



Strategies Towards the Financial Sustainability of RLAS

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Contents

Acknowledgements.....	2
Executive Summary.....	3
Introduction	5
Findings	6
Recurring Costs Estimates Rural Land Administration System	6
Unit Costs at Different Land Administration Transaction Levels	7
Implications Unit Costs	8
Strategies.....	9
Revenue Generating Strategies - Value Strategies	10
Cost reduction Strategies	14
Road Map Towards Financial Sustainability of the Rural Land Administration System.....	15
Road Map (Overview).....	15
Value strategy 1 “Revenues from Land Administration Transactions”	16
Value strategy 2 “Revenues from Land Information Services”	17
Strategy 3. Acquiring Required Regional Budgets to Recover Recurring Costs RLAS	18
Conclusions	19
Annex 1 – Recurring Costs All Regions (Normative Model).....	22
Annex 2 – Recurring Costs Oromia (Normative Model)	23
Annex 3 – Recurring Costs Tigray (Normative Model).....	24
Annex 4 – Recurring Costs Amhara (Normative Model)	25
Annex 5 – Recurring Costs SNNPR (Normative Model)	26
Annex 6 – Fee Revenue Calculation (24 LIFT Woredas and All Regions)	27
Annex 7 – Scenario: Effects Improved Tax Revenues all Regions (Scenario Doubling)	28
Annex 8 – Timeline Road Map (Indicative).....	29
Annex 9 – Experiences and Lessons Learned from Rwanda and other African Countries	1

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Executive Summary

For the land administration system to become sustainable, potential customers must be convinced of the benefits and be able to bear the costs of using the land administration services. These costs include accessibility, ease of use and the financial cost of using the services. Maintaining awareness of the benefits needs constant attention and transaction levels need to be closely monitored so that they increase as expected.

Land administration services need to be available and service levels¹ need to be defined and applied. The population should be aware of the value of land administration, the available land administration services, the fees charged, the requirements for registering transactions and service levels. Efforts should also be made to make the Woredas aware of the importance of harmonized services, service levels and fees. The services should initially be related to registration (land administration transactions) and future services related to land administration information.

Based on a normalized model² for the Woreda land administration, the estimated total recurring costs³ for all Woreda and Kebele land administration offices in the 4 regions, would be:

- Oromia ETB 233,764,910
- Tigray ETB 28,116,395
- Amhara ETB 125,601,280
- SNNP ETB 71,516,387

Revenues to recover the projected recurring costs are still very low. Oromia, SNNP and Tigray do not levy a fee for land administration transactions, while Amhara levies a fee of ETB 10 and ETB 20. The 2015/2016 transaction level in the 24 selected LIFT Woreda's reached 1% of approved certificates. This is below expected transaction levels of 3% to 5%.

To recover the recurring costs of the Woreda and Kebele land administration offices, a fee amounting to ETB 151 should be levied at a 5% transaction level. However, a fee, set at this high level would seriously harm efforts to develop a sustainable rural land administration system. Firstly, before land holders are prepared to pay a fee, they need to experience and understand the value of land administration. Secondly, the affordability of using the system needs to be considered.

Full cost recovery based just on fees for land administration transactions is not achievable, as the unit costs at a 5% transaction level will remain much higher than viable fee levels. Additional strategies for financial sustainability are required.

Four strategies have been identified, two revenue generating strategies which includes 1) revenues from land administration transaction fees and 2) revenues from land administration information services strategy) and two cost reduction strategies 3) cost reduction and 4) resource sharing.

Revenues from Land Administration Transaction Fees

Based on discussions in Amhara, the only region who has implemented a fee system, and subsequently consulting the 4 regions, the opinion is that ETB 40 is viable, once citizens have experienced the value of the land administration system. At a 5% transaction level, the recurring cost coverage ratio would be around 24% at a fee rate of ETB 40. Further investigation is needed to decide upon the appropriate time to introduce this fee levy system. A further increase in the medium term to ETB 60 would increase the cost coverage ratio to 36%, however further investigation will be needed to establish whether fees can be increased. These studies need to consider the value of the service provided when compared against the costs including the perception of land holders/users towards the land administration services.

Revenues from Land Administration Information Services

This strategy is based on two products: Providing a web enabled on line information service and providing customized datasets. For the web enabled on line services a growth scenario towards 5% transaction level

¹ Service level: Agreed upon performance level of a service, for instance agreed upon delivery time of a new certificate, opening times of the front office

² Defined standard model of the front - and back office at Kebele and Woreda level

³ Recurring costs: Regular cost incurred repeatedly, or for each item produced or each service performed on a recurring or repeated basis

and 3 inquiries per transaction has been used to estimate the revenues. This strategy assumes that: Land holders recognise the value of registering, GTP objectives on economic growth and ICT usage are achieved, the land administration can pursue an effective land administration information services strategy and the land administration will be allowed to recover recurring costs by charging fees to public and private users. At ETB 20 per inquiry, the gross⁴ recurring cost coverage ratio is estimated at 36%. This point could be reached in 5 years after introduction of land administration information services provided that land holders perceive the land administration services at the Woreda level as valuable and affordable and therefore register land transactions.

If the value strategies could be implemented effectively, it is estimated that the rural land administration could have a cost recovery of up to 76% in the midterm (5 years after introduction of the land administration information services).

Further opportunities for cost recovery should come from cooperation with the revenue authorities⁵ on land use and land income tax.

Cost Reduction and Resource Sharing Strategies

In addition, to the revenue strategies two cost reduction strategies have been identified but need further assessment. These strategies aim at lowering the recurring costs of the rural land administration system during the introduction and subsequent phases.

Optimising Operations

The following actions are regarded as important in attempting to optimize operations:

- The Kebele land administration expert should only be introduced in Woredas, where an up to date Woreda land administration system is implemented. Attempting to improve service delivery, by only introducing Kebele land administration experts will increase recurring costs and would not be effective where the existing land administration system is outdated.
- Introduction of best practices eventually based on improved ICT infrastructure conditions as foreseen in GTP-II. Cooperation between Woredas regarding processing would lower recurring costs, lower ICT related risks and improve data quality management.
- Synergies through sharing resources - Cost reduction opportunities based on the reliance of institutions on land administration data or systems should be explored. Examples are rural and urban land administration (regarding registration services, land administration information services, management and control, governance) and the use of land information by the revenue authorities.

⁴ The recurring costs of operating the web enabled land administration information services need to be defined and subtracted.

⁵ According tax experts currently working on improvement of the Ethiopian tax system, there is a large potential to improve the revenues from land use and land income. Up to date land holding information (land holder, land user, type of land user, holding size, land productivity, land income and the cadastral map) enables to tap into this potential. Introducing an effective land administration would support a more differentiated approach on tax collection based on productivity of the land and would also be a step in the direction of tax based on land income. Improvements to the land tax collection could increase revenues. The recurring cost coverage ratio would increase from 133% to 267%⁵. RLAS also will also lower the information maintenance costs of the revenue authorities. The land administration should assess the possibility of cooperation with the revenue authorities to achieve these synergies and subsequently share a part of the recurring costs of RLAS.

Introduction

Background

The vision of Ethiopia (GTP-II) is to become a lower middle-income country by 2025. The Land Investment for Transformation Program (LIFT) supports GTP-II through the objective to improve the incomes of the rural poor in Ethiopia by increasing land tenure security through second level land certification (SLLC) and an improved rural land administration system, maximising benefits to small holder farmers through to a Making Markets Work for the Poor (M4P) component, in the four states of Oromia, Amhara, Tigray and the Southern Nations, Nationalities and Peoples Region (SNNPR).

The purpose of this study is to identify and validate financial strategies and subsequently develop an action plan for a system that will ensure rural land administration financial sustainability.

Any investment in land certification (SLLC in the case of Ethiopia) must be supported by a continuously well-functioning Land Administration System (RLAS in the case of Ethiopia). Indeed, registering (post-SLLC) land transactions and updating the land records should be affected on a continuous basis to avoid that the Land Register quickly becomes out-of-date and thus useless. The RLAS should thus be sustainable on the long-term. This requires for institutional, financial and operational sustainability as complementary components. Coordinated execution of needed actions in all three areas is crucial. The road to a sustainable land administration system is long and consists of many incremental steps. Although this report focusses on financial sustainability, it has been prepared as a contribution to the LIFT project holistic approach to RLAS sustainability. The LIFT business case acknowledges this holistic view and recognises the importance of placing RLAS interventions at the core of the LIFT programme. The LIFT approach incorporates experiences and lessons learned from Rwanda, Mozambique and other African countries. An overview of relevant experiences and learnings is included in annex 9.

Link RLAS (Rural Land Administration System)– GTP-II

The objectives of GTP-II are strongly linked to having a Rural Land Administration System.

- In GTP-II, agriculture is envisaged as the main driver of rapid and inclusive economic growth and development. The Rural Land Administration System (RLAS) supports this objective to increase the productive capacity and efficiency of the agricultural sector as landholders will have appropriate security of tenure with spatial boundaries recorded in an up-to-date land register, thus the livelihoods of farmers will be enhanced by increased production, improved land rental, access to finance and other markets.
- RLAS enables better land use management and planning. The country's rapid urbanization requires this to be well planned. Land administration supports urban and rural planning and can mitigate disputes arising at the urban and rural border. (GTP-II 1.4.5.)
- RLAS supports the position of women and other vulnerable groups. The security of tenure will particularly enhance the status and livelihoods of women, girls, the disadvantaged and marginalised, and will encourage all landholders to protect their investments through adopting environmental protection and climate change resilience measures. "GTP-II" The on-going schemes of credit and marketing supports to women entrepreneurs and businesses will be strengthened to promote the economic empowerment of women.
- To effectively support the funding of GTP-II, tax revenue needs to go up drastically. RLAS enables more effective and efficient tax collection. During GTP II, emphasis will be given to strengthening domestic resource mobilization through widening the tax base; strengthening and ensuring full implementation of tax information administration system; enhancing taxpayers' education and communication; enforcing tax laws; and strengthening revenue and customs institutional capacity. Total government revenue (domestic revenue), which stood at ETB 199.6 Billion by the end of 2014/15, is projected to reach ETB 620.6 billion by the end of 2019/20. Out of the total government revenue, ETB 603.3 billion is expected to be generated from domestic sources (tax and non-tax) of which ETB 542.8 billion is projected to be raised through tax revenue.
- RLAS supports efforts towards climate resilient green economy (GTP-II 1.4.9.)

Purpose and Scope of the Study

- The purpose of this study is to derive alternative strategies to ensure financial sustainability of the RLAS at the Woreda level in each (LIFT project) region.

- The scope⁶ of this study is the rural land administration system, its' services, primary processes and roles at the Woreda and Kebele level as described in the manual “Maintenance of Rural Land Records 19 January 2016”.
- The key functions are land registration, cadastre, cadastral surveying and mapping and the provision of land information.

Methodology

Budget, cost, capacity, process time, service level, fee, land transaction, tax revenue data have been collected through questionnaires in 24 LIFT Woredas. Estimations of costs and revenues per region are based on a normative model for Woreda and Kebele land administration (derived from the documents “Maintenance of Rural Land Records 16 January 2016” and the “IWORLAIS Operations Guide”), 2007 CSA Census data for the number of Woredas and Kebeles and the Land Administration Strategic Road Map data for number of parcels.

Qualitative information was collected through interviews with the Ministry of Finance, Ethiopian Investment Agency, Regional Bureau of Finance Amhara, Regional Revenue Authorities Amhara, Regional Land Bureau Amhara, Regional Land Bureau Oromia, Regional Revenue Authority Oromia, Revenue Authority Meskan, Land Bureau Meskan, EEA consultants on rental agreements, Micro Finance Institutions (MFI), Consultants Ethiopian Tax, Audit, and Transparency (TAUT) Programme, National Planning Commission, Ministry of Agriculture.

The principles, value strategies and measures for implementation were defined and validated in three workshops with representatives of LIFT’s programme regions and included Regional Land Office Heads, Regional Heads of the Revenue Authorities, Regional Land Administration Experts, 24 Woreda Land Administration Heads and Woreda Land Administration Experts as well as the Director Rural Land Administration and Use Department (RLAUD) and experts from RLAUD of the Ministry of Agriculture.

Findings

Revenues from fees for land transactions cannot recover the recurring costs of the rural land administration system.

To calculate the recurring costs for each LIFT region a normative approach was used to define the Woreda and Kebele rural land administration operations model. The operations model is the one described in terms of services, processes and roles as stated in the manual “Maintenance of Rural Land Records” and information gathered from 24 sample LIFT Woreda land administration offices. The following recurring costs are included.

Recurring Costs Estimates Rural Land Administration System

Recurring Staff Costs

The recurring costs for staff is based on a normative minimum Woreda and Kebele land administration staffing allocation to be able to transact land transactions up to 5%.

Staff

Head of the land administration/Land Registrar, responsible for approving transactions (1)

Land administration experts, responsible for processing transactions (2)

Surveyors/GIS (2), responsible for field survey and for spatial processing of transactions

DB/ICT (0,5), responsible for the maintenance of the land register database, of the computer systems and of the local area network

Kebele land administration expert, responsible for first support to land holders and checking on completeness and correctness documents, as required for a transaction (1 per Kebele)

The average recurring costs for staff (salaries) is about 63% of the total recurring costs.

⁶ Outside the scope of this study are

- Costs of the regions and zones.
- Costs related to land use, land valuation and environment protection
- Costs of developing and operating NRLAIS

Other Recurring Costs

Other recurring costs (totalling 37%) include per diems, ICT depreciation, office supplies, electricity/telephone/internet, transport and fuel and maintenance of equipment⁷.

Total Recurring Costs Rural Land Administration Per Region

Based on the recurring costs of a normalized operations model and the number of Woredas and Kebeles⁸, the total recurring costs for the 4 regions was calculated, using a linear extrapolation and were calculated as follows:

Region	Item	Cost
Oromia	Staff costs	ETB 150,500,650
	ICT Costs	ETB 23,064,000
	Other recurring costs	ETB 60,200,260
	Total	ETB 233,764,910
Tigray	Staff costs	ETB 17,824,568
	ICT Costs	ETB 3,162,000
	Other recurring costs	ETB 7,129,827
	Total	ETB 28,116,395
Amhara	Staff costs	ETB 81,145,914
	ICT Costs	ETB 11,997,000
	Other recurring costs	ETB 32,458,366
	Total	ETB 125,601,280
SNNPR	Staff costs	ETB 46,499,562
	ICT Costs	ETB 6,417,000.
	Other recurring costs	18,599,825
	Total	ETB 71,516,387

Unit Costs at Different Land Administration Transaction Levels

Current Land Administration Transaction Levels

Based on the approved certificates in the SLLC process and land transaction data gathered by 24 LIFT Woreda land administrations, it is calculated that the formal land administration transaction level reached 1% of approved certificates in 2015/2016.

Unit costs based on potential land administration transaction levels, as estimated by 24 LIFT Woreda land administration experts.

The potential land administration transaction level, as estimated by the 24 LIFT Woreda land administration experts is 2,7 % of the total approved parcels⁹. This potential includes formally registered transactions and their estimates of the informal transactions. At a transaction level of 2,7%, unit costs for one land administration transaction would be as high as ETB 304.

Unit costs based on 3%, 5% and 8% land administration transaction levels

The estimated numbers by the Woreda land administration experts are at the low end. Looking at the future value increase of land, the demand and supply potential of micro finance, insurance and rental of land, a 5% land administration transaction level would probably be a more appropriate level. At a 3%, 5%, 8% transaction levels, unit costs for one transaction would be ETB 278, ETB 167 and ETB 104 respectively.

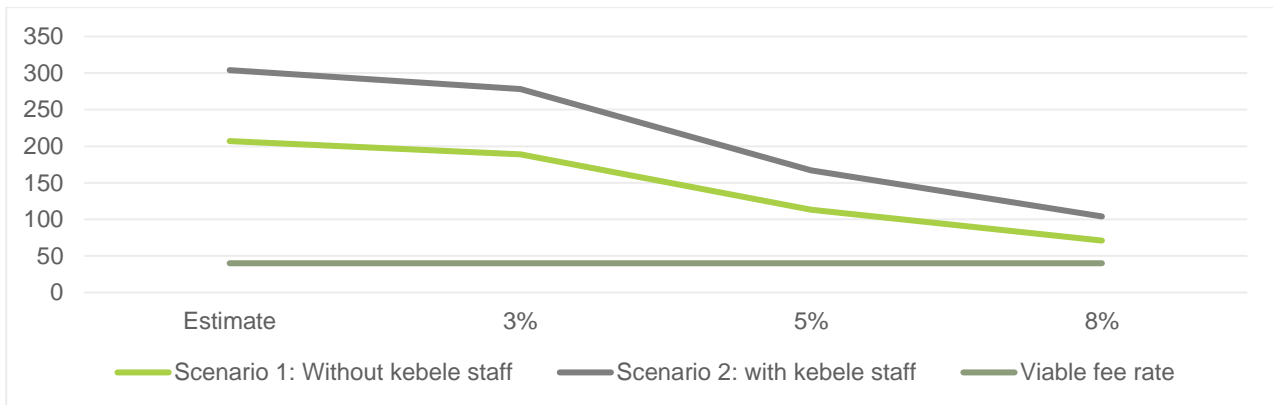
⁷ The recurring costs are based on the budgets submitted by the 24 LIFT Woredas with corrections for ICT⁷, fuel and transport and per diem (17% of salary). These corrections reflect the increased use of ICT, the received feedback from the Woredas on budget gaps regarding per diem and the expected increase in transport and fuel costs. This was agreed upon in the validation workshop of 12 and 13 December 2016.

⁸ Number of Woredas and Kebeles, derived from data Central Statistics Agency (Census 2007).

⁹ This number, estimated by the 24 LIFT Woredas, has been linearly extrapolated to obtain regional numbers, using Census 2007 data. Source number demarcated parcels per region: Strategic Land Administration Road Map.

Unit Costs Per Transaction

Unit costs at different transaction levels and recurring costs including and excluding Kebele land administration experts.



This outcome has important implications for the strategies on financial sustainability.

Implications Unit Costs

To recover the recurring costs of the Woreda and Kebele land administration offices a fee amounting to ETB 167 should be levied at a 5% transaction level. A fee, this high would however seriously harm efforts to develop a sustainable rural land administration.

Based on discussions in Amhara, the only region who has implemented a fee so far, a fee of ETB 40 would be viable, but only after citizens have experienced and accepted the value of the land administration.

Assuming that effective operations and effective value strategies are implemented, the recurring cost coverage ratio could increase from currently close to 0% to 24% (based on 5% transaction level and 40 Birr fee). This cost recovery ratio could be reached within 2 to 3 years after successful implementation within a Woreda.

Additional cost recovery can be achieved by differentiating fees based on the type of transaction.

The analysis shows that cost recovery based on only land administration transactions is not realistic and therefore additional strategies for financial sustainability are required.

Strategies

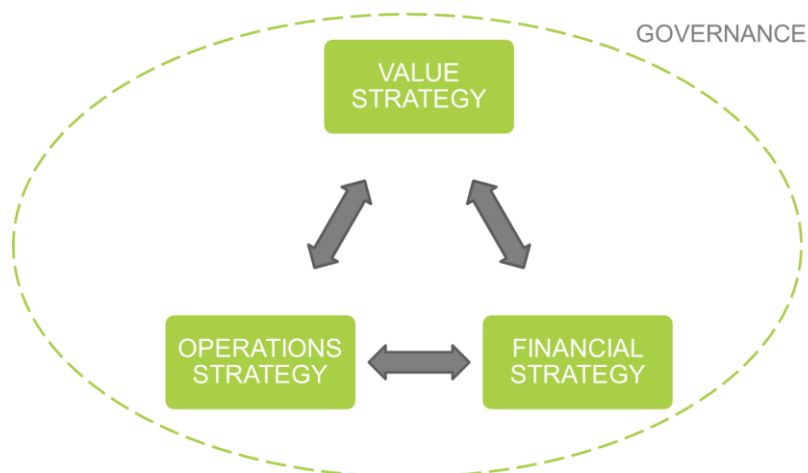
Four strategies towards RLAS financial sustainability have been identified. Two revenue generating strategies (1) revenues from fees and 2) revenues from land administration information) have been assessed. Two potential cost strategies (3) optimising operations and 4) resource sharing) will be briefly summarised.



Four strategies towards financial sustainability

The potential recurring cost coverage depends on the selected value and operations strategies. The financial outcomes will be determined by the ability to create and capture value, the effectiveness and efficiency of the operations strategy, governance, favourable economic development and a favourable political context.

Value and operations strategies influence financial sustainability. Revenues are linked to the created value and costs are linked to operations. This study has identified and assessed several value propositions with high revenue potential. A more detailed study on market potential for land administration information services needs to be undertaken to establish more detailed needs, requirements and value derived from land information. This is included in the road map measure “Business case land information services



Financial strategy interacting with operations and value strategy

Revenue Generating Strategies - Value Strategies

The value strategies can be subdivided into 3 strategies. The success of the subsequent strategy builds on the success of the previous strategy. Strategy 3 will not be discussed in detail, as it will only have impact in the long term.

Strategy 1. Creating value for the land holders and other right holders.

Strategy 2. Achieving wide use of land administration information.

Strategy 3. Integrating rural land information with other information sources (NSDI)

Strategy 1. Creating Value for the Land Holders and Other Right Holders.

The value proposition for basic land administration services is to offer landholders appropriate security of tenure with spatial boundaries recorded in an up to date and reliable land register. The rural land administration system can effectively enable the implementation of income increasing services such as rental, micro finance, insurance. These services will further underpin the value of the land administration.

The main priority is to create value for the land holders and other right holders¹⁰. Establishing high awareness and perceived value, preference for using the land administration system, continuous value enhancement through added value services, the introduction of best practices for operations and monitoring and evaluation should be pursued.

The necessary services at Woreda and Kebele level need to be available at low customer cost (accessible, easy to use, fees should not prohibit citizens registering). The registration should capture all transactions in a timely and accurate manner.

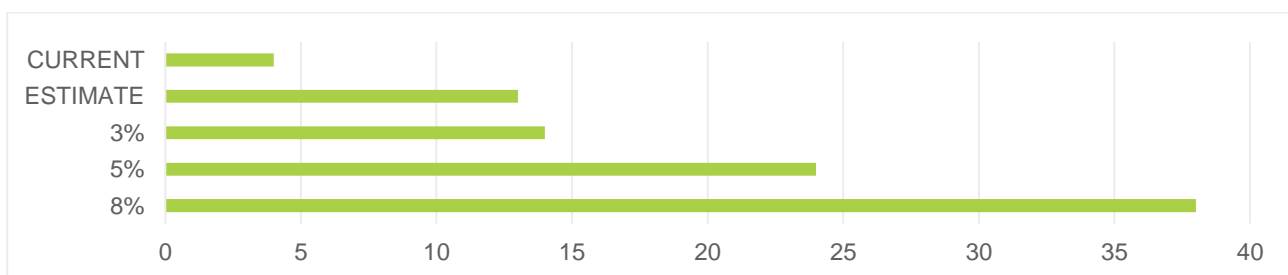
A key performance indicator for the success of the land administration would be the penetration ratio which compares formal transactions to all potential transactions (formal + informal).

Right holders will be willing to pay for land administration services when they recognise the added value obtained from the land administration (secure their rights and potential to increase of income).

The revenue strategy would be to levy fees for every transaction at the land administration office. The recurring cost coverage would be 24% in case of a fee of ETB 40 and 5% land administration transaction level. Further investigation is needed to decide upon the moment of introducing this fee. A further increase in the medium term to ETB 60 would increase the cost coverage ratio to 36%

Clearly this strategy is not sufficient to achieve financial sustainability and therefore additional strategies will be required.

Estimated recurrent cost coverage ratio RLAS at ETB 40 fee



Revenues could be further increased by differentiating services and fees based on different customer groups such as small land holders versus legal entities/large scale investors. Cost coverage rate 24% at 40 Birr and 5% transaction level. For more detailed information, see annex 7.

¹⁰ LIFT Inception report: The landholders will have appropriate security of tenure with spatial boundaries recorded in an up to date land registry, and the program will thereby contribute to a vision for a more efficient rural land sector. The livelihoods of farmers will be enhanced by increased production, improved land rental, access to finance and other markets. This security of tenure will particularly enhance the status and livelihoods of women, girls, the disadvantaged and the marginalised, and will encourage all landholders to protect their investments through environmental protection and climate change resilience measures.

Strategy 2. Achieving Wide use of Land Administration Information.

Based on a properly functioning rural land administration system, land administration information services geared towards a wide use by the public and private sector should be developed as a second strategy towards financial sustainability.

The value proposition is to offer wide access to land administration information for different purposes such as land transactions, land-use, urban fringe development, security, environment, wildlife, minerals, mobility, agriculture, infrastructure, natural resources, taxation, economic and social development.

This strategy is based on two products: Distribution of web enabled land administration information services and distribution of customized datasets.

Demand for land administration information services is linked to formal land administration transaction levels, the value created by the land administration information services, accessibility, pricing, but also professional business development to generate use. General conditions are that GTP-II objectives on economic growth and ICT infrastructure and usage are achieved, the land administration system can pursue an effective land administration information services strategy and the land administration institutions will be allowed to recover recurring costs by charging fees to public and private users.

Product I: Web enabled land administration information services

Based on international experience, online up-to-date information services can be a large revenue generator (for example, based on experience in the Netherlands, where about 70% of the total turnover of information services is providing up-to-date online information services). A business case for Web enabled land administration information services needs to be developed. The suggested service should be introduced, including the following information products (representing a share of 60% of the total revenues from land information services):

- Land information per object (parcel, land holding)
- Land information per subject (land holder)
- Right information per object (parcel, land holding)
- Rights information per subject (land holder)
- Parcel maps

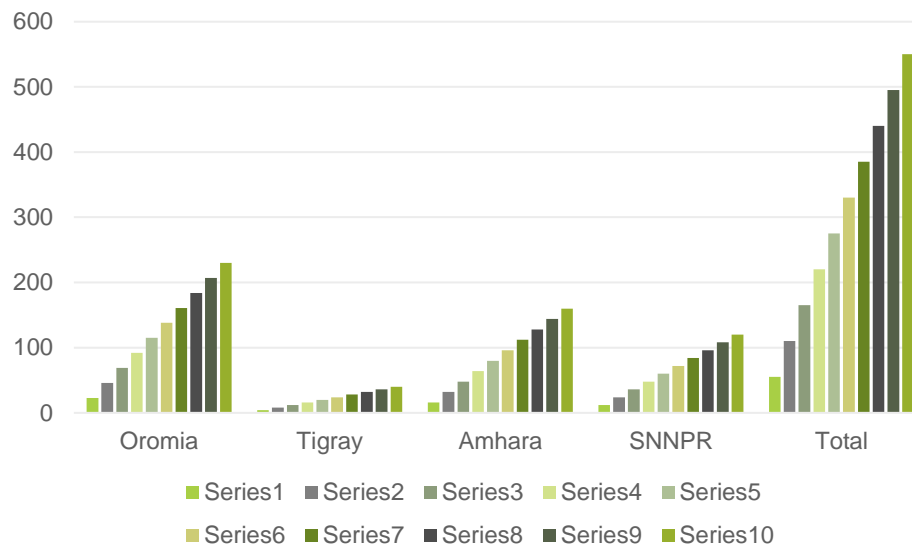
There are multiple opportunities to generate revenues with a limited number of online products. Slight adjustments in product specifications introduce opportunities to further differentiate offerings towards specific customer groups.

It will take time to tap into the revenue potential. But as land is scarce and a large part of the current national income and future national income is related to land there is a large potential for web enabled land administration information services.

Land information enquiries are (in) directly linked to land administration transaction levels and can achieve a ratio of 1:10 compared to the number of land administration transactions. However, this can only be achieved with freedom of dissemination of land information, high geographic coverage, high transaction levels, integration of the urban and rural land administration, high value to be generated from land, favourable technical and economic conditions.

A growth path towards 5% transaction level and 3 inquiries per land administration transaction has been used to estimate the revenues. At ETB 20 per inquiry, the gross recurring cost coverage ratio is estimated at 36%

Revenue Potential – Web -based Land Information Services (ETB million)



Revenue levels at 5% transaction levels and 1 up to 10 inquiries per transaction. Transaction fee 20 Birr per inquiry

Region	1	2	3	4	5	6	7	8	9	10	Number of parcels
Oromia	ETB 23	ETB 46	ETB 69	ETB 92	ETB 115	ETB 138	ETB 161	ETB 184	ETB 207	ETB 230	23,000,000
Tigray	ETB 4	ETB 8	ETB 12	ETB 16	ETB 20	ETB 24	ETB 28	ETB 32	ETB 36	ETB 40	4,000,000
Amhara	ETB 16	ETB 32	ETB 48	ETB 64	ETB 80	ETB 96	ETB 112	ETB 128	ETB 144	ETB 160	16,000,000
SNNPR	ETB 12	ETB 24	ETB 36	ETB 48	ETB 60	ETB 72	ETB 84	ETB 96	ETB 108	ETB 120	12,000,000
Total	ETB 55	ETB 110	ETB 165	ETB 220	ETB 275	ETB 330	ETB 385	ETB 440	ETB 495	ETB 550	55,000,000

Potential users of these information services are:

- Land holders
- Land users (for instance renters)
- Intermediaries bringing together land holders and potential land users (e.g. land rental service providers)
- MFIs
- Insurers
- Investors/Investment agencies
- Agricultural suppliers
- Woreda offices (land management functions regarding rural planning, resettlement, expropriation, issuing of building permits, valuation and compensation, infrastructure development and maintenance, renovation, communication to the public)
- Developers, building companies
- Revenue authorities
- Researchers
- Land use planners
- Land use managers
- Emergency and security services
- Utilities
- Lawyers, accounting firms (valuation)
- Courts and court bailiffs
- Ministries and their agencies

Based on a limited number of interviews held for this study several opportunities have been identified.

Provision of web enabled land administration information services to support the rental market (Involved customer groups: c)

Especially in areas with high (current or future) potential, the demand for agricultural land is foreseen to be high. Land is a scarce asset. At present supply and demand is mostly local but in the above-mentioned areas demand is expected to become more regional and interregional. By creating transparency on the supply side of parcels, higher rents for land can be achieved. This improves the income of the land holders and challenges land users to increase land productivity. Rental service providers would also benefit from the introduction of web enabled information services as they can offer their services to supply - or demand side.

Provision of web enabled land administration information services to MFIs (Involved customer groups: d)

MFIs wish to ascertain the land rights of the borrower and the potential income the right holder can derive from the holding. This is important to assess to what extent the borrower will be able to repay the loan. MFIs are therefore reviewing whether loans have been granted by another MFI already, whether the land holders have limited rights in land use, what the land productivity is, the type of crop and market prices. The land administration system could tap into high demand if it meets the information requirements of MFIs. The interesting part is that these information requirements are quite similar to the information needed by agricultural institutions for soil and crop productivity improvement and an essential part of the information needed for land income tax.

Provision of land administration data sets and web enabled land administration information services to insurance companies (Involved customer groups: e)

Insurance companies can benefit from location-based land information as they will be able to expand crop insurance offerings due of lower transaction costs and in doing so support the improvement of land income potential of landholders.

Investors/Investment agencies (Involved customer groups: f)

Investors and their facilitators (investment agencies) are looking for suitable areas to invest in and therefore an up to date rural land administration would help them to identify the current right holders. This improves land investment planning but also land management.

Agricultural suppliers (Involved customer groups: g)

Based on soil and crop, agricultural suppliers can better target potential users of their products and services.

Customized datasets

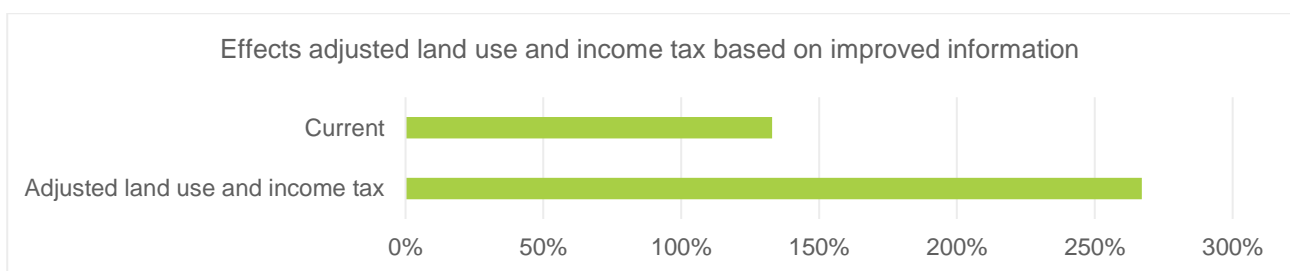
In addition to offering online up-to-date web enabled land information services, customized information datasets can be provided on a periodic base with administrative and spatial data of a Woreda or region. This will mainly be for internal use by public bodies. These datasets can be used for purposes such as policy development, rural planning and taxation.

Improved land use and tax collection ability (Involved customer groups: h)

Efficient tax collection by the revenue authorities relies on up to date land administration information. Due to poor maintenance of land administration records, data quality in many Woredas has deteriorated so much that the revenue authorities have to reconstruct the data for tax collection. Tax collection is also hindered because of the absence of a cadastral map. The absence makes it impossible to check whether tax is collected on all parcels in a Woreda.

Up to date land administration information will be of great value to the revenue authorities. It enables them to optimise revenues through better targeting and differentiating.

Estimated recurrent cost recovering ratio RLAS



Improvement land tax revenues from currently 133% to 267% recurring cost coverage ratio, based ability to differentiate and more effectively target landholders

Tax experts, currently working on improvement of the Ethiopian tax system, suggest that the future land use and income tax revenues could, compared to current revenues, be 4 times higher. Improved land administration information plays an important role. Up to date land holding information (land holder, land user, holding size, land productivity and the cadastral map) supports the ability to improve tax revenues and lower the tax collection costs.

The increase in tax revenues through doubling land tax revenue, would cover the total recurring costs of an up to date rural land administration system in the 4 regions¹¹. As mentioned before, RLAS would also lower the information maintenance costs of the revenue authorities. The land administration should assess the possibility of cooperation with the revenue authorities to achieve these synergies and subsequently find a way to share a part of the recurring costs of RLAS.

Datasets for improved land use planning and management (Involved customer groups: l, m).

Land information can be beneficial for land use planning and management. Location, size, land holder, soil, productivity would be valuable attributes. These attributes would also be valuable to the revenue authorities and micro finance institutions.

Strategy 3. Integrating Rural Land Information with other Information Sources (NSDI)

Linking land administration information services with other public information services further optimises the service provision and value of information in the public domain. The required linking assumes increased levels of cooperation between ministries and agencies. To accommodate NSDI, a long-term development, the funding of the land administration would need to be adjusted.

Cost reduction Strategies

Besides value strategies, two cost reduction strategies have been identified (Optimising operations and resource sharing).

Optimising Operations

Managing the costs of the Kebele land administration expert

Access to rural land administration services at the Kebele level is crucial for effective service provision to land holders. The Kebele land administration expert would function as the front office for all rural land administration services.

The introduction of the Kebele land administration experts in all Kebeles of the Woredas of the 4 regions does however impose significant recurring costs (ETB 147 million, which is 32% of the total recurring costs).

The land administration expert at the Kebele level only make sense when an up to date land administration system has been implemented and when there is a strong political and financial commitment to maintain up to date records. The extra costs of introducing a Kebele land administration expert need to be offset by added value and at some point, increased revenues. This will not be the case if the Woreda has a land administration system which is out of date.

Introduction of Best Practices at Woreda Level

Introduction of best practices based on country wide improved ICT conditions, as foreseen in GTP-II, would lower recurring costs and introduce opportunities to improve data quality -, ICT, and data security management.

Resource Sharing

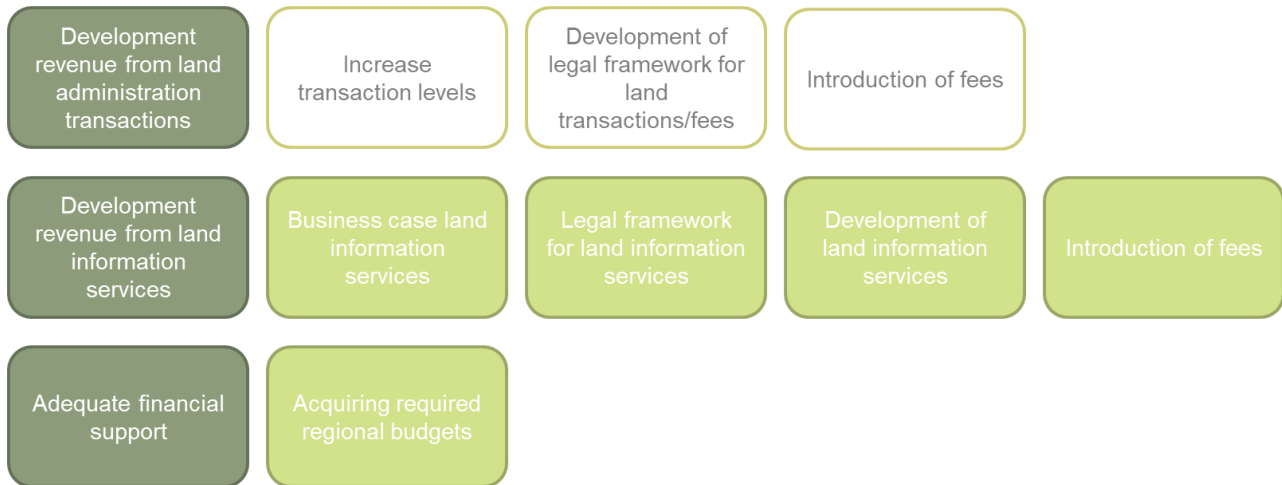
Resource sharing reduces the recurring cost base of the rural land administration. Examples are rural and urban land administration (registration services, land administration information services, management and control, governance) and shared resources between the rural land administration and the revenue authorities.

¹¹ The recurring cost coverage ratio of land taxes/total recurring costs rural land administration system would increase from 133% to 267%

Road Map Towards Financial Sustainability of the Rural Land Administration System.

Road Map (Overview)

This road map identifies the measures and actions needed to implement the strategies (Annex 8: Indicative time line).



Situation

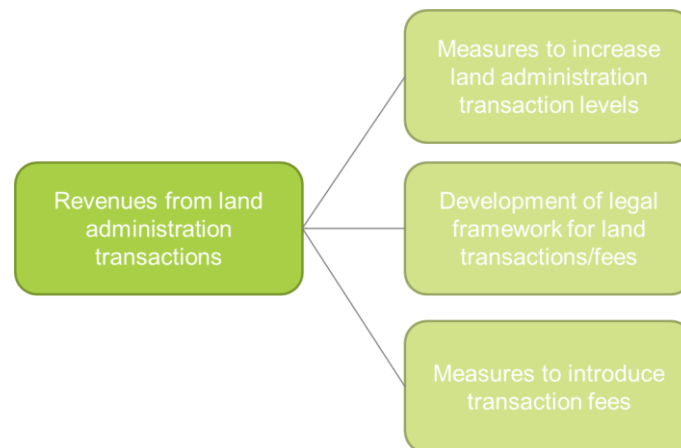
Opportunities to significantly increase the financial sustainability of the land administration have been identified. However, the capability of the land administration to create value and generate revenues to become financial sustainable are at present minimal.

The roadmap identifies the measures needed to develop the revenue generating and capturing capability of the land administration system. Until this capability is developed, the Regions and Woredas need to cover up to 100% of the recurring costs through budget support. The cross-cutting importance of the rural land administration system and necessary funds to support sustained services is not sufficiently recognized by the Regions and the Woredas. Regional and Woreda decisions makers need to be become more aware of costs, value and potential revenues from the land administration system. Underestimation of the need for a sustained budget will negatively impact the ability to provide sustainable land administration services. Increasing the value provided and understanding the potential subsequent revenues are the best incentives for the Regions and Woredas to provide the required budgets now and in the future.

It is estimated that the rural land administration could have a cost recovery of up to 76% in the midterm (5 years after introduction of the land administration information services). This is based on the value strategies “Revenues from land administration transaction fees” and “Revenues from land information services” (customized datasets and web enabled information services)

Improved cooperation with the revenue authorities could further increase the value and revenues for the Regions and Woredas.

Value strategy 1 “Revenues from Land Administration Transactions”



Situation

With a fee of ETB 40 and a land administration transaction level of 5%, 24% of the recurring costs of the rural land administration could be recovered.

However, at present, revenues from land administration transactions are, with the exception of Amhara, zero as fees are not implemented (Tigray, Oromia and SNNP).

Furthermore, formal land administration transaction levels are still at a very low level. The average 2015/2016 transaction level in the 24 LIFT researched Woredas was less than 1% of approved certificates, and this is far below the expected 3% to 5% transaction level. Many land transactions are still informal. This implies that there are issues with perceived value by land holders and land users of the land administration (i.e. issues with the value propositions, distribution channels and communications (channels and messages).

Measures to Increase Land Administration Transaction Levels

	Actions
1	Assessment of the effectiveness of the value propositions, distribution channels, communication channels and messages and organization effectiveness.
2	Development and field testing of: <ul style="list-style-type: none"> Enhanced rural land administration linked value propositions Enhanced channel strategies effectively incorporating the existing Kebele structures, accepted by the community Enhanced communication messages and channels to effectively address awareness issues of the land holders/users. Improvements of the land administration effectiveness to increase land administration transactions

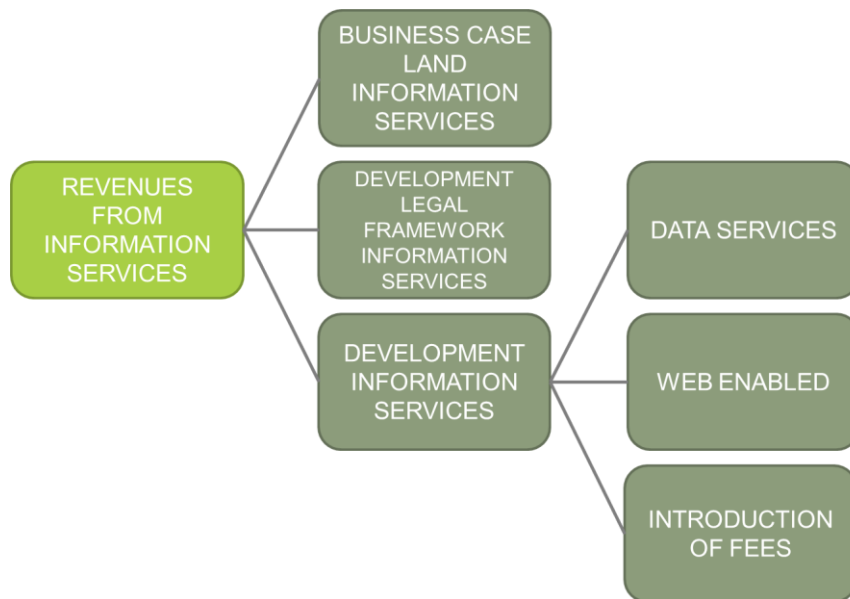
Development of Legal Framework for Land Transactions/Fees

	Actions
1	Development of a legal/regulatory framework to govern obligation to register land transactions, service levels and fees for land transactions.
2	Development of policy framework for decision makers for earmarking of land administration revenues, allocation of land administration revenues to land administration budgets

Introduction of land administration transaction fees

	Actions
1	Development of fee structure for land administration transaction services
2	Development of changes in regulation and directives and other measures related to implementation
3	Development of working guidelines
4	Communication strategy and material
5	Development of fee introduction plan (including budgets and capacity building)

Value strategy 2 “Revenues from Land Information Services”



Situation

The land administration information services strategy is based on two services: Providing a web enabled on line information services and providing customized datasets. For the web enabled on line services a growth scenario (towards 5% transaction level and 3 inquiries per transaction) has been used to estimate the revenues.

At ETB 20 per inquiry, the gross recurring cost coverage ratio is estimated at 36%. This point could be reached in 5 years after introducing the land administration information services and provided land holders perceive the land administration transaction services as valuable and affordable.

Additionally, about 16% of the recurring costs of the rural land administration could be recovered through customized datasets.

Business Case Land Information Services (Datasets and Web Enabled Services)

	Actions
1	Identification of value propositions and specific requirements of potential customer groups
2	Identification/calculation of the potential revenues streams
3	Analysis of legal aspects related to the business case
4	Calculation of development costs required information services
5	Calculation of the annual recurring costs for running required information services based on a to be defined operations model
6	Calculation contribution margins to the land administration budgets and pay-back time of the development project
7	Risk assessment and mitigation measures

Development legal framework land information services

	Actions
1	Intellectual property rights
2	Pricing
3	Privacy
4	Licensing
5	Policy note for decision makers including topics proposing earmarking of land administration revenues, allocation of land administration revenues to land administration budgets

Development of Land Information Services (Datasets And Web Enabled)

	Actions
1	Development of land administration information services (datasets)
2	Development of service introduction plan
3	Identification changes in regulation and directives
4	Development support systems and organization
5	Execution service introduction campaign targeting staff, stakeholders, channels, potential customers.

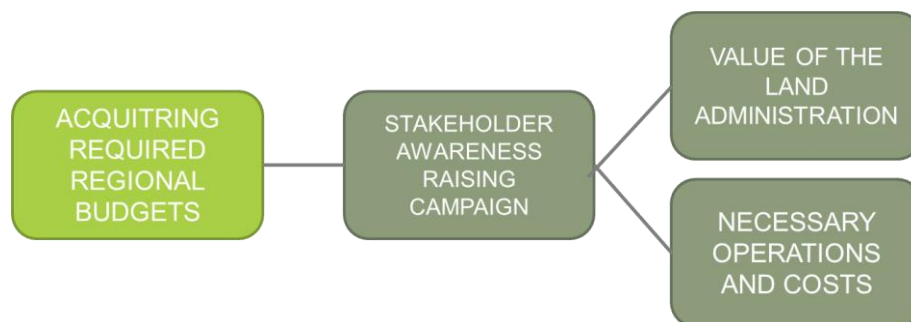
Development of Land Information Services (Web Enabled Land Information Services)

	Actions
1	Development of on line land administration information services
2	Development of service introduction plan
3	Identification in regulation and directives
4	Development support systems and organization
5	Execution service introduction campaign to staff, stakeholders, channels, potential customers.

Measures to Introduce Fees for Land Information Services

	Actions
1	Development of fee structure for information services
2	Development of changes in regulation and directives and other measures related to implementation
3	Development of working guide lines
4	Communication strategy and material
5	Development of fee introduction plan (including budgets and capacity building)

Strategy 3. Acquiring Required Regional Budgets to Recover Recurring Costs RLAS



Situation

The rural land administration will need budget support from the Region and Woreda for many years to come. To obtain the required budget, stakeholders need to be made more aware of the recurring costs, cross-cutting value and future revenues.

The two measures “Increase land administration transactions” and the “Business case information services” will deliver important arguments for presenting the value and potential revenues of the rural land administration system to the decision makers.

Stakeholders Awareness Raising Campaign

	Actions
1	Establishment of inter-regional task group
2	Development of the case for the rural land administration system for parliament members and Regional, Zonal, Woreda and Kebele council and cabinet leaders and other stakeholders including value, costs, revenues and incentives.
3	Development of an awareness raising campaign
4	Development of a model physical and financial template for a five year and yearly budget proposal

Actions	
5	Creating awareness of the value of RLAS to the regional and Woreda council and leaders with the purpose to allocate the required budget
6	Reaching an agreement on the allocation of required budgets
7	Report of physical and financial achievements for stakeholders

Conclusions

Any investment in land certification (SLLC in the case of Ethiopia) must be supported by a continuously well-functioning Land Administration System (RLAS in the case of Ethiopia). Indeed, registering (post-SLLC) land transactions and updating the land records should be affected on a continuous basis to avoid that the Land Register quickly becomes out-of-date and thus useless. The RLAS should thus be sustainable on the long-term. This requires for institutional, financial and operational sustainability as complementary components; therefore, coordinated execution of needed actions in all three areas is crucial. Although this report focusses on financial sustainability, it has been prepared as a contribution to the LIFT project holistic approach to RLAS sustainability. The LIFT business case acknowledges this holistic view and recognises the importance of placing RLAS interventions at the core of the LIFT programme. The LIFT approach incorporates experiences and lessons learned from Rwanda, Mozambique and other African countries. An overview of relevant experiences and learnings is included in annex 9.

It is estimated that the rural land administration could have a cost recovery of up to 76% (chapter 8) in the midterm (5 years after introduction of the land administration information services).

By supporting the GoE in the short term with the following measures, crucial momentum will be maintained to build trust of the land holders and users in the land administration system, to have better and sustained budget support from the Regions and Woredas and to be able to implement the value strategies to create value and generate revenues from land administration transactions and land information services.

Support of the following measures in the short term are recommended:

- Increase the number of registered land transactions
- Introduce land administration transaction fees/legal framework
- Develop a business case for Land Administration Information Services, to enable the GoE to effectively interest donors to fund the development of the land administration information services
- Acquire required regional budget, promoting the RLAS to decision makers

The implementation of these four measures from the road map (projected for 2017 in annex 8 “Timeline road map”) are the basis for development of RLAS towards financial sustainability.

Financial and non-financial incentives (and disincentives) for landholders and land users to use the RLAS and for the Government to use and maintain the RLAS will be determined during execution of these measures.

Measure “Increase land administration transaction levels”

This measure aims at increasing the use of the RLAS by land holders/users through enhanced rural land administration linked value propositions, enhanced channel strategies and enhanced communication messages.

Based on the Ethiopian situation and international experience (e.g. the Rwandan case), the scope of the study will include raising land holder/user’s awareness, perceived value and perceived costs of RLAS. Based on the outcomes, the potentially most effective measures to increase land administration transaction levels will be determined. Financial and non-financial incentives and disincentives to land holders and land users to use the RLAS will be addressed.

This proposal includes:

- Research to thoroughly understand the actual reasons why land holders do not register

- Based on these insights: Design and implementation of effective measures/incentives. Suitable best experiences from Rwanda will then be adopted¹².

Measure “Introduce land administration transaction fees, adapting the legal Land Administration framework to this effect” (chapter 11.3)

This measure includes the development of a legal/regulatory framework to govern the obligation to register land transactions, the service levels and the fees for land transactions.

It also includes the development of a policy framework for decision makers for earmarking of land administration revenues and allocation of these revenues to land administration budgets.

Measure “Business case land information services” (chapter 12.1)

The threat to any land administration system is lack of obvious value in combination with the need for prolonged substantial government budget support.

The essential incentive to use and manage RLAS will be the value of the RLAS based and administration information services in the Ethiopian context to land holders/users, the GoE and other institutional users. Revenues should lower the net budget contribution to RLAS by the GoE.

This measure will start with the identification of value propositions and specific requirements of potential customer groups in terms of land information services and the subsequent identification/calculation of their potential revenues. This and the next steps will showcase the value of RLAS to potential users and the importance of maintaining RLAS as well as the potential contribution of land information services to financial sustainability and will provide a business case for the development of land information services.

Based on their effectiveness, financial and non-financial, incentives and disincentives for the Institutional users to use and maintain RLAS will be considered.

Measure “Acquire required regional budget”, promoting the RLAS to decision makers (chapter 13)

Convincing decision makers to continuously allocate adequate budgets to RLAS was mentioned as a major challenge by the regional and woreda Land Administration representatives in the workshop held in December 2016.

This measure, as stated in the roadmap, aims at developing and promoting the RLAS case to parliament members and regional, zonal, woreda and kebele councils and cabinet leaders.

The case will include value, costs and revenues of RLAS and the financial and non-financial incentives and disincentives to promote that appropriate budgets are allocated to support RLAS.

Sustainability needs to be addressed right from the start of the development of the land administration system. Capabilities required to successfully develop the land administration system are similar to those needed for running a business:

Sound Business Model

Essential groundwork will be provided by proposal 1 “Increase of land administration transaction levels” and 2 “Development of the business case information services”. Further input will come from “Monitoring RLAS implementation”.

Sound Strategies to get Buy in from Users and Stakeholders

Essential groundwork will be provided by the proposal 1 “Increase of land administration transaction levels” and 2 “Development of the business case information services”

¹² It is to be expected that like in Rwanda, the reasons for not registering will be multiple, ranging from lack of awareness, habits to use traditional ways of (informally) transacting, perception of no added value to formally transacting, perception of high costs for the customer to transact formally (e.g. travel distance, conflicting laws causing them to not transact, conflicting interests, etcetera). Prohibitive pricing, which is the case in Rwanda, is not relevant in Ethiopia.

The solutions will range from the development of new value propositions, improvements in service provision (including distribution channels) to changes in use of communication channels and/or improved messaging. Monitoring of progress will be addressed through operational support.

Sound Operations

Getting the rural services operational and developing best practices is handled in “Monitoring RLAS implementation”. Operational improvements based on the outcomes of proposal 1

“Increase of land administration transaction levels” will be incorporated by “Monitoring RLAS implementation”.

Focused, Capable Organization, which can Operate with a Clear Mandate

The GoE however lacks the capability to implement the measures as stated in the road map to increase value and revenues to start recovering recurring costs. Further support for the execution of the road map is required.

Groundwork for the information services will be provided by proposal 2 “Development of the business case information services”

Annex 1 – Recurring Costs All Regions (Normative Model)

Region	Number of Woredas (Source CSA Census 2007)	Number of Kebele (Source CSA Census 2007)	Deputy Woreda Head/ Land registrar	Land administration expert	PS 6 Surveyor/ GIS	DB/ ICT	Kebele LA expert level 4	Kebele LA Expert level 3	Kebele LA Expert level 2	Kebele LA Expert level 1	Scenario 1. (Without Kebele staff) Total staff costs	Scenario 2. (With Kebele staff) Total staff costs	Total other recurrent costs	Recurrent costs ICT and equipment	Scenario 1. (Without Kebele staff) Total recurrent costs	Scenario 2. (With Kebele staff) Total recurrent costs
	#	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT
		47,887	41,100	31,536	27,576	20,916	18,132	13,766	11,532			60%	ETB 93,000			
Oromia	6 LIFT Woredas Oromia	117	6,0	12,0	12,0	3,0	39,0	24,0	10,0	44,0	ETB 1.241.652	ETB 3.137.412	ETB 1.254.965	ETB 558.000	ETB 3.054.617	ETB 4.950.377
Tigray	6 LIFT Woredas Tigray	83	6,0	12,0	12,0	3,0	0,0	83,0	0,0	0,0	ETB 1.241.652	ETB 2.746.608	ETB 1.098.643	ETB 558.000	ETB 2.898.295	ETB 4.403.251
Amhara	6 LIFT Woredas Amhara	161	6,0	12,0	12,0	3,0	0,0	161,0	0,0	0,0	ETB 1.241.652	ETB 4.160.904	ETB 1.664.362	ETB 558.000	ETB 3.464.014	ETB 6.383.266
SNNP	6 LIFT Woredas SNNP	116	6,0	12,0	12,0	3,0	0,0	116,0	0,0	0,0	ETB 1.241.652	ETB 3.344.964	ETB 1.337.986	ETB 558.000	ETB 3.137.638	ETB 5.240.950
Total	24 LIFT Woredas	477,0	24,0	48,0	48,0	12,0	39,0	384,0	10,0	44,0	ETB 4.966.608	ETB 13.389.888	ETB 5.355.955	ETB 2.232.000	ETB 12.554.563	ETB 20.977.843
Oromia	248	6121	248	496	496	124	2.040	1.256	523	2.302	ETB 51.321.616	ETB 150.500.650	ETB 60.200.260	ETB 23.064.000	ETB 134.585.876	ETB 233.764.910
Tigray	34	595	34	68	68	17	0	595	0	0	ETB 10.788.540	ETB 17.824.568	ETB 7.129.827	ETB 3.162.000	ETB 21.080.367	ETB 28.116.395
Amhara	129	3003	129	258	258	65	0	3.003	0	0	ETB 54.450.396	ETB 81.145.914	ETB 32.458.366	ETB 11.997.000	ETB 98.905.762	ETB 125.601.280
SNNP	69	1777	69	138	138	35	0	1.777	0	0	ETB 32.220.564	ETB 46.499.562	ETB 18.599.825	ETB 6.417.000	ETB 57.237.389	ETB 71.516.387
Total region	480,0	11496,0	480	960	960	240	3040	6631	523	2302	ETB 148.781.116	ETB 295.970.694	ETB 118.388.278	ETB 44.640.000	ETB 311.805.394	ETB 458.998.971

Annex 2 – Recurring Costs Oromia (Normative Model)

Number of Woredas (Source CSA Census 2007)	Number of Kebele (Source CSA Census 2007)	Deputy Woreda Head/ Land registrar	Land administration expert	PS 6 Surveyor/ GIS	DB/ ICT	Kebele LA expert level 4	Kebele LA Expert level 3	Kebele LA Expert level 2	Kebele LA Expert level 1	Scenario 1. (Without Kebele staff) Total staff costs	Scenario 2. (With Kebele staff) Total staff costs	Total other recurrent costs	Recurrent costs ICT and equipment	Scenario 1. (Without Kebele staff) Total recurrent costs	Scenario 2. (With Kebele staff) Total recurrent costs	
																Kebele
	#	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	
		47,882	41,100	31,536	27,576	20,916	18,132	13,746	11,532			40%	ETB 93,000			
Hetosa	23	1,0	2,0	2,0	0,5	23,0	0	0,0	0,0	ETB 206.942	ETB 688.010	ETB 275.204	ETB 93.000	ETB 575.146	ETB 1.056.214	
Dodota	12	1,0	2,0	2,0	0,5	9,0	0	0,0	3,0	ETB 206.942	ETB 429.782	ETB 171.913	ETB 93.000	ETB 471.855	ETB 694.695	
Sire	17	1,0	2,0	2,0	0,5	0,0	17	0,0	0,0	ETB 206.942	ETB 515.186	ETB 206.074	ETB 93.000	ETB 506.016	ETB 814.260	
Tole	24	1,0	2,0	2,0	0,5	4,0	0	0,0	20,0	ETB 206.942	ETB 521.246	ETB 208.498	ETB 93.000	ETB 508.440	ETB 822.744	
Sude	27	1,0	2,0	2,0	0,5	3,0	7	10,0	7,0	ETB 206.942	ETB 614.798	ETB 245.919	ETB 93.000	ETB 545.861	ETB 953.717	
Diksis	14	1,0	2,0	2,0	0,5	0,0	0	0,0	14,0	ETB 206.942	ETB 368.390	ETB 147.356	ETB 93.000	ETB 447.298	ETB 608.746	
Grand Total	117	6,0	12,0	12,0	3,0	39,0	24,0	10,0	44,0	ETB 1.241.652	ETB 3.137.412	ETB 1.254.965	ETB 558.000	ETB 3.054.617	ETB 4.950.377	
	248	6121	248	496	496	124	2040	1256	523	2302	ETB 51.321.616	ETB 150.500.650	ETB 60.200.260	ETB 23.064.000	ETB 134.585.876	ETB 233.764.910

Annex 3 – Recurring Costs Tigray (Normative Model)

Region	Number of Woredas (Source CSA Census 2007)	Number of Kebele (Source CSA Census 2007)	Deputy Woreda Head/ Land registrar	Land administration expert	PS 6 Surveyor/ GIS	DB/ ICT	Kebele LA expert level 4	Kebele LA Expert level 3	Kebele LA Expert level 2	Kebele LA Expert level 1	Scenario 1. (Without Kebele staff) Total staff costs	Scenario 2. (With Kebele staff) Total staff costs	Total other recurrent costs	Recurrent costs ICT and equipment	Scenario 1. (Without Kebele staff) Total recurrent costs	Scenario 2. (With Kebele staff) Total recurrent costs														
																	Kebele										Woreda	Woreda	Woreda	Woreda
																	#	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT
			47.882	41.100	31.536	27.576	20.916	18.132	13.746	11.532			40%	ETB 93.000																
TIGRAY	Hintalo Wajirat	17,0	1,0	2,0	2,0	0,5	0,0	17,0	0,0	0,0	ETB 206.942	ETB 515.186	ETB 206.074	ETB 93.000	ETB 506.016	ETB 814.260														
TIGRAY	Emba Alaje	15,0	1,0	2,0	2,0	0,5	0,0	15,0	0,0	0,0	ETB 206.942	ETB 478.922	ETB 191.569	ETB 93.000	ETB 491.511	ETB 763.491														
TIGRAY	Raya Alamata	11,0	1,0	2,0	2,0	0,5	0,0	11,0	0,0	0,0	ETB 206.942	ETB 406.394	ETB 162.558	ETB 93.000	ETB 462.500	ETB 661.952														
TIGRAY	Samerti Samre	18,0	1,0	2,0	2,0	0,5	0,0	18,0	0,0	0,0	ETB 206.942	ETB 533.318	ETB 213.327	ETB 93.000	ETB 513.269	ETB 839.645														
TIGRAY	Kelite Awlalo	9,0	1,0	2,0	2,0	0,5	0,0	9,0	0,0	0,0	ETB 206.942	ETB 370.130	ETB 148.052	ETB 93.000	ETB 447.994	ETB 611.182														
TIGRAY	Dega Tembien	13,0	1,0	2,0	2,0	0,5	0,0	13,0	0,0	0,0	ETB 206.942	ETB 442.658	ETB 177.063	ETB 93.000	ETB 477.005	ETB 712.721														
	Grand Total	83	6,0	12,0	12,0	3,0	0,0	83,0	0,0	0,0	ETB 1.241.652	ETB 2.746.608	ETB 1.098.643	ETB 558.000	ETB 2.898.295	ETB 4.403.251														
	<i>Extrapolated numbers based on number Woredas (Source CSA Censuses 2007)</i>	<i>34</i>	<i>595</i>	<i>34</i>	<i>68</i>	<i>68</i>	<i>17</i>	<i>0</i>	<i>595</i>	<i>0</i>	<i>0</i>	<i>ETB 10.788.540</i>	<i>ETB 17.824.568</i>	<i>ETB 7.129.827</i>	<i>ETB 3.162.000</i>	<i>ETB 21.080.367</i>	<i>ETB 28.116.395</i>													

Annex 4 – Recurring Costs Amhara (Normative Model)

Region	Number of Woredas (Source CSA Census 2007)	Number of Kebele (Source CSA Census 2007)	Deputy Woreda Head/ Land registrar	Land administration expert	PS 6 Surveyor/ GIS	DB/ ICT	Kebele LA expert level 4	Kebele LA Expert level 3	Kebele LA Expert level 2	Kebele LA Expert level 1	Scenario 1. (Without Kebele staff) Total staff costs	Scenario 2. (With Kebele staff) Total staff costs	Total other recurrent costs	Recurrent costs ICT and equipment	Scenario 1. (Without Kebele staff) Total recurrent costs	Scenario 2. (With Kebele staff) Total recurrent costs								
																	Kebele				Woreda	Woreda	Woreda	Woreda
																	#	LACT	LACT	LACT	LACT	LACT	LACT	LACT
			47,882	41,100	31,536	27,576	20,916	18,132	13,746	11,532			40%	ETB 93,000										
AMHARA	Jab Tehinane	33,0	1,0	2,0	2,0	0,5	0,0	33,0	0,0	0,0	ETB 206.942	ETB 805.298	ETB 322.119	ETB 93.000	ETB 622.061	ETB 1.220.417								
AMHARA	Enebsie Sar Midir	33,0	1,0	2,0	2,0	0,5	0,0	33,0	0,0	0,0	ETB 206.942	ETB 805.298	ETB 322.119	ETB 93.000	ETB 622.061	ETB 1.220.417								
AMHARA	Hulet Ejju	44,0	1,0	2,0	2,0	0,5	0,0	44,0	0,0	0,0	ETB 206.942	ETB 1.004.750	ETB 401.900	ETB 93.000	ETB 701.842	ETB 1.499.650								
AMHARA	Gozamin	24,0	1,0	2,0	2,0	0,5	0,0	24,0	0,0	0,0	ETB 206.942	ETB 642.110	ETB 256.844	ETB 93.000	ETB 556.786	ETB 991.954								
AMHARA	Debre Elias	15,0	1,0	2,0	2,0	0,5	0,0	15,0	0,0	0,0	ETB 206.942	ETB 478.922	ETB 191.569	ETB 93.000	ETB 491.511	ETB 763.491								
AMHARA	Womberma	12,0	1,0	2,0	2,0	0,5	0,0	12,0	0,0	0,0	ETB 206.942	ETB 424.526	ETB 169.810	ETB 93.000	ETB 469.752	ETB 687.336								
	Grand Total	161,0	6,0	12,0	12,0	3,0	0,0	161,0	0,0	0,0	ETB 1.241.652	ETB 4.160.904	ETB 1.664.362	ETB 558.000	ETB 3.464.014	ETB 6.383.266								
	<i>Extrapolated numbers based on number Woredas (Source CSA Censuses 2007)</i>	<i>129</i>	<i>3003</i>	<i>129</i>	<i>258</i>	<i>258</i>	<i>65</i>	<i>0</i>	<i>3003</i>	<i>0</i>	<i>0</i>	<i>ETB 54.450.396</i>	<i>ETB 81.145.914</i>	<i>ETB 32.458.366</i>	<i>ETB 11.997.000</i>	<i>ETB 98.905.762</i>	<i>ETB 125.601.280</i>							

Annex 5 – Recurring Costs SNNPR (Normative Model)

Region	Number of Woredas (Source CSA Census 2007)	Number of Kebele (Source CSA Census 2007)	Deputy Woreda Head/ Land registrar	Land administration expert	PS 6 Surveyor/ GIS	DB/ ICT	Kebele LA expert level 4	Kebele LA Expert level 3	Kebele LA Expert level 2	Kebele LA Expert level 1	Scenario 1. (Without Kebele staff) Total staff costs	Scenario 2. (With Kebele staff) Total staff costs	Total other recurrent costs	Recurrent costs ICT and equipment	Scenario 1. (Without Kebele staff) Total recurrent costs	Scenario 2. (With Kebele staff) Total recurrent costs											
																	Kebele							Woreda	Woreda	Woreda	Woreda
																	#	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT	LACT
			47.882	41.100	31.536	27.576	20.916	18.132	13.746	11.532			40%	ETB 93.000													
SNNP	Meskan	26,0	1,0	2,0	2,0	0,5	0,0	26,0	0,0	0,0	ETB 206.942	ETB 678.374	ETB 271.350	ETB 93.000	ETB 571.292	ETB 1.042.724											
SNNP	Kacha Bira	20,0	1,0	2,0	2,0	0,5	0,0	20,0	0,0	0,0	ETB 206.942	ETB 569.582	ETB 227.833	ETB 93.000	ETB 527.775	ETB 890.415											
SNNP	Sodo	31,0	1,0	2,0	2,0	0,5	0,0	31,0	0,0	0,0	ETB 206.942	ETB 769.034	ETB 307.614	ETB 93.000	ETB 607.556	ETB 1.169.648											
SNNP	Doyegena	13,0	1,0	2,0	2,0	0,5	0,0	13,0	0,0	0,0	ETB 206.942	ETB 442.658	ETB 177.063	ETB 93.000	ETB 477.005	ETB 712.721											
SNNP	Silti	7,0	1,0	2,0	2,0	0,5	0,0	7,0	0,0	0,0	ETB 206.942	ETB 333.866	ETB 133.546	ETB 93.000	ETB 433.488	ETB 560.412											
SNNP	Mirab Badewacho	19,0	1,0	2,0	2,0	0,5	0,0	19,0	0,0	0,0	ETB 206.942	ETB 551.450	ETB 220.580	ETB 93.000	ETB 520.522	ETB 865.030											
	Grand Total	116,0	6,0	12,0	12,0	3,0	0,0	116,0	0,0	0,0	ETB 1.241.652	ETB 3.344.964	ETB 1.337.986	ETB 558.000	ETB 3.137.638	ETB 5.240.950											
	<i>Extrapolated numbers based on number Woredas (Source CSA Censuses 2007)</i>	<i>69</i>	<i>1777</i>	<i>69</i>	<i>138</i>	<i>138</i>	<i>35</i>	<i>0</i>	<i>1777</i>	<i>0</i>	<i>0</i>	<i>ETB 32.220.564</i>	<i>ETB 46.499.562</i>	<i>ETB 18.599.825</i>	<i>ETB 6.417.000</i>	<i>ETB 57.237.389</i>	<i>ETB 71.516.387</i>										

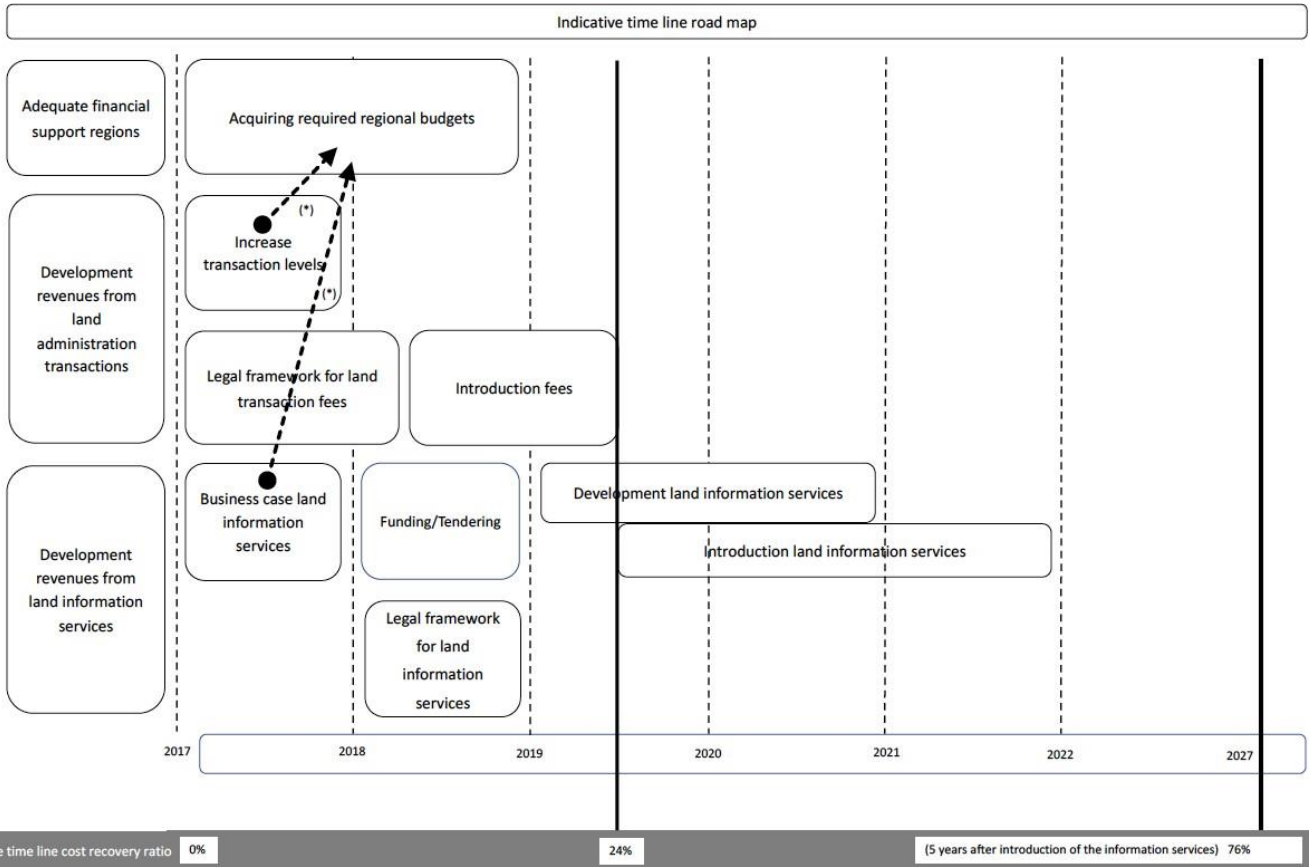
Annex 6 – Fee Revenue Calculation (24 LIFT Woredas and All Regions)

Region	Number of Woredas (Source CSA Census 2007)	Potential revenues based on number of formal transactions	Potential revenues based on estimated number of formal transactions	Scenario 1 (Without Kebele staff) Revenues (costs)	Scenario 2 (With Kebele staff) Revenues (costs)	Scenario 1 (With Kebele staff) Revenues (costs)	Scenario 2 (With Kebele staff) Revenues (costs)	Scenario 1 (With Kebele staff) Revenues (costs)	Scenario 2 (With Kebele staff) Revenues (costs)	Scenario 1 (With Kebele staff) Revenues (costs)	Scenario 2 (With Kebele staff) Revenues (costs)	Scenario 1 (With Kebele staff) Revenues (costs)	Scenario 2 (With Kebele staff) Revenues (costs)	Scenario 1 (With Kebele staff) Revenues (costs)	Scenario 2 (With Kebele staff) Revenues (costs)
Oromia	6 LIFT Woredas Oromia	ETB 1,076,360	ETB 360,280	0%	0%	35%	22%	428,794	ETB 514,553	ETB 857,588	ETB 1,372,141	17%	28%	45%	10%
Tigray	6 LIFT Woredas Tigray	ETB 218,360	ETB 60,880	2%	2%	8%	5%	697,012	ETB 836,414	ETB 1,394,024	ETB 2,230,438	29%	48%	77%	19%
Amhara	6 LIFT Woredas Amhara	ETB 624,440	ETB 208,880	6%	3%	18%	10%	166,447	ETB 987,647	ETB 1,646,078	ETB 2,633,725	29%	48%	76%	15%
SNP	6 LIFT Woredas SNP	ETB 103,480	ETB 41,600	1%	1%	3%	2%	239,328	ETB 287,194	ETB 478,656	ETB 765,850	9%	15%	24%	5%
Total	24 LIFT Woredas	ETB 2,072,540	ETB 571,640	9%	5%	30%	19%	1,521,361	ETB 3,628,808	ETB 6,376,344	ETB 11,009,154	20%	34%	52%	20%
Oromia	486/6	ETB 20,206,880	ETB 6,448,573	0%	0%	33%	19%	23,000,000	ETB 27,600,000	ETB 46,000,000	ETB 73,600,000	21%	34%	50%	20%
Tigray	34	ETB 344,987	ETB 1,237,373	2%	1%	6%	4%	4,000,000	ETB 4,800,000	ETB 8,000,000	ETB 12,800,000	2%	3%	6%	2%
Amhara	129	ETB 4,450,920	ETB 1,425,460	5%	3%	14%	11%	16,000,000	ETB 19,200,000	ETB 32,000,000	ETB 51,200,000	5%	7%	11%	5%
SNP	69	ETB 478,400	ETB 1,190,020	1%	1%	2%	2%	12,000,000	ETB 14,400,000	ETB 24,000,000	ETB 38,400,000	1%	2%	3%	1%
Total Region	486/6	ETB 34,442,400	ETB 11,342,400	6.5%	4.8%	23.4%	13.1%	55,000,000	ETB 66,000,000	ETB 110,000,000	ETB 170,000,000	17.7%	25.4%	36.4%	14.7%

Annex 7 – Scenario: Effects Improved Tax Revenues all Regions (Scenario Doubling)

Region	Number of Woredas (Source CSA Census 2007)	Current land use tax collection	Current land income tax collection	Scenario 1. (Without Kebele staff) Recurrent cost coverage ratio (based on land tax revenues 2015/2016)	Scenario 2. (With Kebele staff) Recurrent cost coverage ratio (based on land tax revenues 2015/2016)	Scenario 1. (Without Kebele staff) Recurrent costs coverage ratio (based on improved land tax revenues)	Scenario 2. (With Kebele staff) Recurrent costs coverage ratio (based on improved land tax revenues)
							2
Oromia	6 LIFT Woredas Oromia	ETB 4.529.979	ETB 884.891	177%	109%	355%	219%
Tigray	6 LIFT Woredas Tigray	ETB 2.834.671	ETB 3.289.182	211%	139%	423%	278%
Amhara	6 LIFT Woredas Amhara	ETB 7.940.060	ETB 6.310.276	411%	223%	823%	446%
SNNP	6 LIFT Woredas SNNP	ETB 800.219	ETB 3.280.568	130%	78%	260%	156%
Total	24 LIFT Woredas	ETB 16.104.929	ETB 13.764.917	238%	142%	476%	285%
Oromia	248	ETB 187.239.132	ETB 36.575.495	166%	96%	333%	191%
Tigray	34	ETB 16.063.134	ETB 18.638.699	165%	123%	329%	247%
Amhara	129	ETB 170.711.293	ETB 135.670.934	310%	244%	620%	488%
SNNP	69	ETB 9.202.519	ETB 37.726.532	82%	66%	164%	131%
Total region	480,0	ETB 383.216.078	ETB 228.611.660	196%	133%	392%	267%

Annex 8 – Timeline Road Map (Indicative)



(*) Underpins case for required regional budget to sustain RLAS

Annex 9 – Experiences and Lessons Learned from Rwanda and other African Countries

It's important to bear in mind LIFT is working in a context where low-cost, large-scale systematic registration is possible. Comparison with Rwanda is useful in this respect, as Rwanda is the only other African country to have undertaken such an ambitious 'big step' programme to date (though other countries are planning similar). Other similarities between the two countries are also contextually important:

Rwanda and Ethiopia are somewhat unique in that they did not inherit an embedded colonial system for land administration. Both countries recognise pragmatic formalisations of customary systems without legacy issues around land allocations under colonial rule. Politically, both countries have a recognised 'reset' in their political history (post-Genocide, and post downfall of the Derg) where previously embedded systems aimed at protecting elites or reinforcing the status quo were discarded.

Most importantly, the push for land reform was in both cases driven by Government, not by the international community, with Government taking a greater lead and responsibility for the reforms.

This short paper also examines issues from Mozambique, and from ECA countries

Learning from Rwanda:

Since 2012, Rwanda has one national integrated urban and rural land administration system. The land administration system in Rwanda has not reached the point of being sustainable. It still deals with significant informal land administration transaction levels in rural areas, service¹³ provision which needs to become more effective and efficient, IT challenges, an operation which is not budget neutral¹⁴ and institutional challenges. Based on assessments in 2014 and 2015 a set of financial, operational and institutional measures are now being implemented by the Land Administration Department. Due to lack of change capacity these measures are supported by external parties.

During programme implementation, the development partners supporting the Rwanda Land Tenure Regularisation Support Programme chose to focus resources and performance measurement on the delivery of first registration across the whole country. Despite a clear written roadmap (adopted by Government of Rwanda) for broad-based and sustainable reform of land administration institutions, the donor-funded interventions failed to establish fully functioning land administration services in rural districts of Rwanda in order to meet the maintenance requirements of the recently completed register.

Subsequent Government and donor-funded efforts to better support maintenance have struggled to gain traction due in part to the gap between the completion of registration and the commencement of interventions aimed at supporting land administration. These activities were disjointed (with different donors supporting different aspects) and delivered through government systems with poor monitoring and accountability. Interventions in land administration in Rwanda have been heavily technology focused, perhaps failing to address some of the institutional and logistical challenges.

A number of specific barriers to public participation in Rwanda have been identified:

- The Rwandan programme suffered from affordability issues arising from registration fees constraining the collection of leases
- High levels of transaction fees (approximately £30/parcel) were also perceived to be a constraint on the registration of changes to title after certification.
- The capacity building element of the Rwanda programme suffered from the emphasis of the

¹³ The main reasons for not formally registering land transactions in Rwanda are:

- A prohibitive fee structure, which still has not been adjusted because of slow political decision making.
- Lack of awareness. Land awareness campaigns are effective but need to be organized close to the people with the use of a few effective messages to avoid confusing people.
- The established historic way of transacting informally, mainly because locals know each other well and can provide witnesses between themselves. People do not see the added value to register formally when agreements have been signed by neighbours and local authorities.
- Conflicting laws causing them to not transact.

development partners and government on certification, leaving the development of the land administration system to the end of the programme.

- Land Administration Information Systems were not ready to accept registration data after certificate issuance, resulting in many transactions being processed in the registration software without appropriate checks and balances and means of recording historical data. Software was not available for roll-out to districts.
- District authorities, and district-level land administration staff demonstrated uneven levels of participation in the land registration process (either through absence, indifference, politics, or weak engagement). It is thought that this led to low-levels of ownership of the land administration system.

The LIFT business case acknowledges these lessons from Rwanda and recognises the importance of placing land administration interventions at the core of the LIFT programme. Specifically:

- Under LIFT there are no fees to participate in the certification exercise, so this issue is not expected to arise (evidence to date shows that where constraints exist, this is on the supply side – though LIFT is still meeting targets).
- As part of the LIFT's land administration system implementation, woredas' land revenue structures will be reviewed to maximise income whilst still encouraging registration of changes of title.
- Through the land administration component of LIFT, capacity building such as on-the-job training will be carried out simultaneously with certification so as to ensure that when the certification is complete in a particular woreda, there is a functioning land administration system with trained staff operating it.
- LIFT recognised during the early stages that the National Rural Land Administration Information System would not be ready for roll out before the completion of initial SLLC woredas (and this has indeed been the case). To mitigate this, LIFT invested in the development of an interim IT system to manage transactions efficiently, accountably, and transparently at woreda level. This interim IT system subsequently will form an important module of the national system to be rolled out by RLAUD supported by the Finnish Ministry of Foreign Affairs.
- The use of financial aid will encourage the inclusion of SLLC into woreda-level work programmes which will prioritise the work against other tasks in the land sector and promote the recognition of the importance of sustaining the system.

In recent correspondence with the former Director General of the Rwanda Natural Resources Authority, it was noted that participation in land administration in rural areas was considered to be constrained by lack of access to land administration services and information at a convenient and nearby location. Despite this, municipalities were showing good transaction rates – though a high volume of formal transactions still conceals a significant volume of informal transactions. LIFT will be conducting investigations into reasons for informality in RLAS through ongoing surveys and a specific research paper on the topic. This will inform our approach to roll-out and communications strategy. The results of these surveys will inform our approach to communications and public engagement during RLAS roll-out and operation.

Learning from Mozambique

Mozambique has been piloting and demonstrating different approaches to land reform for several years, through projects funded by MCA-Mozambique, The World Bank, USAID, and to some lesser extent European bilateral donors. Approximately 500,000 DUATs (Direito do Uso e Aproveitamento da Terra) have been registered to date. In April 2015, Government of Mozambique is launching its Terra Segura programme aimed at registering 5 million DUATs over 5 years. In terms of national coverage, Mozambique's land administration is currently some way behind Ethiopia, and a long way behind Rwanda.

In summary, the key observations related to the sustainability of land administration in the Mozambique context are:

Connectivity and power supply is not reliable in rural districts. 'Light versions' of Land Information Systems operate best.

Capacity building is required at local level for staff in terms of land administration operation and service provision

Communications and public awareness to educate citizens about their rights and obligations

Learning from ECA Countries

From 1994 to 2013 the World Bank supported land administration and management programmes in Europe and Central Asia totalling over \$1.2 billion. While country context varied, it is worth considering some lessons

from across the region (and from countries like Kyrgyzstan in particular, where IT infrastructure in rural areas is weak). The key challenges may be summarised as:

- Unclear user and system requirements for Land Information Systems
- Lack of experience in managing big IT systems
- Lack of trained staff to support system implementation and maintenance
- Poor data quality
- Dual software / paper-based systems – existing regionalised legacy systems being used in parallel with new systems

The key lesson learned from this experience that an incremental approach to implementing land administration systems is best, gradually moving from paper-based procedures to locally held digital systems, and ultimately to nationally integrated systems.

Concluding Summary:

LIFT has incorporated lessons learned into the business case, particularly from DFID's experience in Rwanda. Many aspects of programme design were specifically put in place to avoid repeating the errors of the past.

There are a number of common lessons from Rwanda and elsewhere which are worth considering:

- Supply side: the focus should be on building institutions to support land administration and that provide direct contact with the public. Software should be introduced incrementally.
- Demand side: greater public awareness and transparency are required. These should include conventional communications methods in addition to social marketing and using trusted intermediaries.

LIFT's forthcoming surveys and study on informality in land administration will examine both the supply and demand side issues and allow LIFT to calibrate its approach accordingly.

It is also worth noting that LIFT is not attempting to achieve sustainability in land administration in isolation. Government of Ethiopia is committed to this outcome, and is also supported by other

interventions such as REILA (and REILA II, commencing Q3 2017) and USAID's LAND project. LIFT maintains strong and regular communications, and a harmonised vision with these actors.

At present, LIFT's log frame does not reflect this complexity in delivering sustainable land administration services. The present focus is on the volume of transactions processed through RLAS, with no baseline for transactions established. More realistic indicators must be put in place if LIFT's contribution to a sustainable land administration system is to be properly targeted, monitored and measured.