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### **Acknowledgements**

This report was made possible through the support of the UK government's Land: Enhancing Land Governance for Economic Development (LEGEND) programme. The authors wish to thank the UK Department for International Development (DFID) for its support in the work, and particularly to Chris Penrose-Buckley, DFID's Land Policy Lead for his comments on this review. Thanks to the UK Land Policy Forum for comments on the first presentation of the review results, particularly Richard Baldwin, Andrew Smith and Andy Smith for sharing their extensive experience of land tenure regularisation (LTR). Thanks also to David Booth for his astute insights into the political economy of land reform. Finally, thank you to Chris Little and Nina Behrman for their help in the production process, and to Ciara McKeon for her helpful review and comments.

# **Contents**

Acknowledgements									
List of boxes and tables  Acronyms  Executive summary									
						1	Introduction		
							1.1	Context	12
	1.2	Approach and methodology	12						
	1.3	Structure of the report	13						
2	Understanding land tenure regularisation								
	2.1	Defining the aim and scope of LTR	14						
	2.2	Types of LTR programmes	15						
3	Rationale for and outcomes of LTR								
	3.1	The economic case	17						
	3.2	Social factors	20						
	3.3	Land administration issues	22						
	3.4	Has LTR achieved its objectives?	23						
4	Successful LTR design and implementation: DFID's experience								
	4.1	Political buy-in	25						
	4.2	Planning and design for socially sensitive LTR	27						
	4.3	The role of collective titling	28						
	4.4	The importance of public outreach	29						
	4.5	Land administration: systems and institutions	29						
	4.6	Cost-effective LTR	32						
	4.7	Implementing modes for LTR and land administration	35						
	4.8	Working with other donors	36						
5	Conclusions and recommendations								
	5.1	Should DFID continue with land administration and LTR programmes?	37						
D.	foron	cac	15						

# **List of boxes and tables**

### **Boxes**

Box 1	The continuum of land rights	14
Box 2	Overview of six DFID land interventions with significant LTR components	15
Box 3	LTR as a solution to land-related conflict in Rwanda	21
Box 4	Avoiding barriers and creating allies in land titling: the Philippines	26
Box 5	Incentives and success factors for PPPs in land administration	32
Box 6	FFP or 'fit-for-purpose' approach to LTR	34
Tables	S	
Table 1	Outputs, outcomes and impacts of DFID's LTR programmes	24
Table 2	2 Estimated parcel costs for LTR	33

# **Acronyms**

**CLUF** Community Land Use Fund (Mozambique)

**CofO** certificate of occupancy**CSO** civil society organisation

**FFP** fit for purpose

**GEMS** Growth and Employment in States (Nigeria)

**GLASP** Guyana Land Administration Support Programme

**GLSC** Guyana Lands and Surveys Commission

**GLTN** Global Land Tool Network

**ILMIS** Integrated Land Management Information System (Tanzania)

iTC Community Lands Initiative (Mozambique)

**LIFT** Land Investment for Transformation (Ethiopia)

LTA Land Tenure Assistance (USAID, Tanzania)

LTR land tenure regularisation

LTRP Land Tenure Reform Programme (Rwanda)LTSP Land Tenure Support Programme (Tanzania)

MOLA Mozambique Land Action

MSME micro, small and medium enterprise

PPP public—private partnershipSLLC second level land certificateSRM Strategic Road Map (Rwanda)

TA technical assistance

**TWP** Thinking and Working Politically

# **Executive summary**

### **Context**

Growing populations, globalised economic growth, rapid urbanisation and climate change are increasing pressure on land and natural resources, presenting complex planning and management challenges for governments. Clarification and security of land rights for land users of all kinds is important to promote economic growth and development, and also critical to minimise land-related disputes and wider conflicts. This, in turn, can contribute to national peace and stability. There is growing interest in land programmes that aim to secure land and property rights at scale, widely referred to as land tenure regularisation (LTR), which aim to identify, delineate and describe land and property rights clearly on the ground, within law and for the full range of land users.

Since its initial involvement in LTR as part of a land administration reform and development programme in Guyana (1997–2005), DFID has expanded its portfolio of land programmes. This has included significant and sustained large-scale investment to support LTR in other countries, including Rwanda, Nigeria, Ethiopia, Tanzania and Mozambique, through programmes costing between £5 and £62 million. Playing a leading role in the design and implementation of reform, capacity-building for land institutions and the roll-out of large-scale tenure regularisation activities, DFID's programmes have enabled the issuing of over 20 million individual or joint titles or certificates across Rwanda, Nigeria, Ethiopia and Tanzania, and 1,400 community titles in Mozambique.

This has gone hand in hand with the development of innovative methods and procedures and the introduction of new technology, which has delivered substantially lower costs for land demarcation per parcel in the last decade. These have been socially inclusive and

protective of marginalised and vulnerable groups. In most countries where DFID has supported LTR, over 50% of beneficiaries have been women, through single and joint titling with spouses. Furthermore, land market activity has increased and the number of land-related disputes has fallen. This is a significant achievement.

As DFID continues to aid low-income countries to improve tenure security and land administration, it needs to incorporate lessons from past projects into future programming and implementation. In setting priorities and developing new programmes, DFID and other interested donors need to be clear about the benefits, achievements, potential risks and consequences of LTR, and related programmes, at local and national levels. This review investigates both how LTR programmes can best fulfil their many objectives and how to mitigate potential social and economic risks to individuals and communities in target areas.

This report reflects on the experience of DFID land programmes which include LTR across six countries (Guyana, Rwanda, Nigeria, Ethiopia, Tanzania and Mozambique), drawing also wherever possible on relevant experiences of programmes driven by other donors. It summarises the drivers of LTR and land administration developments in different contexts experienced to date and includes wider evidence on successful LTR outcomes, factors influencing success and lessons learned in the design, implementation and follow-up of country land programmes and broader land-support facilities.

### **Key findings**

Land reform and tenure regularisation programmes may encompass a wide range of economic, social and institutional objectives. The most common stated rationale for LTR is to secure land rights at scale, facilitating productive investment, credit access and land markets to stimulate macroeconomic growth, raise incomes and ultimately contribute to poverty reduction. Either implicitly or explicitly, LTR programmes have also aimed to:

- prevent and minimise disputes and conflicts over land rights, so that these do not contribute to wider social and civil unrest
- create a basis for government to clarify land ownership and to use that information for local and national planning, targeting land service provision and generation of revenue.

There have been some evident successes across these objectives – especially in terms of greater tenure security increasing investment at household level, and the positive effects of LTR on access to credit. However, defining appropriate levels of ambition for LTR programmes requires measurement of impacts beyond immediate outcomes. Good baseline data and impact evaluations, and enough time, are necessary to measure the contribution or attribution of LTR interventions. The process of LTR alone can have only limited effects if other interventions such as supporting land administrations, facilitating land market services and implementing dispute resolutions are not put in place.

Ensuring that LTR fosters equitable development also requires adequate analysis of existing customary and informal land tenure systems in order to avoid risks of corruption, elite capture and disempowerment of communities. There are risks that the most marginalised people - including women, ethnic minorities and the non-literate - could be negatively affected. While the wider literature flags these, this review indicates that DFID-funded programmes have been able to mitigate risks through effective design and implementation. Overall, LTR programmes and strengthened land administrations can have a positive impact on social and economic development in the longer term.

### **Successful LTR: eight lessons**

This review of DFID land tenure programmes with large LTR components has identified a set of lessons and guiding principles for successful design, implementation and sustainability. These are offered to help those developing, managing and implementing LTR programmes to ensure that LTR is socially inclusive, politically smart and technically and financially effective.

# Lesson 1: LTR is necessary but not sufficient to promote broad-based economic development

To achieve sustainable benefits, LTR normally needs to be included as a component of a wider programme to reform and strengthen legal, policy and institutional frameworks related to land. While important in many contexts, mass clarification and registration of land rights is not sufficient by itself to achieve the multiple objectives and ambitions associated with LTR, or to deliver long-term, sustainable outcomes. LTR and local land administrations cannot by themselves resolve the social and economic development constraints beneficiaries face. To achieve its economic aims, LTR is likely to need complementary measures for access to finance and market opportunities, legal empowerment and promotion of an enabling business environment, so that people can make use of land titles and certificates to transact and invest in land and property and to thereby improve economic opportunity. For instance, Ethiopia's Land Investment for Transformation (LIFT) programme with its dual focus on land certification and access to financial services should in due course serve to enable functional and inclusive land rental markets in the most productive agricultural regions.

# Lesson 2: Sustainable land administration must be a central part of LTR work from the start

LTR interventions need to be integral to programmes reforming and strengthening legal, policy and institutional frameworks for land governance. LTR requires functional, service-oriented land institutions and ongoing development of accurate, comprehensive

digital land information systems to deliver sustainable outcomes in the longer term. A key lesson from both Rwanda and Ethiopia is that development of the land administration system must keep pace with the delivery of titles, to avoid undermining the system's ability to register ongoing transactions and remain up to date. Following comprehensive LTR in Rwanda, recent developments in land administration suggest government revenues from national land registration may be enough to recoup the full costs of the programme by 2025. However, institutional capacity to register changing rights and capture the resulting revenues needs to develop further as transactions accelerate in line with rapid economic growth. Establishment of sustainable land administration capacity therefore needs to be built into the design and implementation of LTR from the start and will become increasingly important in the post-LTR phases of the work.

# Lesson 3: LTR does not have to be the same in every context

While most DFID-funded programmes have focused on large-scale, individual titling, this may not be the most appropriate approach in all contexts. Official land registration and titling may be useful under certain contexts, such as when:

- land markets are evolving rapidly, with significant pressure on land involving many people from outside the local community
- farmers require evidence of secure land rights to obtain credit and to protect their interests where urban encroachment, infrastructure development and private investment threaten land users.

In other circumstances it may be more appropriate to strengthen customary, collective management systems through issuing titles to whole communities or producer associations, as in Mozambique. It may also be appropriate to use a mixture of both approaches: perhaps integrating formalisation of individual rights in instances where land pressures are highest but strengthening collective management systems in others.

# Lesson 4: LTR requires sustained political will and a politically smart approach

The experience of DFID's programmes shows that LTR is most successful when supported by strong government commitment and ownership, as in Rwanda and Ethiopia. Even with this commitment, there are significant challenges: sustaining a programme over the longer term needed to achieve LTR objectives means ensuring that political enthusiasm and target-driven approaches for immediate quick-fix results from LTR do not compromise other parallel but essential activities in building capacity in land administration. In addition, vulnerable groups must not be further marginalised.

Taking a long-term strategic view from the start, adopting sustainable timing and pace of implementation and building the capacity of a broad group of stakeholders to support design and implementation significantly mitigates these risks. Where political commitment from national government is not immediately present, DFID advisers might look further afield for support, building inter-ministerial consensus and constructing a wider alliance of interests outside government.

# Lesson 5: Social inclusiveness is crucial in LTR-related activities

Social inclusiveness is vital for achieving broadbased benefits from LTR and can help to build political support for it. Broad public support and consent for the processes and procedures of LTR lie at the heart of clarifying land rights. Programme designers must therefore ensure that those affected by LTR and related activities are fully involved and understand the long-term benefits and outcomes. In Rwanda for example, working with gender-balanced village teams to demarcate boundaries and with village councils to adjudicate disputes proved fundamental in achieving high levels of participation and served to ensure recognition of women's rights on the ground. To achieve results that reduce, rather than increase, inequalities in access to land, LTR programmes must therefore go beyond merely providing women and other socially vulnerable groups with a property title.

Holding separate meetings for marginalised groups gives them voice in the process and builds

awareness, as well as capacity to protect and manage land rights. This, combined with legal empowerment, has proved particularly effective in local and national decision-making processes and has genuinely strengthened tenure security and challenged existing stereotypes.

### Lesson 6: Consider appropriate use of fit-forpurpose new technologies

New technology, such as tablets, low-cost GPS and drones, backed up by customised software and IT infrastructure, can reduce the costs of mapping and documenting land rights and promote greater transparency. This has enabled recent DFID-funded programmes to implement LTR at a scale not previously contemplated. However, there are key processes around adjudication and dispute resolution that require full social participation and where the impact of technology might be more limited.

Consequently, new technology must be used with care and focus on serving users rather than emphasising top-down technical solutions and high-accuracy surveys. This raises inevitable challenges: ensuring technical and financial capacity and an appropriate legal and policy framework for selection, operation and access; building capacity for storing and processing the data generated; and breaking down resistance by surveyors and others with vested interests who may feel threatened by their introduction.

# Lesson 7: Governments and donors need long-term commitments to the land sector

Successful implementation of LTR requires multi-year, multi-phase commitments and coordinated approaches to support institutional reform and capacity in land agencies and deliver lasting tenure security at scale. As part of this, it is critical to integrate activities and time to build capacity for land administration to ensure that cadastral records and land service delivery are sustainable. Land issues are socially and politically complex, and it requires patience and flexibility to set up a well-informed strategy, fieldtest it and build in opportunities for adjustment along the way over the long term. Manging this can be problematic where there are both changes in the political landscape and technical-staff changes in donor and partner agencies over time.

The process of preparing long-term strategies and plans to achieve results, if properly undertaken and made clear at the outset, can serve to ensure consistency in the long term. It can also encourage government buy-in and phased and targeted donor commitments to supporting ongoing changes. The development of Rwanda's Strategic Road Map is a useful reference point: Phase 1 of Rwanda's land reforms in 2005-09 comprised development of DFID-funded strategic planning, field testing and institutional development, and a public consultation programme culminating in the government-approved Strategic Road Map (SRM) for implementation. This provided a basis for consensus among donor partners and government to support ongoing initiatives up to and including 2019.

# Lesson 8: LTR and land administration work needs appropriate implementation modalities

It is vital to ensure that the right people, skill sets and systems are in place to support the design and implementation of LTR and land administration programmes within an appropriate institutional framework. Clearly defining roles and responsibilities of government management and technical assistance (TA) is crucial to avoid gaps or duplication of tasks, and to ensure efficient and harmonious relationships. TA arrangements can ensure more efficient technical progress, recruitment and provision of key staff at local and national levels and free up government employees to focus on strategic issues.

Overall, DFID's involvement in LTR has shown that having experienced and skilled management embedded within a government structure achieves the best results. This ensures that capacity will be established and can enable effective local skills development, as in Rwanda and Guyana.

### The role of DFID and other donors

As a leading funder of programmes featuring LTR, DFID has an important role to play, alongside other donors, in unblocking paths to pro-poor land reform by working with governments in the process of designing, implementing and monitoring effective

and efficient activities. There is scope for strengthening this role, based on the experience of the last two decades. Key points include the following:

- Ensuring lessons on design, planning and implementation are shared. DFID has a history of managing LTR-related programmes, and some have benefited from DFID advisers' experiences in different countries. A robust system for retaining and sharing institutional learning is crucial here, and various links could be strengthened to support this.
- Filling the evidence gap. DFID and other donors could generate more evidence to inform the design and implementation of future programmes, for example by incorporating impact assessments into LTR programmes from the start, establishing

- baseline information and tracking progress with robust methodologies.
- Promoting an approach that is strategic, adaptive and politically smart. Donors need to link advisers and programmes working on Thinking and Working Politically (TWP) approaches and governance with those working on land, often in the same country offices.
- Ensuring that internal systems and processes are realistic and flexible enough to enable course correction. Reducing the pressure for business cases to overpromise on delivery within unrealistic timeframes in order to get approved may be an important step.
- Investing more in government capacity to coordinate and articulate priorities. This could improve sharing of experience among governments, funders and civil society, and ensure better sequencing of respective interventions.

# 1 Introduction

### 1.1 Context

Growing populations, globalised economic growth, climate change and rapid urbanisation have resulted in increasing pressures on land and natural resources, presenting complex planning and management challenges for governments. In many countries, large numbers of established land holdings remain insecure and undocumented, and investment in land administration and land-use planning have not kept pace with growing demands for land, increased land values and mounting transactions. Traditional and customary practices in land management are under pressure as never before due to their informal character, internal conflicts and power imbalances, and from the expansion of formalised statutory systems of land markets, land-use change and investments that override the legitimacy of customary rights, or from all of these at the same time.

Challenges are especially acute in sub-Saharan Africa, particularly where a legacy of dual structures of formalised property rights and undocumented informal rights administered by customary authorities and land-holding families exists. Clarifying, documenting and registering land rights and sustaining systems at local level is crucial for optimising land use and minimising land-related disputes and related financial and business risks. This is the case for ordinary land users, for companies seeking to make sustainable investments and for governments investing in infrastructure projects. Mitigation of these risks has led to greater interest in improving land administration and implementing LTR, the overarching aim of which is to systematically clarify land and property rights within law for the full range of land users.

Over the last 15–20 years, DFID has developed a worldwide reputation as a leading funder supporting national programmes of land tenure and land administration, notably in Rwanda, Ethiopia and Mozambique. These programmes have included systematic LTR as a central component to develop capacity to clarify rights in rural and urban areas. In Mozambique, the programme has focused on rural community land registration through collective titling. Large-scale and mass coverage by some of these programmes distinguish them from smaller-scale sporadic or demand-led land titling for particular categories of land users.

This report offers a summary and overall assessment of DFID's experience with land tenure security programmes, the rationale for undertaking LTR, the factors influencing their success, wider evidence of what comprises successful LTR outcomes, and lessons learned. It aims to share information on best practice for the benefit of DFID advisers to apply to the design, planning, implementation and follow-up of country land programmes, broader land support facilities or development programmes involving LTR components.

### 1.2 Approach and methodology

This report reviews six land interventions that constitute DFID's principal formative experience on delivering LTR and supporting land administration. They include: three programmes involving large-scale LTR in Rwanda, Tanzania and Ethiopia; one business-oriented programme in Nigeria with an LTR component; one land programme in Mozambique focusing on securing land rights for rural communities and producer organisations; and a land sector institutional reform programme in Guyana involving LTR to update and clarify the state land-lease register.

Research for this report has drawn on several sources of information on DFID-funded land programmes. These include: design and build documentation, such as project documents and memoranda, business cases, theories of change, risk matrices and log frames; mid-term and annual reviews; and project completion reports. Wherever possible, this documentation was supplemented with research papers, such as systematic reviews.

This review focused mainly on project design, implementation management, and outputs and outcomes where these are known. Because of the long timeframe needed to achieve demonstrable outcomes and impacts from programmes with significant LTR components, there is, to date, limited understanding of longer-term impacts. In addition, some of the programmes did not have a built-in baseline study from which to assess long-term results.

### 1.3 Structure of the report

This report initially clarifies the concept of LTR – what it does and does not include (Section 2). It then presents the rationale for LTR within the wider context of land tenure, land policy and land administration reform, as well as DFID's specific aims and whether evidence shows that these were achieved (Section 3). Later sections draw out key points on how LTR can best be undertaken – technically, economically and politically (Section 4). The report concludes with key lessons learned and recommendations for DFID advisers and land practitioners when thinking about the design, roll-out and follow-up of future land programmes that may have significant LTR components (Section 5).

# 2 Understanding land tenure regularisation

# 2.1 Defining the aim and scope of LTR

LTR is an administrative procedure designed to clarify the rights of existing occupants and/or users of land and, where necessary, convert these into legally recognised rights, usually by granting registered title to the land. The exact nature of the title to be granted will vary from the award of leasehold titles or other forms of certification of rights to use and occupy land (where rights to land are formally held by the state, or sometimes by traditional authorities or land-owning families) to absolute freehold title to the land.

The type of interest or title to be granted in any given situation may be applied across a wide range of tenure situations to clarify and recognise rights across a general continuum of rights (Box 1). These include:

- initial clarification of rights within informal and customary systems that may not necessarily lead to full title under statutory law but may be used to develop local registers and associated by-laws
- clarification of individual and/or group rights leading to legal title and registration, contained in a formal registration system.<sup>1</sup>

In practice, in many cases, and when applied to pre-existing customary rights, LTR will involve the process of first registration and the establishment of local and national registries in a low-cost, participatory and sustainable manner. The key outputs of investment in LTR are national and/ or local registers of rights that provide open and public records necessary for existing land rights to be recognised and legally and securely transacted, as the basis for effective land administration.

### Box 1 The continuum of land rights

According to the conception of the Global Land Tool Network (GLTN) of different forms of tenure, land rights lie on a continuum: 'At one end are formal land rights, where the owner is an individual, who holds a set of registered rights to a parcel of land that are enshrined in law; the parcel is delineated on a map held in a records office; the owner has the right to occupy the land, build on it (subject to approvals), sell it, rent it out, transfer it to his or her heirs, and prevent other people from coming on to it. At the informal end of the continuum are informal rights; a group of individuals (such as a clan) who may have traditional rights to use a piece of land. The boundaries of the land may not be clearly marked on the ground or on a map, and there may be no official paperwork certifying who owns or has what rights to the land. In between these two extremes are a wide range of rights.'

Source: GLTN (2015).

<sup>1</sup> Adapted from McAuslan (1994: 47) in Dale and Mclaughlin (1999)

The initial investment in LTR and the resultant registers can be significant in terms of time, cost and supporting land administration infrastructure.

Once the registers are completed they should never need to be re-done but must be maintained and updated through day-to-day transactions (changes in ownership), annotations and amendments as an essential component of the land administration system established to record and legally administer rights in land. LTR is thus not a standalone intervention; it must be part of a general reform of the land administration itself.

### 2.2 Types of LTR programmes

Most DFID-funded land programmes that have significant LTR components have focused on a range of issues that ultimately required formalising individual rights in land under freehold or long-term lease titles. These programmes have sometimes been wide ranging, involving policy and legal developments, institutional and technical support programmes and field interventions. Five of DFID's long-term programmes have made a significant and sustained large-scale investment in land

### Box 2 Overview of six DFID land interventions with significant LTR components

Rwanda Land Tenure Reform Programme (LTRP) and Land Tenure Regularisation (LTR) (2003–2018)

Comprehensive long-term land tenure and legal, policy and institutional reform with strategic planning (LTRP) under Phase 1 (2003–05). Phase 2: full national LTR and land administration development programme – implementation of a wide range of developments set out in new policies and laws.

Ethiopia Land Investment for Transformation (LIFT) (2013-2020)

Land certification programme in four regions, LTR with improved rural land administration systems, cross-cutting policy reviews and development of the rural land sector to enhance productivity and investment. Complementary market-systems interventions ensure that the benefits of LTR are maximised. Certification is estimated to cover 14 million parcels.

Mozambique Community Land Use Fund (CLUF) (2006–14); grants under Mozambique Land Action (MOLA) to the Community Lands Initiative (2014–2019)

DFID leadership of a donor consortium to implement a Community Land use Fund (CLUF) to map and register land rights of, and promote land-based economic development for, rural communities and producer associations. Established the Community Lands Initiative (iTC) as an independent organisation now being established as a national foundation.

Tanzania Land Tenure Support Programme (LTSP) (2016-2019)

Land titling programme with policy and institutional development. Rural LTR and issuance of Certificates of Customary Rights of Occupancy (CCROs) in three pilot districts, including land-use planning development of local land registries, and methods and procedures for scaling up. Policy and institutional development; raising awareness of and strengthening participation, consultation and representation; capacity-building at all levels.

Nigeria Growth and Employment in States (GEMS) (2012–2017)

Programme to improve the Nigerian business climate. Land activities to de-risk investment and rationalise land administration at state level in Kano and Jigawa. Process review and institutional development; gender inclusion and empowerment strategies; development of Systematic Land Title Registration (SLTR) model; support to large agriculture investment mechanisms using SLTR.

tenure reform in which regularisation and registration at individual or household levels have formed a substantial part. DFID has also supported interventions at community levels in Mozambique over 12 years from 2006 to 2018 using approaches of collective titling and decentralised land management involving customary leaders, producer groups and community-based organisations.

All programmes except for those in Mozambique and Ethiopia have used systematic LTR methods for first registration.<sup>2</sup> In Guyana, systematic LTR was designed to rectify existing leasehold registrations that had not been updated to enable the main land institution in the country to provide proper land administration services. Box 2<sup>3</sup> summarises the key characteristics of the six DFID land programmes reviewed.

<sup>2</sup> Systematic methods have been used in Ethiopia. However, this was for updating first level certification to second level certification, following a previous 'first registration' intervention.

<sup>3</sup> Principal elements of a planned 2015–2020 successor programme (MOLA), intended to develop local and provincial government capacity for land registration and participatory land use and economic planning in three central provinces, was not implemented due to procurement problems. MOLA provided continuing grant funding to iTC as an independent body during 2014–19 but without provision of technical or management support.

# 3 Rationale for and outcomes of LTR

Land reforms can have a range of economic, social and administrative objectives. These reflect the contexts of the target countries, the demands and evidence base for land tenure and policy reform, the status of existing land registration and land administration arrangements, and shifts in the focus of policy, specifically an increasing emphasis on both promoting and responding to economic growth.

The rationales for undertaking LTR in DFID-supported land programmes using some or all of these factors are variously stated in business cases, project memoranda and scoping documents - usually as part of a series of wider land policy objectives. However, the requirements, procedures and expectations for project documentation have changed over the last two decades, as new insights and experience from tenure reform have come to light. For example, the rationale for implementation interventions in Guyana was developed as part of early feasibility work which included a business plan for land administration that necessitated a programme of LTR. By contrast, a designand-implementation approach was adopted in Ethiopia. This allowed for a business case to be developed that aimed to follow an M4P4 approach to permanently transform existing institutions and promote market systems.

The following sections review several economic, social and administrative factors that provide the rationale for work within each of DFID's land programmes. Where possible, these are also compared to the most recent, and in some cases ongoing, evidence on the actual outcomes achieved.

### 3.1 The economic case

Tenure reform, especially if it leads to largescale registration or reforms in how land administration is carried out, is a holistic undertaking that affects individuals, businesses and government on every level and therefore has an important role to play in supporting the wider economy. Combined with initiatives to strengthen access to markets and credit, LTR is expected to provide individuals and companies with security for their land and property rights. This can provide the basis for increased investment and productivity, providing a secure legal basis to strengthen land markets and - ultimately improve macroeconomic growth (e.g. Besley and Ghatak, 2009; Locke and Henley, 2014; Lawry et al., 2017).

The general contextual situation needs to be made clear through early assessment of the political economy and governments' receptivity to change and developing land rental and purchase markets. As an example of this, Box 3 summarises the results of economic analysis undertaken in the strategic planning stage of the Rwanda National Land Reform Programme to assess the justification for LTR – in this case first registration of land for the whole country. Separate cost benefits were undertaken to further support the case for change.

At the microeconomic level, the literature identifies three main channels through which tenure security can contribute to inclusive economic development: promoting productive investment; improving credit access; and increasing land market activity.

<sup>4 &#</sup>x27;Making Markets Work for the Poor' (M4P) refers to an approach that seeks to tackle market failures and ensure that markets create large-scale, lasting benefits for the poor.

### 3.1.1 Promoting productive investment

Studies have shown that weak rights undermine investment and reduce productivity in Africa (e.g. Besley, 1995; Deininger and Jin, 2006; Goldstein and Udry, 2008; Fenske, 2011), However, though the positive effects of tenure security on land-related investment have been noted in the literature (Deininger and Feder, 2009), the evidence base is not strong and conclusive in all contexts (Locke and Henley, 2014). Nonetheless, evidence shows that better defining and protecting property rights via demarcation of land and adjudication of rights demonstrates some positive impacts. These include increased investment in land or freed-up labour for other productive uses rather than time spent guarding less secure plots.5

The need to strengthen tenure security through LTR in order to boost investment in land and agricultural productivity by farmers<sup>6</sup> underpins many of the DFID-funded programmes. This argument is often framed around smallholder farmers where insecure land tenure is seen as a barrier to improving low levels of agricultural productivity and investment and thereby acting as a brake on economic growth. However, attracting external investment in agriculture is also important – this underpinned the recognition of community land rights in Mozambique as the entry point to facilitate partnership with investors and promote access to public development programmes.

So far, early evaluations of the Ethiopia LIFT programme's LTR and market systems approach have observed positive changes in input markets, which in could imply desired impacts on land investment and productivity. Programme documentation also reveals that an increase in levels of tenure security among farmers led to productive investments in land in Tanzania and Guyana. Nigeria's GEMS3 has widely been credited with facilitating private-sector investment, although the quantifiable

effect remains elusive. Similarly, Mozambique's Community Land Use Fund (CLUF) promoted a diversity of new economic opportunities by enabling beneficiaries to access business and development support, credit, shares of government, natural resource tax revenue and partnerships with private investors.

The most compelling evidence of tenure reform promoting productive investments comes from an impact assessment of Rwanda's LTR programme. In rural areas this found positive impacts on soil conservation investments, such as building or maintaining structures like bunds, terraces and check dams. Individuals whose parcels had been registered almost doubled investments in soil conservation and femaleheaded households even tripled them (Ali et al., 2014). There is also evidence of a drop in farm labour as well as a shift towards self- or wage-employment with higher incomes.<sup>7</sup>

### 3.1.2 Improving credit access

While there has been some evidence of the positive impacts of land titling on credit access (see e.g. Feder et al., 1988), most studies find that effects are slow to materialise (Field and Torero, 2006). In theory, though the immobility and indestructibility of land make it an ideal source of collateral, it remains costly for banks to determine whether plots of limited size located in remote locations, offered as collateral, can be accepted (Ali et al., 2011). Furthermore, as in the case of Ethiopia, land 'ownership' is vested in the state and so is not legally possible to offer as collateral.

With regard to credit this suggests that LTR, even when accompanied with improvements in land administration, is not in itself sufficient for meaningful change in credit access. Complementary interventions are needed. Ongoing work in Ethiopia is helping to address this through initiatives with banks and micro finance institutions, reflecting an evolution of

<sup>5</sup> See e.g. recent studies by Deininger et al. (2011) in Ethiopia or Goldstein et al. (2015) in Benin.

This argument tends to be discussed for smallholder farmers but attracting external investment in agriculture by clarifying land and property rights is also an important driver for governments.

<sup>7</sup> Based on initial findings of an RCT presented at the 2018 World Bank Conference on Land and Poverty (Ali et al., 2018).

DFID's thinking and the evidence base on LTR. LIFT explicitly recognises that most of the economic benefits of LTR in the most populated rural regions in the Ethiopian highlands depend on complementary interventions designed to promote the use and uptake of land certificates, such as improved access to finance and financial and agricultural markets. In this way, the programme aims to boost productivity, create jobs and strengthen markets to raise income and lift people out of poverty. To date, the evidence is compelling, with over 9,400 loans worth £7.4 million (US\$9.7 million) issued to farmers using their land certificates to reduce risk to lenders. However, providing new lines of credit to individuals through microfinance institutions remains an issue due to the lack of loans available.

There are also ambitions to work closely with banks and microfinance institutions under LTSP in Tanzania. Banks are already working closely with field teams to promote investment and expand the local credit market under the USAID-funded LTA programme. However, to date evidence from Tanzania suggests that certificates have not yet enabled farmers to secure bank loans on a significantly large scale (Stein et al., 2016).

However, the impact on credit markets may take more time to unfold. For instance, there is evidence of a positive impact of LTR on credit access in Rwanda, with an observed average increase of 40–80% per year in transactions, with up to 17 banks and more than 70 microfinance agencies accessing the register. In December 2015, it was recorded that 'US\$2.6 billion of mortgage lending was secured by 49,694 loans, of which 65%, 30%, and 5% were secured against residential, agricultural, and commercial land, respectively' (Ali et al., 2017: 387).

The focus in Nigeria was different, in that LTR was part of a broader effort to strengthen the business environment, specifically to generate land titles, in this case through Certificates of Occupancy (CofOs). However, it was also – mistakenly – expected that these titles would then facilitate borrowing and thus drive the growth of micro-, small- and medium-scale enterprises (MSMEs). So far, the evidence in Nigeria is mixed: 21–24% of respondents

indicated that accessing loans was a reason for applying for a certificate of occupancy, and 4% actually used certificates to access loans.

Likewise, the evidence base is less than clear in Mozambique and Guyana. The programme in Mozambique enabled producer associations to access municipal and in some cases bank-operated credit schemes but did not facilitate credit access for individual farmers or households, as issuing them with land rights certificates was outside its scope. There is also little evidence of improved credit uptake in Guyana, where lease terms of 50 years or less are insufficient to enable the granting of credit access to leaseholders.

### 3.1.3 Increasing land market activity

Overall, LTR serves to promote more active land market activity by providing a secure legal basis for transactions. It can also serve to increase rental market activity, as it reduces a landlord's risk that tenants or other parties will assert ownership claims. Efficient land markets can, thereby, provide mechanisms to reallocate underutilised land to more efficient uses and therefore increase productivity. Where all rights are registered and legally recognised this should limit the opportunities for land grabbing by stronger claimants over weaker ones.

For DFID, land reform as a means of increasing the efficiency of land allocations, transfers and agricultural productivity for land users was a significant design ambition in Rwanda's LTR and Ethiopia's LIFT programmes. LIFT supports innovations that improve landrental processes and procedures, including generating greater awareness and information around rental markets, fair pricing and an improved legal and regulatory framework. In particular, the desired impact is to facilitate transfers to more productive uses, as well as consolidating land and cropping systems. This was a key driver in Guyana, where previous leases were not transferable, and the economy needed to move land out of rice and sugarcane to free land for the expansion of residential and commercial purposes.

Recent data now shows that the original ambitions of Rwanda's LTR programme in terms of land market activity have been met, with

total transactions (of all types) having increased to over 250,000 since 2011, approximately a quarter of which are transfers (Baldwin et al., 2019). Based on growth projections, the total number of transactions (all types) will almost triple to 500,000-600,000 by 2023-25. LTR also improved land-rental market functioning and efficiency-enhancing land transfers to buyers and tenants with greater agricultural skill sets, as well as resulting in higher non-farm employment. A wave of distress sales, as feared by critics, did not materialise (Ali et al., 2015). Similarly, the proportion of female ownership was not adversely affected, suggesting that men were not using land transactions to transfer land from female landowners (Global Challenges Certification, 2017). However, the introduction of a flat-rate transfer fee of RwF20,0008 initially caused a significant reduction in registered land market activity, particularly at the lower end of the market where this was a very high percentage of low-value or smaller plots (Ali et al., 2014).

Changes in land-rental systems have also been observed in Ethiopia, although evidence is still being collected. To date, 14,441 formalised land-rental contracts have been recorded. Early reviews indicate that these contracts have increased trust between landlords and tenants, helping them to avoid disputes and supporting vulnerable groups (e.g. female-headed households) in paying school fees and diversifying livelihoods. As with Rwanda, there is also evidence that the system has empowered women's roles in decision-making around land-rental transactions and the general management of the household.

Evidence on the impact of LTR on land market activity in Guyana, Mozambique, Nigeria and Tanzania is not yet available. However, a previous study of the impact of issuing 200,000 leasehold titles to over 200,000 informal land claims in Dar es Salaam found significant positive effects on housing investment, an indicative but not statistically robust increase in tenure security and reductions in land sales, but no impact on credit access (Collin et al., 2015).

### 3.2 Social factors

# 3.2.1 Prevention of land disputes and promoting social cohesion

Without clear tenure arrangements, natural resource disputes and conflicts with associated civil disorder can escalate to cause both social and political instability. The participatory methods used for LTR can be applied to resolve these issues through clarification of boundaries and access rights to reduce ambiguities. This can be effective where disputes or conflicts arise between farmers and pastoralists, within or between families and communities, between communities and external investors, or between governments and individuals or communities.

The need to resolve or reduce disputes is an integral part of many of DFID's land programmes. In Rwanda, registering land through participatory LTR was seen as key to resolving and moving beyond the fragile postgenocide political and social situation to promote peace and reconciliation (Box 3). Rwanda's LTR programme increased security, reduced disputes and supported general peace and stability. Between 2010 and 2012, less than 0.1% of the 8 million titles were disputed (Shearer, 2013).

While there is no literature that looks beyond land disputes to assessing the contribution of the LTR programme to wider peace and stability, one study noted that:

Systematic land titling has been used in post-conflict situations ... A case could be made that land titling has been more successful in meeting the objective of political stability than in achieving the more widely advertised economic impacts. (Bruce, 2007)

# 3.2.2 Promoting social inclusion and gender equality

The aims of land reform are not just limited to post-conflict situations, but can address existing social inequalities as well. Cutting across the drivers of LTR programmes is a general aim of

<sup>8</sup> Replacing the percentage charge bands based on a percentage of the value of the land or property.

<sup>9</sup> Project Memorandum for Phase 1 in Rwanda.

#### Box 3 LTR as a solution to land-related conflict in Rwanda

'Researchers have tended to consider land scarcity as a possible causal factor in the Rwandan genocide (André and Platteau 1996; Uvin 1998). Although a simple Malthusian explanation is unconvincing, it is true that during the 1994 genocide the political elite tried to incite ordinary peasants by insisting that lands held by Tutsi families would be redistributed once they had been killed. This became one of the rationales to justify the killing (Straus, 2006: 165).'

(Takeuchi and Marara, 2009)

'Conflict over land is a big issue in Rwanda and we cannot ignore that fact ... there are no common rules and this brings conflicts over land ... Even before genocide, there were many land conflicts among same families or different families. The genocide added to what existed before and the situation became worse. It was easy to tell people to kill to get more land from people killed. This became easy when those lands were not registered ... there is a huge necessity to have laws and regulations, especially in our society who has been covered by a bad history for a long time.'

(Kayitesi Blewitt, personal communication, 2005)

promoting understanding of land-rights issues and equal access for all groups. Emphasis is often given to women's rights but such programmes can also promote the inclusion of other vulnerable groups by raising awareness of land access and governance issues. Older people tend to have more of an affinity and attachment to the land and may have significant authority over it, so can also form an important target group in LTR activities.

Nonetheless, promoting gender equality is a legal obligation of DFID funding<sup>10</sup> and several decades of academic research have confirmed the importance of women's ownership of, and access to, land for women's empowerment and a range of associated household and development outcomes (Lanz and Daley, 2016; Meinzen-Dick et al., 2017). There are three main pathways through which clarifying and strengthening women's land and property rights can achieve this:<sup>11</sup>

- strengthening women's empowerment and influence over decision-making
- increasing women's productivity or incomes in farming and other agriculture-related livelihoods
- enabling women to mobilise their land rights to diversify into non-agricultural activities and sources of income, e.g. through rental of land as well as via industrial activity such as agri-processing.

Early studies of land tenure reform in Tanzania suggest that such changes may have improved the tenure security of some women (Daley, 2008; Englert, 2008). Studies from other experiences show that land titles given to women have increased their bargaining power in some countries, including Ethiopia (Meinzen-Dick et al., 2017). However, equitable land laws and land titles issued to women may not always guarantee women will automatically claim their rights or enjoy the associated benefits. While

<sup>10</sup> See International Development Gender Equality Act 2014.

<sup>11</sup> This draws on IFPRI's conceptual framework on the links between women's land rights, poverty reduction and economic empowerment (Meinzen-Dick et al., 2017). The literature tends to focus mainly on women's land rights in rural and periurban settings.

LTR procedures and the resulting titling can be gender-sensitive, enforcement of rights can be problematic due in part to lack of awareness, male resistance, inaccessibility to justice with associated costs, lack of political will on the part of governments, and social and cultural norms (McAuslan, 2010; Veldman and Lankhorst, 2011; USAID, 2013). Ownership of assets confers power to women only if they can secure cultural interpretation of this ownership as legitimate and appropriate (Jackson, 2003).

While all the programmes incorporate an element of promoting women's land rights, this has become more pronounced over time, with an increasing emphasis on joint titling and participatory regularisation processes. DFID-funded programmes have increasingly acknowledged that LTR is either part of a package of measures to promote women's economic empowerment (such as in LIFT<sup>12</sup>) or is accompanied by actions to change social norms around women's land rights (e.g. in Tanzania and Rwanda). Women's participation in community-based land management was also central to programming in Mozambique.

The evidence around these programmes' social impact has largely been positive, especially with respect to strengthening women's land rights. Rwanda's LTR overwhelmingly increased female ownership of land, improving women's tenure security as well as knowledge and raising awareness of land rights (Ali et al., 2011; 2014; 2017; Santos et al., 2014; Lengoiboni and Groenendijk, 2015). Of the parcels owned, 86% have a woman as either sole (25%) or co-owner (61%) (Ali et al., 2017). Furthermore, women's rights to bequeath or sell and were increased (Ali et al., 2015), as was female empowerment to make decisions on land (Langoiboni and Groenendijk, 2015). However, registry data on subsequent transactions implies a decline in the number of parcels for which at least one claimant is female from 86% to 77%, 'warranting continued monitoring' (Ali et al., 2017: 381).

Women's land rights were also strengthened in Ethiopia, where a higher than expected 89%

of titles were issued with female household members listed either jointly or individually. In Mozambique, CLUF gave women a greater voice and increased engagement in community organisations and women-led community enterprises. Before this, studies (e.g. Forum Mullher et al., 2010; Quan et al., 2013; FAO, 2015) had noted the lack of women's decision-making power over customary land, due in particular to higher non-literacy among women. Poor and vulnerable groups in Tanzania enjoyed increased levels of tenure security as a result of the LTSP.

### 3.3 Land administration issues

The administrative objective of tenure and land-administration reform to support LTR has often been less well understood and sometimes given lower priority in implementation of DFID-funded programmes. Without an accurate, well-run and transparent land registry, local and national governments cannot approve and register legally secure land-rights transfers through sale, inheritance or gift. (Please see Section 4 below for more details.)

The exception is Guyana, where the long period of under-investment in lease registry had left documents insecure, plans out of date and many transactions overdue or never completed. Without clear and unequivocal land records, the Guyana Land and Surveys Commission was unable to meet its obligations to ensure transparency in the administration of public lands and the raising of revenue, resulting in a programme to strengthen the leasehold registry through LTR. Guyana also represents the biggest success story from an administrative point of view. Today, GLSC is an autonomous body thanks to the financial sustainability achieved through registration and collection of revenues from 15,000 newly-registered leasehold land parcels.

In Rwanda, discussions on the possibility of using registration to improve the tax base came in the latter part of Phase 1 of the LTRP. The

<sup>12</sup> DFID Ethiopia commissioned a study to learn about the 'additional interventions that will facilitate women to use their access to land ... to enhance/diversify their income, increase their productivity and become economically empowered' (Lanz and Daley, 2018).

finance ministry was keen to use LTR in urban areas as way to levy property tax. However, the final approach adopted was to emphasise the benefits for citizens of clear property rights, rather than presenting LTR mainly as a precursor of new taxes. This has yielded clear results and transaction fees associated with LTR have generated considerable income: US\$3.4 million in 2017/18 and rising. Correlation with GDP indicates that this income is expected to almost double in three to five years. With more than US\$25 million of fee income generated already, the total amount of development-partner investment should be recouped by 2023–25. Furthermore, land tenure and administration reforms have resulted in clear improvements in performance. In 2016, 82% of women and 74% of men interviewed in Rwanda reported that they were satisfied with the country's land administration services (Global Challenges Certification, 2017). At the same time, the Rwandan government recognised the need to reduce remaining barriers to accessing administrative services through further decentralisation and establishing an integrated online portal (Global Challenges Certification, 2017). Backlogs are beginning to emerge at district level and the current structure needs development to become sustainable. Similar lack of proper maintenance of the registers is a common issue in more mature programmes, including those in Rwanda and Mozambique.

In contrast to Rwanda, experience in Tanzania has shown that rumours of registration being used as a means of levying taxes can severely hinder and discourage participation to the point where local populations refuse to participate and provide information. Furthermore, high fees can severely impact the collection of certificates and titles. Despite Nigeria succeeding in providing a simplified process of issuing certification and registering 180,000 plots, the number of CofOs actually collected was very low (fewer than 1,000). Nonetheless, GEMS3 in Nigeria has increased internally generated revenue for Kano State from N11 billion in 2011 to N30.9 billion in 2016. The Collateral Registry, which was facilitated by GEMS 3's federal investment team, now has registered assets worth \$102 billion.

Likewise, although mass certification has been achieved in Ethiopia, where 11 million of 14 million parcels have so far been demarcated and 7.7 million have been issued with second level land certificates (SLLCs) at low unit costs. However, uptake of certificates is still low (13% according to latest review) and the land administration is rarely used for registering transactions.

# 3.4 Has LTR achieved its objectives?

Overall, in terms of the number of titles issued under these programmes, the results are certainly impressive: over 20 million individual or joint titles or certificates across Rwanda, Nigeria, Ethiopia and Tanzania have been prepared and issued, with 1,400 community titles in Mozambique. However, focusing on the number of titles issued may ignore the wider economic, social and administrative outcomes and impacts of tenure and land-administration reforms, which are summarised in Table 1. For instance, recent household-survey evidence from Rwanda, Nigeria and Tanzania suggests that the possession of formal property rights does not necessarily translate to perceived tenure security, unless complemented with additional measures (Prindex, 2019).<sup>13</sup>

The evidence base for the impact of DFID's programmes is still developing, partly because some programmes are still ongoing and also because the results take considerable time to evolve. In some cases, lack of baseline data makes it difficult to assess a direct link between tenure and land administration reforms and wider social and macroeconomic improvements.

However, on balance, the evidence that does exist, and positive government and public responses to initiatives so far, suggest that DFID-supported programmes have led to improved economic outcomes in the form of productive investment, credit access and land market activity in Rwanda, Ethiopia and, to a lesser extent, Nigeria. The social impacts, where measured, have also been overwhelmingly positive, particularly in terms

<sup>13</sup> Ethiopia and Guyana were not included in the 2019 survey, and in Mozambique there was not a statistically significant relationship between the possession of formal property rights and perceived tenure security.

of strengthening women's land rights. The outcomes of DFID's programmes in terms of well-functioning land institutions and their sustainability are the most difficult to

judge within a short timeframe, with only Guyana demonstrating the emergence of a financially sustainable and autonomous landadministration system.

Table 1 Outputs, outcomes and impacts of DFID's LTR programmes

Programme	Direct LTR outputs	Selected high-level impacts
Ethiopia LIFT	Nearly 12 mln parcels demarcated and 9.4 mln issued with SLLCs; 7.7 mln SLLCs collected/ distributed (ongoing: aim is 14 mln)	Economic impact: some evidence of productive investments by farmers; improved credit access with 9,415 loans worth £7.4 million (US\$9.7 million) issued to farmers using land certificates to reduce lenders' risk; increased land market activity with 14,441 formalised land-rental contracts so far recorded.  Social impact: 89% of titles issued list woman's name (singly/jointly); 1,690 parcels returned to rightful users in vulnerable groups.  Administrative impact: cost per parcel to be reduced to £3.90 (US\$5.10).
Guyana GLASP	Registration of 15,000 land parcels	Economic impact: evidence of productive investments among farmers but lease terms deemed insufficient for granting credit access.  Administrative impact: revenues increased to over G\$100 million. To this day, the GLSC remains an autonomous and financially sustainable body.
Mozambique MOLA	Approximately 725 registrations of community land holdings and 675 collective titles for producer groups	<b>Economic impact:</b> new diversity of economic opportunities enabling beneficiaries to access business and development support, credit, shares of government, natural resource tax revenue and partnerships with private investors. <b>Social impact:</b> increased voice and engagement of women in community organisations and women-led community enterprises.
Nigeria GEMS3	180,000 plots registered; fewer than 1,000 CofOs collected	Economic impact: facilitated private-sector investment in Kaduna (to the tune of \$350 million); some evidence of improved credit access, with 21–24% indicating that accessing loans was a reason for applying for CofO and 4% actually using certificates to obtain loans.  Administrative impact: despite mass registration of plots, fewer than 1,000 CofOs collected due to high fees involved; internally generated revenue in Kano State increased from N11 billion in 2011 to N30.9 billion in 2016, while registered assets currently stand at \$102 billion.
Rwanda LTR	11.4 mln parcels demarcated; 8 mln titles issued; 7.4 mln titles collected	Economic impact: individuals with registered parcels doubled soil conservation efforts against those who were not registered; increase in non-farm labour; improved credit access with \$2.6 billion of mortgage lending through loans largely secured against land; increased land market activity with over 250,000 transactions registered.  Social impact: significant contribution to long-term peace and stability with fewer than 0.1% of 8 million titles disputed; overwhelmingly positive impact on married women's access to land (76% of sample).  Administrative impact: \$3.4 million generated from transaction fees associated with LTR and \$25 million from fee income. Costs projected to be recouped by 2023–25; improved satisfaction with land administration services although backlogs are emerging.
Tanzania LTSP	211,989 parcels demarcated and 38,438 registers issued (aim: 300,000 parcels)	Economic impact: evidence that improved tenure security has led to productive investments in land by farmers; however, farmers have so far been unable to use certificates to secure bank loans.  Social impact: improved perceptions of land-holders on tenure security among smallholder farmers and vulnerable groups, especially women (from 9% to 50.5%).

# 4 Successful LTR design and implementation: DFID's experience

The broad range of political, social, technical and economic factors must be taken into account when implementing LTR. This requires detailed planning, best practice in implementation and ongoing monitoring of existing and potential impacts over time. Investments in LTR and first registration of land are for the long term, and signal significant changes in how land is administered and transacted in future years. The following sections summarise key parameters that must be considered in both the design of work and its implementation. This draws on DFID's considerable experience to date, as well as on key points from research literature.

### 4.1 Political buy-in

DFID-funded land programmes have been most successful and delivered at greatest scale in a context of strong government commitment and ownership of the process, and where government perceived the programme as contributing to the longer-term national economic development trajectory. This may also be driven by a strong commitment to implement relatively recent and broadly supported land laws. This has been the situation in Rwanda and Ethiopia, where individualised landholding patterns, insecure tenure conditions, demographic pressures on land and the growth of informal land markets in different regions necessitated the need for comprehensive tenure reform and regularisation. Strong stakeholder ownership, including by government at different levels, was also a key factor for a successful programme in Mozambique.

The ongoing challenge for future programmes is how to support existing political commitment and encourage necessary reforms in other countries where political will is lacking. Where there is real national commitment, community needs and customary rights or practices must be considered and incorporated in planning and implementation from the outset. There is little explicit focus on this in programme documentation for the six land programmes reviewed here. However, local community focus and participation in the process has played a central role in all the implementation programmes to date and is considered fundamental to successful implementation of land programmes in general and of LTR in particular. In addition to the six programmes, we have drawn on wider literature on the political economy of land reform to identify barriers to change and how these might be overcome.

# **4.1.1 Overcoming common barriers to change**

Land governance and reform are considered deeply political (Boone, 2013). It is common for legal and institutional reform to be frustrated by patronage politics, clientelism, corruption, low institutional capacity, vested interests, interelite collusion and the workings of informal institutions (Boone et al., 2018). As a result, land reform often lies in the hands of a diverse range of institutional actors, at both administrative and representative levels, often driven by conflicting priorities that may be both personally and

politically motivated. Institutional conflicts and contestation can hamper reform efforts through inherited mandates and vested interests relating to constituencies and resources or power at different levels. Typical examples include:

- Where responsibility for implementation is vested in a single ministry but other ministries, departments and agencies also have significant interests in how land is managed and administered. These interests may not always be aligned.
- Government institutions at different levels often have different interests: top-down policy development and implementation may result in significant problems with local government over mandates, procedures, roles and responsibilities, and resourcing.
- Communities themselves and customary authorities may also challenge the laws and actively oppose their implementation, where the implementation of statutory rights do not take account of the existing rights or prerogatives.

Where a reform programme has been proposed, it may also be the case that accompanying policy reforms are not wholeheartedly supported in relevant sectors of government due to policy inertia or active resistance to change (Pierson, 2004). This may be because of the presence of stakeholders who have the power to stall, check or undercut reform, and in some instances block

attempts to progress to implementation, but whose consent and cooperation is required to advance reform.

Furthermore, governments may not fully understand the possible consequences of reforms and what will be required to sustain them. For example, Tanzania's land laws were passed in the 1990s, but the country has struggled to implement them effectively, mainly due to the scale of the task and capacity constraints in the implementing government institutions. Only now is the government considering moving to a national programme following three years of field testing, as an emerging economic imperative in response to growing land pressure. This contrasts sharply with Rwanda, where political commitment to implementing new laws with strong public backing was very high. Within just five years of passing new land laws in 2005, the government had detailed the laws and procedures required, beginning a nationwide LTR programme in 2010.

Insights from the wider literature and the field experience of DFID LTR programmes point to an overriding need for early discussions between government and potential donors on programme design. This is required in order to ensure these are highly attuned to political-economy dynamics of actor networks inside and outside government involving astute and agile interaction with different stakeholders. This can be achieved by both drawing on more specialised governance or political-economy capacity and building in sufficient time

### Box 4 Avoiding barriers and creating allies in land titling: the Philippines

Congressional approval of a Residential Free Patent Bill and passage into law in 2010 resulted in a 1,400% increase in residential land titling in the Philippines, due to the greater ease with which ordinary Filipinos can obtain secure title to residential land in urban areas.

This took place in an unfavourable political context, characterised by the absence of institutionalised political parties and prevalence of corruption, control of regional politics by locally dominant families and an executive branch with weak capacity to deliver policies.

A team of local activists supported by the Asia Foundation developed a way of formulating the objective of land reform that side-stepped major opposition, avoided threatening entrenched interests and generated support in unexpected quarters. This technically informed and politically agile approach worked through groups inside and outside government; it relied heavily on leveraging different sources of influence in less conventional places, spending political capital to build a strong coalition of interests and discovering allies through the learning process.

Source: Booth (2014)

and flexibility to construct alliances and make adjustments over time. Box 4 describes how this has worked in the Philippines.

Even with strong political commitment to change, supporting LTR programmes should involve widespread engagement with the public using participatory approaches. To help create favourable conditions for reform and provide reassurance that highly positive outcomes are possible, the following approaches are useful to consider:

- Providing information on successes and supporting cross-country exchange of experiences, both within and outside government. Government officials from Ethiopia visited Rwanda to understand lessons from the LTR experience there; donors have sponsored officials to participate in key land governance events, such as the annual World Bank Conference on Land and Poverty.
- Building capacity outside the government to advocate for positive change, as far as the political environment allows. A programme to support land-related civil society organisations (CSOs) in Tanzania was developed alongside the LTSP (although this could have been more far-reaching and impactful).
- Ensuring a thorough understanding of government perceptions of priorities and institutional concerns, and providing robust, fact-based reassurance to different ministries involved. Land programmes that spent significant time assessing and testing the feasibility of LTR processes and developing a clear strategy for implementation have been most successful. Rwanda's land programme is a good example, with two phases that established the sequencing of tasks and enabled further investment and donor support in long-term LTR and land administration.
- Working with veto players to reduce resistance.
   Organisations of land-related professionals,
   such as land surveyors, lawyers and project
   managers, may be resistant to new approaches
   to LTR. This may be because of vested interest

in established practices or due to unfamiliarity with new technologies. Resistance to the adoption of general boundaries by survey professionals in Nigeria required the GEMS programme to invest in monthly negotiations with the Nigerian Institute of Surveyors, which effectively delayed the LTR project for a year before the boundaries were accepted.

# 4.2 Planning and design for socially sensitive LTR

Confirming, protecting and ensuring the land rights of communities and more vulnerable or marginalised groups such as women and the disabled requires a detailed understanding of how groups access and hold land, and their roles working on and maintaining land and property. Some of these relationships may be determined through customary norms, in cases where the introduction of formal statutory systems through LTR may have unintended consequences.

Understanding and addressing social issues, particularly those related to gender, therefore need to take place from the planning and design stage of LTR, and through implementation as part of the ongoing processes and procedures of monitoring and evaluation. <sup>14</sup> It is important to gather accurate information and engage early with those affected to gain maximum understanding of the baseline situation before systematic large-scale LTR begins. This is best achieved through public meetings, focus groups and outreach to help provide two-way information on the law, how LTR will be implemented and how this will affect ownership of and access to land.

At the same time LTR processes need to ensure that the legal framework protects the rights of women and all other vulnerable social groups and that adequate measures are put in place during implementation. An important step is to test current systems and practices against the legal framework related to land, and to review the legal framework itself. Analysing statistics must go beyond headline figures. For example,

<sup>14</sup> This draws on procedural design initiatives for Rwanda, which are broadly followed in other countries – Tanzania, Ethiopia, Mozambique – and are recommended best practice. While this section focuses particularly on women, the same steps would also apply to managing other social or inclusion issues in LTR.

queries about the gender outcomes of LTR that assess the number of land parcels assigned to women generally mask issues of divorce, marriage and polygamy and their complex relationships to land ownership.

It has been shown many times in land programmes, notably in Rwanda and more recently in Ethiopia and Tanzania, that special measures to ensure inclusion of more vulnerable groups can be very successful. It has been shown that programmes to promote women's rights in Rwanda have proved particularly effective and provided an opportunity for women to learn more about how to assert their property rights.

In some communities, women, and members of other less powerful social groups, may be stigmatised for speaking in public about rights or claims. Steps to reduce this and ensure full exchange of information may include:

- holding public information meetings for separate social groups
- discussing different groups' property rights in general community public meetings
- providing gender-sensitive training for implementation staff.
- Procedures, checks and monitoring:
  - Community-based LTR programmes use a system of checks and balances to verify claims and claimants, allowing LTR to clarify rights and resolve competing claims.
    - All adults with a legal interest must be present during demarcation and adjudication.
    - Neighbours are used to verify legitimacy of individuals or staff recruited locally.
  - If fraudulent or unresolved claims are upheld, some people may not learn about an erroneous claim that affects them until after demarcation is complete. For this reason, a formalised period is needed in which people can file objections or corrections to the record. In addition, specialist training should be provided for all those within the community who assist in resolving land-related disputes, specifically those on women's property rights and consensusbased resolution techniques.

 Recognition of property and land-use rights of different social groups through LTR also requires ongoing verification. This is to ensure that programmes are achieving their intended results and benefits for the different groups, particularly for women and groups such as pastoralists who may be less visible.

### 4.3 The role of collective titling

While most DFID-funded programmes have focused on large-scale titling of household land parcels, this may not be appropriate in all contexts. Clarifying and registering secure rights to individual land parcels has proved useful in situations where land values are rising under demographic and market pressure, and when farmers, traders and family businesses require investment capital and need formal title or evidence of secure land rights to access loans (where broadly accessible credit markets are in place).

Where pressures on land and needs for finance do not lead to demands for individual title, it may be more appropriate to secure land rights on a collective basis through community-based organisations or producer groups, and to strengthen customary, collective management systems, as was done in Mozambique. Where rural communities rely on land and natural resources over wide areas, collective titling has created a basis for new business opportunities and partnerships, for the benefit of entire communities. In other regions where agricultural markets are growing, land titles for producer associations provide new ways for women, poor farmers and vulnerable groups to access land securely. In these contexts, individual titling may risk capture of land resources by local powerholders and better-off farmers, but formalising community land holdings can provide sufficient security to women and vulnerable groups. To ensure their protection, building legal awareness, arrangements for fair local governance and access to justice have proved to be important complements to collective land titling.

In Ethiopia, the LIFT programme focuses on securing individual household rights in the highlands - prime agricultural areas with higher pressure on land where farmers work individual plots on a long-term basis. 15 This contrasts with regions where land is under less pressure and used collectively, notably for grazing, where individual household titling is unlikely to be suitable and would involve higher costs. In Tanzania, the scope of tenure regularisation programmes has broadened to include collective customary rights of occupation of grazing and forest areas, alongside individual rights to agricultural land, according to the demands of land users. DFID-assisted land interventions in Mozambique have shown that mapping and formal recognition of community land holdings can provide the entry point for systematic household-level LTR or formalisation of individual titles as farmers come to demand them. At the same time, this enables communities as a whole to protect their rights and negotiate with external investors and claimants. These examples point to the need for a more differentiated approach to LTR: combining clarification of individual and collective rights, according to demand.

# 4.4 The importance of public outreach

Social inclusion and effective operations in the implementation of land administration development and LTR requires the effective design and construction of clear and consistent public messages that must be skilfully delivered in public fora. Through these structured messages the public will be informed about the LTR programmes and how land will be administered under the new arrangements using various media outlets, including social media where relevant, radio, newspapers and leaflets and, particularly at local/village level, village meetings. Key information in media announcements must include the reasons for LTR, the benefits to the occupants and an outline of the procedures that will be followed. All of the key messages should be government-approved at local or national level or both, and not left open to alternative interpretations by vested interest groups or individuals.

In addition to the processes of LTR, emphasis must be given to messages relating to the importance of land titles, how these should be kept within the household and what procedures are to be used to raise finance and pass on the land through sale or inheritance. Best practice requires improvement and protection of the rights of women and vulnerable groups, who must always be given considerable emphasis in the planning and implementation of LTR. If legal provisions exist for the protection of women's land rights, these can be disseminated and applied through public outreach of the administrative and regulatory procedures put in place by the programme.

# 4.5 Land administration: systems and institutions

Land administration systems provide the means through which the rules of land tenure are applied and made operational. This comprises systems to administer procedures and processes including the transfer of rights through sale, lease, loan, gift or inheritance and regulating land and property development. Services may also be provided to resolve ownership disputes and to enable land-holders to use their properties as collateral. These systems must be in place and given priority if activities relating to LTR are to be sustainable in the long term. Planning or establishing new land administration agencies, whether at national, local or even village level, must be given high priority within design and planning of LTR.

The need for training to build capacity to maintain and manage land registers is paramount. Registries need to register information about the value and use of land and its associated resources, ongoing transactions (including their level, type and location) and land parcel mutations, sub-divisions and consolidations. Services cover juridical,

<sup>15</sup> Despite most registration under LIFT applying to privately held land parcels, the SLLC process also identifies, demarcates and records communally held land. Instead of the individual or household, the communal land is recorded in the name of the Kebele Administration or community.

regulatory, fiscal, and information management and are usually organised in terms of technical and financial capacity to survey, map, provide land registration and, where necessary, land valuation. Land registries' primary purpose is to maintain and provide accurate records of land and property ownership, needed either by land users themselves or by government. This can be for planning purposes, to support the management of market transactions, address land disputes and facilitate government revenue generation, from service fees to rental charges where applicable. As a result of large-scale LTR work, expanded and improved registry capacity and a proactive customer service orientation will be needed. Following LTR, revenues may be raised to off-set the costs for providing these services through levying fees for transaction, although low-income land users cannot be expected to pay high fees or government rents where formerly no such fees or rents were payable.

Ancillary uses for the register might be in planning for provision of water and/or electricity, levying property taxes and enforcement of zoning and environmental laws. The potential for developing these functions as part of a multipurpose cadastre may also serve to encourage additional government buy-in from related government departments.

### 4.5.1 Demand and supply issues

Some important lessons have emerged from the programmes undertaken by DFID relating to establishing, running and sustaining land administration systems. These concern:

- demand-side how to ensure landowners make full use of new formal systems to ensure a legal basis for ongoing transactions and that the registration of transactions is kept up-to-date, rather than reverting to informal, unregistered practices
- supply-side how to establish sustainable, accessible, cost-efficient systems and institutions and maintain the registries for the long term early in programmes where LTR is to be implemented.

One of the most significant and recurring themes of project review documents involving

LTR has been that much more emphasis and attention is required for establishing and maintaining land administration institutions and land information systems. Without the long-term presence of a functioning land administration that is actively used by all landowners, the initial accuracy of the record obtained through LTR and the longer-term benefits of LTR will erode over time. Planning and design for the development of land administration services must therefore take into account the strength of the local and national land market and the existing and potential volume of transactions. Without public demand to drive the system, the public record established through first registration LTR and the related land administration service will quickly fall into disuse.

The establishment of a land administration system and appropriate management structure for updating the cadastre and recording land transactions cannot therefore be a secondary consideration added after or during significant progress on mass LTR. It must be the primary concern in the design of large-scale land programmes.

Therefore, there are two issues to consider when undertaking LTR:

- 1. Tailoring LTR interventions to address different levels of land market development. Where land values are not escalating and there are low levels of land market development, governments may opt for collective LTR or no LTR rather than formalisation of individual rights.
- 2. Raising awareness of the benefits of LTR. Where individual titling is more appropriate, attention must be paid to developing an initial understanding of local land market conditions and demand to ensure LTR does no harm and that outreach and communication fully convey the potential benefits of registration to the public, institutions and legal entities in the long term. This must include raising awareness early in the design process so that land owners make use of the services provided in the post-LTR period.

In Ethiopia, the addition of the Economic Empowerment Unit to the LTR initiative was designed to stimulate demand for services through public awareness and promotion of opportunities to access finance. In Rwanda, realisation of the benefits of registering transactions is now fuelling a significant increase in demand for land administration services combined with an increase in demand for loans and mortgages. Post-LTR interventions have placed greater emphasis on developing a more effective IT system to improve data quality, reliability, promoting local services and increasing efforts to further promote public awareness of service availability and the need to register transactions.

While these programmes have recognised the importance of land markets, the development of such markets is primarily driven by other factors over which the programme has no influence. In more remote areas where land values are low and there is no pressure on land, a household-level LTR programme is difficult to justify if the level of transactions to sustain an individual titling system is low, and especially when land is held and managed on an extended family basis under customary principles.

## 4.5.2 Fit-for-purpose and decentralised land administration

To guarantee sustainable registries and land administration systems, the pace of implementation of LTR activities must remain in step with land service development. In Rwanda, the target-driven approach to ensuring timely completion of LTR compromised the need to properly assimilate the reforms into local institutions and the post-registration service outlets at an equivalent rate. Similarly, in Ethiopia, field implementation has progressed faster than the development of rural landadministration systems. Work is underway to redress this imbalance.

In Tanzania, with the LTSP nearing completion, sufficient time is needed to develop strategies and operational capacity before scaling up implementation to avoid the risk of LTR field operations accelerating beyond the capacity to analyse and assimilate records into a new land

administration system and service network. In Mozambique, greater attention could have been paid to the capacity of government systems to accurately record and incorporate community land rights and claims in the registers, eliminate errors, unscramble overlapping land records and improve registration processes in order to provide greater tenure security, reduce potential disputes and sustain benefits.

Another key challenge for many LTR-related programmes is to develop and implement workable models for local registry management, maintenance and cost recovery at district and village levels. The case for developing local registries rather than national- or even district-centralised registries is now very strong:

- In Ethiopia, the ongoing challenge is how to roll out land administration systems for all 140 woredas (districts) and to organise maintenance and management of these systems between the regional bureaux, woredas and kebeles (wards). Since the most recent mid-term review, LIFT has refocused efforts on building the sustainability of the rural land administration system (RLAS). The Government of Ethiopia has also reaffirmed its commitment to RLAS and has worked with LIFT to develop 'model' land administration offices at woreda level to demonstrate how appropriately resources and supported offices can provide effective services. These model offices will provide an opportunity for peer-learning and experiencesharing with other woredas.
- In Tanzania, models for increasing the capacities of the District Land Offices to manage an increased number of land transactions from villages have yet to be established. However, the USAID-funded Land Tenure Assistance (LTA) programme and the DFID-funded LTSP are working to address the problem.
- In Guyana, the newly formed Guyana Lands and Surveys Commission (GLSC) needed significant reforms to land administration that required new and updated records obtained from field LTR, to enable the GLSC to operate both financially and technically.

### 4.5.3 Building effective institutions

Both the supply and demand sides of the equation rely on having land administration institutions run efficiently and with integrity, that are accountable and largely self-financing in the long term. This requires that key issues of accessibility, simplicity, efficiency and cost are carefully factored in the design to ensure maximum public participation in and ownership of local land institutions.

A recent study of experience from five countries, including Rwanda (Princeton University, 2018), identifies several lessons to support effective land administration institutions:

- It is important to balance the efficiency of gathering several functions of land administration into a single agency with the need for some separation of powers to enable balanced influence on policy-making.
- Introducing effective digital technologies can be important but requires careful preparation and may divert resources away from more fundamental tasks, such as ensuring public understanding.
- A registry depends on a reasonably large and active formal property market to generate enough land-related revenues to support its operations. Otherwise, support may be required from local or national government.
- A clear policy on data-sharing among government agencies facilitates combining important data to track progress and ease access of other agencies to land records.

• Tightening procedures and record security limits opportunities for fraud.

Existing land administration institutions usually need restructuring and additional capacity to manage increased activity resulting from LTR. In Rwanda, a recent evaluation concluded that:

continuation of the current institutional and organisational structure will result in continued degradation of the service ... If the security of the register becomes questionable then land market transactions and mortgages become more risky and expensive. (Baldwin et al., 2019)

If land transaction levels are sufficiently high, governments may consider a public–private partnership (PPP) as a way forward, an option being discussed in Rwanda and other countries (Box 5).

### 4.6 Cost-effective LTR

Implementing LTR and land administration programmes at large scale requires cost-effective design making use of innovative use of the latest technology and efficient customer-friendly procedures and systems. LTR – provision of first registration to establish systems – is one of the most significant costs. This section looks at the documented costs of

### Box 5 Incentives and success factors for PPPs in land administration

'As IT evolves, the commercial opportunities that can be derived from the land information generated in land administration increases. The opportunities invite governments that are in need of capital to reform/establish land administration systems by involving the private sector. It also attracts the private sector to invest in public services that are commercially rewarding.

... several factors contribute to the success of a PPP in land administration... political will ... support by the community of stakeholders, transparency in the bidding process and documents, a clear set of expectations from the partnership, active engagement of stakeholders during the partnership, strong leadership of the public partner in times of crisis and potential legal reform.'

Source: Kalantari et al., 2019.

recent LTR activities, their key drivers and the underlying technology and processes.

### 4.6.1 The costs of LTR

Standard methods and procedures for detailing costs and benefits of land tenure and administrative reforms have not yet been systematically developed. Costs per parcel – or unit costs for initial LTR – are therefore dependent on what is included or excluded from the calculation in each region or country. Table 2 summarises unit costs from four LTR programmes, ranging from US\$5.10 per parcel for Ethiopia to US\$11 per parcel for Mozambique. This also shows there is currently no agreed system for inclusions and exclusions in assessing these costs.

Broadly, targets for 'low cost' with the inclusions and exclusion used by the Land Tenure Assistance (LTA) project in Tanzania, supported by USAID, and other programmes (Rwanda, Ethiopia, Tanzania and Mozambique) might be under US\$10per parcel. This might vary from area to area and costs may be higher in urban or peri-urban areas where fees for adjudicators and para-surveyors may be higher. Inclusion of just one or two extra cost items in unit cost determinations can significantly raise the cost to unacceptable levels. It is therefore important that agreement is reached in early planning to determine how unit costs will be calculated.

Implementation of LTR and landadministration programmes requires the capture, verification and analysis of large volumes of data to produce a comprehensive record. The major drivers of costs included are the operating costs (such as staff, vehicles and fuel) for central and local activities. These will be costed on average numbers of days and field visits, daily fees, conditions on the ground and levels of difficulty, distance or remoteness, data capture and processing to title. Each of these costs is determined as per the stage of the operation. Depending on the methods used, other costs may include IT expenditures such as tablets for use in the field, and basic IT equipment to capture and consolidate field data in the registry. Imagery may be a significant cost depending on the specification.

In Ethiopia, the LIFT programme uses a simple calculation of all costs – including some donor costs – divided by the number of parcels registered monthly. The unit costs (usually expressed as a cost per parcel or per issued certificate) for Rwanda and Tanzania exclude the following:

- all donor support costs (e.g. technical assistance)
- start-up and capital costs (e.g. for satellite imagery, which is usually financed by central government, sometimes with donor support

Table 2 Estimated parcel costs for LTR

Country	Estimated costs per parcel (US\$)	Comments
Rwanda (LTRSP, DFID) <sup>1</sup>	6.00	Inclusive of the cost of high-resolution aerial photography – excluding costs of TA
Ethiopia (LIFT, DFID) <sup>ii</sup>	5.10	On a quarterly total spend on LTR, SLLC is then divided by the total number of parcels approved, to give the cost per certificate. Based on November 2018 estimate
Mozambique (MCA) <sup>iii</sup>	11.00	Inclusions and exclusions not specified
Tanzania (LTA, USAID) ™	8.00	Cost of imagery and tablets for MAST excluded

Notes: (i) LTRSP (DFID) Rwanda Final Report, 2013.

<sup>(</sup>ii) LIFT estimates as of November 2018 – this is a global figure with no elemental cost breakdowns for inclusions and exclusions.

<sup>(</sup>iii) Land Project, Mozambique (MCA), 2011. From 2008 to 2012, MCC funded household-level LTR in specific municipalities in northern Mozambique, in parallel with support to community land registration by DFID and other donors which MCA also supported.

<sup>(</sup>iv) LTA USAID Tanzania. This cost is subject to further change as work is still ongoing.

 post-LTR transactions services, which are priced separately from LTR and based on costs with a possible margin to generate revenues for further investment.

### 4.6.2 The role of new technology

Developments in technology are now revolutionising efforts to document land rights and to increase access to land data and records around the world. Use of technology, such as recording tablets, GPS, more easily available high resolution satellite imagery and use of drones, now allows practitioners to document land rights effectively at much lower costs, in even the most remote locations, compared to traditional surveying techniques. This can improve transparency and agency efficiency by processing data into a viable digital register. Providing access to such technology through open access software is key to reducing costs.

Recent discussions<sup>16</sup> indicate a broad consensus that technology has the potential to reduce costs at certain points in the process of mapping and documenting land rights. Investing in this as a public good or promoting public—private partnerships to provide spatial data are both ways forward. There are trade-offs between costs and accuracy/quality that can be usefully considered in terms of being 'fit for purpose' (Box 6).

While these innovations have the potential to help secure land rights for the estimated 70% of land in low- and middle-income countries that is currently undocumented, they

also involve challenges. User needs should determine what technology is applied, rather than the other way around.

- Use of new technologies requires complex software and computer infrastructures, which may require financial and technical support in resource-constrained environments.
- The number of options available and their implications – can be overwhelming and more practical research on the best approach is ongoing, through development of guidelines and criteria to assess what would work best in particular contexts.
- There are areas in which technology cannot necessarily reduce costs or time, including consultation, negotiation and resolving historic conflicts, which require face-to-face contact.
- Using new technology and going to scale also raises challenges of establishing infrastructure capable of storing and processing the huge amount of data being generated; this includes issues of cybersecurity and data protection.

When applying IT in land administration and LTR work consideration must also be given to political buy-in and alignment with a country's legal and policy framework, crucial to sustaining processes and approaches. This can sometimes be a hard sell for decision makers who are not IT literate and it is sometimes the case that IT capabilities are oversold and inappropriate. Those advocating the use of new technology in work on land tenure should ensure applications

### Box 6 FFP or 'fit-for-purpose' approach to LTR

When assessing technology and investment choices, the focus should be on a 'fit-for-purpose' (FFP) approach that will meet the needs of society today and can be incrementally improved over time. This should be flexible and focused on serving the purpose of the systems (citizens' needs such as providing security of tenure and control of land use) rather than focusing on topend technical solutions and high-accuracy surveys.

Any new approach also needs to be in line with the existing legal and policy framework to ensure that it meets required standards and uses appropriate institutions. However, technology can also be used to advocate for changes in the law and shift attitudes about what is possible, playing a potentially disruptive role.

and solutions are fit-for purpose and can be easily applied to a given situation.

# 4.7 Implementing modes for LTR and land administration

Programmes of LTR and land administration are generally large, requiring significant inputs of personnel, equipment and supporting services. In five of the six land programmes reviewed for this study, DFID has contracted organisations or service providers as TA to deliver key parts of the land programmes directly – including LTR. In Rwanda, Phase 1 was supported by an externally contracted TA team embedded in the ministry working alongside the minister and ministry staff, assisting with capital procurements and building repairs/constructions, and playing a central role in building capacity from a very low baseline level in 2003.

Phase 2 in Rwanda was also driven by a TA service contract with government assuming a lead role in organising and managing both the fieldwork and the development of the land administration institutions. Strong relationships with the DFID country advisers were established. On completion of the TA, the project reverted to direct financial support to government for ongoing development of the land administration institutions. This has not worked as well and there are ongoing challenges in sustaining service delivery. In Ethiopia, the same international programme company that supported Rwanda's land programme helped to design the LIFT programme and is supporting the government in implementation.

In Guyana, the TA was embedded in the client institution for over six years and transformed it from a very low baseline to the level it is currently enjoying today, with strong support from TA and donors. It is widely accepted that merely providing direct 'budget support' to government and its land agency would not have achieved the same results. The project completion review (PCR) 2005<sup>17</sup> stated:

If a budget support approach had been used, neither the policy making, nor the institutional structure would have been strong enough to implement the required changes without the level of [TA] engagement used. The scale of the task and the approach used to achieve the outputs was too large for short individual TA advisors to have had any significant impact.

In Tanzania under the LTSP, however, DFID and other donors channelled funds through the relevant ministry which took responsibility for operational management of field operations. This strengthened government ownership, while TA support to government was contracted separately. Government procurement channels were used to source the bulk of goods and services for a field LTR initiative. The project was managed by a team drawn from ministry and government contracted staff supported by external TA advisers appointed though a project management company, reporting directly to a civil servant tasked with leading the field programme.

Initially, these arrangements hindered progress, particularly in procurement, and the fact that the appointed government team had little or no real experience of rural LTR at the outset. This contrasts with the more responsive operations of the USAID-funded LTA which has a service provider and a small TA team of international and national specialists managing a larger local field team made up of contract and district office staff. Nevertheless, after a slow start the LTSP mobilised for fieldwork and over 200,000 land parcels were field registered. The programme is now considering options for scaling up for the whole country.

In practice, successful implementation of DFID-funded large-scale land programmes has initially relied on contractors/service providers with specialised capacity, both logistically and technically. TA inputs can ensure more efficient deployment of key national and international personnel and equipment than government systems and usually carry specific

<sup>17</sup> Guyana Land Administration Support Programme (GLASP) 1997–2005, Project Completion Review (PCR) April 2005, Summary of Lessons Learned, Supplementary notes to Part D of the Standard PCR Matrix, DFID.

obligations and targets in this regard. This need not necessarily compromise government ownership and development of capacity, provided the TA is embedded with government staff at all times. Such an approach can also release government personnel to focus on more important strategic issues.

The mode of funding and implementation can, however, have a significant effect on programme performance and achievement. Underlying this is whether government land management agencies have sufficient management capacity to deliver large-scale LTR and administration programmes, whether this is contracted out, and how the relative roles and responsibilities of government staff and TA are defined and mandated. Whether funding is direct or through TA, it is especially important that appropriate systems and personnel with the right skill sets are put in place, and to clearly define roles and responsibilities, avoiding gaps or duplication of tasks, and to ensure efficient and harmonious relationships.

### 4.8 Working with other donors

It is usual that different donors work on various aspects of land governance within the same country. Therefore, the systematic and sustained implementation of land administration and LTR is best enabled by different donors coordinating their efforts to a common policy and strategy. In most of the programmes reviewed, DFID has jointly funded with other donors, either in complementary programmes or through a basket fund, though DFID has often taken a technical lead.

In Guyana, there were two separately funded but complementary interventions. The DFID-funded GLASP focused on the reform and transition of the land administration institution to the GLSC. The other programme was supported by the Inter-American Development Bank (IADB): Public Land Administration and Regularisation of Tenure, (PLART), focusing on land administration, regularisation of tenure and

drainage and irrigation rehabilitation. Here, donor collaboration worked well as the two funders had congruent objectives, with coordinated timing and a clear division of activities and responsibilities, working as one team.

In Rwanda, Phase 1 LTRP Strategic Planning was primarily funded by DFID. In Phase 2, the LTR component was supported through a basket fund (DFID, EU, the Netherlands and Sweden) led by DFID. This was to support the LTR, the establishment of the land administration system and the programme of national registrations for transactions. That process was complemented by separate funding led by a Dutch technical team to establish the land administration system and the national database. However, separating the arrangements for establishing a database and administration from the national LTR programme led by DFID compromised database design for receipt of LTR data, resulting in ongoing delays and problems establishing the land administration.

Tanzania's Land Tenure Support Programme (LTSP) is jointly funded by DFID, DANIDA and SIDA with DFID leading and the intention that DANIDA would focus on a complementary programme to support land-related civil society actors to ensure balance and scrutiny in all aspects of the programme. Sustaining the results of LTR also depends on the successful and timely implementation of the Integrated Land Management Information System (ILMIS). In principle, the combined efforts of the ILMIS, LTSP and the CSO-supporting programme could have built momentum around reform; however, this potential has been significantly under-exploited.

While requests to 'improve donor coordination' are a constant refrain, experience has shown that coordinating donor funding on different aspects of land programmes has frequently been problematic, particularly when seeking to ensure effective technical sequencing and transition from pilots to national programmes between donors.

# 5 Conclusions and recommendations

What does our review say about whether DFID and other donors should continue supporting programmes with land programmes where LTR is a key component? If funding for LTR and land administration work should continue, what are the key issues that advisory staff and in-country representatives and those they are working with should consider in designing and implementing such programmes? What is the best means of ensuring best practice in design, implementation and monitoring of LTR-related programmes?

# 5.1 Should DFID continue with land administration and LTR programmes?

Our review of the DFID-funded programmes and wider literature demonstrates that these programmes are undertaken with ambitious multiple objectives. These include:

- promoting investment and economic development, with full social inclusion including for poor and vulnerable groups
- clarifying rights and claims over land and resources and resolving disputes and conflicts
- creating national registers of land ownership, for public and government use in land use and investment planning and land transfers through provision of services.

There have been some evident successes across all of these objectives. DFID's programmes have enabled the issuing of over 20 million individual or joint titles or certificates across Rwanda, Ethiopia, Tanzania and Nigeria, and 1,400 community titles in Mozambique. This has been achieved at substantially lower costs in the last decade through using new techniques

and technology. In most of these countries: over 50% of beneficiaries have been women, through single and joint titling with spouses; land market activity has continued to increase and in some locations land values have risen; methods and procedures developed under LTR have helped to reduce the number of land-related disputes. In more mature programmes, such as in Rwanda, revenues from land transactions are rising steadily, indicating a stronger base for sustaining land administration services. Overall the introduction of laws and systems for administering land have helped bring order and legal protections where there were previously only informal arrangements – this is particularly important in growing economies, where population densities are increasing.

Further evidence is emerging of the positive effects of greater tenure security on investments at household level, and the positive effects of LTR on access to credit in Rwanda, Ethiopia and Tanzania. Progress is now being made to involve finance institutions in the LTR work and related public outreach to increase awareness of options for credit

Despite these achievements, this review has also highlighted the difficulties in defining appropriate levels of ambition for LTR work; politically, socially and economically and in terms of measuring impacts beyond output level. These problems derive from unrealistic expectations of government and donor investors of what development of land administrations and LTR alone can achieve, without programmes to address other complementary interventions. Prediction of future results for the long term is not an exact science and this has been compounded by a lack of good feasibility studies, baseline data or impact evaluations

to measure the contribution or attribution of LTR and land administration interventions. Higher-level outcomes also take time, sometimes decades, to manifest.

In addition, LTR and land administration implementation is not without risks. It can be highly political and, without adequate analysis of existing informal tenure systems and markets, it poses risks to existing, widely accepted tenure systems and markets, risks of corruption, elite capture and disempowerment of communities. While the wider literature flags these risks, this review indicates that DFIDfunded programmes have been able to mitigate and manage the risks effectively. With effective design and implementation, such programmes can have a positive impact on social and economic development, given the right context, and contribute to strengthening systems of land administration.

### Successful LTR: eight lessons

This review of DFID land tenure programmes with large LTR components has identified a set of lessons and guiding principles for successful design, implementation and sustainability. These are offered to help those developing, managing and implementing LTR programmes to ensure that LTR is socially inclusive, politically smart and technically and financially effective.

# Lesson 1: LTR is necessary but not sufficient to promote broad-based economic development

To achieve sustainable benefits, LTR normally needs to be included as a component of a wider programme to reform and strengthen legal, policy and institutional frameworks related to land. While important in many contexts, mass clarification and registration of land rights is not sufficient by itself to achieve the multiple objectives and ambitions associated with LTR, or to deliver long-term, sustainable outcomes. LTR and local land administrations cannot by themselves resolve the social and economic development constraints beneficiaries face. To achieve its economic aims, LTR is likely to need complementary measures for access to finance and market opportunities, legal empowerment

and promotion of an enabling business environment, so that people can make use of land titles and certificates to transact and invest in land and property and to thereby improve economic opportunity. For instance, Ethiopia's LIFT programme with its dual focus on land certification and access to financial services should in due course serve to enable functional and inclusive land rental markets in the most productive agricultural regions.

# Lesson 2: Sustainable land administration must be a central part of LTR work from the start

LTR interventions need to be integral to programmes reforming and strengthening legal, policy and institutional frameworks for land governance. LTR requires functional, service-oriented land institutions and ongoing development of accurate, comprehensive digital land information systems to deliver sustainable outcomes in the longer term. A key lesson from both Rwanda and Ethiopia is that development of the land administration system must keep pace with the delivery of titles, to avoid undermining the system's ability to register ongoing transactions and remain up to date. Following comprehensive LTR in Rwanda, recent developments in land administration suggest government revenues from national land registration may be enough to recoup the full costs of the programme by 2025. However, institutional capacity to register changing rights and capture the resulting revenues needs to develop further as transactions accelerate in line with rapid economic growth. Establishment of sustainable land administration capacity therefore needs to be built into the design and implementation of LTR from the start and will become increasingly important in the post-LTR phases of the work.

# Lesson 3: LTR does not have to be the same in every context

While most DFID-funded programmes have focused on large-scale, individual titling, this may not be the most appropriate approach in all contexts. Official land registration and titling may be useful under certain contexts, such as when:

- land markets are evolving rapidly, with significant pressure on land involving many people from outside the local community
- farmers require evidence of secure land rights to obtain credit and to protect their interests where urban encroachment, infrastructure development and private investment threaten land users.

In other circumstances it may be more appropriate to strengthen customary, collective management systems through issuing titles to whole communities or producer associations, as in Mozambique. It may also be appropriate to use a mixture of both approaches: perhaps integrating formalisation of individual rights in instances where land pressures are highest but strengthening collective management systems in others.

# Lesson 4: LTR requires sustained political will and a politically smart approach

The experience of DFID's programmes shows that LTR is most successful when supported by strong government commitment and ownership, as in Rwanda and Ethiopia. Even with this commitment, there are significant challenges: sustaining a programme over the longer term needed to achieve LTR objectives means ensuring that political enthusiasm and target-driven approaches for immediate quick-fix results from LTR do not compromise other parallel but essential activities in building capacity in land administration. In addition, vulnerable groups must not be further marginalised.

Taking a long-term strategic view from the start, adopting sustainable timing and pace of implementation and building the capacity of a broad group of stakeholders to support design and implementation significantly mitigates these risks. Where political commitment from national government is not immediately present, DFID advisers might look further afield for support, building inter-ministerial consensus and constructing a wider alliance of interests outside government.

# Lesson 5: Social inclusiveness is crucial in LTR-related activities

Social inclusiveness is vital for achieving broadbased benefits from LTR and can help to build political support for it. Broad public support and consent for the processes and procedures of LTR lie at the heart of clarifying land rights. Programme designers must therefore ensure that those affected by LTR and related activities are fully involved and understand the long-term benefits and outcomes. In Rwanda, for example, working with gender-balanced village teams to demarcate boundaries and with village councils to adjudicate disputes proved fundamental in achieving high levels of participation and served to ensure recognition of women's rights on the ground. To achieve results that reduce, rather than increase, inequalities in access to land, LTR programmes must therefore go beyond merely providing women and other socially vulnerable groups with a property title.

Holding separate meetings for marginalised groups gives them voice in the process and builds awareness, as well as capacity to protect and manage land rights. This, combined with legal empowerment, has proved particularly effective in local and national decision-making processes and has genuinely strengthened tenure security and challenged existing stereotypes.

### Lesson 6: Consider appropriate use of fit-forpurpose new technologies

New technology, such as tablets, low-cost GPS and drones, backed up by customised software and IT infrastructure, can reduce the costs of mapping and documenting land rights and promote greater transparency. This has enabled recent DFID-funded programmes to implement LTR at a scale not previously contemplated. However, there are key processes around adjudication and dispute resolution that require full social participation and where the impact of technology might be more limited.

Consequently, new technology must be used with care and focus on serving users rather than emphasising top-down technical solutions and high-accuracy surveys. This raises inevitable challenges: ensuring technical and financial capacity and an appropriate legal and policy framework for selection, operation and access;

building capacity for storing and processing the data generated; and breaking down resistance by surveyors and others with vested interests who may feel threatened by their introduction.

## Lesson 7: Governments and donors need long-term commitments to the land sector

Successful implementation of LTR requires multi-year, multi-phase commitments and coordinated approaches to support institutional reform and capacity in land agencies and deliver lasting tenure security at scale. As part of this, it is critical to integrate activities and time to build capacity for land administration to ensure that cadastral records and land service delivery are sustainable. Land issues are socially and politically complex, and it requires patience and flexibility to set up a well-informed strategy, fieldtest it and build in opportunities for adjustment along the way over the long term. Manging this can be problematic where there are both changes in the political landscape and technical-staff changes in donor and partner agencies over time.

The process of preparing long-term strategies and plans to achieve results, if properly undertaken and made clear at the outset, can serve to ensure consistency in the long term. It can also encourage government buy-in and phased and targeted donor commitments to supporting ongoing changes. The development of Rwanda's Strategic Road Map is a useful reference point: Phase 1 of Rwanda's land reforms in 2005-09 comprised development of DFID-funded strategic planning, field testing and institutional development and a public consultation programme culminating in the government-approved SRM for implementation. This provided a basis for consensus among donor partners and government to support ongoing initiatives up to and including 2019.

# **Lesson 8: LTR and land administration work needs appropriate implementation modalities**

It is vital to ensure that the right people, skill sets and systems are in place to support the design and implementation of LTR and land-administration programmes within an appropriate institutional framework. Clearly defining roles and responsibilities of government management and technical assistance is crucial to avoid gaps

or duplication of tasks, and to ensure efficient and harmonious relationships. TA arrangements can ensure more efficient technical progress, recruitment and provision of key staff at local and national levels and free up government employees to focus on strategic issues.

Overall, DFID's involvement in LTR has shown that having experienced and skilled management embedded within a government structure achieves the best results. This ensures that capacity will be established and can enable effective local skills development, as in Rwanda and Guyana.

### The role of DFID and other donors

As a leading funder of programmes featuring LTR, DFID has an important role to play, alongside other donors, in unblocking paths to pro-poor land reform by working with governments in the process of designing, implementing and monitoring effective and efficient activities. There is scope for strengthening this role, based on the experience of the last two decades. Key points include the following:

- Ensuring lessons on design, planning and implementation are shared. DFID has a history of managing LTR-related programmes, and some have benefited from DFID advisers' experiences in different countries. A robust system for retaining and sharing institutional learning is crucial here, and various links could be strengthened to support this.
- Filling the evidence gap. DFID and other donors could generate more evidence to inform the design and implementation of future programmes, for example by incorporating impact assessments into LTR programmes from the start, establishing baseline information and tracking progress with robust methodologies.
- Promoting an approach that is strategic, adaptive and politically smart. Donors need to link advisers and programmes working on TWP approaches and governance with those working on land, often in the same country offices.
- Ensuring that internal systems and processes are realistic and flexible enough to enable course correction. Reducing the pressure for business cases to overpromise on delivery

- within unrealistic timeframes in order to get approved may be an important step.
- Investing more in government capacity to coordinate and articulate priorities. This

could improve sharing of experience among governments, funders and civil society, and ensure better sequencing of respective interventions.

### References

- Albertus, M. (2015) Autocracy and redistribution. Cambridge: Cambridge University Press Ali, D., Deininger, K. and Goldstein, M. (2011) 'Environmental and gender impacts of land tenure regularization in Africa'. World Bank Policy Research Working Paper 5765. Washington DC: World Bank
- Ali, D., Deininger, K. and Goldstein, M. (2014) 'Environmental and gender impacts of land tenure regularization in Africa: pilot evidence from Rwanda' *Journal of Development Economics* 110: 262–275
- Ali, D., Deininger, K., Goldstein, M., La Ferrara, E. and Duponchel, M. (2015) 'Determinants of participation and transaction costs in Rwanda's land markets'. Case Study, World Bank Development Research Group
- Ali, D., Deininger, K. and Duponchel, M. (2017) 'New ways to assess and enhance land registry sustainability: evidence from Rwanda' World Development 99: 377–394
- Ali, D., Deininger, K., Goldstein, M. and La Ferrara, E. (2018) 'The impact of land title registration in Rwanda'. Presentation at the World Bank Conference on Land and Poverty, March (www.conftool.com/landandpoverty2018/index.php?page=browseSessions&form\_session=43#paperID1071)
- Andre, C. and Platteau, J.-P. (1998) 'Land relations under unbearable stress: Rwanda caught in the Malthusian trap' *Journal of Economic Behavior and Organization* 34(1): 1–47
- Baldwin R., Ruhara, C. and Lyadema, J. (2019) 'The link between land markets and sustainable land administration evidence from the Land Market Sustainability Study'. Presentation 1 March, Kigali
- Bandiera, O. (2007) 'Land tenure, investment incentives, and the choice of techniques. Evidence from Nicaragua' *The World Bank Economic Review* 21(3): 487–508
- Besley, T. (1995) 'Property rights and investment incentives: theory and evidence from Ghana' *Journal* of *Political Economy* 103(5): 903–937
- Besley, T. and Ghatak, M. (2009) 'Property rights and economic development'. CEPR Discussion Paper DP7243 (https://ssrn.com/abstract=1372563)
- Boone, C. (2013) 'Land regimes and the structure of politics: patterns of land-related conflict' *Africa* 83(1): 188–203
- Boone, C., Dzyenhaus, A., Manji, A., Gateri, C., Ouma, S., Owino, J., ... and Klopp, J. (2018) 'Land law reform in Kenya: devolution, veto players, and the limits of an institutional fix' *African Affairs* (in press)
- Booth, D. (2014) Aiding institutional reform in developing countries: lessons from the Philippines on what works, what doesn't and why. WPP Series 1, ODI and the Asia Foundation
- Bruce, J. (2007) Drawing a Line under the crisis: reconciling returnee land access and security in post-conflict Rwanda. Humanitarian Policy Group Working Paper. London: ODI
- Collin, M., Sandefur, J. and Zeitlin, A. (2015) Falling off the map: the impact of formalizing (some) informal settlements in Tanzania. CSAE Working Paper WPS/2015-09
- Dale, P.F. and McLaughlin, J.D. (1999) Land Administration. Oxford: Oxford University Press
- Daley, E. (2008) 'Gender, uenyeji, wealth, confidence and land in Kinyanambo: the impact of commoditization, rural–urban change and land registration in Mufindi district, Tanzania' in B. Englert and E. Daley (eds) Women's land rights and privatization in Eastern Africa. Oxford: James Currey
- Deininger, K. and Feder, G. (2009) 'Land registration, governance, and development: evidence and implications for policy' *The World Bank Research Observer* 24(2): 233–266
- Deininger, K. and Jin, S. (2006) 'Tenure security and land related investment: evidence from Ethiopia' *European Economic Review* 50: 1245–1277
- Deininger, K., Ali, D. and Zevenbergen, J. (2011) 'Impacts of land certification on tenure security, investment and land market participation: evidence from Ethiopia' *Land Economics* 87(2): 312–334

- Do, Q.-T. and Iyer, L. (2008) 'Land titling and rural transition in Vietnam' *Economic Development* and Cultural Change 56: 531–579
- Englert, B. (2008) 'Changing land rights and gendered discourses: examples from the Uluguru mountains, Tanzania' in B. Englert and E. Daley (eds) Women's land rights and privatization in Eastern Africa. Oxford: James Currey
- FAO Food and Agriculture Organization (2015) 'Gender and Land Rights Database: Mozambique' (www.fao.org/gender-landrights
  - database/countryprofiles/countries-list/general-introduction/en/?country\_iso3=MOZ)
- Feder, G., Onchan, T., Chalamwong, Y. and Hongladarom, C. (1988) *Land policies and farm productivity in Thailand*. Baltimore, MD: Johns Hopkins University Press
- Fenske, J. (2011) 'Land tenure and investment incentives: evidence from West Africa' *Journal of Development Economics* 95: 137–156
- Field, E. (2007) 'Entitled to work: urban tenure security and labor supply in Peru' *The Quarterly Journal of Economics* 122: 1561–1602
- Field, E. and Torero, M. (2006) 'Do property titles increase credit access among the urban poor? Evidence from a nationwide titling program'. Cambridge MA: Department of Economics, Harvard University
- Forum Mulher, Cruzeiro do Sul, CFJJ, AMUDEIA (2010) 'Action research: securing women's access to land in the context of gender-biased green revolution policies: Manhica District, Mozambique' (www.idrc.ca/en/ev-158124-201-1-DO\_TOPIC.html)
- Global Challenges Certification (2017) 'Securing Land Rights: Making Land Titling Work in Rwanda, 2012-2017' (https://successfulsocieties.princeton.edu/sites/successfulsocieties/files/LS\_Land\_Rwanda\_Revised\_9\_14\_2017.pdf)
- GLTN Global Land Tool Network (2015) 'The continuum of land rights a brief' (http://mirror.gltn.net/index.php/land-tools/gltn-land-tools/continuum-of-land-rights)
- Goldstein, M. and Udry, C. (2008) 'The profits of power: land rights and agricultural investment in Ghana' *Journal of Political Economy* 116(6): 981–1022
- Goldstein, M., Houngbedji, K., Kondylis, F., O'Sullivan, M. and Selod, H. (2015) Formalizing rural land rights in West Africa: early evidence from a randomized impact evaluation in Benin. Policy Research Working Paper WPS 7435, Impact Evaluation Series. Washington DC: World Bank Group Lackson, C. (2003) 'Gender Analysis of Land: Beyond Land Rights for Women?' Journal of Agrarian
- Jackson, C. (2003) 'Gender Analysis of Land: Beyond Land Rights for Women?' *Journal of Agrarian Change*, 3(4): 453-480
- Jacoby, H., Guo, L. and Rozelle, S. (2002) 'Hazards of expropriation: tenure insecurity and investment in rural China' *American Economic Review* 92(5): 1420–1477
- de Janvry, A., Emerick, K., Gonzales-Navarro, M. and Sadoulet, E. (2015) 'Delinking land rights from land use: certification and migration in Mexico' *American Economic Review* 105(10): 3125–3149
- Kalantari, M., Paez, D., Anand, A., Burns, T. And Rickerseya, K. (2019) 'Review of public-private partnerships in land administration'. Paper prepared for presentation at the World Bank Conference on Land and Poverty, 25–29 March, Washington DC
- Kayitesi Blewitt, M. (2005) Survivors Fund (SURF), personal communication, London, May Lanz, K., and Daley, E. (2016) 'Gender, land and agricultural development in Africa'. LEGEND Evidence Update 2
- Lawry, S., Samii, C., Hall, R., Leopold, A., Hornby, D. and Mtero, F. (2017) 'The impact of land property rights interventions on investment and agricultural productivity in developing countries: a systematic review' *Journal of Development Effectiveness* 9(1): 61–81
- Lengoiboni, M. and Groenendijk, L. (2015) 'Land tenure regularization in Rwanda: registration of land rights for women and its impacts on food security'. Paper presented at the LANDac International Conference.
- Locke, A. and Henley, G. (2014) 'Topic guide: land. Evidence on demand' (https://assets.publishing.service.gov.uk/media/57a089b4e5274a31e0000212/EoD\_Topic\_Guide\_14\_March14\_Land.pdf)

- McAuslan, P. (2010) 'Personal reflection on drafting laws to improve women's access to land: is there a magic wand?' *Journal of Eastern African Studies*, 4(1): 114-130
- Meinzen-Dick, R., Quisumbing, A., Doss, C., Theis, S. (2017) 'Women's land rights as a pathway to poverty reduction: framework and review of available evidence' *Agricultural Systems* (http://dx.doi.org/10.1016/j. agsy.2017.10.009)
- Pierson, P. (2004) *Politics in time: history, institutions, and social analysis.* Princeton, NJ: Princeton University Press
- Princeton University (2018) 'Innovations in land registry management (cross-cutting)' Innovations for Successful Societies, Princeton University (http://successfulsocieties.princeton.edu/)
- Prindex (2019) 'Prindex comparative report, March 2019'. London: ODI and Global Land Alliance Quan J., Monteiro, J. and Mole, P. (2013) 'The experience of Mozambique's community land initiative (iTC) in securing land rights and improving community land use: practice, policy and governance implications'. Paper presented at the World Bank Conference on Land and Poverty, 8–11 April (www.conftool.com/landandpoverty2013/index.php)
- Santos, F., Fletschner, D. and Daconto, G. (2014) Enhancing inclusiveness of Rwanda's land tenure regularization program: insights from early stages of its implementation' World Development 62: 30–41
- Shearer, S. (2013) 'Securing land rights project: working paper on land tenure regularization in Rwanda'. Rwanda Initiative for Sustainable Development
- Stein, H., Maganga, F., Odgaard, R. and Askey, K. (2016) 'The formal divide: customary rights and the allocation of credit to agriculture in Tanzania' *Journal of Development Studies* 52(9): 1–14
- Takeuchi, S. and Marara, J. (2009) Conflict and land tenure in Rwanda. JICA Research Institute Working Paper 1. Tokyo: Japan International Cooperation Agency Research Institute
- Veldman, M. and Lankhorst, M. (2011) 'Enhancing Legal Empowerment through Engagement with Customary Justice Systems Small Grants Program' (http://www.idlo.org/Documents/Rwanda\_pager.pdf)
- USAID (2013) 'Land tenure, property rights, and gender: Challenges and approaches for strengthening women's land tenure and property rights' (https://www.land-links.org/wp-content/uploads/2016/09/USAID\_Land\_Tenure\_2012\_Washington\_Course\_Module\_3\_Land\_Tenure\_Gender\_Brief.pdf)

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