustainable finance approach using the Benefits calculator and the assessment tool to identify and quantify pathways.

Stage One - Initialisation

- ***Objective:*** *to get an accurate and up to date view of the current situation and identify possibilities.*

- **Description:** This step will carry out a rapid State of Readiness feasibility assessment and use the Benefits Calculator to examine the land sector ecosystem (Figure 10) and map out the revenue flows as per Figures 6, 7,8. identifying revenue sources and cost centres and how they interlink. This provides a benchmark from which work can take place. This can be undertaken as an additional activity connected to an ongoing programme or as a stand-alone activity.
- **Output:** A rapid assessment of the current status and feasibility of introducing a sustainable finance approach and an estimation of potential benefits.
- **Comment:** In reality it is likely that there will be considerable missing and ambiguous information at this stage, what is important is that the diagnostic identifies issues to be addressed and possible pathways for change, as well as flag areas for further investigation.
- **Decision**: Based on this initial work, a decision will be made as to whether to proceed or not at this point in time.

Stage Two – Design Transition pathway and Business Plan (Planning for Change)

- ***Objective:*** *Planning for Change: identify pathways for transition drawing on the SLA Theory of Change and dovetailing with other initiatives.*

- **Description:** This step involves a detailed analysis and identification of pathways for change. These pathways may well concentrate on a particular pathway or subset of conditions, e.g.:
    - revenue enhancement implementation at city level through cadastral improvement
    - focus on contributory models for customary land registration, etc.

  In all cases, the activities will "map" onto the SLA Theory of Change, contributing to the overall transition process.

  The results are to be discussed, agreed with the partners and then embodied into a short **strategic plan** and a more detailed **Business Plan** for the host agency, one that shows how to place financial and operational performance at the centre of its approach and establishes the necessary working arrangements.
- **Output:** this stage will produce the following outputs, supported by background analysis and framing papers:
    - A **Strategic plan** that sets out the high-level direction and long-term objectives
    - An **Annual Business** plan reflecting the sustainable finance approach
    - A **Pathways to change** document that sets out the transition pathways, and identifies what needs to be done.
    - An updated Benefits assessment
    - Supporting background papers as required.
- **Comment:** The methodology does not require that every step in the Theory of Change is addressed in any planned programme. Rather the SLA Theory of Change is a guide and programmes will select those components which are relevant to the particular transition pathway that is prioritised. It is expected that all initiatives will require detailed analysis of costs, revenues, land market determinants, but, for example, decisions around the land administration infrastructure may well have been made and systems in place, etc.
- **Decision**: On completion of this stage, the strategy document and the business plan will have mapped out a clear transition plan, and the benefits assessment will be updated. Senior Management should consider and then endorse the approach at this stage.

Stage Three – Programme execution

Based on the agreed Pathways to Change and the Strategic Plan, specific activities or interventions are identified which will support the transition process. The intervention may be a short targeted one or a more complex multi aspect programme involving multiple partners. The Annual Business plan and the Benefits calculator, and the Readiness calculator will be updated annually, or more frequently if required. Monitoring and Evaluation proceed as required.

The actual focus of the programme will be determined by the particular state of development and priorities established through the initial analysis, however it is likely to include some of the key steps set out in the next section.

4.4. Key Steps for implementing a sustainable finance approach

Identifying Key steps

Based on the Theory of Change and the analysis of experience to date, the following key steps for implementing a sustainable approach are proposed (Table 13).

Table 13. Key steps for implementing a sustainable finance approach

Step	Description and output	Rationale
1. **Develop a clear understanding of the current situation**	Countries must begin with a diagnostic that identifies: • the existing legal, policy and institutional framework • gaps in land information, coverage and system functionality • current revenue flows (fees, taxes, duties, rents, etc.) • operational costs across national, district and local levels • condition and capacity of existing land agencies and local authorities • • state of land markets (urban, rural, agricultural)	• This forms the baseline for planning and identifies political economy constraints that may influence reform.
2. **Use the Readiness Assessment and Benefits Calculator**	These tools help governments: • estimate revenue potential • model different financing options • identify gaps that must be addressed before scaling • prioritise actions • engage Ministries of Finance with evidence-based arguments	• They are essential for designing realistic, politically feasible reforms and gaining support
3. **Analyse all land-based revenue sources**	Countries need a detailed examination of the revenue streams that depend on improved land administration, including: • property taxes • ground rents and lease payments • transfer duties / stamp duties • development charges • transaction fees and service fees • sales of public land and development rights • land value capture opportunities	• Governments often underestimate these revenues because they are scattered across different agencies. Consolidation and transparency are essential.
4. **Engage early with Ministries of Finance, Revenue Authorities, and Development Partners**	Sustainable finance requires whole of government commitment. Collaboration ensures: • alignment with national fiscal policy • improved coordination between land and tax agencies • access to domestic financing options • integration with decentralisation and urban planning reforms • credible long-term investment planning	• This strengthens both financial and institutional sustainability. And fosters political support
5. **Establish or strengthen the land administration infrastructure**	This includes: • appropriate legal frameworks • organisational structures and institutional mandates • national or local digital land information systems • service delivery points (national, district, municipal) • standard operating procedures • • reliable data model and quality standards	• Infrastructure need not be built all at once. Countries may start with local registers, lightweight systems or phased deployment, as long as data can later migrate to national platforms.
6. **Implement cost-effective,**	Key actions include: • adopting Fit-For-Purpose methodologies	• Countries should also explore contributory / co-financing models, where

	scalable first registration	• using low-cost imagery and simplified boundary methods • avoiding expensive, precision-survey requirements where unnecessary • applying systematic, area-wide registration using digital capture from the outset	beneficiaries pay affordable fees for registration, reducing the financial burden on government.
7.	**Analyse operational costs and introduce business planning**	A Sustainable Finance approach requires: • activity-based costing of all land services • identification of salary, overhead and transaction costs • multi-year cost projections • performance indicators for productivity, revenue and efficiency • annual business plans linking outputs to budgets • • regular financial reporting and monitoring	• This ensures agencies understand their true cost structure and can improve performance over time.
8.	**Undertake a detailed land market assessment**	Governments need to understand: • transaction volumes and types • formal vs. informal markets • valuation patterns • market bottlenecks and distortions • investor incentives • geographic “hot spots” for land activity	• This informs revenue expectations and identifies targeted interventions to stimulate land markets.
9.	**Identify and quantify benefits for landholders and the economy**	Countries should measure: • increases in land values • number and value of loans issued using documented land • productivity gains in agriculture • reductions in disputes • • improvements in land market activity	• Quantifying these impacts strengthens political support and makes the economic case for
10.	**Build public trust and demand for services**	Sustainable finance requires active participation of citizens and landholders. Governments should: • communicate the economic benefits of registration • ensure affordability and protect vulnerable groups • strengthen dispute resolution mechanisms • promote access to finance for landholders (microfinance, mortgages)	• Demand-side incentives are essential to increasing service uptake—and revenue.
11.	**Develop a national Strategic Plan and Annual Business Plan**	The Strategic Plan (3–5 years): • sets out the vision for sustainable financing • identifies transition pathways • aligns investments with revenue opportunities • integrates institutional, legal and financial reforms • coordinates national and local responsibilities The Annual Business Plan operationalises this through: • output targets • cost and revenue monitoring • financial performance indicators • annual updates of benefits and readiness	• This becomes the backbone of the sustainability agenda.
12.	**Pilot, adapt, and scale**	Countries should: • pilot sustainable finance initiatives at district or urban levels • test contributory models • trial revenue improvements (e.g., property tax strengthening) • refine IT and administrative systems • scale successful components progressively nationwide	• This reduces risk and builds institutional learning.

Summary: The 12 Essential Steps

1. Diagnose the current system and context
2. Apply readiness and benefits tools
3. Analyse all forms of land-based revenue
4. Engage early with Ministries of Finance, Revenue Authorities, and Development Partners
5. Build or strengthen land administration systems
6. Implement low-cost, scalable first registration
7. Quantify benefits for landholders and the economy
8. Introduce costing and business planning
9. Conduct land market assessment
10. Quantify benefits for landholders and the economy
11. Generate public trust and demand for services
12. Develop strategic and annual plans for sustainability
13. Pilot, iterate and scale

Scaling Up

Based on the Theory of Change, and earlier work with GZ, a set of prerequisites were identified that must be in place before a sustainable finance solution can be scaled up successfully. This can be applied at local, regional level, or national level. In practice, it is recommended to work at a decentralised level as many of the sister functions such as local administration (covering planning development control, revenue generation (property tax and other local taxes) are concentrated as well. Recent examples of this include pilot work by GIZ setting out possible routes for

- Contributory model for registration and sub county revenue model (Uganda)
- Revenue Enhancement and cadastre Improvement at city level (Ethiopia)

For scaling up locally or nationally, we can identify the following prerequisites that need to be in place (Figure 12)

Figure 12. Prerequisites for scaling up the sustainable finance approach

1. **There must be a clear legal and policy framework in place embracing all tenure types**
2. **There must be efficient, established procedures for systematic and sporadic registration including digital output**
3. **There must be an existing digital land administration IT system (or one being established).**
4. **The public is able to access land administration services**
5. **There is clear public acceptance and buy in, clear incentives and benefits can be accessed or are being developed**
6. **The land administration agency has a clear strategic and business plan in place including costs, services delivery, revenues and cost recovery KPIs**
7. **There is a commitment by government, including a desire to increase land-based revenues and support from Ministry of Finance**

5. Recommendations for further work

5.1. Introduction

Developing countries face major challenges in establishing and sustaining effective land administration systems. Despite decades of investment from governments and development partners, very few countries have achieved nationwide, functional systems capable of providing secure tenure, supporting land markets, and generating land-based revenues. The traditional model—heavy upfront funding from donors, limited cost recovery, and under-resourced institutions—has repeatedly proven insufficient.

This report has proposed a Sustainable Finance approach to land administration: a shift toward financing models that mobilise domestic revenue, leverage land-based assets, ensure cost-effective operations, and generate tangible benefits for governments and landholders. The study has drawn on experience from Rwanda, Uganda, Tanzania, Ethiopia, Malawi, Burundi and others, and provides practical tools to support adoption, including a Theory of Change, a Benefits Calculator, and a Readiness Assessment.

A key shift in thinking is to focus on transition pathways to allow land administration reform to move from whatever the current state of development in a country is, to one where land administration is seen as the key foundational element underpinning wide economic benefit and able to support very significant financial flows benefitting both citizens and increasing domestic revenues.

5.2 Specific Recommendations

Specific Recommendations to test the methodology

1. Develop and test the Benefits Calculator and readiness in 5–10 diverse countries (as set out in section 4)
2. Conduct longitudinal studies of Rwanda, Ethiopia, and Tanzania experiences
3. Pilot innovative financing mechanisms in 2–3 countries
4. Establish a global tracking system for costs and revenues

Recommendations for further research

The following recommendations for further research work will help to build the global evidence base and advance the state of knowledge. The recommendations are grouped as follows and are described in more detail in Table 14.

8. Standardised Measurement and Evaluation
9. Political Economy and Behavioural Factors
10. Land Markets and Economic Linkages

11. Equity and Inclusion
12. Technology and Digital Transformation
13. Sectoral Integration
14. Comparative Studies and Evidence Creation

It is recommended that the suggestions below are discussed and coordinated with partner governments and other development partners.

Table 14. Recommendations for Further Research Work

Focus	Research Priorities	Key questions
8. Standardised Measurement and Evaluation	**Develop standardised methodologies for costing and impact measurement** • Create universal costing frameworks that allow true comparison across countries and programmes • Develop standardised indicators for financial performance, cost recovery, and sustainability • Establish methodologies to track long-term revenue impacts (5–20 years) • Design tools to capture indirect economic benefits and multiplier effects • Research optimal data collection intervals and monitoring frameworks	• What are the true full-cycle costs of establishing land administration systems? • How can we accurately attribute revenue increases to land administration improvements? • What are appropriate benchmarks for different country contexts?
9. Political Economy and Behavioural Factors	**Understand demand-side dynamics / willingness to pay** • Investigate determinants of citizen willingness to pay for land services across different contexts • Study behavioural triggers that increase voluntary registration and service uptake • Analyse the political economy of revenue retention vs. centralisation • Research how to build and maintain public trust in land institutions • Examine the role of social norms and peer effects in registration decisions	• What drives variation in willingness to pay across communities? • How do political cycles affect land administration reform sustainability? • What messaging and incentives most effectively drive voluntary registration?
10. Land Markets and Economic Linkages	**Quantify land market impacts and feedback loops** • Establish clear causal links between land administration improvements and market outcomes • Research the relationship between registration coverage and market formality thresholds • Study urban vs. rural market dynamics and their revenue implications • Investigate the impact on credit markets, agricultural productivity, and investment • Analyse gentrification and displacement risks from formalisation	• At what registration coverage level do formal markets become self-sustaining? • How do improved land administration systems affect agricultural productivity and rural incomes? • How do we quantify the benefits of functioning land markets for landholders?
11. Equity and Inclusion	**Ensure sustainable finance approaches are pro-poor and gender-responsive** • Research differential impacts on women, youth, and marginalised groups • Study how fee structures affect participation of poor households • Investigate models for subsidising vulnerable groups without undermining sustainability	• How can contributory models avoid excluding the poorest? • What are the gender-differentiated impacts of different financing approaches?

		• Analyse the intersection of customary and formal systems in financial sustainability • Research how to prevent elite capture of benefits	• How do we balance customary authority with sustainable formal systems?
12.	**Technology and Digital Transformation**	**Assess technology's role in reducing costs and improving sustainability** • Evaluate cost-effectiveness of different digital solutions (central versus local registers, cloud, proprietary vs. open source) • Research the potential of AI and machine learning for automated registration • Study mobile technology's role in service delivery and payment systems • Investigate interoperability standards and data sharing protocols • What standards can be developed for data sharing across land administration systems	• What is the true cost reduction potential of different technologies? • How to build in interoperability at early stage? • What are minimum viable digital systems for different contexts?
13.	**Sectoral Integration**	**Explore linkages with other development sectors** • Research integration with national ID systems, civil registration, address systems • Study connections to agricultural extension, credit, and insurance programmes • Investigate links to urban planning, infrastructure investment, service delivery • Analyse integration with climate adaptation and disaster risk management • Research connections to social protection and poverty reduction programmes• •	How can land administration systems leverage and support other sectoral investments? • What are the efficiency gains from integrated approaches? How do we avoid duplication across sector programmes?
14.	**Comparative Studies and Evidence Creation**	**Build the global evidence base** • Conduct systematic reviews and meta-analyses of existing evidence • Develop typologies of sustainable finance approaches for different contexts • Create decision-support tools for selecting appropriate models • Build a global database of costs, revenues, and performance indicators • Establish communities of practice and knowledge-sharing platforms	• What patterns emerge from cross-country comparisons? • Which approaches work in fragile and conflict-affected states? • How do we adapt models across different legal frameworks?

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Annex A. Developing Sustainable Finance Solutions – Recent country Experience

Introduction

The Table below provides a summary of the case studies used to develop and support this overall knowledge product. The case studies are derived from work undertaken in seven different countries supported by GIZ, MCC, RVO, UK FCDO, USAID,.

Table A.1: Recent experience of developing sustainable finance approaches *(from Baldwin and Sanjak, 2025).*

Sustainable financing approach	Approach and Country	Brief Summary
Sustainable financing for First Registration	**Self-financing approach, Uganda** **See Case Study A.1.**	• Ony some 75,000 customary land parcels mapped so far out of estimated 18 million in Uganda • Building on GIZ registration initiatives (involving 20,000 parcels in 4 districts, 11 sub counties), now have initiated a self-financing approach that can be scaled up • Approach uses a self-financing/contributory model that finances land services through fee collections from Landowners to enable land registration activities by mandated government structures leading to the issuance of land certificates • Tested in Bululu and now being implemented in two districts and seven sub counties. Average costs to land holder are 55,000 UGX per land holder • Digital National Land Information System (NLIS) in place at MZO offices across country and aim is to upload land certificates from the programme. Initiative now being adopted and supported by Ministry at national level
	Contributory Model, Tanzania **See Case Study A.2.**	• Design and implementation of a beneficiary contribution model as a sustainable approach to support village land registration and land use planning processes. Implemented by LTA-NGO • Implemented village land registration across several districts, including Iringa, Kilolo, Mbarali, and Wanging'ombe. Most recently 10,000 CCRO (Certificates of Customary Right of Occupancy) issued in Wanging'ombe District. More than 45,000 CRO have been issued this way to date. • The implementing NGO has Identified additional channels for financial support of most poor community members • Typical costs to landholder are 50,000 TzS (around 20 USD)
Sustainable financing of operations and service delivery	**Cost Recovery through transaction income Rwanda** **See Case Study A.3.**	• Rwanda has largely completed registration of land with over 11 million parcels (by 2016) and by 2025 has 450,000-500,000 transactions annually • Introduced Private Notaries, Private surveyors, flexible working of Registrars, all digital titles and on-line transactions and payments • By 2025 the land administration sector is estimated to have achieved over 80% cost recovery for the last three years if considering all

		transaction fee income (and the replacement stamp duty from Nov 23) and will be 100% by end of 2025 (but note most income goes via treasury0 • Total revenues from transactions (2011-2025) have generated revenues approaching the original Development Partner investment in the registration programme (£70 million USD)
	Business plan approach, Burundi See Case Study A.4.	• Testing a Business Plan to encourage uptake of land certificates and registration by new title holders in return for fee payments • Tested the plan in Nyanca Lac – Over 40,000 plots registered at average cost of around 25,000 BIF, total is over 350,000 USD representing some 30% of Commune annual budget • Approach is to explicitly considering costs and revenues from registration activities – also reduce disputes - 55% of court cases concern land disputes
Sustainable Financing for Programme Design	**Revenue led approach, Malawi See Case Study A.5.**	• Rigorous evaluation of existing cost and revenue structures, service delivery and financial optimisation of organisational solutions for decentralised land administration and service delivery • Sharing of services and more flexible working practices • Identification of revenue led approach to kick start and progressively fund land administration reform/upgrade through market-based approach to ground rents • Strong focus on revenue growth, revenue retention agreed with Ministry of Finance
Value added – Access to Finance	**Access to Finance and sustainable rural land administration – Ethiopia See Case Study A.6.**	• Rural land registration now approaching 30 million out of 560 million parcels, 20+ million parcels in the NRLAIS digital system • Rural Transfer fees being introduced (Amhara), initial results show 24% cost recovery, willingness to pay surveys show landholders consider • Mobile land offices and more flexible working introduced, monitoring of costs and revenues • Emphasis moving to sharing of urban/rural land administration services • Programme of SLLC supported loans - by March 2025, a total of 3 billion ETB (~ 20 million USD) disbursed through over 300 branches to 70,000 applicants. Loan amounts vary, ranging from a minimum of 50,000 ETB to a maximum of 200,000 ETB. • Now moving to sharing of urban/rural land administration services, emphasis on developing a sustainable system from financial and performance view.
Land value Assessments	**Land value capture Somalia See Case Study A.7.**	• Land value capture as a tool to fund security of tenure. Effective land use and urban infrastructure for displaced communities • Proposal for introduction of progressive property tax system based upon land value and existing municipal structures
Integrated approach for cost effective land formalization (first registration)	**Integrated approach, Colombia**	• Integrated approach to improve conditions of rural households for economic development based on land tenure • Developed tool, methodology and information system to calculate cost/time per parcel. Achieved cost reduction of 72% as compared to base line upon implementation of 10 municipal pilot projects with different geographic, conflict and security conditions • Designed, established more than 30 municipal land offices improving local land management and tax collection

A.1. Uganda

Sustainable Finance / Cost Recovery Initiative /Short Case Study	
Country name / Location	**Uganda**
Date submitted:	03/04/2025
Respondent (name)	Mrs. Dorcus Okalany
Contact details (Tel, email)	
Organization / project name (if relevant)	Ministry of Lands, Housing and Urban Development, Uganda/ Responsible Land Policy in Uganda

1. Please indicate the principal nature of the sustainable finance initiative

- ☐ First registration – contributory model or self-financing
- ☐ Cost recovery of operations /sustainable financing
- ☐ Outsourcing to private sector / Institutional reform
- ☐ Demand side incentives and benefit sharing / creation
- ☐ Revenue Enhancement
- ☐ Other (please specify//…)

2. Background: brief statement about the background situation

(Insert brief statement about the background situation) –.

In 2013, the Government of Uganda formulated a comprehensive National Land Policy (NLP) as a policy framework for the efficient, equitable, and optimal utilization and management of Uganda's land and land-based resources for poverty reduction, wealth creation, and overall socio-economic development of the Country. The Ministry of Lands, Housing and Urban Development rolled out its implementation through two implementation Action Plans drafted in 2015-2018 and 2019-2021. After 10 years of implementation, the Uganda NLP 2013 is set for review and revision. The review and revision process will build on experiences thus far and lessons learnt to date. Over the decade several stakeholders and development actors have identified issues requiring further policy intervention either through their engagement in the implementation process, studies or in interaction with communities and citizens of Uganda. One such initiative is the self-financing approach which adapts the full and direct technical cooperation support by the BMZ commissioned Responsible Land policy in Uganda project.

While technical cooperation is there to help develop and prove the concept, these projects are unlikely to ever have the financial means to cover the demand nationwide in Uganda. There is renewed interest from both governments and development partners in leveraging various own source revenues to drive sector reform. For this, a mindset shift is needed from project logic with limited timeframes towards continuous land service provision, by the mandated structures. (adapted from self-financing policy brief)

3. What was the specific aim of the initiative and how did it come about – what were the drivers…

Please explain what was the rationale that drove the initiative – what was the initiative, and why did it come about? Who was involved. And what were the problems in getting it started and how are they addressed

The rationale for the initiative was to have a sustainable mechanism for continued land registration and updates as donor funding is time bound. The initiative was self-financing model of Land registration, and it was triggered by the overwhelming demand for land services from communities and willingness of the community leaders to adopt the process.

Communities and their duty bearers / stakeholders are involved in the process entailing awareness creation, alternative dispute resolution and land documentation using fit-for purpose approaches and technologies.

There were capacity challenges in starting process and mindset change for many communities on the need to pay a minimal fee for land services delivery. This was achieved by holding consultative meetings on fee setting, capacity building of the duty bearers and giving technical back stopping for the process to thrive.

4. Description of the intervention / initiative

Short description of the initiative. If there is a Theory of Change for this initiative, please attach it to the end of this form.

Self-financing/contributory model is a model that relies on financing land services through fee collections from Landowners to enable land registration activities by mandated government structures leading to the issuance of land certificates. The purpose of this initiative was to devise a sustainable mechanism of security of tenure allowing that no one is left behind unregistered and to inculcate a registration culture with the aim to have ensure updating of land registers. Not only does it focus on documentation of land but also awareness creation / education on land rights, out of court resolution of land disputes and investment related grievances.

5. Results

Please summarise briefly the results to date and please give some quantitative figures -how many households or parcels involved, over what period, revenues generated, costs covered etc. If appropriate give the number of transactions or indicate revenues etc.

The total number of parcels involved, that have picked applications for the process to commenced in their villages is 929 from Teso and Lango region. This is from 07 sub counties without the consideration of areas that self-financing has been scaled to.

6. Political economy considerations

Are there any political economy considerations that you think are important for this kind of approach and what do you see as possible barriers/ bottlenecks in scaling up this process. What is the reaction of a) the public, b) the local institutions.

Initial consultations with political and administrative heads to secure buy-in are paramount. Proposal, discussions and consensus on land fees to be charged by the district local authorities is necessary. Policy and legal frameworks for local administration and land management are already in place and in support of land fees setting. Self-financing fees are set slightly higher than the established statutory fees to be able to meet the prevailing related land registration costs. Still, community awareness needs to be created to leverage on the economies of scale from systematized land documentation as individual applications would necessitate higher fees charged.

The public has mixed reactions to the approach, though to a larger extent the approach is a good initiative to a long-lasting remedy for land service delivery. Introduction of self-financing after non-fee collection related support to communities' delays community buy-in for previously assisted communities. However, the systems capacities must be strengthened. The local institutions have limited capacities, and this has to be addressed upon buy-in by the local authorities as a means to kick-start land documentation activities. A possible barrier to scaling up the approach is the reluctance to create annual budget lines at the subcounty level to manage land activities.

7. Lessons learned and scaling up

What lessons have been learned from this initiative and how can it be scaled up. Is it the intention to scaleup? And how will that happen.

For the initiative to succeed kick-start capacity enhancement must be done at all levels. Institutionalisation of knowledge improvement trainings through a master trainer capacity building cascade, execution of activities and backstopping for quality assurance is key. Retooling mandated structures with necessary equipment is vital. Political and community leaders need to lead by example by having their own land mapped. Strengthening of ADR committees to support vulnerable persons in land dispute and grievances resolution is critical. Scaling up is possible and it starts from the willingness of neighbouring sub counties to adopt the initiatives. Then local governments need to integrate and prioritize land service provision in their annual plans and budgets.

8. Risk and mitigating actions

What do you see as the main risks with this kind of approach and what are the mitigation strategies.

Social accountability and transparency - Corruption risk tendencies with respect to the management of collected land fees is a foreseeable risk. Corruption risk can be mitigated through devising social accountability and transparency mechanisms, creating awareness and building capacities of the responsible stakeholders. Participatory corruption risk mapping to collaboratively and constructively identify transparency gaps is beneficial. Ring-fencing collected land fees for the effective delivery of land services is critical. While a systematic approach is preferred and leverages on economies of scale, fee collection results in a less systematic process with higher cost of service delivery owing to an inability to pay by some. CSOs have a continuing role in policy implementation and oversight with respect to advocating for transparency in self-financed land services delivery.

9 Anything else?

Please add anything else that you wish to highlight and feel free to annex reports, diagrams etc.,

Self-financing costs are further reduced with input from the sectoral responsible Ministry including the free of charge provision of background ortho-photos/imagery and facilitation of ToT trainings as opposed to reliance of external consultants. It is cost saving to rely on local authority human resources for awareness, ADR and land mapping as opposed to outsource services.

Annex 1: Self-financing policy brief 240601_Policy Paper_self-financing UG_GPRLP_chk.pdf

A.2. Tanzania

Sustainable Finance / Cost Recovery Initiative /Short Case Study (3 pages max, not including annexes)	
Country name / Location	**TANZANIA**
Date submitted:	April 30 2025
Respondent (name)	MUSTAPHA NURDIN ISSA
Contact details (tel, email)	
Organisation / project name (if relevant)	TANZANIA LAND TENURE ASSISTANCE

1. Please indicate the principal nature of the sustainable finance initiative	
☐ First registration – contributory model or self-financing	☐ Cost recovery of operations /sustainable financing
☐ Outsourcing to private sector / Institutional reform	☐ Demand side incentives and benefit sharing / creation
☐ Revenue Enhancement	☐ Other (please specify//…)

2. Background: brief statement about the background situation

(Insert brief statement about the background situation)-

The Tanzania Land Tenure Assistance (TLTA-NGO) has adopted a beneficiary contribution model as a sustainable approach to support village land registration and land use planning processes. Under this model, village residents voluntarily agree to participate by contributing a fixed amount per Certificate of Customary Right of Occupancy (CCRO). These contributions are deposited into a local bank account and managed by a specially elected village committee, ensuring transparency and local ownership of the process.

The funds collected are used to cover a wide range of essential activities, including the rectification of village boundaries, preparation of Village Land Use Plans (VLUPs), rehabilitation of Village Land Registries for the secure storage of CCROs, and the registration and issuance of CCROs. The contribution amount is designed to cover all related costs such as payments to community and district staff, transportation, stationery, printing, and production.

Despite the financial constraints faced by TLTA-NGO, the organization has continued to implement this self-financing modality effectively. It has made significant progress in supporting village land registration across several districts, including Iringa, Kilolo, Mbarali, and Wanging'ombe.

3. What was the specific aim of the initiative and how did it come about – what were the drivers…

Please explain what was the rationale that drove the initiative – what was the initiative, and why did it come about? Who was involved. And what were the problems in getting it started and how ae they addressed

The village land titling program in Tanzania was initiated with the goal of strengthening land ownership and promoting sustainability through the issuance of Certificates of Customary Right of Occupancy (CCROs). A key rationale driving this initiative was to foster a deeper sense of ownership and responsibility among community members, which is essential for long-

term stewardship of land resources. Recognizing that local engagement is critical for sustainability, the program sought to involve Local Government Authorities (LGAs) more directly in land registration activities.

The initiative brought together multiple stakeholders, including village residents, village leaders, and government officials at various levels. By integrating the efforts of these groups, the program aimed to build local capacity and accountability, ensuring that land rights were properly recorded and respected.

However, the implementation faced significant challenges. Chief among them was the inability of some community members—particularly women and people with disabilities—to afford the costs associated with land registration. This posed a risk to the inclusivity and equity of the program. To address this, the initiative partnered with external organizations such as Land Bridge, which provided funding to cover CCRO fees for women, thereby promoting gender equity in land ownership.

Additionally, the timing of program activities presented logistical difficulties, as they initially conflicted with the agricultural calendar. To mitigate this, the program was adapted to a seasonal schedule: activities were paused during the farming season (December to April) and resumed during the harvesting season (May to November). This adjustment allowed villagers to participate without compromising their agricultural responsibilities, ultimately improving community participation and the program's overall effectiveness.

4. Description of the intervention / initiative

Short description of the initiative. If there is a Theory of Change for this initiative, please attach it to the end of this form.

A beneficiary contribution model as a sustainable approach to support village land registration and land use planning processes. Under this model, village residents voluntarily agree to participate by contributing a fixed amount per Certificate of Customary Right of Occupancy (CCRO). These contributions are deposited into a local bank account and managed by a specially elected village committee, ensuring transparency and local ownership of the process.

The funds collected are used to cover a wide range of essential activities, including the rectification of village boundaries, preparation of Village Land Use Plans (VLUPs), rehabilitation of Village Land Registries for the secure storage of CCROs, and the registration and issuance of CCROs

More than 45,000 plots covered in total with average cost to landholder being 50,000 TzS

5. Results

Please summarise briefly the results to date and please give some quantitative figures -how many households or parcels involved, over what period, revenues generated, costs covered etc. If appropriate give the number of transactions or indicate revenues etc.

Notably, in the 2024–2025 period, over 10,000 Certificates of Customary Right of Occupancy (CCROs) were successfully issued to village residents in Wanging'ombe District alone, demonstrating the effectiveness and resilience of the self-financing modality.

6. Political economy considerations

Are there any political economy considerations that you think are important for this kind of approach and what do you see as possible barriers/ bottlenecks in scaling up this process. What is the reaction of a) the public, b) the local institutions.

Yes, there are several political economy considerations that are critical for the success and scalability of the beneficiary contribution model for village land registration in Tanzania. Understanding the incentives, power dynamics, and interests of key stakeholders is essential for navigating challenges and maximizing impact. The following are key political economy consideration:

Local Power and Political Interests:
Village leaders often play a central role in mobilizing communities and implementing land registration processes. However, some may exploit the initiative for political gain—delaying processes, spreading misinformation, or promising free land titles to gain favor during elections. This undermines the integrity of the self-financing model and can reduce public trust.

Misinformation and Lack of Transparency:

One of the major bottlenecks is the circulation of misinformation, particularly regarding land rent and fees associated with CCROs. Some residents may be misled into believing that the government or NGOs should provide the service for free, which can lead to resistance or withdrawal from the process.

Coordination Between Institutions:
While TLTA-NGO and village committees may be well-aligned, coordination with district and regional land offices is crucial. Delays in technical approvals, staffing shortages, or shifting priorities at the government level can hinder timely implementation and scalability.

Capacity of Village Committees:
Although village committees are tasked with managing funds and implementation, they often lack adequate financial management skills, which can lead to inefficiencies or even misuse of funds. Capacity building is necessary to ensure accountability and sustainability.

7. Lessons learned and scaling up

What lessons have been learned from this initiative and how can it be scaled up. Is it the intention to scaleup? And how will that happen.

Key Lessons Learned:

Community Willingness to Pay Exists:

A major lesson from this initiative is that village residents are willing to contribute financially to secure their land rights when the process is transparent, well-organized, and delivers tangible benefits. This challenges the assumption that rural communities cannot or will not pay for land registration.

Local Ownership Promotes Sustainability:

Entrusting village committees with fund management and oversight has promoted a strong sense of ownership, increased transparency, and enhanced community trust in the process.

Strategic Partnerships Are Essential:

Collaborations with organizations like Land Bridge to support vulnerable groups (e.g., women and people with disabilities) demonstrate the value of targeted support within a broader cost-recovery framework.

Timing and Flexibility Matter:

Adjusting the implementation timeline to avoid the farming season significantly improved participation and logistical feasibility, showing that flexibility to local rhythms is crucial for success.

Political Influence Must Be Managed:

Addressing political interference and misinformation from local leaders is necessary. This requires clear communication strategies and political engagement to align incentives.

8. Risk and mitigating actions

What do you see as the main risks with this kind of approach and what are the mitigation strategies.

Main Risks:
Limited Access to Financial Services in Villages:
Many villages lack reliable financial institutions or mobile money services, making it difficult to collect and securely manage contributions from residents. This can delay implementation and reduce community participation.

Exclusion of Vulnerable Groups:
Women, elders, and people with disabilities, who often have limited access to income, risk being left behind if they cannot afford the required contributions. This undermines the equity and inclusiveness of the program.

Mismanagement or Misuse of Funds at Village Level:
Without proper training and oversight, village committees managing the funds may face challenges with financial accountability, leading to mistrust or project failure.

Community Fatigue or Distrust Due to Misinformation:
Confusion or deliberate misinformation about land rent, ownership rights, or the role of the government can create resistance and reduce participation.

Mitigation Strategies:
Partnering with Financial Institutions:
Collaborate with local banks and mobile money providers to deploy agents within villages for fund collection. These agents can facilitate secure, accessible, and transparent transactions while building community trust in the process.

Subsidizing the Cost for Vulnerable Groups:
Continue partnering with NGOs and donor organizations to cover registration costs for women, elders, and people with disabilities. This ensures that no one is excluded due to financial barriers.

Capacity Building for Village Committees:
Provide targeted training on financial management, record-keeping, and transparency practices to the committees responsible for handling community funds. Regular audits and oversight mechanisms can further improve accountability.

Clear Communication and Public Awareness Campaigns:
Use community meetings, local radio, posters, and storytelling to clarify the process, roles, and benefits of land registration. Address myths and misinformation proactively, especially during politically sensitive periods.

Flexible Payment Options:
Explore the use of installment-based payment plans or seasonal contributions aligned with harvest times, to make it easier for residents to pay without disrupting their livelihoods.

9 Anything else?

Please add anything else that you wish to highlight and feel free to annex reports, diagrams etc,

1. Commitment to Equity and Inclusion:
Tanzania Land Tenure Assistance (TLTA-NGO) is strongly committed to ensuring that land registration efforts are equitable and inclusive. A top priority moving forward is to secure funding to subsidize the cost of Certificates of Customary Right of Occupancy (CCROs) for marginalized groups, particularly people with disabilities, women, and elders, who often lack the financial capacity to participate.

2. Strengthening Operational Capacity:
To scale and sustain its land registration model, TLTA-NGO also seeks support to cover essential operational costs. These include:

- Procurement of digital infrastructure (e.g., servers) for secure land data storage and management.
- Enhancement of data management systems to improve service delivery.
- General NGO operational expenses necessary to manage and expand field activities.

3. Leveraging a Proven, Community-Owned Model:
The success of TLTA-NGO's beneficiary contribution approach, demonstrated by the issuance of over 10,000 CCROs in Wanging'ombe District in 2024–2025, offers a scalable and locally owned model. With additional support, this initiative can expand to more districts while ensuring no one is left behind.

4. Opportunities for Strategic Partnerships:
TLTA-NGO is open to collaboration with government entities, financial institutions, NGOs, and donor agencies. These partnerships can:

- Facilitate cost-sharing mechanisms.
- Support technical training and capacity building.

- Expand the reach of land registration to underserved communities.

A.3. Rwanda

See ***Case Study#2 – Establishing nationwide land administration system -Rwanda*** , *section 2.4 of main report*

A.4. Burundi

Sustainable Finance / Cost Recovery Initiative /Short Case Study (3 pages max, not including annexes)	
Country name / Location	**Burundi**
Date submitted:	28.04.2025
Respondent (name)	**Remy Ndayiragije**
Contact details (tel, email)	r
Organisation / project name (if relevant)	Amahoro@Scale

9. Please indicate the principal nature of the sustainable finance initiative	
☐ **First registration – contributory model or self-financing**	☐ Cost recovery of operations /sustainable financing
☐ Outsourcing to private sector / Institutional reform	☐ Demand side incentives and benefit sharing / creation
☐ Revenue Enhancement	☐ Other (please specify//…)

10. Background: brief statement about the background situation

(Insert brief statement about the background situation)-

The payment and withdrawal of the certificates and the registration of land have been challenging. The rate of people who actually buy the land after then Land tenure Registration process was relatively low in previous communes (municipalities). The costs and distance to the commune that need to be bridged to get certificate form a hindrance for people to actually withdrawal the certificate. Also many people feel that the land certificate is safer when it remains at Communal Land service office.

To assure the sustainability of the SFC registry it was needed to increase the number of payment/withdrawal and registration of land transaction. If not registered transaction, the registry it self will become quickly outdated. Furthermore if citizens do not retrieve and pay their certificate the benefits of registration are diminished .

For Amahoro@Scale programme, a strategy has been developed such a business model with intensive awarenes raising campaigns and engaging Local authorities from the colline (village) Level up national level and more involvement of the communal (municipality) land service to visit and delivering certificate for all who are willing to pay instead of requiring from land owners to come the communal land services.

The most important was to engage the communal (municipality) to translate the Land revenue in Communal Budget .

The Nyanza -Lac commune (municipality) budgeted only for the 11 Colline (Village) out of 26 a total amount of 344,600Euro representing 30% of the communal annual budget (2025-2026).

This revenue will be not helping only for the operationalization of Land service but also will support the commune for more investissement for social infrastructure such Education and health

11. What was the specific aim of the initiative and how did it come about – what were the drivers…

Please explain what was the rationale that drove the initiative – what was the initiative, and why did it come about? Who was involved. And what were the problems in getting it started and how ae they addressed

The project aim to scal up the Land Tenure Registration for Burundi and generate evidence **of cost-efficiency throughout a business Model.**

The Land tenure registration used to be alone without the component of land administration and land governance. The tactic of generate evidence in term of the potential cash payment (source of revenue for the commune) and sharing this information at both communal Level and national was missing in previous proposal. The LTR was for free of charge while people are willing to pay and support the land services for sustainability perspective resulting of less interest to the communal authority to support the services

12. Description of the intervention / initiative

Short description of the initiative. If there is a Theory of Change for this initiative, please attach it to the end of this form. (See business Model in annexe)

13. Results

Please summarise briefly the results to date and please give some quantitative figures -how many households or parcels involved, over what period, revenues generated, costs covered etc. If appropriate give the number of transactions or indicate revenues etc.

Coût moyen de retrait d'un certificat foncier à Nyanza Lac , Aout 2024 *: taux de change, 2908BIF/$*

Colline	Number of plot	Total cost in BIF/ Colline	Average cost /certificate (BIF)
RUVYAGIRA	3296	85 977 526	26 085
RANGI	1864	55 842 339	29 958
Gisenga	4812	127 115 578	26 416
Mukimba	3989	94 649 446	23 728
KABO	2373	61 837 867	26 059
RIMBO	2415	59 274 501	24 544
KIDEREGE	3050	81 627 423	26 763
BUHEKA	4150	104 544 363	25 191
Kabonga	3296	85 977 526	26 085
NYABIGINA	4812	127 115 578	26 416
Muyange	6451	149 837 030	23 227
Total	**40 508**	**1 033 799 177**	**25 521**

It is equivalent of 344 600 Euro representing 30% of the Communal annual Budget for 2025 -2026

14. Political economy considerations

Are there any political economy considerations that you think are important for this kind of approach and what do you see as possible barriers/ bottlenecks in scaling up this process. What is the reaction of a) the public, b) the local institutions.

The model developed in this program inspires national policy on land administration and governance. It inspires both the political choices of decentralized land management, by enabling the resolution of land conflicts, and by treating land as land capital for certificate holders.

The model also outlines how land services should be managed and operated in an inclusive way, enabling women legally married in a community of property regime to assert their rights.

Actually there is the government willing to scale up with the large support of the central government and the National Land commission . The guideline to establish a communal land service has been developed by the programme and approved by the government (The ministry in charge of Land).

This business model suggests technical manuals for setting up and running communal land services, as well as tools for managing these services.

The main challenge should be the new changing communal administration (administrative reorganisation)which may slowdown the speed for scaling up

15. Lessons learned and scaling up

What lessons have been learned from this initiative and how can it be scaled up. Is it the intention to scaleup? And how will that happen.

- **The OGR registration approach** guarantees the performance of the communal land service Even if it's expensive it is also very inclusive
- **A certificate Withdrawal strategy:** Mobilization alone is not enough, but transparency in the collection of these revenues is improving the mobilization of these local resources. Not only could this revenue guarantee financial viability, it could also increase the commune's investment capacity.
- **Accounting for land registration revenues**: The lack of awareness of land registration revenues means that communes attach little importance to communal revenues.
- **Communal (municipality) Land services budget**: If the service is unable to deliver quality services, it becomes less efficient and discourages the securing of land rights because people pay and wait 5-6 months to receive their certificates, which breaks the enthusiasm of the population to collect their certificates.
- **Collaboration between services**: Securing land tenure not only enables land conflicts to be managed, but also guarantees holders access to financial capital, either in the form of a bank mortgage or a rental contract. These products involve other players such as microfinance institutions/banks and the courts..
- **Women's land rights**: Grouped recognition registration guarantees land rights for legally married couples (Code de la personnes et des familles), but must be backed up by registration of the spouse's name on the land certificate.
- **Land rights for the landless**: A good number of Burundian people remain landless while there are state lands that can be reallocated in protected areas, but also by giving a good proportion to the landless to connect them into the production chain and contribute effectively to national development. This would make for good advocacy

16. Risk and mitigating actions

What do you see as the main risks with this kind of approach and what are the mitigation strategies.

- **The conflict between the government and private related to land** : The programme have been engaged to facilitate the dialogue on such matter however 2 villages (more than 800Household) were refused because they are told that they living in a national Reserve (more than 50 years)
- **The new administrative reorganization** : The land service may not be a priority and get less resources : The programme is engaged in the negotiation with the Technical Working Group to ensure the legal frame give space to land services and Technical resources as well.

9 Anything else?

Please add anything else that you wish to highlight and feel free to annex reports, diagrams etc,
Attached the poster for the Business Model

A.5. Malawi

Sustainable Finance / Cost Recovery Initiative /Short Case Study	
Country name / Location	**Malawi**
Date submitted:	May 2025
Respondent (name)	Based on WB 2025 paper: "*Developing cost effective land administration and revenue enhancement in Malawi"* by Devie Chiloga, Pamela Kanonga, Eunice Kaipsya
Contact details (tel, email)	
Organisation / project name (if relevant)	Ministry of Lands programme preparation: Session: Sustainable Financing For Effective Land Administration: Developing cost effective land administration and revenue enhancement in Malawi

17. Please indicate the principal nature of the sustainable finance initiative

- ☐ First registration – contributory model or self-financing
- ☐ Cost recovery of operations /sustainable financing
- ☐ Outsourcing to private sector / Institutional reform
- ☐ Demand side incentives and benefit sharing / creation
- ☐ Revenue Enhancement
- ☐ Other (please specify//…)

18. Background: brief statement about the background situation

(Insert brief statement about the background situation)-

Responsibility for land administration at the national level in Malawi is invested in the Ministry of Lands. Until December 2021, the Ministry was designated the Ministry of Lands, Housing and Urban Development (MOLHUD). However, from early 2023, the urban development function has been transferred to the Ministry of Local Government, Unity and Culture (MOLGUC). Land administration services are provided through the central headquarters and other offices located at the regional and district levels. Both a deeds registration system and a title registration system exist.

The Deeds Registry dates from 1893, and all deeds from across the country are registered sequentially at a single Deeds Registry in Lilongwe. By January 2023, over 100,000 deeds have been registered. Applications were accepted at the district offices across the country and are forwarded to the Deeds Registry for processing. Title registration covers only the declared registration districts of Zomba, Lilongwe, Blantyre, Kasungu, Mzuzu, and Karonga and these records are processed and managed by title registries in Mzuzu (Mzuzu and Karonga), Lilongwe (Lilongwe and Kasungu), and Blantyre (Blantyre and Zomba).

Historically, registration has been centralised and paper-based records were stored in three Land Registries and one Deeds Registry. Recently a digital Land Information Management System (LIMS) has been developed and records are being scanned, digitised and transferred to LIMS, however many of the records are incomplete or are known to require updating. Moreover, it is only Deeds and Leases which are registered. A large-scale customary land registration is yet to start, although extensive pilots have been undertaken, and methodologies and procedures developed, tested and documented.

Altogether, until 2024, there were 28 district land offices and three regional land offices (four for physical planning). The MOL was responsible for all staff at HQ and the regional offices (including the registries), however, at the district level, some staff were Ministry staff, and some were local government staff deployed at District (it also varies from one district to another) .

Devolution of Land Administration Functions

Malawi's National Decentralisation Policy was developed and then enshrined in the 1998 Local Government Act. The policy calls for the decentralization of all Ministry line functions to district, city, and municipal councils (there are 28 districts, four cities, and three municipal authorities). The revised Land laws of 2016/22 align with the decentralization principle and call for the delivery of public-facing land services to be devolved to the local council level, with the Ministry providing technical and legal oversight. The preparation for this decentralization has been going on for some time, and the Ministry of Lands has prepared a Devolution Plan which was approved in February 2023 and is now being followed.

According to the National Local Government Finance Committee (NLGFC), the devolution is supposed to transfer existing functions, resources, and budgets and does not include plans for additional resources or funds to assist with the devolution. In the case of the Ministry of Lands, the legislation of 2016 calls for establishing District Land Registries and ensuring that there is

appropriate professional staff located at the district level to undertake the land administrative functions or responsibilities. However, the District Land Registries are only in the process of being established now.ey

19. What was the specific aim of the initiative and how did it come about – what were the drivers…

Please explain what was the rationale that drove the initiative – what was the initiative, and why did it come about? Who was involved. And what were the problems in getting it started and how ae they addressed

The key objective of the current reform programme in Malawi is to provide nationwide land administration services in line with the Government of Malawi Devolution Policy and the revised land laws of 2016/2022 which provide the basis for a modern, well-functioning land administration service. An additional requirement is to do this in a cost-effective manner

Malawi is developing an approach to modernising the land administration sector based on an a more sustainable financial approach. While there have been many previous attempts, a consistent problem has been how to secure the necessary funding to modernise the land administration system and also implement the required devolution of land services as required by the National Decentralisation Policy.

20. Description of the intervention/initiative

Short description of the initiative. If there is a Theory of Change for this initiative, please attach it to the end of this form.

The approach adopted by Malawi is to provide services countrywide but in a cost-effective manner with financial sustainability as a key consideration. This means that at the outset, potential revenue streams are considered as well as how to optimise the cost for service delivery, while ensuring compliance with the 2016/2022 laws and the devolution policy., rather than trying to just implement a simple expansion programme without considering costs and revenue.

The costing analysis firstly calculates the current MOL and district costs for providing land administration services to use as a baseline. The cost of full devolution are then calculated and other alternative models are explored that may offer a more cost-effective solution.

On the revenue side, the revenues from land related activities are audited to establish a baseline, and then the potential for revenue increase is explored, on the premise that if the land administration coverage and quality is improved, how will this impact potential revenues. In the case of Malawi, there is considerable evidence that the current lease income could be substantially improved through bringing the lease records up to date and ensuring that leaseholders pay their ground rents. Potential income from customary land registration and transfers is considered to be still quite some time in the future and this is not seen as a potential source of income in the near future and is not considered.

Up until 2024, all revenues were essentially passed directly to Treasury and then MOL is financed directly from the state budget as part of the annual MOF led process. In order to make more transparent the link between land revenues and MOL actions and also incentivise the revenue collection, it has been agreed that MOL can implement a revenue retention of 25%. MOL is also interested to further develop its on-line services (via LIMS) that will also result in additional MOL revenues.

The methodology for the costing analysis is based on using actual official Ministry budgetary, revenue, and service delivery data as the baseline data. District costs were estimated based on staffing eequirements. Corresponding to this, we seek to identify the land administration services provided and the quantities of services that are delivered at present. This then allows unit costs to be established which can then be used to calculate costs and income for different scenarios.

Implications for Malawi.

The implication of this strategy is that revenues of 67.3 billion MWK will be generated, of which around 16 billion MK is used to support the revenue enhancement and collection over the nine years. Interestingly, the total cost of the optimal solution is estimated as 50.4 billion MWK over five years, meaning that the costs of the implementation of the devolution strategy will be equivalent to the ground rent income collected during the nine-year period

This model is also only assuming a very slight increase in other fee income (Table Ten) and evidence from other countries (e.g. Rwanda, Ethiopia) shows that as the overall countywide registration proceeds, so the number of transactions increases very quickly

21. Results

Please summarise briefly the results to date and please give some quantitative figures -how many households or parcels involved, over what period, revenues generated, costs covered etc. If appropriate give the number of transactions or indicate revenues etc

MOL approach. The MOL approach is to find the most cost-effective way to implement the requirement for devolution of land administration services while also increasing total revenue generation. It is frequently difficult for Ministries of Land to lobby effectively for more funds for land administration given the competing budget requirements. By carefully considering costs and

revenues as a starting point, Malawi has developed a strategy where the ongoing devolution of land services will go hand in hand with increasing revenues.

Costs of Devolution and Service Delivery: The expected costs of implementing the devolution requirements in a cost-effective manner will cost around 50.4 billion MWK with operational recurrent costs estimated at around 8.1 billion MWK per year. Over a nine-year cycle, total costs will be 82.8 billion MWK.

Revenues: On the revenue side, by negotiating a 25% retention of overall revenues (ground rent and fees for other services), MOL will be able to generate enough income through this retention to cover the additional costs of ground rent improvements and revenue collection. Over the planned nine-year period, total revenues of 67.3 billion MWK will be collected with 25% (16.81 billion MWK) retained by MOL which covers the additional ground rent costs of 15.09 billion MWK.

Implications for Malawi: The implication of this strategy is that revenues of 67.3 billion MWK will be generated, of which around 16 billion MK is used to support the revenue enhancement and collection over the nine years. Interestingly, the total cost of the optimal solution is estimated as 50.4 billion MWK over five years, meaning that the costs of the implementation of the devolution strategy will be equivalent to the ground rent income collected during the nine-year period

22. Political economy considerations

Are there any political economy considerations that you think are important for this kind of approach and what do you see as possible barriers/ bottlenecks in scaling up this process. What is the reaction of a) the public, b) the local institutions.

It is frequently difficult for Ministries of Land to lobby effectively for more funds for land administration given the competing budgets. In developing its approach, the MOL has placed the issue of obtaining financial support as a critical factor in developing a successful strategy. To support this, it has carried out a thorough analysis of the existing organisational structure and costs of land administration services to serve as a baseline and also allow comparison with other countries. It also clearly shows that there has been very little investment compared to land administration sectors in other countries .

Rather than simply adopting a “one size fits all” approach to implementing the new and laws and the decentralisation requirements, MOL has carefully considered alternative service delivery structures. Alternative structures and the organisational, staffing and cost requirements have been assessed, while also considering the demand at district level for land services.

T

Thirdly, by carefully considering costs and revenues as a starting point, Malawi has developed a strategy where the ongoing devolution of land services will go hand in hand with increasing revenues. A critical factor has been identifying suitable potential revenue sources (in this case ground rent) and putting in place measures to develop these revenues in a sustainable way, taking into account affordability, willingness to pay and market values.

In developing this approach, one of the most crucial factors has been working with partners such as the Ministry of Finance, Ministry of Local Government, DHRMD, city and municipal authorities to gain support for the initiative; including the decision to support revenue retention.

23. Lessons learned and scaling up

What lessons have been learned from this initiative and how can it be scaled up. Is it the intention to scaleup? And how will that happen.

The next steps are to continue with the devolution process, in line with the more optimal solution outlined; further support the role out and operationalisation; provide more support to the TLMA in terms of systems and processes, while developing the necessary systems to update ground rent billing and collection.services provided and the quantities of services that are delivered at present. This then allows unit costs to be established which can then be used to calculate costs and income for different scenarios.provided and the quantities of services that are delivered at present. This then allows unit costs to be established which can then be used to calculate costs and income for different scenarios.

24. Risk and mitigating actions
What do you see as the main risks with this kind of approach and what are the mitigation strategies.
9 Anything else?
Please add anything else that you wish to highlight and feel free to annex reports, diagrams etc,

A.6. Ethiopia

Sustainable Finance / Cost Recovery Initiative /Short Case Study	
Country name / Location	**Ethiopia: SLLC backed loans for rural land holders**
Date submitted:	May 2025
Respondent (name)	Extract from WB 2025 paper "*Leasing sustainable land transactions and land linked loans: Ethiopian case study*":. This extract is focused on the Land Linked Loan available to rural land holders. Woldu Tadesse Reda: Ministry of Agriculture Ethiopia
Contact details (tel, email)	
Organisation / project name (if relevant)	

25. Please indicate the principal nature of the sustainable finance initiative	
☐ First registration – contributory model or self-financing	☐ Cost recovery of operations /sustainable financing
☐ Outsourcing to private sector / Institutional reform	☐ Demand side incentives and benefit sharing / creation
☐ Revenue Enhancement	☐ Other (please specify//…)

26. Background: brief statement about the background situation
(Insert brief statement about the background situation)- In Ethiopia, the First Level Land Certification (FLLC), introduced in the late 1990s, aimed to enhance tenure security for rural households, starting in Tigray in 1998, with subsequent expansions to other regions. The Second Level Land Certification (SLLC) program was later introduced to address gaps in the system, but challenges such as slow service delivery, low landholder awareness, and limited institutional capacity have persisted, undermining the full impact of these efforts. To address these challenges, the Ethiopian Ministry of Agriculture, in collaboration with development partners, launched the Climate Action through Landscape Management (CALM) program in 2020. This initiative focuses on improving rural land administration in four key regions—Amhara, Oromia, SNNPR, and Tigray—by strengthening land registration systems, supporting the development of land markets, and increasing agricultural productivity. Additionally, the Woreda Land Administration Model Office Project and the innovative Mobile Back Office Centers aim to address operational hurdles by streamlining service delivery and improving access to land certification services, particularly in remote areas. Alongside land administration efforts, access to finance remains a significant barrier for Ethiopian smallholder farmers, who have historically been limited to group lending schemes with small loan sizes and rigid repayment terms. The inability to use land as collateral has restricted farmers' access to capital, limiting investment opportunities in land and agricultural development. Formalizing land rights through certification has the potential to unlock land as an economic asset, allowing it to be used as collateral for loans. While studies show that land titling can expand access to credit, challenges remain, particularly regarding land's illiquidity and fluctuating value. The Land Investment for Transformation (LIFT) program has piloted SLLC-linked loans, which offer more favorable terms for borrowers and are aimed at enhancing access to finance by linking land use rights with

financial products. Through these integrated approaches, Ethiopia seeks to promote sustainable rural development by combining land administration with financial inclusion, enhancing the livelihoods of rural communities.

27. What was the specific aim of the initiative and how did it come about – what were the drivers…

Please explain what was the rationale that drove the initiative – what was the initiative, and why did it come about? Who was involved. And what were the problems in getting it started and how ae they addressed

This case study is focused on the land linked loan available to land holders, thereby providing them with a direct tangible benefit from involvement in the rural land registration programme.

Secure and efficient land transactions, coupled with accessible land-linked financial services, are critical for fostering sustainable rural development. In Ethiopia, where the majority of the population depends on agriculture, land serves not only as a source of livelihood but increasingly as an economic asset. Despite significant progress made through land certification programs, including the registration of approximately 30 million rural land parcels under the Second Level Land Certification (SLLC) initiative, challenges persist in ensuring that land transactions and collateral-based lending are streamlined, equitable, and sustainable.

This study examines the Ethiopian experience in easing land transactions and facilitating land-linked credit, focusing on innovations, institutional frameworks, and implementation challenges. With legal provisions now allowing the use of certified land use rights as collateral, financial institutions have disbursed over 3 billion birrs in loans as of March 2024. However, the uptake remains uneven due to policy gaps, limited public awareness, inadequate service delivery mechanisms, and institutional capacity constraints.

The study highlights the emerging role of mobile service delivery platforms in transforming rural land administration by enhancing access, reducing transaction costs, and improving transparency. It further underscores the importance of integrated land information systems, clear and enforceable legal frameworks, tailored land valuation methods, and strengthened linkages between land governance and rural finance.

28. Description of the intervention/initiative

Short description of the initiative. If there is a Theory of Change for this initiative, please attach it to the end of this form.

The LIFT program collaborated with partner MFIs, including Omo, Siinqee (Oromia Credit & Saving S.C.), and Dedebit Credit and Saving Institution S.C. (DECSI), to formulate an individual loan product specifically tailored to farmers with SLLC. This innovative product leverages the SLLCs, providing MFIs with security based on the precise landholding size of farmers. It utilizes the produce of the land and/or the land use right as a guarantee to secure loans (LIFT, 2019). The pilot initiative expanded with substantial program support from 2017 to 2021, including technical assistance and capacity building for newly engaged financial institutions in product development, cost-benefit analysis, and default management.

Following the closure of the LIFT program, the Rural Land Administration and Use Directorate (RLAUD) continued to play a pivotal role in ensuring the sustainability and expansion of the loan product, collaborating closely with key stakeholders. entives and benefit

29. Results

Please summarise briefly the results to date and please give some quantitative figures -how many households or parcels involved, over what period, revenues generated, costs covered etc. If appropriate give the number of transactions or indicate revenues etc

The current status of the land-linked loan product reflects a favorable outcome, in line with the assumptions set by the LIFT program. Microfinance institutions (MFIs) have shown a strong willingness to adopt and expand the loan product, in response to increasing demand from farmers. Regional governments also display a positive outlook toward regulatory improvements that support the growth of such financial instruments.

At present, more than ten MFIs are actively disbursing land-linked loans, with three of them transitioning into full-fledged banks. Additionally, approximately ten more new MFIs are preparing to launch individual loan products in the near future.

As of March 2024, a total of 3 billion ETB (appr, 20 million USD) has been disbursed through over 300 branches, underscoring the product's widespread adoption. Loan amounts vary, ranging from a minimum of 50,000 ETB to a maximum of 200,000 ETB. A notable milestone was the mobilization of 50 million ETB in savings through the land-linked loan product by March 2020, further demonstrating its success in stimulating both loan uptake and savings behavior among farmers.

30. Political economy considerations

Are there any political economy considerations that you think are important for this kind of approach and what do you see as possible barriers/ bottlenecks in scaling up this process. What is the reaction of a) the public, b) the local institutions.

A study conducted by the Ethiopian Economic Association (EEA) identified that the need for frequent visits to land administration offices and the lengthy bureaucratic procedures required to initiate formal land transactions were significant deterrents. For example, in Tigray, 25.1 percent of rural landholding households reported needing to visit the land authority four or more times to initiate a formal transaction process.

Additionally, findings from the LIFT Programme's 2019 study on formal and informal land transactions underscore geographic accessibility as a critical factor. The study revealed that landholders located closer to woreda centers or all-weather roads were significantly more likely to register transactions formally than those residing in remote areas. Specifically, landholding households in proximate locations had a formal registration rate of 15.6 percent, compared to 10.1 percent in remote locations—demonstrating a statistically significant disparity. This trend indicates that remote rural households tend to rely more heavily on informal practices, largely due to higher transaction costs and weaker outreach efforts.

Landholders also cited frustrations related to the complexity of the process, including the number of required visits to kebele or woreda offices, the overall length of the process, and unclear administrative requirements. These procedural inefficiencies—coupled with insufficient guidance and communication from land offices—emerged as major disincentives to formal registration. Both rural landholders and woreda officials acknowledged that these challenges hinder efficient service delivery and discourage formalization.

A customer satisfaction survey conducted by the LIFT Programme in 2017 further assessed public awareness of formal land registration requirements. It found that 85.2 percent of respondents became aware of the benefits of transaction registration during the Second-Level Land Certification (SLLC) process. However, many landholders still believed that transactions involving family members did not require legal documentation. A lack of clear information on registration procedures was also identified as a persistent barrier.

31. Lessons learned and scaling up

What lessons have been learned from this initiative and how can it be scaled up. Is it the intention to scaleup? And how will that happen.

Key lessons from the Ethiopian case demonstrate that sustainable land transactions and land-based financing require a multi-pronged strategy encompassing legal reform, technological innovation, stakeholder capacity building, and financial literacy. Addressing these components holistically will be essential for unlocking the full economic potential of land and promoting inclusive, sustainable rural development. The Ethiopian case offers valuable insights for other developing countries aiming to modernize land governance and improve access to credit for rural populations t

32. Risk and mitigating actions

What do you see as the main risks with this kind of approach and what are the mitigation strategies.

9 Anything else?

Please add anything else that you wish to highlight and feel free to annex reports, diagrams etc,

A.7. Somalia

Sustainable Finance / Cost Recovery Initiative /Short Case Study	
Country name / Location	**Somalia, Bosaso**
Date submitted:	September 2024
Respondent (name)	Respondents of the research were included (Bosaso Mayor, Executive secretary, land and finance department team, land brokers, land owners, members from IDPs communities, Director General of the Ministry of Interior, and Director General of the Ministry of public Works).
Contact details (tel, email)	Abdirizak,mali@gmail.com
Organisation / project name (if relevant)	Saameynta Joint Programme (IOM, UN-Habitat, UNDP)

33. Please indicate the principal nature of the sustainable finance initiative

Revenue Enhancement by Using land value capture as a sustainable finance tool to support urban infrastructure and equitable urban growth

34. Background: brief statement about the background situation

Somalia is one of the fastest urbanising countries in the world: rapid urbanization is unfolding within a context of profound fragility, with internal displacement as one of the major drivers. The country now hosts over 3.9 million internally displaced persons (IDPs), grappling with the challenge of complex protracted displacement fuelled by armed conflict between state and non-state actors, clan conflicts, and the impact of climate change. Somalia's unplanned rapid urbanization compounds the dual challenge of addressing displacement-related vulnerabilities and fostering urban resilience to achieve poverty reduction, sustainable urban growth, and social and political accountability.

IDPs face major challenges connected to unmanaged urbanization (inequitable access to services, discrimination, more precarious jobs, safety concerns, etc.), with a lack of tenure security being among the most critical. By living in informal settlements on privately owned land with no written arrangement, IDPs are often exposed to a high risk of evictions, hindering self-reliance and trapping them into a vicious circle of poverty and marginalization. At the city level, unmanaged urbanization and lack of land use planning hamper urban upgrading and inclusive development. Local governments face challenges like poor urban regulatory frameworks, inability to deliver public services, and limited access to revenue streams (both in terms of municipal tax collection and fiscal decentralization). This translates into municipalities having to rely on private sector (that may prioritize profit) and international programmes (that may be discontinued) to deliver essential services to a great share of the city population and to sustain their staffing costs.

Over the past decade Bosaso, the largest urban center in Puntland, has experienced rapid population growth, urbanization, and economic development. Despite this growth, much of the city's urban expansion has been unplanned, resulting in challenges in meeting the rising demand for infrastructure and services, with a detrimental effect on IDPs in particular. Although Puntland has enacted a range of sub-national policies, bylaws, and procedural guidelines, including a State Urban Land Management Law, key challenges in the land management system remain, namely:

A. **Limited municipal land ownership**: large portion of land is privately owned, limiting the local government's ability to implement sustainable urban strategies and land-based finance initiatives.
B. **Land grabbing and registration issues**: Since 1991, much of the land in Bosaso has been seized by land grabbers and remains unregistered, complicating urban planning and land-based financing. Land is often transacted informally through brokers, without formal regulation or collaboration with authorities.
C. **Outdated and inequitable taxation**: The current property tax system uses simplistic area measurements that do not reflect actual land value, creating inequities and overburdening lower-income households.
D. **Underutilization of own source revenue**: Only 15 of Bossaso's 28 authorized revenue sources are actively pursued, limiting funds for essential services and infrastructure.

E. **Challenges in securing durable solutions for IDPs**: 98% of land occupied by IDPs is privately owned, putting these communities at risk of eviction due to the absence of formal tenure agreements.
F. **Weak framework enforcement**: Although a legislative framework is in place, enforcement is weak due to outdated laws, limited administrative capacity, and ongoing resource struggles between governmental levels.

35. What was the specific aim of the initiative and how did it come about – what were the drivers…

The research delves into the potential of land value capture as a strategic tool to finance urban infrastructure and support durable solutions for displaced communities in Bosaso. It was commissioned by the Saameynta Joint Programme, in collaboration with RVO/Land-at-Scale partners. Saameynta is a durable solutions programme addressing the complex challenges of internal displacement in Somalia through innovative and sustainable approaches. It supports the Federal Government of Somalia's goal to end displacement for one million people by improving access to services and livelihood opportunities, strengthening tenure security, promoting social cohesion, and building urban resilience.

One of the programme's stated goals is to harness urbanisation through land value capture mechanisms to scale up durable solutions. This touches on two key outcomes of Saameynta, namely strengthening land governance and building the capacity of local governments. Land interventions aim at strengthening tenure security (through land mapping, registration and titling, and legal and administrative land reforms) and steering urban development (through city strategies and land-based investment packages). Local governance interventions aim at improving knowledge and resources available to the municipalities, for them to be able to plan for inclusive urban development and attract investments that benefit also the most vulnerable sectors of society, improving service delivery and ultimately social accountability.

In line with other programme activities to strengthen land and local governance, Saameynta commissioned a study to explore how land governance tools are being tested in Bosaso to open new revenue streams from improved land administration, focusing the analysis on progressive property taxation systems. This is considered a land-based financing instrument that can greatly improve municipal revenues in fragile contexts, further benefitting both the land administration (in terms of better land and property mapping and registration) and the capacity of local government to deliver services. Introducing land-based financing and land value capture instruments is seen as a viable strategy for harnessing the increased value of privately owned land to finance public services, including durable solution for IDPs.

36. Description of the intervention/initiative

The research explores how land value capture mechanisms could be leveraged to support durable solutions for displaced populations in Bosaso. It examines the legal, institutional, customary and administrative frameworks governing land and taxation in Bosaso, to understand how to improve property tax collection systems – particularly by introducing a progressive model (banding system) – to unlock new sustainable revenue sources for the local government. The research focused on property tax collection as it is a well-known method already prescribed in the Puntland regulatory framework that can be enhanced to capture increments in land values.

The current property evaluation method relies on a simplistic formula that calculates taxes based on area measurements (width * length * height of 3.5 * fixed rate), without considering the actual property value. This approach results in an inequitable tax system where both wealthy and impoverished property owners are subjected to similar tax rates. This leads to a regressive tax burden, where the financial strain disproportionately falls on lower-income families. Consequently, Bosaso's property tax system has been perceived as unfair, undermining tax morale and trust in the governance system.

By implementing a progressive property tax model – thus ensuring that properties are registered, valued, and taxed based on the value – municipalities can more effectively capture a share of the land value increases generated by urban development and public, private and international investments. This not only boosts local revenues but also directly supports the implementation of durable solutions by funding critical services, infrastructure improvements, and tenure regularisation initiatives that benefit both displaced populations and host communities.

37. Results

To effectively implement land value capture, it is essential to draft and publicize a comprehensive tax policy document clearly outlining property and land taxes, assessment methods, opportunities for appeal, exemptions and rebates, compliance procedures, and penalties for non-compliance. Such transparency and clarity will help build trust and tax compliance within communities, and ensure that land value capture is equitably applied across Puntland. Moreover, to fully harness its potential, it is essential to define responsibilities and tax jurisdictions between local governments and national institutions.

The proposed banded property assessment system should be simplified for easier implementation. Currently, six parameters are assessed, many of which do not directly affect land value uplift within the given context. These parameters are categorized into seven tax bands, which could be reduced to three or four to make the system more efficient and manageable. This simplification would align with the limited institutional capacity and financial resources, avoiding the need for complex systems, database overhauls, or legal reforms while still achieving effective property assessment within current constraints.

Local government staff should be trained in accurate surveying and appeals management. Additionally, a Municipal Communication and Information Unit (MCIU) should be established and equipped with the skills to develop and implement strategies that ensure clear community communication and address misinformation about land value capture initiatives

A Social Tenure Domain Model (STDM) exercise should be conducted in Bosaso, concentrating on tenure security and the long-term socio-economic aspects of IDP reintegration. Gaining insights into IDP perspectives on land tenure and settlement sustainability is crucial for refining land value capture strategies. This will ensure that the strategies not only address the needs of both local communities and IDPs but also optimize revenue for public infrastructure development.

38. Political economy considerations

Implementing a progressive property tax system means that wealthier landowners who currently benefit from unregulated land markets will have to pay more: this may create elite resistance, with public officials who may hesitate to enforce due to political alliances. Land brokers, who play a significant role in informal property valuation and land transactions, may resist formalization as it impacts their business. At the same time, communities may resist changes in taxation due to lack of understanding, concerns about potential tax increases and fear of misappropriation and misuse of these revenues. Addressing these perceptions will require transparent communication, education on the benefits of land value capture, and ensuring that funds are visibly reinvested in public services and infrastructure.

Moreover, the relations between State and municipal authorities, especially the overlapping mandates around land management and taxation, are central to the success or failure of reforms and can cause delays and inconsistent enforcement. The lack of a defined tax authority, unclear tariffs, and intergovernmental resource struggle hamper effective land governance and revenue collection. To fully harness land value capture potential, responsibilities and tax jurisdictions between local governments and national institutions must be clearly defined. This clarity will enable comprehensive solutions that address existing social service gaps and support sustainable durable solutions.

39. Lessons learned and scaling up

Property taxes are a vital source of revenue for local governments globally, accounting for an estimated 30-40% of their total income. Their advantages include comparative stability, as properties are fixed in location and easily identifiable, lower compliance costs, and the potential to incentivize more efficient land use. Other Somali municipalities, for example, Garowe, have invested in enhancing and automating property tax systems, reporting increments in revenue collection. Effective reinvestment of these funds into local services can restore public trust and improve tax morale. This, in turn, encourages voluntary tax compliance, reducing administrative and enforcement costs associated with tax collection. Saameynta is already working on institutionalizing the banding system through a municipal by-law, to enhance system fairness and transparency.

By promoting efficient land use and reinvesting in communities, land value capture can drive balanced growth and attract private investment. When managed effectively, it ensures that the benefits of urban development are distributed equitably: this can help address the housing needs of IDPs and reduce reliance on temporary camps, thus reducing inequalities.

The local government needs to establish a comprehensive land management system to fully administer land and implement value-based taxation. Proper land registration will help reduce conflicts and prevent baseless land appropriation, often facilitated by land brokers, ensuring more transparent and equitable land governance and improved tenure security. Effective implementation of land value capture instruments can promote better land use by incentivizing development in underutilized areas, reducing congestion and encouraging higher-density construction. By utilizing land readjustment strategies, local governments can acquire portions of land for public facilities, including parks, sidewalks, and other essential social infrastructure. This approach not only optimizes land use but also enhances the overall urban environment, contributing to more sustainable and organized city development.

40. Risk and mitigating actions

Measuring land value has the potential to disproportionately impact marginalized communities if not managed carefully. For instance, re-integrated settlement areas, considered high-value zones due to infrastructure investment, could face higher taxes and land grabbing, exacerbating the existing inequalities. It is essential to incorporate equitable policies and ensure that the municipality commits to distributing benefits fairly, protecting vulnerable populations from adverse effects. The main risks that may hinder the implementation of the land value capture mechanisms identified are legal and regulatory barriers (outdated and insufficient laws, unclear tax jurisdiction) and lack of capacity and funding (lack of skilled personnel and inadequate systems to support the new parameters for land management and tax collection). Another risk is the speculative nature of Bossaso's land market, driven by land brokers, which requires greater caution during the assessment process to avoid inflated valuation and potential resistance from recipient residents. Saameynta mitigates these by working closely with the Bosaso Land Department and Puntland Ministry of Public Work, to provide technical backstopping and trainings towards policy development/enforcement and an integrated land management system.
9 Anything else?
N/A

Annex B: Assessing State of Readiness

Introduction and guidance in the use of the assessment tool

The questions below are designed to assess the state of readiness for adopting a sustainable finance approach. The aim is not to control the decision making about whether to engage with a sustainable finance approach or not, but more to highlight areas that need to be addressed to help ensure success.

The readiness assessment looks across six vectors

1. Is there a clear understanding of starting conditions?
2. Is there a quantified revenue and cost picture?
3. Is there a realistic, affordable system design?
4. Is there an approach that the public will trust and use?
5. Is there an approach that can pay for itself over time?
6. Is there a strong coordination between land, finance and local authorities?

Foe each vector, there are two functional areas defined each with five specific questions to consider that seek to identify and focus on those elements needed for an effective operational sustainable finance strategy. In almost all country cases, there will be some of these vectors that are largely complete, and others that are less developed. The Readiness Assessment helps to identify which areas need attention, and this will be different for different country contexts

Users should also consider using the Readiness Assessment at sub national level - for example, it is entirely possible to initiate a sustainable finance strategy at regional or city level, as it is the alignment between the institutions at that local level, underpinned by the legal and regulatory framework that needs to be assessed.

Scoring

Each specific question will require to be answered on a scale of 1 (strong NO) to 5 (strong YES).

Score	1	2	3	4	5
meaning	Strong NO, Criteria not addressed at all or absent	Weak NO Criteria is substantially not met, but some evidence exists	Neutral something exists but no financial focus	Weak YES Criteria is partially met	Strong YES criteria is well met

Scores are then aggregated and presented by **Functional Areas** and **Vector.**

The Readiness Assessment is also available as a spreadsheet, Fo convenience, the Vectors, themes and key questions are listed overleaf.

VECTOR 1. Is there a clear understanding of starting conditions?

A. Foundational Diagnostics

□ Has a rapid assessment of the existing land administration system been completed?
□ Are the legal, policy and institutional frameworks fully mapped?
□ Are national, district and local service delivery structures clearly understood?
□ Has a political economy analysis identified key enablers and barriers?
□ Are gaps and overlaps in mandates documented?

B. Safeguards and Inclusion

□ Does the approach protect vulnerable groups from exclusion (financial or legal)?
□ Are gender and social inclusion requirements built into procedures?
□ Are safeguards in place for managing disputes, expropriation, and land rights changes?
□ Are measures in place to protect the most vulnerable and poor?
□ Is there independent monitoring of social impacts?

VECTOR 2. Is there a quantified revenue and cost picture?

C. Revenue Potential Assessment

□ Have all land-based revenue streams been identified (fees, taxes, ground rents, duties, development charges, value capture)?
□ Is revenue currently collected by all responsible bodies mapped and quantified?
□ Are leakages, inefficiencies and barriers to collection understood?
□ Has potential revenue under improved land administration been estimated?
□ Is there coordination between land agencies, revenue authorities, and local governments?

D. Cost and Operational Analysis

□ Are operational (recurrent) and investment costs known for all institutions involved in land administration?
□ Is activity-based costing in place or planned?
□ Is a multi-year cost forecast available?
□ Are staffing, overheads, IT systems and service delivery expenses identified?
□ Are operational inefficiencies documented and prioritised for action?

VECTOR 3. Is there a realistic, affordable system design?

D. Land Administration System Strengthening

□ Is there a strategy for strengthening or deploying national and/or local digital land information systems?
□ Are data standards, data models and update procedures defined?
□ Are service delivery points accessible, functional and adequately staffed?
□ Is decentralisation of services planned or required?
□ Are there clear procedures for data migration, quality assurance and maintenance?

E. Scalable and Affordable First Registration

□ Is a Fit-for-Purpose (FFP) approach adopted for low-cost mass registration?
□ Are simplified survey and adjudication techniques approved in law or regulation?
□ Have contributory/self-financing models been piloted or considered?
□ Are protections in place to ensure affordability for poor and vulnerable groups?
□ Is a plan in place to integrate local registration outputs into national systems?

VECTOR 4. Is there an approach that the public will trust and use?

F. Public Engagement and Demand-Side Actions

□ Has a communication strategy been established to build trust in land services?
□ Is there monitoring of willingness-to-pay and barriers to service uptake?
□ Are benefits for landholders (e.g., access to credit, rental markets) clearly explained?
□ Do the programmes include specific incentives in place to encourage public participation?
□ Are measures in place to support and monitor gender equity and inclusion?

G. Land Market Assessment- demand side action

□ Has a structured assessment of land markets been completed (urban, rural, agricultural)?
□ Are transaction trends, valuation patterns and informal market dynamics understood?
□ Are land market bottlenecks and distortions identified?
□ Does the public have trust in the transparency of land deals and is market data publicly available and regularly updated?
□ Are incentives for investors and financial institutions considered?

VECTOR 5. Is there an approach that can pay for itself over time?

H. Strategic Planning and Business Planning

□ Is there a 3–5 year Strategic Plan for land administration sustainability?
□ Does it align with national development priorities, fiscal policy and decentralisation?
□ Does the plan identify transition pathways and sequencing of reforms?
□ Is there an Annual Business Plan linking output targets, costs and revenue projections?
□ Are financial and performance indicators defined and monitored?

I. Piloting, Learning and Scaling

□ Have sustainable finance pilots been selected (e.g., contributory models, revenue enhancement in cities, district-level systems)?
□ Is there a mechanism to monitor results and adapt approaches?
□ Are local governments part of the piloting and scaling strategy?
□ Is the private sector adequately considered in the development plan
□ Is a national scaling roadmap defined, including funding and institutional responsibilities?

VECTOR 6. Is there a strong coordination between land, finance and local authorities?

J. Tools for Decision-Making

□ Has the Sustainable Finance Benefits Calculator been completed?
□ Has the Readiness Assessment been used to identify gaps and prioritise actions?
□ Are benefits quantified in a form that is compelling for Ministers of Finance
□ Are baseline indicators established for monitoring long-term impacts?
□ Is public perception and behavior being actively monitored

K. Institutional Coordination and Engagement

□ Is there structured engagement with the Ministry of Finance?
□ Are revenue authorities formally involved in design and implementation?
□ Are development partners coordinated behind a shared approach or framework?
□ Are roles between national and subnational institutions clearly defined?
□ Are accountability, transparency and reporting mechanisms in place?

Annex C. Benefits Calculator

Introduction

The table below sets out a proposed methodology for estimating the potential benefits of adopting a sustainable finance approach.

Quantifying benefits of sustainable finance approach

The Benefits calculator is basically a checklist of possible revenue sources and potential value-added items. The actual form, regulation conditions and applicability of different land-based revenues varies very much from one country to another, so the benefits calculator should be **considered a guide to potential revenue sources and value-added benefits,** not a definitive listing of all possible revenue sources with a prescriptive methodology.

This Benefits Calculator should be used at the initial stage to get benchmark values, and then it is updated annually. It should track Actual benefits and changes over time.

It has the following purpose

- It provides benchmark figures for actual land-based revenues which capture the existing situation
- It provides an initial estimate for Value Added, which is primarily to the benefit of the citizens and enterprises (land holders)
- It clearly demonstrates the existing role of the land administration sector in supporting domestic revenue mobilisation, and helps the sector gain traction with Ministry of Finance and other senior policy makers
- Based on trend analysis and increasing land administration coverage, it can be used to calculate future estimated revenues (as in the Rwanda example in the main text) which can be powerful arguments for supporting land administration investment
- It provides comparison data across countries

Using the Benefits Calculator

Table C.1 sets out the Benefits calculator and proposes a breakdown for how to assess the contribution of land-based revenues and added value benefits. Users can use this as a guide, and adapt to the particularities of a particular country or a particular sub region of a country (e.g. city or region).

The Benefits Calculator can be used at the initial stage of a programme, and then can be repeated again over time, perhaps every 2-3 years as appropriate t map and monitor progress.

Usage and Feedback

It would be useful if the tool could be applied in country contexts and the results tracked regionally, drawing comparison between similar countries.

Table C.1. Benefits Calculator *(to be regularly applied and figures updated)*

A. **Land Based Revenue**					
Ref	**Revenue source**	**Base Data / determinants**	**Benefits calculator approach**	**Benefit value**	**Notes**
A.1	**Land administration fee income**	Annual figures (last 3 years) for - • actual transaction fee income (including mortgage etc.) • actual no of transactions by transaction type • Approved Fee Tariff for transactions	**Calculate and record** • the actual total fee income by year by transaction type, for the last three years • the actual mortgage fee income for the last three years **Evaluate the trend**	***Calculate Total fee income***	*Maybe that fees are paid at local and central level – need to aggregate*
A.2	**Stamp Duty / Tax on transfers**	Annual figures (last 3 years) for • actual transfer duty and number of transactions • stamp duty tariff rules	**Calculate and record** • the actual total transfer duty by year for the last three years **Evaluate the trend**	***Calculate Total transfer duty***	*May not be separated out at national level from other stamp duties*
A.3	**Annual Property Tax**	Identify property tax sources (may be several types) Determine annual figures for last three years for • each property tax source/ type • size of the tax base (no of taxpayers billed) • Size of tax base if all applicable properties included and pay • Tax rules and schedules	**Calculate and record** • the actual total property tax paid for each type/source by year for the last three years • the maximum potential total property tax generated if all applicable properties included • identify and calculate arrears • analyse demographics **Evaluate the trend**	***Calculate Total annual property tax***	***This*** *data may not be aggregated easily at national level and may require working with authorities at sub national level.* *May have to estimate potential tax base size if actual figures unknown*

A.4	**Development contributions**	Annual figures (last 3 years) for • fees and charges for development contributions () – identify and list types where possible • development charges rules and tariff	**Calculate and record** • the actual total sum of development charges by year for the last three years • identify any arrears and calculate amounts **Evaluate the trend**	***Calculate Total development contributions***	*This data may only be available at local level; need to identify what types of charges exist and where they are accrued.* *Examples include planning, change of use, building permits etc*
A.5	**Public ground rents / lease income**	Identify ground rents / lease income payable to government or municipal. city authorities or publicly owned corporations. Annual figures for the last three years for • each lease / ground rent type • no of leaseholders actually paying • no of leaseholders billed • Size of base if all applicable properties included and pay • Ground rent / lease payment rules and schedules	**Calculate and record** • the actual total sum of development charges by year for the last three years • The maximum possible income if all applicable property holders paid • identify any arrears and calculate amounts • analyse demographics **Evaluate the trend**	***Calculate total value of ground rents / leases on public land***	*This data can be complex; ground rents are payable on leased land and ,may differ at time of lease initiation, and annual payments etc.* *typically apply to urban land or land leased for agricultural purposes.* *Ground rents are often weakly overseen and collected, however can generate very large revenues if applied at market rate. In many cases the lease management systems are weak and undeveloped.*
A.6	**Other**	Identify other land-based revenues Annual figures for the last three years for each revenue type • no of properties actually paying • no of leaseholders billed • Size of base if all applicable properties included and pay • rules and schedules of payment for different fees	**Calculate and record** • the actual revenues of each revenue type and the total sum by year for the last three years. • The maximum possible income if all applicable property holders paid • Analyse demographics **Evaluate the trend**	***Calculate total value of other direct land-based revenues***	*This data can be complex, often only available at local level and may include such payments as* • *Rental income tax* • *Agricultural income tax* • *Commercial permits, etc.* *These kinds of revenue are often weakly overseen and collected, however can generate significant revenues*

A	**Total estimated land-based revenues**			**Sum of 1-6 above**	This is the current estimated value of land-based revenues
B Value Added Benefits					
Ref	**Value Added source**	**Base Data / determinants**	**Benefits calculator approach**	**Benefit value**	**Notes**
B.1	**Access to Finance**	Identify access to finance mechanisms based on registration or security of tenure Annual figures for the last three years for • mortgages number and value • Loans based on real estate – number and value • Rules and regulations around mortgages and loans	**Calculate and record** • the actual number and total value of mortgages issued per year • Actual number and value of loans issued on basis of registration or security of tenure each year • Analyse demographics **Evaluate the trend**	***Total value of loans and mortgages issued*** ***Total value of property covered issues***	*Mortgage data should be available centrally. Other loans (including micro finance) may not be centrally reported) Also monitor the number of entities supplying mortgages. Loans, interest rates and default rates*
B.2	**Added value examples (usually context specific)**	These benefits are those indirect benefits which accrue to landholders. Typically they involves calculating percentage increases or using proxy values to address value added benefits including • Tenure Security • Agricultural productivity • Reduced disputes • Household incomes • Household investment • Greater access to rental markets • Increase in property value	I**dentify** • Each added value benefit that is applicable and the methodology for calculation, including evidence to support the approach (country and domain specific) **Calculate and record** • Estimated financial value of each value-added benefit, no of beneficiaries.. • Perceived socio-economic benefit (qualitative argument) • Ensure documented methodology and identify clearly source materials • Analyse demographics **Evaluate the trends**	*Added Value Estimates for* • *Tenure security* • *Agricultural productivity* • *Reduced disputes* • *Greater access to rental markets* • *Household incomes* • *Household investment* • *Greater access to rental markets*	*Each of these value-added items requires that there is an evidence base for the benefit (from previous surveys), or there is a clear proxy (such as willingness to pay). Examples include:-* • *Tenure Security (how much people are willing to pay for registration)* • *Agricultural productivity (based on estimated 15-20% improvement)* • *Reduced disputes (based on costs of registration)* • *Household investment (based on 15-20% more likely to invest)*

		These generally are considered to have a wider socio-economic benefit rather than pure financial benefit		***Note that there needs to be a clear evidence base to support these estimated figures***
B	**Total Value-Added Benefits**		**Sum of 7-9 above**	This is the total estimated value of the additional benefits
C	**Base Data – country foundational data**			
Ref	**Value Added source**	• **Base Data / determinants**	**Notes - Examples of base data**	
C.1	**Base Data**	• GDP • Total tax revenues • Total Non-Tax revenues • Land administration data • Land market data	• Total tax revenues, non-tax revenues from Government budget. Track annual data • Land administration data includes basic data on tenure type, no of parcels registered and number exist in fact etc. number available in digital form etc. • Land market data includes land values, sales prices and trends by property type, investment returns, mix of investor types, capital structures; transaction costs for buyer/seller, access to finance, private sector service providers (lawyers, notaries etc., agents, valuers etc.).t	

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