

# How can a rural land information system benefit land users in Ethiopia?

*A business case for a rural land administration information system demonstrates the value to public and private sector stakeholders – and thus to rural land users – of accurate and accessible administrative and cadastral information on land parcels in four regions of Ethiopia.*

## Background

Under the Land Investment for Transformation (LIFT) programme, close to 16 million land parcels covering over 6 million households have been demarcated through second level land certification (SLLC) of rural land in Tigray, Amhara, Oromia and the Southern Nations, Nationalities, and Peoples' Region (SNNPR). Rural land administration information services (RLAIS) are a key component of this rural land administration

system (RLAS), enabling public and private sector institutions to develop high value services that can improve the economic, social, environmental and legal living conditions for rural land users. RLAIS would take the form of web-enabled online information services, data services (provision of datasets on mass storage media or through a download service) or physical access points.



## Objectives and methodology

Drawing on desk research, semi-structured interviews and meetings with potential customer groups and stakeholders in the capital of Addis Ababa and the four regions, a business case was developed with the intention of helping decision-makers understand the value of RLAIS to different user categories, its contribution to the (financial) sustainability of the RLAS, and ultimately to enable the Rural Land Administration and Use Directorate at the Ministry of Agriculture to engage donors for funding.

## Research findings

By having access to certified information on their holdings, rural land users can facilitate agreements and resolve (and indeed avoid) disputes related to boundaries, sharecropping, land exchange, land rent, divorce and expropriation. Beyond providing these direct benefits, RLAIS are indispensable to governmental institutions supporting agricultural development, tax institutions, and planning and investment agencies, as well as private sector players such as microfinance institutions, microinsurance institutions and rental agents.

### Private sector

#### Microfinance institutions

Certified land administration information would expedite the processing and disbursement of microfinance loans, lowering transaction costs and risks for microfinance institutions. The application process would be streamlined by the provision of accurate and up-to-date information on land parcels through RLAIS, which could also provide assessments of the market performance of loans. Microfinance loans are usually provided to farmer groups, but RLAIS could facilitate higher loan limits for individual farmers. Microfinance institutions estimate that



about 50% of rural agricultural households are interested and eligible for loans, but only half of these households can be serviced at present, meaning there is a potential demand of between 4.3 million and 8.2 million loans across the four states.

#### Micro-insurance institutions

Similarly, the servicing of farmers with insurance for their inputs and crops could be facilitated by RLAIS. However, demand is estimated to be low, ranging between 20,000 and 79,000 insurance policies.

#### Rental service providers

About a quarter of the 16.6 million agricultural households in the four states rent land, and most of these agreements are local – only 23% are between unrelated individuals. Better and more accessible information opens up the land rental market, including to larger commercial renters and investment. It also provides the backing for fairer pricing and safer rental agreements, and should encourage renters to boost the productivity of their land. Currently, it is estimated that there will be demand for about 60,000 rental agreements per year across the four states, with potential to increase if the land rental market expands across regions.

### Public sector

#### Planning agencies

RLAIS would play a crucial role in underpinning the initiation and monitoring of land use planning and management by public institutions such as the Bureau of Agriculture and Natural Resources, the Regional Agricultural Research Institute, the Bureau of Finance and Economic Development, and the Bureau of Rural Land Administration and Use. Geo-referenced information would support the targeted development of research and plans that are based on individual and aggregated landholdings combined with data on productivity, soil fertility, disease and pest surveys, agricultural systems and so on. Demand would be met through annual data subscriptions to specific areas covered by RLAIS, and use would depend on the geographic information system (GIS) capability of user groups.

#### Revenue authorities

A tax collection system characterised by participation, fairness and good governance, as well as lowered rates of tax collection costs and tax evasion, depends on the reliable landholding information that RLAIS can provide.

A broader and more equitable tax base will allow resources to be better allocated to provide agricultural inputs and developmental infrastructure like roads, schools and health centres.

### Legal bodies

Land-related conflicts comprise half the caseload in the civil courts across the four states, and a study from Tigray found that agricultural productivity declined by about 20% for farmers caught up in such disputes. There is an obvious correlation between the availability of certified administrative and cadastral land information and the resolution of potential or ongoing disputes – for each case, the court would send a request for information to the local land administration bureau.

## Setting up a rural land administration information service

The potential benefits to multiple stakeholders, with synergistic impacts on rural land users, will only be realised if RLAIS is legally accepted as the single source for certified rural land administration information. This will require a comprehensive implementation programme including:

- Development of a limited number of information services and products.
- Development and implementation of an operating model.

- Capacity building.
- Implementation of necessary regulations.
- A sustained campaign to generate actual demand.

### Marketing and distribution through product differentiation

Implementation of RLAIS should begin with the development of a limited number of high-quality products that best meet customer needs. Customer value depends on the reliability, legality, accessibility and comprehensiveness of an information service that can be accepted by stakeholders as the gold standard for rural land administration. Multiple channels could be deployed to distribute RLAIS. At a minimum, information would be available as hard copies or data on storage media at local woreda land administration offices. Web-enabled online information services and data services should then target private and public customers and data services, with the content modified according to customer needs (e.g. market information for the rental, microfinance and microinsurance market). The modalities to be offered will depend on potential customers' access to telecom and internet networks.

### Revenue generation for cost recovery by RLAIS

Setting up and operating RLAIS has recurring costs, but these are a fraction of what will be required to carry out certification under the RLAS: ETB 100 million for development and roll-out; and ETB 8 million of annual

## Potential demand and revenue for top five customer groups for online information services

| Customer group (top 5)               | Potential demand (inquiries) | Potential revenue at ETB 20 per inquiry |
|--------------------------------------|------------------------------|---|
| Microfinance institution/competitors | 4.1–8.2 million              | ETB 82–164 million                      |
| Microinsurance institution           | 0.02–0.079 million           | ETB 0.4–1.58 million                    |
| Rental broker/land user              | 0.063 million                | ETB 1.26 million                        |
| Courts                               | 0.168 million                | ETB 3.36 million                        |
| Rural land administration bureau     | 1.485 million                | ETB 29.7 million                        |
| <b>Total</b>                         | <b>5.8–10 million</b>        | <b>ETB 116.7–199.9 million</b>          |

Net cost recovery ratio, RLAIS web services to RLAS | 23%–41% (mid and high scenario)

costs of RLAIIS against ETB 458 million of annual costs for RLAS. Given the pressure on regional budgets, and the need to ensure the sustainability of the RLAS, a pricing strategy should be developed to generate revenue through the provision of information services. It has been estimated that professional and customer-orientated online (web) services alone, which the private sector would be willing to pay for, could generate revenues of ETB 200 million annually, covering up to 41% of RLAS costs (see table). Charging public agencies for data services, alongside promotion of the associated benefits and the introduction of service level agreements, could push the cost recovery ratio up to 57%. Demand at the regional level, with potential for growth, has been estimated to be at least 36 data subscriptions. This indicates that RLAIIS could only not pay its own way but even contribute significantly to the long-term sustainability of the RLAS.

## Roadmap for RLAIIS

The success of RLAIIS depends on the legal, institutional and operational conditions being in place. Over the course of an estimated three years, these should be developed in tandem with the information products and pricing strategies, as described above. An operating model that includes capacity-building measures will carry out RLAIIS' core customer-orientated functions covering account management, customer service, operations, product and service management, and support to the operating model (i.e. human resources and information and communication technology). The operational phase would begin with a roll-out to eight model woredas, following which it would be extended to 142 woredas (see figure for summary of roadmap) in the course of an additional three years.

## Success factors

For RLAIIS to be taken up across the 142 woredas, and to generate revenues for RLAS as a whole, it needs to be fit-for-purpose to the Ethiopian context. This not only means that the data in RLAIIS should be accessible, reliable and useful to potential customer groups, but that landholders in particular need to trust the system and the data in it enough to use it. This is the foundation for long-term sustainability based on use by the customer groups that will pay for RLAIIS services. More generally, the following factors are critical to the success of RLAIIS:

- Robust operating model drawing on Ethiopian context and experience.
- Appropriate organisational set-up, capacity and culture.
- Technical capacity, particularly regarding data management and adequate ICT networks on both operator and customer ends.
- Political will on the part of both woreda and regional cabinets.
- Legal conditions that allow for freedom of information, privacy, legal liability of RLAS data and data standards.

Associated risks stem from the lack of the abovementioned success factors, but it is worth underlining the need for up-to-date land registration data, without which customer trust will be rapidly eroded.



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### About the Research Summary series

This series summarises key research by the UK Department for International Development (DFID)-funded Land Investment for Transformation (LIFT) programme. LIFT aims to improve the incomes of the rural poor in Ethiopia by securing the land rights of households through second level land certification (SLLC); improving rural land administration systems (RLAS); and increasing productivity by leveraging SLLC through a 'making markets work for the poor' (M4P) approach, in Oromia, Amhara, the Southern Nations, Nationalities, and Peoples' Region (SNNPR) and Tigray regions.

This summary is based on the following report: Magis, M. 2018. The research was commissioned by LIFT but has been conducted by an independent consultant and does not necessarily reflect the views of LIFT or DFID.