Public Disclosure Authorized

Public Disclosure Authorized

LAND equity

ETHIOPIA

Review of the Legal Cadastre of the Government of Ethiopia

ISSUES & POLICY RECOMMENDATIONS REPORT

November 2016

Issues and Policy Recommendations Report

DOCUMENT CONTROL

Date	Version #	Author	Checked by	Details
18 July 2016	1	Tony Burns	Kate Fairlie	Draft report provided to World Bank for review
9 September 2016	2	Tony Burns	Kate Fairlie	Revised draft report provided to Ministry and World Bank for circulation prior to stakeholder workshop
9 October 2016	3	Tony Burns	Kate Fairlie	First version of report revised in response to stakeholder feedback and information gathered in mission 26 September to 7 October 2016 and discussions with MoUDH.
10 November 2016	4	Tony Burns	Kate Fairlie	Report revised upon receipt of comments from World Bank

TABLE OF CONTENTS

ANNEXES III
TABLE OF ACRONYMS IV
EXECUTIVE SUMMARY VII
1 INTRODUCTION 1
2 STRATEGIC CONTEXT: THE GTP II 2
2.1 URBAN MAP PRODUCTION, SURVEYING AND LAND USE RIGHT REGISTRATION PROGRAM 3
2.2 PROGRAM BUDGET 4
2.3 ANALYSIS OF CADASTRAL AIMS UNDER REVISED GTP II 5
3 LAND ADMINISTRATION REFORM AND THE CURRENT SITUATION IN ETHIOPIA 6
4 LEGAL CADASTRE: DESCRIPTION AND RATIONALE 10
4.1 LESSONS FROM PAST ATTEMPTS AT LAND REGISTRATION AND LAND INFORMATION SYSTEMS 10
4.2 THE URBAN LAND DEVELOPMENT AND MANAGEMENT POLICY AND STRATEGY 10
4.3 THE SYSTEMATIC ADJUDICATION AND REGISTRATION PROCESS 11
4.4 KEY FEATURES OF THE SYSTEMATIC ADJUDICATION AND REGISTRATION PROCESS 13
4.5 OBSERVATIONS ABOUT THE LEGAL CADASTRE 13
5 ASSESSMENT OF CURRENT PILOTS UNDERWAY 17
5.1 MoUDH SUPPORT FOR PILOTS 17
5.2 PROGRESS, ACHIEVEMENTS AND CHALLENGES IN THE ADDIS ABABA PILOT 17
5.3 PROGRESS, ACHIEVEMENTS AND CHALLENGES IN THE 23 CITIES PILOTS 19
5.4 KEY OBSERVATIONS FROM THE SITE VISITS 20
5.5 GOOD PRACTICES FROM INTERNATIONAL EXPERIENCE 25
6 LEGAL REVIEW 30
6.1 LEGAL FRAMEWORK 30
6.2 CHALLENGES IN IMPLEMENTING THE EXISTING LEGAL FRAMEWORK. 31
6.3 MAIN LEGAL/PROCEDURAL CONSTRAINTS TO IMPLEMENT CADASTRES 33
6.4 ISSUES OR GAPS IN THE LEGAL FRAMEWORK 35
7 INSTITUTIONAL ASSESSMENT 37
7.1 AGENCIES ROLES AND RESPONSIBILITIES FOR CREATING OR MAINTAINING LAND REGISTRIES 37
7.2 ROLE AND RESPONSIBILITIES OF THE MINISTRY OF URBAN DEVELOPMENT AND HOUSING 38
7.3 ROLE AND RESPONSIBILITIES OF REGIONAL GOVERNMENTS 38
7.4 ROLES AND RESPONSIBILITIES OF CITIES 38
7.5 FUNDAMENTAL DECISIONS RELATING TO RESOURCING 39
7.6 STRUCTURE 39

7.7 STAFFING 41
7.8 FACILITIES 44
7.9 OPERATING THE LEGAL CADASTRE UNDER A SELF-FINANCING ARRANGEMENT 45
7.10 EXPECTED REVENUE 45
7.11 EXPECTED ANNUAL OPERATING COSTS 48
7.12 IDENTIFYING AND MEASURING THE CAPACITY BUILDING NEEDS AND OUTPUTS 49
7.13 REVIEW OF THE MANAGEMENT CONTRACT 50
8 MAINTENANCE AND UPDATE OF THE LEGAL CADASTRE 52
9 ICT REVIEW 53
9.1 ICT SYSTEMS REVIEWED IN JUNE 2016 53
9.2 CADASTRE AND REAL PROPERTY REGISTRATION SYSTEM (CRPRS) 54
9.3 ADDIS ABABA CADASTRE INFORMATION SYSTEM (AA-CADIS) 56
9.4 SOFTWARE FOR SYSTEMATIC ADJUDICATION 57
10 TENURE IN URBAN ETHIOPIA 58
11 KEY ISSUES AND POLICY RECOMMENDATIONS 62
11.1 STRENGTHENING AND EXPANDING THE LEGAL CADASTRE IN ADDIS ABABA 62
11.2 IMPLEMENTING SAR IN AN EFFICIENT AND PARTICIPATORY MANNER IN THE 23 CITIES 65
11.3 STRENGTHENING THE QUALITY OF SERVICES FROM THE LEGAL CADASTRE 70
11.4 PROJECT MANAGEMENT, POLICY FORMULATION AND MONITORING AND EVALUATION 75
12 NEXT STEPS 80
13 REFERENCES 81

ANNEXES

Annex 1 GTP II details for activities related to the legal cadastre
Annex 2 Overview of past attempts at land registration and LIS
Annex 3 Site visits to Oromia, Amhara, Tigray and SNNPR
Annex 4 Organisational structures of MoUDH, Regional Administrations and Cities
Annex 5 Estimated number of properties in Addis Ababa and the 23 Cities based on the 2007 Census
Annex 6 Estimated number of properties per urban centre based on the 2007 Census (excl. Addis Ababa and the 23 Cities)
Annex 7 Organisational Standards under TVET
Annex 8 Doing Business – Registering Property in Ethiopia

TABLE OF ACRONYMS

3D	Three dimensions
AALHRIA	Addis Ababa Landholding Registration and Information Agency
AA-CADIS	Addis Ababa Cadastre Information System
ADR	Alternative dispute resolution
ArcGIS	ArcGIS is a geographic information system (GIS) supplied by ESRI (www.esri.com)
AutoCAD	AutoCAD is a commercial software application for 2D and 3D computer-aided design (CAD) and drafting
BPR	Business Process Re-engineering
BSC	Balanced Score Card
CAD	Computer-aided design
CAMA	Computer Assisted Mass Appraisal
CoFLAS	Costing and Financing Land Administration Services (GLTN tool)
COFOPRI	Commission for the Formalisation of Informal Property (Peru)
CORS	Continuously operating GNSS reference station
CPTA	Computerized Property Tax Administration
CRPRS	Cadastre and Real Property Registration System a.k.a. National Urban Cadastre System
DC	Domain Controller
DFID	Department for International Development (United Kingdom)
DGPS	Differential GNSS positioning system
EC	Ethiopian Calendar
ECSPG	Ethiopian Cities Sustainable Prosperity Goals
EFY	Ethiopian Financial Year
ELADM	Ethiopian Land Administration Domain Model
EMA	Ethiopian Mapping Agency
FIULIPO	Federal Integrated Land Information System Project Office
FURPRIA	Federal Urban Real Property Registration and Information Agency
GCP	Ground Control Point
GIS	Geographic Information System
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (or German Agency for International Cooperation)
GLTN	Global Land Tools Network, system established by UN-Habitat
GNSS	Global Navigation Satellite System
GoE	Government of Ethiopia
GSD	Ground sample distance
GTP	Growth and Transformation Plan
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (or German Agency for Technical Cooperation, now GIZ)
HRD/M	Human resource development/management
HRSI	High resolution satellite imagery
ICT	Information and communications technology
IGN	The French National Institute of Geographic and Forest Information
INSA	Information Network Security Agency
IT	Information technology
IULFMS	Integrated Urban Landholding File Management System
IULIS	Integrated Urban Land Information System
iWoRLAIS	Interim Woreda Rural Land Administration Information System
iMassReg	Interim Mass Registration System
LADM	Land Administration Domain Model (ISO 19152:2012)
LAIS	Land Administration Information System (Rwanda)
LAS	Land Administration System
LDP	Local development plan

LEI	Land Equity International
LIFT	Land Investment for Transformation
LIS	Land Information System
LGAF	Land Governance Assessment Framework (World Bank)
LHRIA	Land Holdings Registration and Information Agency
LMA	Land Management Agency
LMB	Land Management Bureau
LTP	Land Titling Project (Thailand)
LTR	Land Tenure Regularisation (Rwanda)
MoA	Ministry of Agriculture
MoUDC	(former) Ministry of Urban Development and Construction
MoUDH	Ministry of Urban Development and Housing
MOU	Memorandum of Understanding
NRLAIS	National Rural Land Administration Information System
NS2	Certificate of pre-emptive right (Thailand)
NS3	Certificate of Possession (Thailand)
NS3k	Certificate of Possession (Thailand) issued on the basis of photomap
NS4	Title Deed (Thailand)
NSDI	National spatial data infrastructure
NURPRIS	National Urban Real Property Registration Information System
O&C	Observations and Corrections (Rwanda)
OECD	Organisation for Economic Co-operation and Development
OLL	Organ Land Law (Rwanda)
pa	Per annum
PC	Personal computer
PIN	Parcel Identification Number
PUPRP	Peru Urban Property Rights Project
QA/QC	Quality assurance/Quality Control
RAD	Requirements Analysis Document
RCMRD	Regional Centre for Mapping of Resources for Development
RECS	Real Estate Cadastre System
REILA	Responsible and Innovative Land Administration Project
RNRA	Rwanda Natural Resources Authority
RPRS	Real Property Registration System
RPI	Registry of Immoveable Property (Peru)
RPU	Registry of Urban Property (Peru)
RRR	Rights, restrictions and responsibilities
RTG	Royal Thai Government
SAD	Software Architecture Document
SAR	Systematic Adjudication and Registration
SDCRPRS	System Developer for the CRPRS project
SNNPR	Southern Nations, Nationalities and Peoples' Region
SOP	Standard Operating Procedure
SQL	Structured Query Language
SUNARP	Superintendent of National Public Registrations (Peru)
TNA	Training needs analysis
TOR	Terms of reference
TVET	Technical & Vocational Education & Training
ULDMB	Urban Land Development and Management Bureau
ULDMPDIS	Urban Land Development and Management Policy Directions and Implementation Strategy
USD	Dollars (United States of America)
UTM	Universal Transverse Mercator map projection
WAN	Wide area network
WB	World Bank

ETHIOPIAN FINANCIAL YEAR, CALENDAR YEAR AND GREGORIAN CALENDAR YEAR

Ethiopian Financial Year (EFY) 1 Hamle to 30 Sene (8 to 7 July)	Ethiopian Calendar (EC) 1 Meskerem to 5 Pagumen (11 to 10 September)	Gregorian Calendar 1 January to 31 December	GOE Plan Periods
EFY 1998	1998/1999	2005-2006	Plan for Accelerated and Sustained Development to End Poverty
EFY 1999	1999/2000	2006-2007	
EFY 2000	2000/2001	2007-2008	
EFY 2001	2001/2002	2008-2009	
EFY 2002	2002/2003	2009-2010	
EFY 2003	2003/2004	2010-2011	Growth & Transformation Plan I (ULGDP I 2008-2014)
EFY 2004	2004/2005	2011-2012	
EFY 2005	2005/2006	2012-2013	
EFY 2006	2006/2007	2013-2014	
EFY 2007	2007/2008	2014-2015	
EFY 2008	2008/2009	2015-2016	Growth & Transformation Plan II (ULGDP II 2015/16 – 2019/20)
EFY 2009	2009/2010	2016-2017	
EFY 2010	2010/2011	2017-2018	
EFY 2011	2011/2012	2018-2019	
EFY 2012	2012/2013	2019-2020	
EFY 2013	2013/2014	2020-2021	Growth & Transformation Plan III
EFY 2014	2014/2015	2021-2022	
EFY 2015	2015/2016	2022-2023	
EFY 2016	2016/2017	2023-2024	
EFY 2017	2017/2018	2024-2025	

Note: Where the Ethiopian Financial year is used "EFY" is placed before the year(s); otherwise all dates refer to the Gregorian Calendar.

EXECUTIVE SUMMARY

Ethiopia's Growth and Transformation Plan II establishes a goal of reaching middle income status by 2025 and envisions industrial development for growth and job creation, through effective urban development. Targets identified to reach this goal will require substantial amounts of land, but local government's ability to establish and implement urban plans, enforce regulations and identify underutilized land is undermined by the lack of a comprehensive legal cadastre. The Ministry of Urban Development and Housing has developed an ambitious agenda of activities to support GTP II, including the adjudication and registration of 1.6 million and 1.2 million landholdings respectively, across 91 cities in five years – with 200, 000 adjudicated and 150,000 registered in just the first year across the identified 23 cities. Further activities in the plan include the training of over 23,000 trainees and 16,000 implementing staff and support to Cities to establish geodetic control points (GCPs), prepare the cadastral base mapping and undertake preparatory file management. A number of pilot projects have been established within cities to develop urban legal cadastres and ultimately implement the new system, including the pilot in Addis Ababa (commencing prior to Proclamation 818/2014) and the pilots in 23 cities (including Adama, Mekele, Hawassa and Bahir Dar). However, these pilots have been slow to progress, and, given the historic failure of urban cadastral pilots in Ethiopia, the ability to complete and scale-up the current pilots remains a concern. A World Bank team including consultants from Land Equity International conducted a diagnostic mission to Ethiopia from 6-18 June 2016 to evaluate the urban legal cadastre pilot projects underway and to develop policy recommendations based on key issues identified. A follow-up mission to discuss and revise the preliminary evaluation and policy recommendations was conducted from 26 September to 7 October 2016.

This document presents the key issues and findings from these two missions, exploring the reasons behind the limited piloting success of the Ethiopian urban legal cadastre achieved so far, as well as ICT development, legislative reform and capacity building progress. From the review, the core priority for MoUDH in creating the urban legal cadastre is clearly program management and this has been acknowledged with the recently tendered Management Contract fulfilling some of this role. However, MoUDH has not as yet awarded the contract. Given the critical nature of program management to the success of this activity, it may be necessary for MoUDH to revise the scope of the TOR or method of contract in order to ensure the necessary services can be contracted as soon as possible. This report, along with the Project Design Document, should assist in reviewing the Management Contract.

The Ethiopia Cities Sustainable Prosperity Goals (ECSPG) prepared by the MoUDH to support the overall objectives of GTP II and GTP III, whilst revised down from those initially received, are ambitious. They will require significant progress in scaling up the current pilots in order to be achieved. Fundamentally:

(i) there is no process as yet clearly established for pilots that can be scaled-up; and
(ii) there is no clarity on whether the funds are available, and whether Regions have agreed to their activities and the implied funds necessary.

It is clear that the MoUDH requires assistance in designing pilots that can be used to develop efficient, cost-effective processes that can be scaled up nationally, skills that can potentially be transferred within the Management Contract. The piloting will then refine and elaborate on standard measures that can be shared across cities, including public awareness, staffing, budgeting and timeframes. Clear and sustainable funding measures have been proven internationally to be critical to success, and a policy of self-financing will underpin business planning. Additionally, there is a

need to prepare staffing plans – with a review of international standards – and align these with capacity development plans, business and financial plans. Again, such activities could occur within the Management Contract. Resourcing is a key element for further review, with projected staffing figures in this document far below the numbers identified in existing business process documents and for training under GTP II.

On the institutional, legal and regulatory frameworks, five key constraints are highlighted:

- Lack of standard operating procedures and supporting materials
- Alignment of the Cadastre and Real Property Registration System (CRPRS) with the legal framework
- Requirement for regularization to be completed, with no process for resolving discrepancies in the field
- Lack of clarity on institutional roles
- Lack of clarity on the registration of condominiums, government and religious land

The absence of comprehensive, centralized guidelines and standard operating procedures for the implementation of activities at regional- and city- level is the core constraint underpinning a lack of progress, linking closely with the program management need identified above. Whilst some legal amendments are recommended (for example, to simplify the number of registers required and to remove the need for landholders to submit a second application for registration), a significant number of the recommendations in this report cover the establishment of manuals and guidelines for city- and sub-city level staff who will ultimately be implementing the urban legal cadastre. These span the need for standard operating procedures for updating the legal cadastre in response to transaction applications, the development of manuals/guidelines for adjudication teams, the development of guidelines to address common types of discrepancies between field information and parcel files, and clear strategies for public awareness. As a first step, parcel file management is a critical prerequisite to the success and efficiency of systematic adjudication and registration (SAR), and should be prioritised. Improved file management will better support and identify the size of regularization work required. The process of regularization will critically require local and neighbourhood development plans, funds and time to implement these plans and pay compensation. It will also be necessary to improve the cooperation between right creating institutions and registration agencies. Achieving these recommendations will fundamentally address the 'holes' that may otherwise appear in the cadastre, causing it to remain incomplete.

On the ICT side, several systems were assessed with particular focus on the CRPRS, which is the strategic national platform for implementation of the urban legal cadastre system. CRPRS is currently in development and due for release in the latter part of 2017, although an August 2016 review undertaken by IGN highlighted serious concerns. The August review found that there was no realistic plan for the development of CRPRS and MoUDH was not receiving appropriate updates on development status by the contractor (the Information Network Security Agency, INSA). Whilst the June 2016 mission found progress by INSA was at that time appropriate, this was dependent on MoUDH receiving the (then) upcoming deliverables on time. CRPRS development underpins MoUDH planning for the urban legal cadastre, and close attention is needed, as well as potentially additional support, to ensure minimal delays. Both reviews highlighted the need for MoUDH to be more involved in the development process of CRPRS, which would ensure that the solution delivered meets the expectations and needs of the Ministry, Regional Administrations and Cities.

The ICT review also identified a gap in the current ICT landscape in relation to systems supporting the SAR process. If the standard operating procedures and manuals recommended are put into

place, the improved file management process adopted and an efficient manual process for registration of transactions and transfer to the CRPRS when developed, this should not be a significant concern.

The following Table documents the recommendations. These follow the structure of activities in the Project Design Document and are explored in more detail in Section 12.

Table 1: Summary of Policy Recommendations

Theme 1: Strengthening and expanding the legal cadastre in Addis Ababa
Recommendation 1: Addis Ababa should concentrate on clearing the backlog and undertaking work on preconditions prior to declaring any more adjudication neighbourhoods.
Recommendation 2: The capacity of the right creator in Addis Ababa should be strengthened to support SAR through a program of title management, the correction of titles found deficient during file management and title issuance.
Recommendation 3: SAR in Addis Ababa should be implemented as set out in Proclamation 818/2014 with good public awareness, areas declared at the level of adjudication neighbourhoods and the process completed in less than five months.
Recommendation 4: MoUDH should review the experience in Addis Ababa and SNNPR implementing Proclamation 818/2014, particularly with regards to levels of responses to the public notice calling for applications for registration of landholdings. This review should document the experience and lessons and recommend changes in the public awareness campaigns and/or SAR process that might increase public participation.
Recommendation 5: Independent experts should be engaged to review the ICT application in Addis Ababa and to develop an appropriate strategy to address the problems with the system and to support the implementation of the legal cadastre. The review should also consider the strategy to migrate from AA-CADIS to CRPRS.
Recommendation 6: MoUDH should work with Addis Ababa to develop an improved manual system to record the legal cadastre and support on-going transactions until the records can be managed in a computerized system.
Recommendation 7: The project to develop the legal cadastre should include activities to strengthen the capacity of the rights creating institution.
Recommendation 8: The project should include an activity to strengthen the capacity of the Public Complaints Office to enable the office to process the complaints from landholders who are aggrieved by decisions made by the right creator.
Theme 2: Implementing SAR in an efficient and participatory manner in the 23 cities
Recommendation 9: The Urban Land Development and Management Bureau in MoUDH with assistance from the Regional Administrations should identify and map the scope of urban areas requiring regularization and should prepare and cost a plan to complete regularization.

Recommendation 10: MoUDH should prepare a standard for parcel files, aligned with requirements of systematic adjudication and registration, and encourage Regional Administrations and Cities to adopt the standard.

Recommendation 11: MoUDH in cooperation with Regional Administrations and Cities should develop a process to correct the deficiencies in parcel files that are identified during file management. This process when developed should be implemented as part of file management prior to declaring an area for SAR.

Recommendation 12: MoUDH should prepare a plan to scale-up file management and file correction. Funding should be provided to facilitate implementation given the critical nature of this task.

Recommendation 13: In a Region commencing SAR, at least 2 pilots -one in a well-established area and one in an expansion area - should be undertaken in the city in the Region where file management has been completed prior to scaling up SAR in other cities in the Region.

Recommendation 14: An arrangement should be established to share experience and knowledge in implementing Proclamation 818/2014. This arrangement would logically involve regular reports on the status, experience and key lessons from implementing Proclamation 818/2014 and regular meetings of key staff from Federal and Regional Administrations and pilot cities that are involved in the activity.

Recommendation 15: Although existing photography over Addis Ababa and the 23 Cities is approaching 5 years since it was captured, it would be best to continue to use the cadastral base maps made from this photography and fill in with ground survey or supplementary methods, including drones, as necessary.

Recommendation 16: Future cadastral base maps used in the field should be produced with photography that was captured less than 5 years prior to use and be used in the field without the vector base.

Recommendation 17: MoUDH should continue to advocate the use of photogrammetric methods in the field. The pilots should be used to demonstrate the ability of photogrammetric methods to produce appropriate maps in a timely and cost-effective manner.

Recommendation 18: Cities should be encouraged to overlay reliable existing cadastral data over the new cadastral base maps so that they can better plan the field activities.

Recommendation 19: MoUDH, with support from the city pilot projects should investigate strategies that can be adopted to reduce the number of discrepancies that arise in the adjudication process and the level of effort required to resolve these discrepancies.

Recommendation 20: MoUDH should develop clear guidelines for the types of discrepancies that are likely to arise during adjudication and prepare clear guidelines for staff in Cities to resolve these discrepancies.

Recommendation 21: MoUDH (FURPRIA) should review the experience to assess the reason for low application numbers within the total 15-day period for applications and make clear recommendations for changes that will increase participation.

Recommendation 22: MoUDH (FURPRIA) with the right creating institution and with support from the Managing Contractor should prepare clear guidelines for staff in the adjudication and

registration of: land held by farmers with and without 'green cards'; government houses allocated to individuals; kebele housing; other government land including roads and streams; property held by religious institutions; and other urban land tenures not under the lease or permit systems.

Recommendation 23: FURPRIA should, with support from the Managing Contractor and the Regional governments, develop Standard 5/2015 into a detailed manual in a format that is readily accessible and understandable to staff on the adjudication teams.

Theme 3: Strengthening the quality of services from the legal cadastre

Recommendation 24: MoUDH with support from the Managing Contractor should develop a clear strategy to explain to the public the benefits of keeping their information in the legal cadastre up to date and prepare the information and materials to implement this strategy.

Recommendation 25: MoUDH with support from the Managing Contractor should develop a Service Charter that defines service delivery standards, the rights of customers, and how complaints from customers will be handled.

Recommendation 26: As a matter of priority, MoUDH should develop comprehensive standard operating procedures for updating the legal cadastre in response to transaction applications. These procedures should be in a form that can be used in the development of CRPRS and be used by staff in the update of the legal cadastre both before and after CRPRS is deployed. If timing permits, this task should occur within the Management Contract.

Recommendation 27: MoUDH should have IGN International review this report and respond to the comments on the RAD that they prepared for CRPRS.

Recommendation 28: INSA should implement all of the recommendations that relate to INSA's development of CRPRS as set out in the IGN International QA/QC review of August 2016 by the end of 2016. If MoUDH and IGN International are not satisfied that INSA has addressed the issues raised by the QA/QC review, senior representatives of MoUDH, IGN and INSA should review the situation and agree on action that will ensure CRPRS is available as soon as possible.

Recommendation 29: The proposal for the regional deployment of CRPRS should be reviewed by IGN International.

Recommendation 30: MoUDH (FURPRIA) should ensure a representative attends each INSA Sprint Review meeting and actively participate in the development of CRPRS. IGN, as the advisors to MoUDH, should also participate in the Sprint Review meetings.

Recommendation 31: MoUDH and INSA should investigate and make a decision on the best strategy to develop an ICT application to support SAR and the registration of transactions in the legal cadastre while CRPRS is being developed.

Recommendation 32: MoUDH should adopt a limited typology of offices that are based on estimated properties in each office. The standards for office space, staff, vehicles, equipment and furniture specified for each office type should be based on expected demand for services within the overall objective that the system be self-financing.

Recommendation 33: FURPRIA should consult with the Regional Administrations and Cities to prepare a staffing plan that lists the staff required to both establish the urban legal cadastre through SAR, and maintain the ongoing operation of the urban legal cadastre and sets out a strategy to

source these staff through reassignment of existing staff, recruitment of new staff, contract employment of temporary staff or outsourcing activities to the private sector.

Recommendation 34: Once a staffing plan to support the legal cadastre is available, a training plan to support the staffing plan should be prepared and this plan should be programed under the ECSPG training activities.

Recommendation 35: MoUDH FURPRIA, with possible support from EMA, should implement systems to register private sector surveyors providing cadastral surveying and mapping services including a code of conduct and appropriate oversight mechanisms using the information prepared by EMA as a starting point.

Theme 4: Project management, policy formulation and monitoring and evaluation

Recommendation 36: The terms of reference and contractual arrangements for the Management Contract should be reviewed and it should be retendered as soon as possible.

Recommendation 37: The Managing Contractor should be given a copy of this report and asked to prepare a work plan to respond to the recommendations set out in this report.

Recommendation 38: MoUDH with support from the Managing Contractor should develop and implement a quality assurance system for the legal cadastre.

Recommendation 39: MoUDH should have discussions with the Regions to ensure there is clarity over budget responsibility and, where necessary, arrangements made for funding allocation, to ensure confidence in and sustainably funded processes.

Recommendation 40: A policy formulation and legislation reform activity should be included in the project design.

Recommendation 41: MoUDH should adopt a policy that the legal cadastre once established be self-financing and develop a budget that demonstrates that the standard office types can be self-financing.

Recommendation 42: If a policy of self-financing is adopted, MoUDH should develop a corporate strategy and business plan to prove and guide its operation.

Recommendation 43: The process to clarify the status of landholdings recorded in the disputes register should be clearly set out in the law and associated instruments.

Recommendation 44: The legal cadastre should record rights, restrictions and responsibilities against the specified landholding to simplify the number of registers required. This change will require MoUDH to make an amendment to the law.

Recommendation 45: MoUDH should investigate the reason why SAR is not being completed in 5 months and recommend action to be taken to ensure it can be completed within the 5 months, or less. If the period is increased MoUDH should look at whether alternative arrangements for transactions can be made. This may require a legal amendment.

Recommendation 46: MoUDH (FURPRIA) should change the SAR process to remove the requirement for the second application for registration and register landholdings from based on information collected on the initial application for registration of landholdings as adjudicated and posted. This will require an amendment to the law.

Recommendation 47: To address the clear problems with the interface between the right creating institution and the institution creating the legal cadastre, some staff from the right creating institution should be assigned to work with the adjudication team with the authority to resolve common issues that arise in the process of SAR.

Recommendation 48: MoUDH (FURPRIA), together with the Region Administrations, should review Condominium Proclamation 370/2003, the relevant condominium legislation in the Regions and Proclamation 818/2014 to determine if amendments to any of these laws are required.

1 INTRODUCTION

Land Equity International (LEI) has been contracted by the World Bank to provide consultancy services in support of the review of the legal cadastre in the urban sector in Ethiopia. Ethiopia is urbanising at a rate of 5.4% per annum, and the recently completed Ethiopia Urbanisation Review (Government of Ethiopia (GoE), World Bank and Cities Alliance, 2015) found that with cities failing to meet the demands of residential growth, there is a clear demand for a robust institutional framework to support sustainable land management, alongside housing delivery, urban governance and municipal finance. This project has the core aims to:

a) evaluate the legal cadastre pilot projects underway in Ethiopia, and
b) help prepare a plan for nationwide roll-out.

LEI commenced the services in May 2016 - delivering an Inception Report on 1st June 2016. The Stage 1: Diagnosis mission was undertaken in Ethiopia from 6-18 June 2016, and included meetings and discussions with relevant Federal, Regional and City governments, donor-led project representatives, World Bank representatives and rural cadastre project representatives. The core findings from this mission were included in the first draft of this document.

This Issues and Policy Recommendations Report is provided in two parts. First, the key issues and findings are drawn from the detailed diagnosis assessment, including an evaluation of past attempts to build cadastral and land information systems in Ethiopia, a legal and institutional framework review, and an analysis of the physical design and ICT aspects of pilot projects completed and underway. Second, a series of policy recommendations are made. These aim to:

a) strengthen the legal/regulatory and institutional frameworks;
b) streamline procedures and processes, particularly relating to the pilots and systematic registration;
c) build capacity;
d) improve IT design and implementation; and
e) facilitate a rapid and robust national roll-out.

A draft Issues and Policy Recommendations document was finalised in September 2016. This document was reviewed by the World Bank, given to the government and presented to a stakeholder workshop held in the World Bank office in Addis Ababa on 29-30 September 2016. The feedback from stakeholders during the workshop, and the additional information gathered during the second mission to Ethiopia from 26 September to 7 October 2016, has focussed the Issues and Policy Recommendations document as it now stands.

2 STRATEGIC CONTEXT: THE GTP II

The Second Growth and Transformation Plan (GTP II) is the main planning instrument in Ethiopia for the five-year period from 2015/16 to 2019/20, and provides the strategic context of the urban legal cadastre of Ethiopia. The overarching objective of GTP II is realizing Ethiopia's vision of becoming a lower middle income country by 2025. GTP II is built on 9 strategic pillars. The fifth strategy pillar is to:

> *"Proactively manage the on-going rapid urbanisation to unlock its potential for sustained rapid growth and structural transformation of the economy."*

The strategic directions set out in GTP II for Urban Development and Housing are:

- Ensuring strong urban development and good governance;
- Developing urban development plans that are integrated with the regional and national development plans;
- Undertaking resettlement programs based on the principles of fairness and helping cities to foster their economic growth;
- Allocating land economically for different development purposes by providing enough compensation, incentives and facilities for farmers;
- Bringing rapid infrastructure developments and finance mobilization to cope with the rate of urbanization with associated coordinated management of stakeholders;
- Strengthening the ongoing housing development program to reduce the imbalance between the demand and supply of urban houses;
- Renovating and upgrading urban cities and creating sustainable development by exercising a green economy strategy.

In 2012/13 MoUDH started preparing the Ethiopia Cities Sustainable Prosperity Goals (ECSPG) to support the overall objectives of GTP II and GTP III. The first five years of ECSPG will be during GTP II and the second five years during GTP III. The ECSPG is structured over 9 pillars, 12 sub-programs and 34 projects, with a 35th project being the Addis Ababa Integrated Project. The 9 pillars set out in the ECSPG are:

1. Urban Transformational Leadership
2. Micro and Small Enterprise and Urban Productivity
3. Urban Good Governance and Capacity Building
4. Urban Planning, Land Development and Management
5. Housing
6. Integrated Urban Infrastructure and Services
7. Environmental and Green Spaces
8. Resilient, Inclusive and Safer Cities
9. Urban Finance.

Preliminary goals established under the ECSPG in support of GTP II by the Ministry were too ambitious, and were subsequently revised. The updated projects to be implemented under GTP II as developed by the Ministry to support the urban legal cadastre are shown in Annex 1. These projects are briefly discussed below.

2.1 Urban Map Production, Surveying and Land Use Right Registration Program

Projects in support of the urban legal cadastre under GTP II are grouped under Program 6: *Urban Map Production, Surveying and Land Use Right Registration*.

There are six projects in total identified under this program, being:

6.1 Urban Legal Cadastre Information Development Project
6.2 Urban Map Production and Surveying Capacity Building Project
6.3 Modern Property-based Taxation System Project
6.4 Development of Urban Landholding Registration
6.5 Development of Urban Cadastre
6.6 System Development, Follow-Up and Quality Control

Activities under these projects represent a marked reduction in ambition compared to the earlier GTP II activities which will promote the Ministry's ability to achieve these within the GTP II timeframe. A summary of these activities is presented below.

6.1 Urban Legal Cadastre Information Development Project

This project includes two sub-activities to:

- Develop the software (CRPRS) for the urban legal cadastre.
- Establish network and data centre infrastructure for the implementation of the CRPRS in 91 cities.

6.2 Urban Map Production and Surveying Capacity Building Project

There are five sub-activities beneath this project, being:

- Training of experts who will implement the land development and management program, including 13,400 staff to attend short-term training and 10,104 staff to be attend mid-term training.
- 3,000 graduates to be certified for professional competence in urban land administration by an approved higher learning institution.
- 91 Office buildings to be constructed for the federal, 5 regional states and Dire Dawa City Administration urban land institutions.
- Supervision and support given to 238 cities so that they can produce base maps by establishing geodetic control points and capturing aerial photography.
- Supervision and support will be given to prepare maps and establish address system in 250 cities.

6.3 Modern Property-based Taxation System Project

This project has three sub-activities:

- 12 framework laws prepared and implemented to modernize the property market, property valuation and taxation system.

- Property-based valuation and taxation system established and implemented in 91 cities.
- Land Price Map will be prepared for 91 cities.

6.4 Development of Urban Landholding Registration

The fourth project has four sub-activities, each with multiple targets:

- Preparation of 4 laws, 5 Standards, and 8 operational manuals to support the implementation of the legal cadastre, as well as 16,000 staff trained on the process including a minimum of 35% or 5,600 women.
- 91 cities to establish coherent and uniform administration, organizational structures and working procedures for the urban landholding registration.
- Preconditions completed in 91 cities, with adjudication of 1,600,000 landholdings and registration of 1,200,000 properties across these cities.
- Public participation in registration facilitated by creating awareness of 5,000,000 community members (35% or 1,750,000 women), with evaluation via feedback from 1,000,000 citizens during adjudication.

6.5 Development of Urban Cadastre

This project includes two sub-activities to:

- In 91 cities, digital landholding registers to be established and urban landholding files integrated with orthophotos and cadastral base maps in line with required standards.
- Ensure the preparation of urban cadastral base maps and cadastral index maps per required standards, including the training of 4,000 professionals for the preparation of surveying and mapping activities in 91 cities.

6.6 System Development, Follow-Up and Quality Control

This project includes two sub-activities to:

- Implement the CRPRS in 91 cities and evaluate the effectiveness in six cities using international experts.
- Undertake quality control on working procedures in 44 cities, identify gaps, prepare a study for improvement and benchmark experiences.

2.2 Program budget

The program budget, calculated to USD from Ethiopian Birr, is shown in Table 2 below. Costs are allocated by type rather than activity, coming to a total cost of approximately USD$87 million.

Table 2 - Estimated budget for legal cadastre in GTP II

		USD	Yearly budget distribution (USD)				
No	**Description**	**Total cost**	**2015/16**	**2016/17**	**2017/18**	**2018/19**	**2019/20**
1	Material procurement	46,700,478	1,173,890	40,987,337	1,359,815	1,478,808	1,700,629
2	Training	2,704,532	960,249	636,975	173,250	426,687	507,371
3	Professional Services	4,737,656	1,624,992	723,710	966,665	677,281	745,009
4	Per diem	179,029	48,890	37,195	46,755	21,483	24,706
5	Fuel	126,899	2,970	24,276	44,226	25,780	29,647
6	Printing	3,023,675	691,654	401,522	569,250	618,750	742,500
7	Consumable office materials	264,301	58,013	43,163	49,163	53,888	60,075
8	Different kinds of payments	23,022,896	4,630,552	4,708,440	5,149,856	5,002,718	3,531,330
9	Transport	6,137,176	705,241	702,906	3,103,310	756,148	869,571
10	Travel and invitations	59,355	4,806	13,284	13,500	9,765	18,000
	Total cost	**86,955,997**	**9,901,257**	**48,278,808**	**11,475,790**	**9,071,307**	**8,228,837**

2.3 Analysis of cadastral aims under revised GTP II

The updated program, projects, activities and targets are much reduced and much more achievable when compared with the earlier version. However, the target of adjudicating 1.6 million landholdings and registration of 1.2 million landholdings across 91 cities is still ambitious. Training numbers and costs are still potentially high (e.g. 16,000 implementing staff to be trained), but achievable with current capacity in Ethiopia (under the TVET program and universities). There is some concern over potential delays to the CRPRS, and possible flow on effects to other activities. Also, the Ministry should review the activities and targets in light of this report – it may not be necessary to construct so many office buildings and the number of properties adjudicated and registered may need to be revised in the earlier years to take into account the need for additional piloting. The staff that require training may also be significantly less.

3 LAND ADMINISTRATION REFORM AND THE CURRENT SITUATION IN ETHIOPIA

Land administration is the way rules of land tenure are applied and made operational.[1] There is great variety in the way land administration is implemented globally but typically land administration includes the functions of surveying and mapping, registration of property rights and property valuation. The land administration systems in countries with well-developed systems have evolved over long periods of time (100-200 years). These systems have typically evolved from simple systems to map and record property rights in defined locations to sophisticated systems that provide property related information over all or most of the country or jurisdiction. These systems are integrated into the social and economic fabric of society.

Many countries with less well developed land administration systems have undertaken land administration reform in shorter timeframes (5-20 years) using the experience, lessons and models from countries with well-developed land administration systems. For example, Thailand, which introduced a title-registration system in 1901 implemented a 20-year land titling program in 1984 with the objective of issuing titles to all eligible landholders in rural areas. The title registration system was originally introduced using an Australian model to register urban land rights and land rights in the central rice-growing areas. By 1980 the registration system covered virtually all urban areas but much of the rural landholdings were not registered in the title system. The policy legal and institutional framework in Thailand was strong and the main emphasis of the land administration reform was the introduction of a new geodetic framework for the cadastral surveys, new base mapping, the introduction of ICT systems and mass systematic registration in rural areas using a range of techniques including ground surveys, photomap surveys and the office conversion of maps and records for lesser documents (certificates of possession). Rwanda implemented a more radical land administration reform in 2011 based on pilots that commenced in 2009. This reform was based on significant policy and legislative reform and a mass land tenure reform program to demarcate, adjudicate and chart property rights for about 10.5 million land parcels over three years. Leases have been issued for nearly 10 million properties.

There is great variety in the way land administration reform has been implemented, reflecting different contexts and situations and differing objectives. However, it is possible to model land administration reform as strategic decisions/activities at two levels – an initial level of decisions/activities that are required to prepare for land administration reform and a second level of implementing land administration reform itself. These two levels and the specific decisions/activities necessary are illustrated in Figure 1 and Figure 2 below. These figures illustrate two typical extreme cases in five key topics in each of the two levels. The key topics for implementing land administration reform in Figure 2 largely follow the measures of quality for registering property that are set out in Doing Business.[2] The figures set out typical interventions in each topic and those designing land administration reform projects have a range of options for the interventions in these topics as is illustrated in the diagrams by the 'equalizer' bars. It should be noted that there is no set phasing of activities and many projects have been designed and implemented with a mix of interventions from Figure 1 and Figure 2.

[1] http://www.fao.org/docrep/005/Y4307E/y4307e05.htm#bm05.2

[2] http://www.doingbusiness.org/methodology/registering-property

Figure 1 - Initial Decisions/Activity to be able to Implement Land Administration Reform

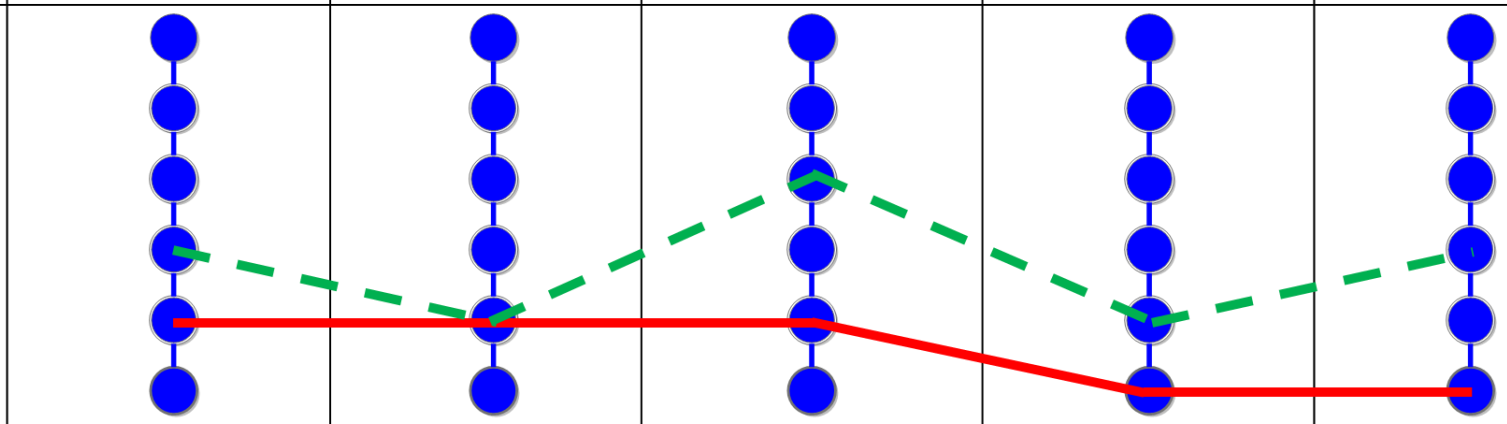
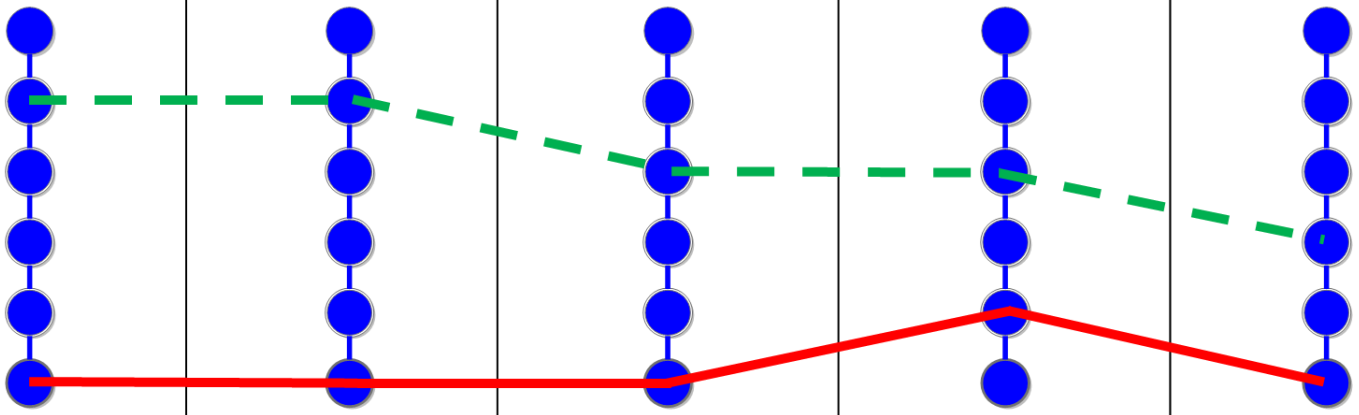
	Policy/legislative Framework	Institutional Arrangements	Capacity	Geodetic Framework	Spatial Framework
Best Case	Recognises the land rights of all sectors of society within a holistic framework that ensures land is available for public uses and is best managed for future generations	Clear definition of institutional roles and mandates. Little duplication of effort and systems and records.	HRD/M strategy in place and being implemented, training needs known and the basis for comprehensive training plan that is being implemented.	Comprehensive geodetic framework in place with data readily available and used as framework for NSDI. CORS available to support GNSS users.	NSDI policy in place with a comprehensive range of spatial mapping products available to land users online and in digital format.
					
Worst Case	Recognises the land rights of the elite, no provision for registering public land and limited protection of land for environmental and cultural purposes	Many institutions involved in land matters with overlapping and conflicting roles and mandates. Duplication of effort and systems and records.	Many approved positions unfilled, little or no training provided to staff, little information available on HRD/M strategy and no sector or institutional TNA.	Geodetic reference incomplete and/or outdated. Geodetic information not readily available. Many different local datums in use – many based on local GNNS observations.	Limited large scale maps available for cadastral surveys and land use planning and these maps are very outdated.
Possible interventions	• Preparation of National Land Policy • Legislative reform	• Institutional reform	• Preparation of HRD/M strategies • Training Needs Assessment • Implementation of education and training plans • Building capacity of education and training institutions	• Geodetic and gravity observations and geodetic adjustment • Deployment of CORS with user support • Conversion of survey/maps • User training	• Development and implementation of NSDI policy • HRSI and map acquisition • Development of web-based delivery

Figure 2- Implementing Land Administration Reform

	Computerisation of Records and System	Service Provision	Access to Records	Geographic Cover	Land Dispute Resolution
Best Case	All land records both spatial and textual are computerized and a comprehensive ICT system in place to support the provisions of services. Data backed up and archived.	Service charter adopted and being implemented. Clear promise on service delivery (time, cost and quality) adopted and being implemented.	Key records available online with the ability to search by a range of spatial and textual references..	The land administration system has comprehensive geographic cover and includes all tenure types, all public land and all land reserved for other purposes such as land of environmental and cultural importance.	Land disputes are resolved quickly in a system that is accessible to all.
					
Worst Case	All map and textual information only available in paper form with many records in poor condition. No back-up or archive. Data poorly stored and difficult to locate. Many records missing or incomplete.	System focuses on process rather than service provision. Process unclear as is the cost time and quality of what is being produced. Typically have to hire intermediary.	Records held and accessible by limited personnel and very difficult to access by others in the institution and almost impossible to access by other agencies and the general public.	The land administration has very restricted geographic cover, restricted for example to urban land and land of economic importance. Public land is not recorded and there is no inventory of public land.	Land disputes are resolved in an expensive process that is non-transparent and only accessible to the wealthy. Multiple and/or overlapping process to resolve disputes
Possible interventions	• Scanning, key data entry and indexing of records • Data entry • Scanning and digitization of map • ICT design and development • End-user training	• Infrastructure to provide services • Design and implementation of standard operating procedures • Service charter adopted with clear promises on service provision • Implementation of efficient process to collect and respond to customer feedback	• Development and implementation of NSDI policy with clear provisions for access, pricing and privacy • Computerisation of records • Development of web-portals	• Mass systematic registration using efficient, participatory processes • Development os a responsive sporadic registration system • Program to register public land and create a public land inventory	• Policy to provide a range of dispute resolution services including ADR • Development of comprehensive guidelines for land dispute resolution

The coloured lines in Figure 1 and Figure 2 illustrate the situation and possible emphasis in Ethiopia – the red solid line illustrates the 'as-is' situation and the green dashed line what could potentially be achieved in a 5-year timeframe.

It is important to understand where the urban sector in Ethiopia fits within the construct set out above. The Doing Business 2016 assessment for Registering Property, although limited to a single hypothetical property at the periphery of Addis Ababa, provides a useful reference.[3] Doing Business ranked the ease of registering property in Ethiopia at 141 out of 189 countries. The Doing Business information for the assessment of the efficiency and quality of registering property in Ethiopia is set out in Annex 8. In measuring the efficiency of the process Doing Business found that the process to register the property requires 7 steps, takes 52 days and costs 6.1% of the property value. More critically, in assessing the quality of the process Doing Business assessed the process as 4.5 out of a maximum of 30 points. This low assessment was due to the fact that the existing records were found to be paper based and these records were not easily accessible and had very limited geographic cover.

In preparing the design for the legal cadastre under GTP II MoUDH found that:

- in most municipalities property records were kept mostly in a paper format supported in some municipalities by a textual database and GIS or CAD software
- there was no consistent format for the manual records and the textual database or the GIS/CAD systems that may support these
- there was a lack of trained staff to able to use the systems
- processes to update the manual and computer records were not consistent and staff had significant discretion in creating, altering or even removing files.

In 2015 MoUDH commissioned a file management study in three major cities: Mekele, Bahir Dar and Dire Dawa. This study has recently been completed and has found significant problems with the existing property files in these cities with many files missing numbers, lacking important information and many unable to be located in the field.

[3] http://www.doingbusiness.org/data/exploreeconomies/ethiopia/registering-property/

4 LEGAL CADASTRE: DESCRIPTION AND RATIONALE

4.1 Lessons from past attempts at land registration and land information systems

A brief review of recent efforts to improve urban land records is set out in Annex 2. This brief review considers the GTZ-supported projects in a number of cities including Hawassa, Adama, Bahir Dar and Mekele as well as the two SAR pilots in Addis Ababa (Bole and Nifas Silk-Lafto sub-cities) under a policy paper developed by MoUDH in 2011.

The GTZ pilots all largely failed to realize successful, sustainable systems to record rights in urban areas in Ethiopia. The pilots in Bole and Nifas Silk-Lafto sub-cities have also faced significant problems. The key lessons from these past efforts have shaped the current effort to implement a legal cadastre. These lessons included that:

(a). the data collection effort and the systems development should focus on the requirements to register rights, restrictions and responsibilities over urban property.
(b). the institutional arrangements adopted will need to address the current lack of clarity in the land management and land administration functions in the Cities.
(c). a key requirement for a cost-effective process for SAR was addressing issues concerning the quality and accessibility of the information in existing parcel files and the complications that can arise in resolving discrepancies between what is found in the field and what is recorded in the existing parcel files.

4.2 The Urban Land Development and Management Policy and Strategy

The updated Urban Land Development and Management Policy and Strategy prepared by MoUDH in August 2013 sets out a range of activities to ensure that systems for urban land development and management are a foundation and driver for development. A key policy objective is registering urban landholdings. Proclamation 818/2014 was prepared to register urban landholdings and signed in February 2014. Key ongoing activities include:

- A program to undertake SAR in Addis Ababa under Proclamation 818/2014 which was started in early 2015, building on the earlier pilots and using the AA-CADIS software.
- MoUDH has prepared and was implementing a plan to pilot SAR in 23 cities. These 23 cities were identified based on cities with the highest population across the regions, excluding Addis Ababa. A further 30 cities were identified by Regional Governments based on a Federal quota.
- MoUDH has put considerable effort into the development of regulations, directives and standards to support the regions in implementing Proclamation 818/2014.
- Specifications for the key ICT application (CRPRS) have been developed by MoUDH, with technical support from IGN International. INSA has been contracted to develop CRPRS.
- A Management Contract to support the implementation of the systematic registration activities and the CRPRS has been tendered for the third time but this tender was cancelled by the Ministry of Finance in October 2016.

4.3 The systematic adjudication and registration process

The SAR process is set out in Proclamation 818/2014 and associated regulations, directives and standards. The process has been broken down into two stages:

- a set of activities that address the preconditions for undertaking SAR; and
- the SAR process itself.

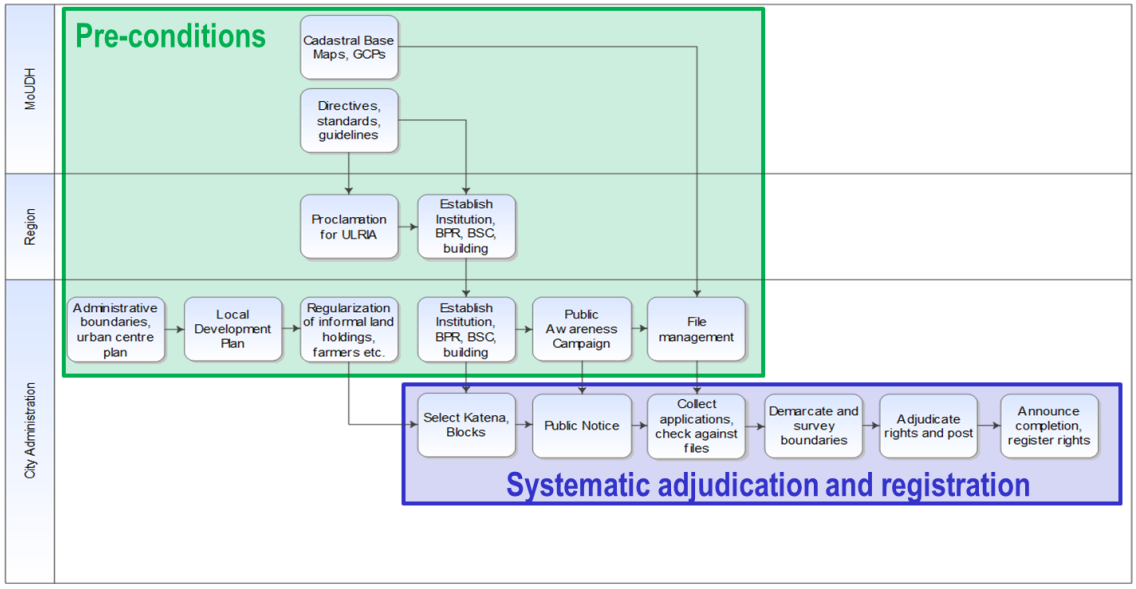


Figure 3 - SAR Process

4.3.1 Overview of systematic adjudication and registration process

Pre-conditions

There are overarching prerequisites for undertaking SAR. Before SAR can be undertaken in a city, the region has to pass a Proclamation to establish the institutions at the regional and urban centre levels to undertake SAR. The institutions have to be established; and under Ethiopian civil service practices this requires the completion of business process reengineering which defines the institutional structure and staff positions and balanced score card analysis which defines the key productivity expectations for staff. The new institution has to be accommodated and this may require investment in buildings, furniture and equipment. As the SAR process is being undertaken through a process of public participation, an important initial activity is a public awareness campaign. Other prerequisites include the production of cadastral base maps and ground control points (GCPs). MoUDH has been providing the cadastral base maps which are based on 1/2,000 scale orthophotomaps with a vector overlay. The photography used to produce the cadastral base maps should be no older than 5 years. MoUDH has commissioned EMA to produce GCPs, although GCPs have also been put in place by regional governments.

There are operational prerequisites for undertaking SAR. The administrative boundary of the urban centre must be defined and the urban centre plan has to be approved and be legally binding. The SAR process can only confirm existing rights so another important prerequisite is that regularization is completed. This is implemented through local and neighbourhood development plans. As SAR is only confirming existing rights it is important that information in the parcel files maintained by the

City/City Administration are readily available to the field teams. However, these existing parcel files are typically in poor form with many files missing entirely or missing key information. The files are also typically stored by name rather than geographic location and this makes access difficult. It has been recognized that an important prerequisite for SAR is file management, which involves validating and re-sorting existing parcel files and possibly recording key information in a database and/or GIS application.

Systematic Adjudication and Registration

MoUDH Directive 45/2014 sets out the process for SAR. The work is undertaken in manageable adjudication sectors, which are defined as comprising 5 adjudication neighbourhoods, each covering no more than 200 land parcels. The adjudication sector is therefore limited to 1,000 land parcels. SAR can only commence in an adjudication neighbourhood when an Adjudication Grievance Handling Tribunal is established in the adjudication sector and Community Observer Teams are established at neighbourhood levels and when a map showing the parcels, blocks and neighbourhood and notice is prepared and announced to the public.

Once the process is publicly announced for an adjudication neighbourhood the landholders have a limited period of time to make an application to have their landholding registered. This period of time is 10 days, with a further 5 days provided if there is sufficient reason for the delay. Any landholder who does not apply in this 15-day period cannot participate in the SAR process and must make an individual application for registration through a sporadic process. The form of the application and the supporting documents that have to be submitted with the application are specified in the Directive. Transfers of a landholding title within the adjudication neighbourhood are suspended during the adjudication period provided that this period is announced to the public prior to work commencement. The period of suspension is specified to be no longer than 5 months.

The date and time for boundary demarcation is specified in the public notice. Landholders are expected to place marks, clean the area around boundaries and be present on the nominated time to identify their boundaries in the presence of community observers and adjacent landholders. The Directive specifies that the demarcation expert be present on each parcel 3 days prior to demarcation as part of the public awareness activity. Furthermore, landholding boundaries will only be adjudicated in cross-checking the submitted application and supporting documentation with the information provided by the right creation institution (in the parcel file). However, the Directive does specify that the data on boundaries will be gathered 'without omitting any type of landholding including over landholdings where the right adjudication activity is not undertaken.' Proclamation 818/2014 Article 14(7) specifies that the boundaries are to be the boundaries agreed upon by adjacent landholders or in the absence of this, be based on the decision of the Adjudication Grievance Handling Tribunal. The boundary points are surveyed by ground survey connected to the GCPs or by photogrammetric methods (either stereo compilation or digitization).

Proclamation 818/2014 in article 14(6) specifies that 'no adjudication of a landholding right may be undertaken with respect to any person's landholding held beyond the legally possessed parcel size.' Any inconsistencies found in the adjudication process cannot be resolved in the field and must be referred to the right creation institution. The right creation institution has 15 days to respond to queries from the adjudication team. Proclamation 818/2014 Article 14(4) states 'unless proved to the contrary, any parcel of land on which a use right has not been created shall be presumed to belong to the government and, upon application, be registered in the name of the organ in charge of administering or developing the land.' The completion of adjudication in an adjudication

neighbourhood is announced publicly. Any person aggrieved by decisions made in adjudication has 15 days to make an appeal. Appeals are resolved by the Adjudication Grievance Handling Tribunal.

Landholders have to apply to have the rights adjudicated registered in the legal cadastre. The application for registration and the requirements for supporting documentation is much the same as the requirements for the application to have the landholding adjudicated.

4.4 Key features of the systematic adjudication and registration process

An important aspect of Proclamation 818/2014 is that it is creating a new register of landholdings based on a process that formally recognizes existing rights. The SAR process as set out in Proclamation 818/2014 cannot create any new rights; the process merely formally recognizes existing titles and puts this information into a new register that provides increased tenure security for landholders.

This means that there are important preconditions to ensure that the landholders in areas where the SAR process is to be applied have existing titles. There are two main tenure types in urban areas. The first is the "permit" system where landholders are subject to an annual rent and a roof tax. Permits have been issued at various times under different regimes, including the Imperial regime that was in place prior to the revolution in 1974. The second system is the leasehold system that was introduced in 1993 with the concept of leasing land for a fixed period, typically 30-99 years, with rights and obligations and the possibility of renewal, but with ultimate ownership and rights of repossession held by the State. The Urban Lands Lease Holding Proclamation 721/2011 sets out the legal basis for the lease system. The leasing system applies to new land although leasehold systems have not been established in all urban areas. Where a leasehold system operates the policy is that a permit is converted to a lease upon application for a transfer other than by inheritance. Much of the current housing in urban areas in Ethiopia remains under the permit system. The Cities maintain parcel files recording the titles held under the lease and permit systems. There is no established system to maintain parcel files and little legal basis other than the Civil Code.

The lease and permit systems do not cover all urban land. Government land is not recorded, nor are well established systems such as kebele housing. There is also informal housing that has various levels of recognition. When a City or City Administration prepares a structural plan that expands the city boundaries, farmers are included in the city. The structural plans are prepared every 10 years and they are introduced with local and neighbourhood development plans that define changes in land use and provide a framework for compensating those losing land and the farmers. As part of this process the farmers are typically issued temporary permits ("green cards") for residential land. The implementation of the local and neighbourhood development plans is often delayed due to the lack of funding to implement the plans and pay the necessary compensation.

An important precondition for the SAR process is the issuance of titles to those whose rights are not formally recorded by the right creation institution. This process of regularization requires local and neighbourhood development plans and funds to implement these plans and pay compensation. It also requires time.

4.5 Observations about the legal cadastre

Proclamation 818/2014 defines the Legal Cadastre as 'an updated landholding information system containing a record of the rights, restrictions and responsibilities on a defined legal boundary for each landholding demarcated as a parcel on a map.'

The strategy of MoUDH clearly focusses on completing the legal cadastre as a basis to introducing a fiscal cadastre and move at some time in the future to a multi-purpose cadastre. MoUDH is in the final stages of designing a Computerized Property Tax Administration system, which will require additional data to support a computer-assisted mass-appraisal (CAMA) process, including building footprint and floor plans, construction materials, construction date, condition etc. This focus on the legal cadastre was confirmed in discussions with stakeholders in Addis Ababa and the various cities visited during the mission in June 2016.

There are some complications in focusing on a legal cadastre that is a map of defined polygons to which is attached a set of rights, responsibilities and restrictions. The lack of building data can complicate the registration of condominiums, although the cadastral base maps will chart building footprints and condominium rights can be attached to a land parcel under LADM. The Requirements Analysis Document (RAD) for the proposed CRPRS that is currently being developed, specifies that the CRPRS should store building units associated with a parcel. The requirement states that the building unit is not going to be stored as a 3D spatially located object, but as a unit without spatial representation in the cadastral map. Mortgages in urban areas in Ethiopia are typically secured against buildings and not land so a system will need to be developed to record mortgages in the legal cadastre.

In addition to mortgages, some consideration of the lease management system is required in the context of a parcel-only legal cadastre. The provisions for the transfer of rights in the legal cadastre (as set out in Ministerial Directive 45/2014) specify that the transfer of a lease, except by inheritance, requires that a lease contract be signed with the right creation institution before the transfer is registered. This clearly implies that the lease management system operates outside of the legal cadastre. This simplifies the requirements for the development and ongoing operation of the legal cadastre and associated systems such as CRPRS. However, the added requirement to negotiate a new lease prior to registering a transfer will add time and cost for citizens registering transfers of landholdings in the legal cadastre.

There are a number of advantages in focusing on the legal cadastre. First, the legal cadastre will address many pressing issues over lack of clarity in rights, tenure security, support for land market, etc. Second, the legal cadastre will provide the fundamental spatial framework for other information systems such as the fiscal cadastre and to support other functions such as land management, land use planning and development, public land management, environmental management etc. Third, the focus on a limited set of information requirements will reduce the level of effort, time and cost required to complete the stated objective.

However, these advantages, particularly the use of the legal cadastre as a framework for other functions, will only be realized if the legal cadastre is implemented well and provides complete or nearly complete cover of the urban centres. The cadastral base mapping (which is prepared based on large-scale orthophotography) will provide complete cover of the urban centres and provide a spatial framework that does not presently exist. In undertaking the SAR process an attempt is made to identify all properties, not only the properties where applications for demarcation are made and which will be adjudicated. The cadastral base maps will provide a framework to validate and chart existing leases and permits in the urban centres, or undertake file management. File management will improve the efficiency of the existing system to record changes in rights and is an essential basis for undertaking SAR.

SAR under Proclamation 818/2014 is only being undertaken in areas where there are approved and legally binding plans in place and where regularization has been completed. By definition unplanned areas and areas where regularization has not occurred will be neighbourhood-sized or larger 'holes' in the legal cadastre. As noted above, the demarcation process under SAR attempts to map all land parcels over all types of land, including those where applications have not been made and adjudication is not being undertaken.

In areas where SAR *is* undertaken there will also be parcel-sized 'holes' in the legal cadastre as the registration of landholding rights, restrictions and responsibilities in the legal cadastre is only being made in response to applications for registration by landholders who have either had their landholding adjudicated in the SAR process or who have had their landholding adjudicated in response to a sporadic application for adjudication and registration. Where there is a discrepancy between the measurements in the field and the information in the parcel file this discrepancy has to be referred to the right creation institution which has 15 days to respond. If it fails to respond, the claim is entered into the disputes register. If the right creation institution responds that only the parcel area specified in the existing title may be registered, as is specified in Proclamation 818/2014, sub-parcel 'holes' will be generated in the legal cadastre. Provisions are made for the registration of government land, but it seems that these are registered by application and in any case the processes to register many forms of government land such as land allocated to individuals or kebele housing is unclear.

In summary, there will be 'holes' in the legal cadastre. These 'holes' include:

(a). Neighbour-sized 'holes' for areas that are not planned or regularized. In the case of Addis Ababa, it is estimated that there are at least 600,000 parcels but there are only about 400,000 titles in the parcel files.
(b). Parcel-sized 'holes' where a landholder with a title does not apply for adjudication and registration in areas subject to SAR in the 15 days specified
(c). Parcel-sized 'holes' where a landholder who has had a right adjudicated does not apply for registration. This could be significant. In Addis Ababa to June 2016 about 33,000 parcels had been adjudicated and posted, but only about 8,000 had been registered (noting that the difference may be due to other factors such as delays in data entry)
(d). Parcel-sized 'holes', aggregated parcel-sized 'holes' and corridors of 'holes' along roads, streams etc., where government land is not registered. About 22% of the 71,000 parcels demarcated and surveyed to June 2016 in Addis Ababa, mostly roads, were not ready for registration. This number may also include government land allocated to individuals and kebele housing.
(e). Parcel-sized 'holes' that are disputed or where the right creation institution has not responded to a query in 15 days. In Addis Ababa about 71,000 parcels had been demarcated and surveyed to June 2016 and in reviewing these documents about 6,600 requests for review were sent to the right creation institution. Responses had only been received for about 2,800 parcels. The information is entered into a disputes register but not into the rights register. The process to change the status from a dispute is unclear.
(f). Sub-parcel-sized 'holes' where the right creation institution will not recognize the measurements in the field and insists on only registering the area specified in the parcel file.

Steps can be taken to reduce the size of the 'holes'. Implementing major programs of regularization will reduce the large 'holes', although it will take time to implement such programs. Other 'holes' could be reduced by changing the procedure. For example, removing the requirement to make application for registration supplying much the same information and supporting documentation as required in the application to have the landholding adjudicated and registered would address one source of 'holes'. Clarifying the process to register government land will remove many other 'holes'. Better public awareness campaigns and a longer period for making application for adjudication could also increase the number of eligible landholders who apply for adjudication.

However, it should be noted that any systematic process relying on individual landholders applying to have their landholding adjudicated and registered will always result in 'holes' as some landholders will be missed or will decide not to participate. The provision for handling sporadic applications for adjudication and registration will fill these 'holes' over time - provided the number of missed parcels is small enough to be managed on a day-to-day basis by staff in the offices providing legal cadastre services. As the adjudication process is merely confirming an existing right, the landholders who decide not to participate miss out on the benefits of being registered in the legal cadastre and the legal cadastre has a 'hole' but the underlying right remains (although there is a risk that someone else may request registration based on documents provided by a right creation institution or the property may be registered in the name of the right creation institution). Directive 45/2014 specifies that any person with a right to which an application for adjudication has not been made has 15 years after registration to lodge an appeal and is guaranteed an equivalent benefit if evidence of a right issued by a right creating authority can be produced.

5 ASSESSMENT OF CURRENT PILOTS UNDERWAY

This section in the report sets out a detailed assessment of the current pilots. The assessment considers the support provided by MoUDH to the implementation by the Regions and Cities of the legal cadastre, the current work in Addis Ababa and the work that is really only starting in the 23 cities.

5.1 MoUDH support for pilots

MoUDH commissioned the Ethiopian Mapping Agency (EMA) to produce the cadastral base maps and GCPs for the legal cadastre. The aerial photography was flown by INSA in 2011-12 for Addis Ababa and 2013/14 for the 23 cities. The cadastral base maps were produced at a scale of 1/2,000 and 0.3m GSD and 1/5,000 and 0.8m GSD for the smaller towns with the data provided as TIFF images and shape files. The work took a year to complete, longer than the 6-month contract period and some of the work had to be outsourced. A local company, GeoMark did much of mapping work under sub-contracts with EMA and INSA. GeoMark produced about 2,000 km^2 of 1/2,000 scale cadastral base maps. This work was finished in 2013 over 9 months, slightly longer than the contract period of 6 months. There were some issues with accuracy and data standards, but GeoMark worked with EMA and INSA to prepare mapping specifications that were based on international best practice. These specifications provide the basis for future contracts.

EMA also delivered the 2nd Order GCPs for the 23 cities which were at a spacing of about a kilometre. About 2,600 GCPs were required. This work took two years and was undertaken by EMA staff. There were delays due to problems in getting access to vehicles and high staff turn-over. Given the potential use of cadastral base maps and the proposal to install a CORS network the value of investing in GCPs is questionable.

MoUDH has requested cadastral base maps and GCPs for a further 30 towns. This work cannot start until 2017 due to delays in the budget.

MoUDH has also contracted a file management activity in three cities – Mekele, Bahir Dar and Dire Dawa. Under this contract the existing parcel files in these three cities are being validated against the new cadastral base maps and data gathered in the field from landholders. The existing parcel files are being re-indexed based on location rather than alphabetical order. The key documents in the parcel files are being scanned and software is being developed. This software will facilitate the access to title records by the adjudication teams and will support the provision of better services under the existing land administration system by supporting the recording of dealings and transactions. This contract was being completed in October 2016 and will serve as the basis for an improved system of file management nationally.

5.2 Progress, achievements and challenges in the Addis Ababa pilot

The Land Holding Registration and Information Agency (LHRIA) was established in 2015. The LHRIA reports to a Board chaired by the Mayor and is separate from the Land Management Bureau in the City Administration. The Agency has operations at the city and sub-city levels. There are 10 sub-cities in Addis Ababa. LHRIA has about 900 staff, with about 400 assigned as project staff on the adjudication activity. In the long-term, LHRIA plans to have about 700 staff.

The current activity in Addis Ababa to create a legal cadastre is based on the pilot SAR activity in Bole and Nifas Silk-Lafto sub-cities (described in Annex 2) and Proclamation 818/2014 and associated material produced by MoUDH. A key step in the adjudication process is the reconciliation

of information gathered and measurements taken in the field with information recorded in property files in the City and Sub-Cities. Any discrepancies between the two sets of information cannot be resolved by LHRIA and need to be referred back to the right creator, the Land Management Bureau.

LHRIA has formulated a plan to complete the adjudication and registration of the estimated 600,000 properties in Addis Ababa over 5 years. This plan is to adjudicate and register 120,000 properties per year. In 2015/16 LHRIA commenced the first year of this project with a plan to adjudicate and register 120,000 properties. A plan was prepared to cover about 89,000 properties in 89 adjudication sections (katenas) covering about 445 neighbourhoods.

5.2.1 Pilot progress to date

In early June 2016 a total of 71,000 parcels had been demarcated and surveyed, 33,000 parcels had been adjudicated and posted for public display (15 days for posting and 15 days for complaints), and about 7,000 properties had been registered in AA-CADIS (RECS-RPRS). There had been 504 complaints that arose during the work and all were resolved.

The law provides for surveying the land parcels by either photogrammetric or ground survey methods. A reconnaissance is undertaken to decide which method is to be used. About 70% of the parcels surveyed, have been surveyed using photogrammetric methods (orthophotomaps at a scale of 1/2,000).

Of the total 71,000 parcels, about 22% were not ready for registration, including most roads. There was a plan to post the remaining 38,000 parcels by the end of June 2016. There were about 16,000 additional parcels in the process of demarcation and survey.

5.2.2 Adjudication challenges

File archives

In total there are about 400,000 titles in Addis Ababa City. These include about 100,000 leases, 140,000 permits, 127,000 condominium units and 16,000 government-owned properties. There are no records for most government or public land. The current archive system is very poor. There is a set of AutoCAD maps that cover Addis Ababa, but the data was produced around 1996 and is not linked to the property files. Approximately 100,000 transactions were recorded in the 9 months prior to June 2016, including about 12,000 transfers.

Since the initial pilots (discussed in Annex 2) commenced prior to Proclamation 818/2014, the preconditions specified in that Proclamation are not a formal part of the process and have not been universally completed prior to commencing SAR.

Clarity in law to issue titles

The ability to acquire titles in Addis Ababa is specified by dates set out in regulations. Properties held prior to 1996 are eligible for titles. Landholders need make individual applications. About 70,000 titles were issued in response to these applications (these are part of the 400,000 existing titles). There are about 4-5,000 individual applications that are still being processed. There are many other properties that were occupied prior to 1996 but lack a title. These include about 160,000 kebele houses. The law to issue titles for these houses is unclear.

Houses occupied between the years 1997 and 2005 were illegal but policy permits the landholders to apply for titles. There were 45,547 applications to June 2016 and decisions had been made for

about 25,000 of these applications. About 2-3,000 titles had been issued. There have been disputes over lease prices and this has delayed the issuance of more titles. In some cases, people occupying state land and green spaces have been relocated.

Houses established after 2005 are deemed illegal and have to be demolished. There have been about 8,000 applications for titles for houses occupied after 2005 and there will be more in future. These applications cannot be processed under the current policy and the landholding remains with the status of illegal occupation.

Capacity and coordination of government agencies

Based on discussions with Title Management staff in the Land Management Bureau it is unlikely that titles will be available for existing landholdings to enable LHRIA to complete the registration of 600,000 properties in Addis Ababa in 5 years. There will still be many houses requiring title deeds. There are gaps in the legal framework to title all parcels.

There additionally exists a lack of coordination and consistency between the Title Administration agency and LHRIA. The LHRIA had sent 6,600 titles to be checked by Title Administration and Title Administration had responded for 2,800 titles. The rest are still in progress. The Title Administration and LHRIA started out as a joint organization with a common committee. This was no longer the case.

The files that Title Administration provide to LHRIA are frozen for transactions for a period of not more than 5 months according to Regulation 324/2014. However, Title Administration has sent about 42,000 files to LHRIA and many have been frozen for more than a year.

Bottlenecks in the SAR process

The review of the activity to date shows three bottle-necks in the process:

1. The adjudication cannot commence until the Land Management Bureau provides the parcel file. There have been delays in getting the files.
2. If there is discrepancy between the information gathered in the field and the information in the file provided by the Land Management Bureau, such as a difference in parcel area, the information has to go to the right creating institution to resolve (other than where the field measurement is smaller than the area in the parcel file by less than 10%). There have been about 6,600 such requests for amendment and only about 2,800 had been sent back. Where the information is not returned, the parcel can be registered in the book of disputes and the review was told that the landholder can later apply for sporadic registration with the fee waived. However, the law is silent as to what will happen to files which are placed in the dispute registry after being referred to the Land Management Bureau in the event that the latter does not respond within the prescribed time limit (15 days).
3. There are delays in entering the information into the registration system, possibly due to delays in the collection of applications by landholders but mainly due to the limited capacity to input data in AA-CADIS.

5.3 Progress, achievements and challenges in the 23 cities pilots

A list of the 23 pilot cities is provided at Annex 5. The information gathered in the site visits to the Oromia, Amhara, Tigray and SNNPR regions to review examples of the current status of activities in the 23 pilot cities is set out in Annex 3. Table 3 presents a summary of the status of achieving the

preconditions to undertake SAR under Proclamation 818/2014 in the 23 cities in the four regions. Pilot SAR has commenced in 5 cities in SNNPR and in June 2016 Amhara and Tigray planned to start in the next few months. These three regions have also commenced work on the preconditions in the other cities that have been selected in the Regions. Oromia is less well advanced. It should be noted that there are still serious issues with some of the preparatory work. For example, although both Tigray and Amhara reported that file management was nearly complete, the file management pilots that were completed in October 2016 in Mekele and Bahir Dar indicated that there were problems with about half the existing files.

5.4 Key observations from the site visits

The following key observations arise as a result of the various discussions with stakeholders and site visits undertaken during the mission in June 2016.

5.4.1 Project management and lack of overarching coordination.

The need for improved project management is an acknowledged gap within the MoUDH. The Management Contract tendered by the MoUDH should fulfil some of this role. Site visits to project offices and fieldwork in Addis Ababa, Mekele and Hawassa demonstrated that work could be undertaken more quickly and efficiently with some central coordination of staff, equipment and task allocation.

5.4.2 No process that can as yet be scaled-up.

In the initial meeting with the MoUDH Task Force during the mission in June 2016 the point was made that there is no proven process to establish the legal cadastre that can be scaled up. The visits to various offices in Addis Ababa and the four regions confirmed that this was the case. It is clear that MoUDH need assistance in designing pilots that can be used to develop an efficient, cost-effective process that can be scaled-up nationally.

The SAR process that is set out in Proclamation 818/2014 and supporting legislation builds on lessons from recent experience, particularly that in Addis Ababa. The process however needs to be tested in a controlled manner to ensure that it is a robust process that will complete registration in a manner that is in accord with the law, is participatory and socially acceptable and is efficient and cost-effective. The piloting will refine the process and elaborate the materials necessary to implement the process such as public awareness materials (brochures, posters, leaflets, media, etc.), training materials and guidelines, manuals and forms for staff involved in implementing the process.

Table 3: Progress of Preconditions in Amhara, SNNPR and Tigray

Precondition	Tigray - 4 Cities	SNNPR – 5 Cities	Amhara – 6 Cities	Oromia – 6 Cities
Public awareness creation	Done annually	Done intensively, particularly in Hawassa, and underway.	Done intensively, in all city administrations.	
Cadastral base maps	Available through MoUDH	Available through MoUDH	Available through MoUDH	Available through MoUDH
Ground Control Points	Completed	Completed	Completed	Completed
File management by block	90% complete, will be complete end 2016	About 90% complete	About 95% complete	Contract let to manage files ion two cities (including Adama). Should be complete in next 2 months.
Proclamation for agency	Proclamation in place, institution established	Proclamation in 2013, institution established in region, zones and 22 cities.	Proclamation in 2015, institution established in Region and being established in urban entres	In 2012/13 a project unit to undertake the IULICO. Draft Proclamation in place.
Buildings for new agency	Complete	Space available in existing buildings in Hawassa and Hossana. Plan to start construction next year in the other three cities.	Under construction together with the rural land administration. Under construction in the cities	Constructing in Region and cities
Business process reengineering	3 processes approved at Region and City levels (some cities have 2 bureaux). List of staff positions and salaries prepared. Not yet approved.	3 processes approved at Region and City levels.	5 processes approved at Region and City levels.	
Registering existing tenure	Regularization of land held by social services almost complete. In general completed at regional level. Some rural land holders do not have permits.	Underway, especially in Hawassa. About 90% complete. The paper work has been largely completed but title deeds have not been prepared.	Underway, especially in Bahir Dar. About 90% complete. The paper work has been largely completed but title deeds have not been prepared.	This work had started 2-3 years ago but has stopped. There are legal gaps.
Preparing new master plans	New master plans have been prepared for 3 cities and await approval by city councils. The existing master plan in the 4th city expires next year and will be replaced.	Master plan for Sodo being prepared. A master plan for Hawassa will be prepared next year. The other three cities have current master plans.	Master plan for all town administrations prepared.	
Pilot activity	Region planning pilot in Mekele in next few months	Currently implementing pilots in 5 cities	Planning to implement a pilot in one sub-city in each city	Not planned at this stage.

The piloting will also produce a clear understanding of the key parameters necessary to plan the roll-out of the process. These parameters include a clear understanding of:

- The average productivity of staff in undertaking key activities
- The staff required in the field and in the office to complete the work in an efficient manner that avoids backlogs and bottle-necks
- The standard budget requirements for key inputs such as cadastral base maps, GCPs, public awareness campaigns, staff salaries (for employees and contract staff), materials, transport, equipment, etc.
- The standard timeframe for key activities to complete the process in a defined locality.

Piloting is typically undertaken in a controlled manner, starting with a small area that can be completed in 3-5 months. The early pilots should be undertaken in well-laid areas with minimal problems. The pilots need to be undertaken in a controlled manner that ensures that information on the key parameters is captured. It is particularly important that the resources are balanced so that there are no backlogs. It is also important to capture lessons from stakeholders, including the community where the process is implemented. Typically, lessons are captured in stakeholder workshops and these lessons applied in refining the process and supporting materials in a new phase of pilots that might test the process in a different or more challenging context. This cycle of pilots might be repeated until it is decided that the process is robust and in a form that can be scaled up.

The pilot activity in Hawassa is already producing some of the information needed. The six-person team (2 surveyors, 2 IT, 1 GIS and 1 administrative staff) can collect 15-17 applications per day in a neighbourhood. The BSC for the surveyor specifies that the team surveys 5-6 parcels per day. This is for ground survey and it is clear that if parcels are to be surveyed on the ground more resources will be required to avoid bottlenecks, or a more efficient process such as the use of photomaps should be adopted. The production figures from Hawassa are a start but are a lot less than achieved in many other countries. In Thailand for example, an adjudication team (a two-person team in the case of photomap surveys and a three person for ground surveys, with locally hired support staff) is expected to demarcate, survey and adjudicate 120 parcels per month on a routine basis. Surveyors with electronic total stations in Thailand are also expected to survey up to 20 to 50 parcels per day depending on the parcel size and location.

A key parameter that will be important in confirming the budget for the program will be the average cost per parcel. There are international benchmarks for this as set out in the table below.

Table 4: Unit cost of Systematic Registration (Source: Byamugisha, 2013)

Country	Cost/parcel (US$)
Rwanda – rural	9-11
Rwanda – urban	9-10
Namibia	11
Madagascar	7-28
Tanzania	45
Uganda	40
Ghana	45
Cote d'Ivoire	7-10

5.4.3 Bottle-necks in the process.

From the field visits undertaken in June 2016, the process defined by law to create the urban legal cadastre was mapped out at Figure 4. There are four clear bottlenecks shown in red:

1) **Regularization process:** the complexity of tenure forms, limited understanding of how 'old permit' and temporary permits (from rural land conversion processes) and the 10-year cycle of master-planning and the preparation of local and neighbourhood development plans with delays in funding for the implementation of the plans and the payment of compensation and the resulting reliance on informal means of gaining access to land all impact on regularization. There does seem to be a lack of clarity on how 'informal landholdings' should be addressed.
2) **File management process:** the current process to maintain urban land records is not clearly specified and there is great variety in systems. However most urban records are poorly maintained and are stored alphabetically which makes them hard to access. Ready access to existing property files is essential for the SAR process. Sorting existing parcel files by block prior to undertaking SAR will greatly improve the access to the parcel files by both the staff undertaking SAR and the staff maintaining the existing property registration systems.
3) **Collection of landholder applications for registration:** Landholders must complete application forms within 15 days of the formal declaration of the SAR activity in order for their landholdings to be registered. Application form completion rates are as low as 50%, and this is possibly a result of low public awareness or potentially other factors. Regardless, unless this is addressed, the systematic registration process will remain incomplete.

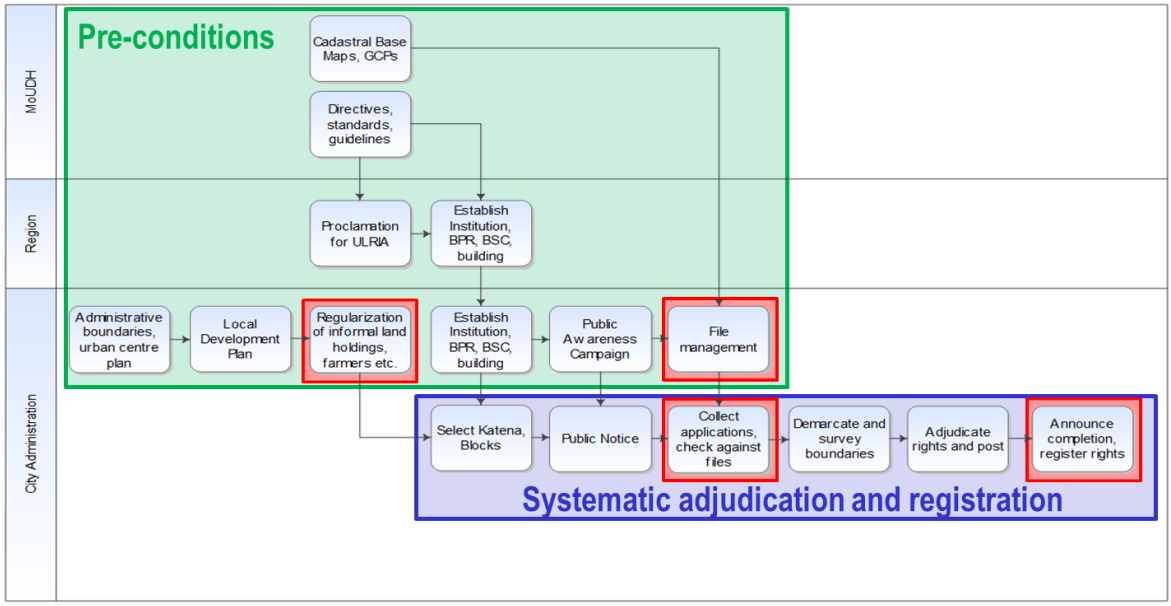


Figure 4: Process showing bottlenecks

4) **Registration of rights:** This is slowed by the separation of rights-creation and registration agencies, the need to follow-up on discrepancies between the files and fieldwork, and the low collection of applications. Regions also unclear on how to issue titles for farmers holding temporary permits, government land (held by agencies, allocated to individuals, and kebele

housing) and religious institutions. Awareness for providers of institutional credit secured against landholdings is required to ensure required documents are available in a timely manner. The process of entering the data in the registration system also seems inefficient and under-resourced.

5.4.4 Importance of public awareness.

Absentee landholders were observed to be a significant problem during the visit to Hawassa in June 2016. Given the very short timeframes for landholders to submit applications for registration it is clear that better public awareness campaigns and/or changes in the timeframes may need to be considered. There are ways to improve public awareness. Staff in Hawassa suggested involving community elders in the activity and in raising public awareness. Good public awareness is a critical success factor in many international projects to register rights. These campaigns include a range of activities from paid advertisements and regular editorial content on formal television, radio and newspaper media, billboards, mobile vehicles, linking to local community groups such as churches and sporting groups, the production of posters, village and community meetings including the use of play-acting presentations on key land sector issues and activities, the production of video-content and distribution through the internet and the production and distribution of videos, leaflets and other material.

International Experience on Public Awareness and Engagement.

A sound and coordinated public awareness strategy should be drafted prior to the commencement of SAR activities to promote local participation and engagement. A localized awareness program can work well in areas with a high percentage of owner-occupiers. In this context, one of the most effective and cost-efficient methods to promote public awareness of SAR is the use of explanatory flyers, particularly when these promote a set date and time for either a public meeting or at which the demarcation team are coming. These flyers should be hand delivered to each landholding, usually about one week before the appointed time for demarcation (or public meeting). Poster advertisements placed about the same time as the mail handouts on telegraph poles, walls, shops, etc. in the locality can also help – but they should also be removed once the adjudication is complete.

In Palestine, the implementation team hired university students to undertake the mail handouts and signage work, which proved quite successful. In Kyrgyz the SAR teams undertook the work themselves, but made a point of coming with distinctive uniforms (the men and women in green) walking around distributing the flyers and explaining what was going to happen in the following week. They also put adverts on local buses.

The critical element of public awareness and engagement is the timing of the publicity, with quick follow up for the actual demarcation. Too many delays, or too long a time period between public awareness activities and demarcation will likely result in low public awareness. Attention should also be made to landholders who may not live in the adjudication area.

To address a wider audience (i.e. nation-wide) several countries have used television advertising, including participation in talk show programs, and discussions on land issues on radio. During these programs, land adjudication would be a key message, but other questions could also be answered regarding land values, etc. In Montenegro, a local comedian made a short video that went viral.

5.4.5 Lack of clarity/understanding of the legal requirements and preconditions for registering rights.

MoUDH have prepared an impressive number of Regulations, Directives and Standards. However, it is clear that there is still a lack of clarity in in the process to issue titles for a range of situations,

including: to farmers holding temporary permits; for government land (held by agencies, allocated to individuals, kebele housing, etc.); land held by religious institutions; for roads and streams. Many of these situations will be clarified as a clear process is developed and tested. Documenting the process in a clear practice manual will address many of the current concerns and will facilitate the national roll-out.

5.4.6 Limited implementation of fit for purpose survey methods.

Whilst the MoUDH estimates 70% of survey can be undertaken via photogrammetry rather than ground survey, there appears to be a strong preference for ground survey in the field. The age of base maps could be an underlying reason in some localities, as well as concerns regarding line mapping. Limited GIS and photogrammetry skillsets in regional cities could also limit uptake.

5.4.7 Delay in the development of CRPRS and need for manual system to update the register.

The CRPRS is unlikely to be available until late 2017 at the earliest. Regional Governments have been instructed to develop and implement manual procedures to establish and maintain the new urban property rights register. Large register books have been prepared for this purpose in SNNPR and other regions. It is not clear that these register books will be the basis for a robust, efficient manual register. In any case clear instructions and a set of standard operating procedures will be needed to support the updating of the registers.

5.4.8 Issues in Addis Ababa.

There are serious issues in Addis Ababa. The activity started prior to Proclamation 818/2014 and it is not clear that the process set out in the proclamation is being followed. For example, one of the delays in registration seems to be the fact that many applications for registration have not been collected. There are serious backlogs in many of the key steps. There are delays in resolving discrepancies. The adjudication teams have about 42,000 parcel files, many for over a year, and these files are not available for recording dealings and transactions.

5.5 Good practices from international experience

Relevant international experience is referenced throughout this report. However, it is useful to look at specific aspects of major international projects that offer lessons for Ethiopia as it plans a major program of SAR. Three countries have been selected for this review: Thailand; Peru; and Rwanda. These countries have been selected as they have recent experience with major systematic registration projects. The tenure arrangements in these three countries varies, with Thailand and Peru both having systems of private ownership while in Rwanda private rights are recognized through leases. The aspects covered in each country are: objectives and outcomes; policy and legal framework; institutional arrangements; evidence for proof of rights; key issues and lessons.

5.5.1 Thailand

Objectives and outcomes. The Thailand Land Titling Program was a twenty-year program designed by the Department of Lands with the objective of issuing land titles to all eligible land owners. The program was designed to be implemented over four 5-year projects, with the first three projects supported by World Bank loans and grants from the Australian government. The first project started in 1984. The Royal Thai Government undertook the fourth phase and continues to implement systematic registration throughout the country.

The systematic registration activity 2014 has produced 12.357 million titles between 1984 and 2014: 4.919 million by ground survey, mostly using simple optical (square and tape) surveys; 4.078 million titles using photomaps and 3.361 million titles through the conversion of lessor documents (NS3k certificates of possession). The program also introduced a new cadastral UTM-coordinate system and updated the title records in urban areas. The land registration system in Thailand is very efficient. By regulation, registration is completed on the day of application unless there is a procedural reason for a delay, such as a requirement for a cadastral survey. The registration data is computerised in about 500 land offices and the cadastral data is computerised in about 70 land offices. Data can only be accessed inside the Department. The sporadic process issued 10.14 million titles between 1984 and 2014. The current status of registered property in Thailand is summarized in the table below. The Department of Lands collects significant revenue. In 2014 there were 8.5 million transactions registered in Thailand and revenue collected of about $2.84 billion (over 13 times the annual expenditure for the Department).

Table 5: Change in Registered Property in Thailand (1985 to 2014)[4]

Registered Property		1985	2014
NS4	- parcel	4,160,000	31,024,027
	- area (ha)	3,324,800	16,438,965
NS3K	- parcel	7,400,000	3,345,179
	- area (ha)	7,728,000	2,560,293
NS3	- parcel	1,000,000	1,058,376
	- area (ha)	2,688,000	1,542,146
NS2/other	- parcel	600,000	148,185
	- area (ha)	1,264,000	224,484
Total	- parcel	13,160,000	35,575,767
	- area (ha)	15,004,800	20,765,888

Policy and legal framework. The Land Code of 1954 provides the main legal framework for the project. A key specification in the law is that systematic registration can only be undertaken over non-forest land. Forest laws that were introduced in the 1960s have reserved about 53% of Thailand for declared and reserved forests, national parks, wildlife reserves and other protected uses. The systematic registration process therefore could only be applied to about 47% of the country (about 24.1 million ha), which was mainly restricted to the developed and rice-growing areas of the country. There has been significant encroachment of forest reserves and as the Land Titling Project was being implemented studies indicated that tree canopy only covered about 18-25% of the country and that perhaps 12 million people were living on land that was reserved as forest land. The policy also failed to address the requirements of ethnic groups living in remote areas, such as the hill tribes.

Institutional arrangements. The Department of Lands in the Ministry of Interior is responsible for land administration in Thailand. The title register is maintained in 77 Provincial Land Offices and 383 Branch Provincial Land Offices, with each office maintaining the register in their jurisdiction. There are about 11,920 staff in the Department, including about 4,700 registration staff and 3,200

[4] Three basic documents are issued under the Land Code, titles (NS4), certificates of possession (NS3 and NS3K) and pre-emptive rights (NS2). Titles and certificates of possession can be transferred and mortgaged. Pre-emptive rights can only be transferred by inheritance.

surveyors. All land registration services are provided by the Department of Lands as are virtually all surveys. There are about 1,200 private surveyors in Thailand. The major systematic registration program was implemented by Department of Land's staff with the support of locally hired labourers.

Evidence for proof of rights. The Land Code 1954 provides a strong framework for systematic registration. In 1985 a change was made to the Land Code to permit the issuance of titles and certificates of possession to those who lacked official documentary proof of rights but could prove occupation of the claimed land by themselves or a previous occupant prior to 1 March 1969, with a restriction that the land cannot be transferred for 10 years. The adjudication form collects information on any previous documents and compares the resurveyed area with that shown on the original document but there are no restrictions that the new area must be the same as the previous area. The adjudication form is signed by the claimant, confirming that the information is correct and that there are no contracts affecting the land and is certified by those with rights to adjoining land and the village head as the representative of the district head. The adjudication record is publicly displayed for 30 days, and disputes settled and the title registered and certificates issued to land owners.

Key issues and lessons. Major factors in the success of the LTP in Thailand include: the strong legal framework; the strong institutional framework with a single agency with a clear mandate; the focus on service delivery, with registration on date of application mandated; good land records management systems linked to a national personal identification system. Lessons included: the lack of clear policy restricted the ability to register the rights of many citizens, particularly those of ethnic minorities; the program to computerise the Department was too ambitious; the attempt to create a national valuation authority was also too ambitious and lacked clear champions in Parliament and the Department.

Relevance to Ethiopia: ***Thailand's strong institutional and legal framework provide a good model for Ethiopia, albeit one that would need to be translated into a Federal system. Thailand's use of manual update during systematic registration is pertinent Ethiopia's situation given the delay in implementation of the CRPRS.***

5.5.2 Peru

Objectives and outcomes. The Peru Urban Property Rights Project which commenced in 1998 with funding from a World Bank loan had the objective of creating a system to assure formal and sustainable rights to real property in selected predominantly poor settlements in the major urban settlements in Peru. The systematic registration was implemented by the Commission for the Formalisation of Informal Property (COFOPRI) and by 2003 about 1.3 million titles had been issued in 14 cities. The project directly benefited over 6 million Peruvians (over 20% of the population) and mobilised about $400 million in formal credit and increased the value of formalised property by over $500 million.

Policy and legal framework. Urban migration that commenced in the 1940s turned what was then a rural society to a predominantly urban society. The migrants from rural areas were largely excluded from the established legal and administrative systems that supported the formal sector. This exclusion particularly applied to legal access to property for housing. The migrants responded by establishing informal human settlements in defiance of the law. Over time the law was changed to provide avenues for formalisation. In the early 1990s simplified systems to formalise informal settlements and a new urban registry were developed. A Law in 1996 established COFOPRI and transferred the responsibility for formalisation from the Municipalities to COFOPRI. Mass formalisation started in 1996 and was scaled up under the PUPRP.

Institutional arrangements. Both COFOPRI and RPU (the urban registry) were established as semi-autonomous agencies with staff employed under private sector arrangements and conditions with a clear focus on service delivery.

Evidence for proof of rights. Peruvian law grants extensive recognition to property rights in both urban and rural settings. This recognition applies not just to individual but also to group rights. Under the reforms to the legal framework, non-documentary proof of rights is accepted. In urban areas an affidavit in a pre-defined form is prepared by the claimant and signed by all adjoining plot occupants and the following "documents of common use" are accepted:

1. Domicile certificates issued by police or Justice of the Peace (typically used to apply for jobs or education)
2. Loan contracts with public or private agents for the financing of connection to basic services, and construction, renovation or purchasing building materials
3. Receipts for payment of public utilities such as electricity, water, sewerage
4. Receipts for payment of property taxes
5. Public or private instruments showing transfer of possession (typically certified either by a municipal authority or a notary).

Key issues and lessons. The key lessons from this project is the success in implementing a major reform building on growing political recognition that an efficient process needed to be found for the formalisation of informal settlements. Important factors in the success included: having a political champion; overcoming bureaucratic resistance by established semi-autonomous agencies run under private sector arrangements; using pilots to develop and test an efficient process. A key lesson was that it is important to ensure that any new agencies are financially sustainable. This became evident when the new urban registry RPU was merged back with the traditional registry (Registry of Immovable Property – RPI) under the supervision of the Superintendent of National Public Registrations (SUNARP).

Relevance to Ethiopia. ***Peru's approach to documentation and public awareness may be useful to review in order to ensure the efficiency of pilots. The lesson that agencies be financially sustainable is also relevant to the sustainability of Ethiopia's cadastre.***

5.5.3 Rwanda

Objectives and outcomes. The objective of the Land Tenure Regularisation (LTR) program in Rwanda was the documentation of all land rights in Rwanda under a new individual leasehold tenure system. In 2015 all 10.67 million land parcels had been demarcated and entered into a computerised register. Of these, 87 percent (9.1 million parcels) had full information of claimants and four percent were registered in the name of government organisations covering about 8.5 percent of the land area (Nkurunziza, 2015:10). The unit cost of this program was $6 per parcel. The LTR program started with pilots undertaken in 2007-10 covering about 15,000 land parcels. Once an efficient process was developed the LTR was scaled up and completed in 3 years.

Policy and legal framework. The government has been developing land policy over the past 20 years. After extensive consultation and the adoption of a new constitution in 2003, a National Land Policy was approved in 2004 and an Organic Land Law (OLL) enacted in 2005. The OLL was abrogated in 2013 and replaced by a new law governing land in Rwanda. Under the OLL land is the "public domain for all Rwandans" and is held under long term lease with the state as the guarantor of the right to own and use the land.

Institutional arrangements. The LTR program was implemented by the Rwanda Natural Resources Authority (RNRA). The LTR program was funded by development partners and implemented by a contractor to DFID hiring local people. Over the duration of the project over 100,000 people worked on the project. Land administration services are provided at district, town and municipality levels by District Land Bureaux, complemented by sector and cell land committees.

Evidence for proof of rights. The LTR process had to be developed in the context that many Rwandans have no formal evidence of their land rights. Adjudication Committees were formed at the cell level. Claimants demarcate boundaries in the presence of their neighbours and the village leader and the claim is adjudicated by the Adjudication Committee. Maps and lists are publicly posted in a 15 day Objections and Claims (O&C) process. After all objections and claims are resolved, leases are prepared and distributed.

Key issues and lessons. Rwanda is the only African country that has completed a country-wide, participatory, low-cost registration system. Key factors in the success was the initial development of an efficient process that was developed in pilots over two years and then scaled-up significantly over a short period with the use of orthophotomaps as the prime map base and the mobilisation of significant staff many of which were hired locally. There are a few lessons, including: the imposition of fees is a barrier to registration, particularly for the poor; charging fees and requiring individual applications for leases has delayed the widespread operation of the system; the delays in developing the Land Administration Information System (LAIS) and difficulties with early versions of LAIS impacted on the deployment of the new records; lack of resources and capacity in the districts has hindered implementation of the system.

Relevance to Ethiopia. ***Rwanda's use of pilots to establish an efficient, fit-for-purpose process prior to scale-up should be adopted by Ethiopia. Review of Rwanda's approach to staffing for the systematic registration process may also be useful. Lessons regarding ongoing transactions should be reviewed as part of the design.***

6 LEGAL REVIEW

6.1 Legal framework

Ethiopia is a federated state governed according to the Constitution of the Federal Democratic Republic of Ethiopia (1995). Article 40 of the Constitution addresses real property, with the Constitution recognising land as the common property of the people of Ethiopia (Article 40 (1), managed in trust by the government for the people (Article 40 (3). Land is not subject to sale or to any other means of exchange, but rights for private entities to hold and use land are provided for.

The 1960 Civil Code remains the core legislation governing private property, despite its age. The predominant sections relating to real property are contained in Book 3, augmented in the protection of real property rights by other codes including the Commercial Code (1960), the Criminal Code (2004), the Civil Procedure Code (1965) and the Maritime Code (1960) (see Abdo 2013 for a further discussion). Its continued application is largely due to the foresight of drafters, who envisioned a future market economy, however the piecemeal approach by which later legislation has been drafted to further govern property has potentially led to conflicts and gaps between the three levels (Constitution, Code and supporting laws).

Laws are developed at both federal and regional level, although regional laws must comply with federal. A further layer is presented by Directives, which are developed based on regulation by either the federal implementing ministerial office, or the implementing bureau or authority at regional level. The intention of a Directive is to guide the exact action for implementation of higher level laws. Legislation pertaining to property rights is governed by laws at all levels of the hierarchy.

With regards urban land, the key legislation at Federal level sitting beneath the Constitution and Code are:

- **Proclamation 721/2011: Urban Land Lease Holding Proclamation**

  Provides for the allocation of rights to use land through urban leases, prohibits land possession and permission other than lease holding and provides for the administration of urban land lease holdings. Applies to all urban lands irrespective of how the lands were held previously.

- **Proclamation 818/2014: Urban Landholding Registration Proclamation**

  Provides for the registration of rights, restrictions and responsibilities relating to urban land. Provides the principles of a legal cadastre and landholding adjudication and registration system.

- **Proclamation 370/2003: Condominium Proclamation**

  This Federal Proclamation applies only to Addis Ababa and Dire Dawa but has been used by the Regions as a basis for their condominium proclamations.

- **Proclamation 455/2005: Expropriation of landholdings for Public Purposes and Payment of Compensation Proclamation**

  Provides for the expropriation of landholdings and the payment of compensation, as well as complaints and appeals processes. Applies to both rural and urban landholdings.

- **Directive 44/2014: Urban Cadastral Survey Directive**

  Provides directions to surveyors on cadastral survey and preparation of the cadastral base maps

- **Directive 45/2014: Urban Land Adjudication and Registration Directive**

  Provides guidelines and directions on the implementation of Proclamation 818, including details on the application for landholding adjudication and registration, the implementation of systematic and sporadic landholding adjudication and registration, responsibilities and grievance handling.

- **Regulation 251/2011: Federal Urban Real Property Registration and Information Agency Establishment Council of Ministers Regulation**

  Establishes FURPRIA with a head office in Addis Ababa, provides powers and duties of the agency, including to coordinate the federal and regional urban real property registration institutions and create a uniform database system of urban real properties.

- **Regulation 323/2014: Urban Cadastral Surveying Council of Ministers Regulation**

  Provides the principles of cadastral survey system implementation, specifies survey measurement and calculation activities and procedures.

- **Regulation 324/2014: Urban Landholding Adjudication and Registration Council of Ministers Regulation**

  Provides the objectives and principles of landholding registration and adjudication, and further detail on the implementation of Proclamation 818.

- **Standard 03/2015: Urban Legal Cadastre Standard**

  Provides the activities and procedures for cadastral surveying and management of data for the Urban Legal Cadastre

- **Standard 04/2015: Urban Cadastral Index Map Numbering System Standard**

  Specifies the Urban Cadastral Index Map Numbering System

- **Standard 05/2015: Urban Land Adjudication and Registration Standard**

  Provides the activities and procedures for urban land adjudication and registration, including necessary forms.

- **Standard 06/2015: Urban Legal Cadastre Registration Payment Computation Standard**

  Sets out the standard for payment under the legal cadastre, including fee calculations for sporadic registration and the provision of landholding certificates.

Further laws, regulations and directives may be enacted by Regional Administration, but these should remain in line with Federal legislation (one example is Condominium laws, which, excepting Addis Ababa and Dire Dawa, exist only at Regional Administration level). Further actions in support of the urban legal cadastre may be specified under:

- **The Urban Land Development and Management Policy and Strategy 2013**
- **The Growth and Transformation Plan II**

6.2 Challenges in implementing the existing legal framework.

The above legislative framework is relatively comprehensive but is complex in nature and contains some areas of concern. Repeated changes to the legal framework, particularly in Addis Ababa, linked

with continued administrative restructures that have led to confusion and a lack of predictability in decision-making relating to urban land.

Abdo (2013) provides a substantial discussion of the conflicts, and the key points of this document will be highlighted in the discussion below. He notes the fragmentation of the legal environment with regards to urban and rural land. It is difficult to determine how decisions made by the Supreme Court regarding urban land may impact the Civil Code and non-urban land.

He also notes the unchecked administrative powers given to Cities without judicial scrutiny, particularly in regard to expropriation. These include:

- Cities are given the power to seize land without intervention from the judiciary (e.g. In the event of lease payment arrears), and the power to seize land in the event construction is not completed within the time limit (following on from this, if improvements are not removed from the land within 6 months, the appropriate body may transfer such improvements to another party).
- It is more difficult for the state to expropriate land from investors than private landholders, with broader definitions of 'public purpose' applying to the latter. Previous expropriation legislation conceived public purpose more narrowly and uniformly, with no distinction between investor and non-investor. This broader definition of 'public purpose' under Proclamation 455/2005 is at odds with Article 1464 of the Civil Code and arguably the Constitution.
- The law restricts appeals only to matters pertaining to the denial or inadequacy of compensation. This implicitly denies landholders the ability to challenge any determination of 'public purpose'.
- The Expropriation Law further does not regard the taking of land itself as expropriation, only the property on that land or improvements – unless the administration is able and willing to give land in the form of displacement compensation to the affected person. In other words, there is no compensation for use rights. This is particularly concerning in the context of the expansion of cities into rural areas, and the disregard for 'location'.

Issues of compensation and the powers of Cities without public recourse to appeal are significant and should be reviewed. These challenges and problems are reflected in the World Bank's Doing Business reporting and the Index of Economic Freedom. Not discussed by Abdo, but reported in the 2016 LGAF report (Gebeyehu, 2016) is the treatment of legal and illegal informal/slum settlements. Long term illegal possessions by squatters are typically destroyed, with illegal settlers unable to claim compensation. This removal is reported as ad hoc in approach and dependent on the need for land for new development activities. Legal informal settlements are those without formal documentation, but landholders can typically demonstrate evidence of tax receipts, or payment of telephone or electricity connection fees. The local (kebele) administration is responsible for the protection of state and communal lands from illegal occupants. The 1960 Civil Code lists a limitation for long-term unchallenged possession to a maximum of ten years (Article 1845) and the LGAF report notes a ruling of the Supreme Court supporting this.

Finally, there remains some confusion with regards to the requirement for Cities to maintain paper and/or digital registers under Proclamation 818/2014. It is unclear whether paper (manual) registers only are legal, or whether there is a requirement for both paper and digital registers.

6.3 Main legal/procedural constraints to implement cadastres

The following key issues are identified in a review of the institutional roles and responsibilities and the legal framework for the legal cadastre.

6.3.1 Lack of standard operating procedures and associated material

There is a possible gap in the implementation of the law and this could be a deficiency in the elaboration of a comprehensive set of standard operating procedures and associated material such as standard forms, guidelines, manuals and training material. Standard 5/2015 provides some information but this is not sufficient to provide clear guidance to staff implementing SAR. There is a cadastral survey procedure and a draft adjudication procedure but these are only available in Amharic and were not reviewed during the study. A comprehensive set of standard operating procedures is necessary to support staff and will address many of the questions and issues that were raised during the discussions with stakeholders during the field visits. This material will also help specify the design of CRPRS and will really be essential for the development of CRPRS given the fact that the current system for recording rights in titles and parcel files lacks any standards or specifications and the technical participants in the Agile process therefore lack a clear reference framework for ensuring that CRPRS will support their requirements.

6.3.2 Alignment of CRPRS with the legal framework

MoUDH plans to develop a comprehensive Cadastre and Real Property Registration System (CRPRS) that will support the implementation and on-going maintenance of the legal cadastre at Federal, Regional and City levels throughout Ethiopia. MoUDH contracted IGN International to specify CRPRS and to supervise INSA who have been contracted by MoUDH to develop CRPRS. A key reference document for the design is the Requirements Analysis Document (RAD) that was prepared by IGN International in 2015 (version 2.0 of the RAD was finalised on 6 July 2015). It is not clear that the RAD specifies CRPRS in sufficient detail.

The RAD specifies 9 workflows and lists 23 transactions but only provides very basic information for 10 transactions. Ministerial Directive 45/2014, Section 9, Sub-Section 1 provides for the transfer of either a permit or a lease under a range of circumstances, transfer through foreclosure by a financial institution, the transfer by a court order, a transfer through inheritance and transfer where a leaseholder has been unable to complete construction; Sub-Section 2 provides for the amalgamation of landholdings, the sub-division of landholdings and the change in use; Sub-section 3 provides for registration of court injunctions, mortgages, and the discharge of injunctions and mortgages. The RAD only provides details for one generic transaction for a transfer, transaction TR-10. The list of 23 transactions covers many transactions listed in Directive 45/2014, although transaction 23 ‘other registers’ is not clear and there would appear to be transactions missing, such as responding to a request for cadastral information which is provided for in Art. 72 and 73 in Directive 45/2014. There are other inconsistencies in the RAD. These include the omission of sub-leases, which are provided for in TR-08 in 3.2.9, in the restriction types listed in 3.2.4.5. Similarly, the workflow for subsequent registration, WF-08, does not include sub-leases which are included in TR-08.

Ministerial Directive 45/2014, Art 67, provides for 7 different registers, including a landholding register, a common building register, a complaints register and a register of requests for registration, and sets out the specific information that is recorded in each register. The fact that Directive 45/2014 lists 7 different registers is an issue raised elsewhere in this report, but the RAD does not mention the registers.

6.3.3 SAR does not create any rights

Systematic registration in many countries is a process that formally recognizes rights. As noted earlier, the success of many systematic registration projects is based on clear rules and procedures to accept non-documentary proof of rights such as affidavits by claimants that they have occupied the property for a long period, witnessed by neighbours and community leaders and supported by documents such as tax and utility supply receipts. These systems do however need the clear definition of public land and any existing rights in the area where systematic registration is being undertaken.

However, SAR in urban areas in Ethiopia under Proclamation 818/2014 can only confirm an existing right. If there is a discrepancy between the information gathered and measured in the field and the information recorded in the existing title and parcel file this cannot be resolved by the adjudication team and needs to be sent to the institution responsible for the creation of rights for resolution. This position is the clear policy decision by policy makers based on a range of concerns including concerns regarding illegal occupation and encroachment of government and public land such as land designated as green space. However, this requirement means that regularization needs be completed prior to undertaking SAR and it also means that the existing title information be reliable and readily available to the systematic registration teams. There also needs to be efficient, pragmatic ways to resolve discrepancies.

6.3.4 Role of new agency to register urban landholdings and right creator

There is a lack of clarity in the roles of the existing land administration institution which have a range of roles including the creation of rights and the maintenance of files to record these rights and the new institution that will be established under Proclamation 818/2014 to register urban landholdings. The new institution will take over the parcel files and be responsible for the issuance of certificates, however the existing role for the creation of rights will remain outside the new institution. As indicated from the current experience in Addis Ababa, there are key bottle-necks in the SAR process related to accessing existing title and file information and in resolving the discrepancies that are identified between the information and data gathered and measured in the field with the information and data in the title and parcel files. There are also issues with parcel files being taken for extended periods by the adjudication teams with no ability to record transactions for these properties. There would appear to be a requirement to see how the process that involves both the adjudication team and the existing land administration institution might be streamlined or made more efficient.

6.3.5 Registration of buildings and condominiums

The Condominium Proclamation number 370/2003 sets out the procedures for the registration of condominiums, unit ownership and common elements (property), the establishment, powers and responsibilities of unit owner associations, the processes for the sale and lease of units, common expenses, amalgamation of association, and the termination of condominium arrangements. The scope of the Proclamation is buildings with 5 or more separately owned units and common elements in a high rise or in a row of houses in the cities of Addis Ababa and Dire Dawa. Addis Ababa City Administration Condominium Regulation number 12/2004 sets out how Proclamation 370/2003 is implemented in Addis Ababa. This regulation specifies that the Land Administration Authority is responsible for the registration of buildings and the issuance of certificates of registration. The regulation also specifies that unit owners are provided with a ‘certificate of ownership’ once the condominium is registered.

Proclamation 818/2014 and the various supporting legislation including Ministerial Directive 45/2014 that sets out the Urban Land Adjudication and Registration Directive specifies that unit holders in a condominium can submit joint applications for registration in the legal cadastre. The SAR activity in Arada and Lideta sub-cities in Addis Ababa are adjudicating and registering condominiums and units. The condominium block and building unit is adjudicated and registered in the name of the respective unit owners' association and the land within the compound is given a unique parcel ID. Individuals units of the condominium are adjudicated and registered in the name of the unit owner. There are about 4,000 condominium unit holders in Arada, Lideta and Akaki-Kality sub-cities. Currently condominiums are only registered manually as there is no mechanism for registration within AA-CADIS. It will be important for the registration system being developed (CRPRS – see Section 9: ICT Review) to include functionality to register condominium units and for a suitable update process to be implemented.

There was some concern expressed during the stakeholder workshop in June 2016 that the Condominium Proclamation may not fully align with Proclamation 818/2014, but as yet no major inconsistencies have been identified. Some aspects do not seem to be covered by the Proclamation, for example, multi-storey buildings containing less than 5 units. Other cities have regional proclamations for condominiums.

6.4 Issues or gaps in the legal framework

MoUDH has put considerable effort into developing the legal and regulatory framework for the legal cadastre. Although this framework has only been tested in Addis Ababa and is starting to be tested in SNNPR, it is possible to identify a number of key issues or gaps. Based on the discussion above and in previous sections of this report, these include:

(a). The requirement that any discrepancy found in the field with data in the title or parcel file must be referred to the right creating authority is causing delays in SAR. There is no guidance on how this discrepancy is resolved and nor does there appear to be any avenue of appeal other than to the Public Complaints Office in the City.

(b). The requirement under Proclamation 818/2014 Article 14 (6) that no adjudication can be undertaken where the landholding is beyond the legally possessed title is very restrictive. From a practical point of view any new measurement will differ from previous measurements, particularly if there is a marked change in the technology used to make the measurement.

(c). The requirement that the right creating institution responds to queries within 15 days seems overly restrictive. Putting the claim in the disputed register where the right creating authority does not respond with 15 days is also not a solution. The law is silent on how the status of parcels placed in the dispute register where there is no response from the right creating institution within 15 days is changed.

(d). Proclamation 818/2014 provides that the rights of farmers in areas where SAR is being implemented can be registered but there is no clear process or instructions for this to happen. This also applies to farmers that have been issued 'green' cards in urban centres.

(e). The process to register government land is unclear. This applies to government houses that have been allocated to individuals, buildings held by multiple government agencies, kebele housing and for other forms of government land such as roads and streams.

(f). The requirement that dealings be suspended in areas subject to SAR should be reviewed if the period required to complete systematic registration is going to take longer than 5 months as it has in Addis Ababa.

(g). Ministerial Directive 45/2014 specifies that 7 different registers be established. Many countries register all rights, restrictions and responsibilities against the property and there is no need for separate registers, even where there are manual land records. As MoUDH is planning a sophisticated ICT application there is even less need for separate registers.

(h). Individual landholders who have had their landholding adjudicated after making the specified application with supporting documentation are then required to make application with much the same information and supporting documentation to have their landholding registered in the legal cadastre.

(i). The Condominium Proclamation only applies to Addis Ababa and Dire Dawa. Other regions have their own Proclamations. These proclamations may not accord with Proclamation 8181/2014. The process to register units in condominiums of less than 5 units is unclear.

7 INSTITUTIONAL ASSESSMENT

7.1 Agencies roles and responsibilities for creating or maintaining land registries

Ethiopia is a federal state and under the Constitution the different levels of Government - Federal, Regional and Woreda/City – have defined roles and responsibilities. These generally range from policy and legislation at the Federal level, to implementation and provision of services at the lower levels. The assignment of roles and responsibilities in terms of the implementation of the legal cadastre and Proclamation 818/2014 is summarized in Table 6. The Regional Administrations have the prime role in establishing and operating offices at the city level to implement Proclamation 818/2014. The Regional Administrations do this through Regional Proclamations. There will be variations in the regional proclamations that establish the legal cadastre.

In implementing Proclamation 818/2014 the Federal government, in additional to the policy and laws is also providing direct support to the Regional Administrations and Cities. This support includes the provision of cadastral base maps and GCPs and the development of CRPRS, the ICT application to register urban landholdings. The use of a standard format cadastral base map and a common ICT application will guide implementation to a common standard for urban property registration that has not existed to date in Ethiopia, but it is important to remember that there will still be institutional and procedural variations in how policy and law is implemented and the tools are applied at the Regional level.

Table 6: Summary of Institutional Roles and Responsibilities

Institutional Level	Responsibility
Federal – MoUDH	• Develops and maintains policy and legal framework • Provides technical support and training to Regional Administrations and cities • Provides the national data centre on urban land registration and related information
Regional Government	• Establishes and operates appropriate land holding registration and information bodies at regional and city levels • Ensures proper enforcement of regulations and directives issued under Proclamation 818/2014 • Determines the urban centres in which landholding registration may start • Fixes the appropriate service fees chargeable for registration and other services
Cities	• Serves as the sole centre that produces information to produce the legal cadastre • Forwards registered information to the appropriate regional body and the FURPRIA • Owns, organizes and manages the legal cadastre data for the City

Other agencies with roles at the Federal level which impact the process of registration include:

- Ethiopian Mapping Agency (EMA): *delegated responsibility for producing cadastral base maps, installing ground control points and developing cadastral surveying regulations for licensing*
- Information Network Security Agency (INSA): *responsible for developing the CRPRS and for coordinating the NSDI*
- Ministry for Agriculture and Natural Resources: *overarching government authority for rural land. Responsible for implementing Proclamation 456/2005 Rural Land Administration and Land Use Proclamation*

Organisational structures for MoUDH and Regional Administrations and Cities where obtained are shown in Annex 4.

7.2 Role and responsibilities of the Ministry of Urban Development and Housing

MoUDH has overall responsibility for the policy and legal framework and to provide guidance to the Regions and Cities. MoUDH has also been responsible for producing the cadastral base maps and the second order ground control points at a kilometre spacing. Within MoUDH a Ministry Task Force on Land has been established. The following agencies which sit under the Ministry also play a key role in urban land registration:

- The Federal Urban Real Property Registration and Information Agency (FURPRIA) *established by Regulation 251/2011 and responsible for establishing and sustaining the national urban legal cadastre including real property registration*
- The Federal Integrated Urban Land Information Project Office (FIULIPO) *established to control the implementation of the National Urban Real Property Registration and Information System (NURPRIS).*

7.3 Role and responsibilities of Regional Governments

The Regional Governments have the responsibility for implementing local laws in line with the Federal policy and legislation, but have the flexibility to do so on their own terms and hence implementation will vary between regions. A key requirement of implementing Proclamation 818/2014 is the Regional Proclamation to establish the new agency responsible for registering urban landholdings, which is established as a separate agency to the rights-creation agency. Once this proclamation is in place the institution must be established at the regional level. This may require a new building and the reassignment of existing staff and/or recruitment of new staff. In some cases, it was observed that both former and newly created agencies continued to operate alongside one another, thus complicating staffing requirements. The institutional structure and the proposed staff requirements are defined based on a Business Process Reengineering (BPR) analysis. The staff actually assigned to the institution will typically be substantially less that the approved positions, particularly in a newly established institution. A Balanced Score Card (BSC) system[5] is also applied to define individual performance standards for the staff in the new institution. The Regional Government also has responsibility for establishing the offices in the Cities to register urban landholdings.

An example regional organizational structure is shown for Amhara in Annex 4.

7.4 Roles and responsibilities of Cities

The Cities maintaining parcel files recording the titles held under the lease and permit systems, preparing local development plans and undertaking public awareness. The office to register urban landholdings in the City is established by the Regional Government. There is great variety in the institutional structures in the various Cities in Ethiopia and variety in the new institutional structures

[5] A balanced score card is a strategy performance management tool that is used by managers to keep track of the execution of activities by the staff within their control and to monitor the consequences arising from these actions (https://en.wikipedia.org/wiki/Balanced_scorecard)

being established to register urban landholdings. This occurs even in the same Region. In Tigray the Regional institution has been established with 3 departments. Many of the new institutions to register urban landholdings at the city level in Tigray have also been established with 3 departments, but some have been established with only 2 departments.

7.4.1.1 Heterogeneity in Systems

As noted above, although Proclamation 818/2014 provides an overarching framework for the initiative to register urban landholdings and to create the legal cadastre there is great variety in the institutional arrangements and approach to the registration of urban landholdings. The BPR process is used to define the organizational structure and approved staffing, but in terms of the provision of services at the City level, this process is not applied consistently even in the same Region. There is also a significant difference between approved positions and filled positions. As noted above the institution at the Regional level in Amhara responsible for registering urban landholdings has 48 approved positions in an institution that has 5 departments but in June 2016 there were only 8 staff assigned in the agency.

As noted above, MoUDH can prepare standards and guidelines, but the Regional Administrations need to decide what can be funded. The development by MoUDH of basic map products such as the cadastral base maps and tools such as the ICT application CRPRS will help standardize systems and procedures. However, the way that the Regional Administrations structure organizations and staff them to use the standards and tools will be at the digression of the Regional administration.

7.5 Fundamental decisions relating to resourcing

The resources required to support the delivery of land administration services depend upon some fundamental decisions on what services are supplied and how they are to be delivered. The decision to focus on the legal cadastre largely defines the services that will be provided, particularly given the fact that the right creation function and the lease management system will operate outside the institution responsible for establishing and operating the legal cadastre.

The resources required to support the institution responsible for the legal cadastre will be considered at three levels:

1. Structure
2. Staffing, and
3. Facilities (building, equipment, vehicles, etc.)

To assist in reviewing these levels in Ethiopia, the Costing and Financing of Land Administration Services tool (CoFLAS, UN-Habitat, 2015) will be used. This tool was developed as a tool to assist policy makers and land sector staff to prepare and assess proposals for LAS reform, particularly in terms of identifying and costing fit-for-purpose approaches. It draws on a survey of 11 countries (which include Rwanda, Peru and Thailand profiled above) to identify likely required staffing, facilities etc. depending decisions made regarding approaches to registration and ongoing transaction recording.

7.6 Structure

The Federal structure in Ethiopia with a defined role for administrations at Federal, Regional and Woreda/City Administration levels, and the sectoral separation of institutions to administer land rights

for rural and urban sectors largely dictate how services will be provided by the institution responsible for the legal cadastre in urban areas.

The role of the three levels of government, as set out in Part 5 of the ULDMPDIS, is:

Role of Federal Government:

a) Formulate policy, supervise and evaluate implementation and make changes as necessary;
b) Develop laws, programs and strategies as appropriate at the Federal level to successfully implement policy
c) Provide capacity building support to ensure the success of the land development and management sector
d) Carry out other activities that are the responsibility of the federal government that are necessary for successful implementation of policy.

Role of Regional Government:

a) Ensure that policy is being implemented in their regions
b) Develop laws, programs and strategies to ensure successfully implementation of policy in the region
c) Provide capacity building support to ensure the success of the land development and management sector in the region
d) Carry out other activities that are the responsibility of the regional government that are necessary for successful implementation of policy.

Role of Cities:

a) Implement policy in their respective city
b) Examine the laws, programs and strategies devised by the Federal government in the context of their city's current situation and implement them
c) Carry out activities to ensure the success of the land development and management sector in their city.

It is clear from this information that the prime responsibility for implementing policy is with the Cities with support from the Regional and Federal Governments. However, many of the Cities have a relatively small number of properties to administer (see the tables in Annex 5 and 6). Looking at the number of projected properties in 2016 for the 200 largest urban centres in Ethiopia, Addis Ababa stands out with an estimated 935,000 properties. Six other cities are projected to have more than 50,000 properties in 2016, a further 17 are projected to have more than 20,000 properties and a further 47 are projected to have more than 10,000 properties.

Obviously the legal cadastre needs to be established in these cities. But once the legal cadastre is in place, based on international benchmarks which predict potential land market activity of 3-6% of properties transferred per year and 20-100% of properties with transactions per year, there is not likely to be a heavy workload in many Cities, particularly those with less than 10,000 properties. As MoUDH is planning the implementation of CRPRS, a sophisticated ICT application to maintain the legal cadastre, the projected level of effort required to provide services is likely to be further diminished, provided CRPRS is implemented successfully and is able to be supported on a routine basis in the Cities.

Given this level of predicted future workload, it seems appropriate to develop a typology of offices with a level of staff and resources set commensurate to the number of properties and hence predicted future workload. In many or perhaps most of the smaller cities this may mean that the office might be just a front-counter, with back-office functions such as registration and document archival provided by neighbouring larger offices or a regional office.

7.7 Staffing

Staff need to be considered at various levels. There will be staff required to create the legal cadastre, including the staff for important tasks included in the pre-conditions such as regularization and file management, as well as the staff involved in SAR. Once the legal cadastre is established there are the staff that will be needed to maintain the legal cadastre at Federal, Regional Administration and City Levels and to provide land administration services to government and the general public.

Establishing the Legal Cadastre

The process for SAR needs to be successfully piloted to be able to determine the number of staff required to complete the task. It is possible to make some projections on the level of staff that will be required to establish the legal cadastre. In preparing CoFLAS, various systematic registration programs were reviewed. Two programs were those in Thailand and Romania. The systematic registration activity in Thailand that was conducted as part of the Land Titling Program was undertaken by government officials supported by locally hired labourers. Here a field party of about 40 staff and local labourers was able to produce about 18,000 titles over the 10-month field season. This works out at about 45 titles/person-month. In Romania the systematic registration was contracted out to the private sector with government oversight and checking. Here the contractors had about 12 staff working for a year, with the equivalent of 4 full-time government officials providing oversight and checking, to register about 10,000 properties. This works out at about 52 properties/person-month.

A reasonable assumption would be that an efficient process in Ethiopia will register 50 properties/person-month. As set out in the tables in Annexes 5 and 6, it is estimated that there are about 4.30 million properties in the major cities in Ethiopia (Addis Ababa, the 23 Cities and the remaining urban centres down to a population of 520 in 2007 – a total of 674 urban centres). This will require 86,000 person-months to complete if the process is as efficient as that in Thailand or Romania. A city of 100,000 properties would require 2,000 person-months, a city of 50,000 properties would require 1,000 person months and one of 10,000 properties would require 200 person months. If done properly, SAR is a process that is only needed once. There is little point in building capacity in government to complete the task and strategies to use contract labour and/or outsource aspects of the task are worth exploring.

Staff will be required for some of the key tasks included in the pre-conditions such as regularization and file management. The file management activity seems to be an activity that could be contracted out. The MoUDH pilots in Mekele, Bahir Dar and Dire Dawa will produce software and a documented process that could be scaled up under contracts in the other cities. Contract staff could also be hired to support regularization as is happening presently in Adama.

Maintaining the Legal Cadastre

CoFLAS provides some international benchmarks for the level of staffing required to support the provision of land administration services. The level of staff required will vary depending on a number of factors, including decisions on where offices that are going to provide services are to be located,

the types of services that are to be provided, the level of automation/computerisation of the process and existing records and whether the services are to be provided internally or partially outsourced. In many countries cadastral surveying is not provided by government.

In preparing CoFLAS, information was obtained from a range of countries that had well established land administration systems. These countries were Denmark, the Netherlands, New Zealand, Norway, Sweden and Thailand. All systems other than Thailand were computerised. Thailand has a manual system of land records that is only partially computerised with over 34 million properties registered, but this system is very efficient. The number of registered properties per office varied (averages of 64,068 in Sweden, 75,397 in Thailand, 704,000 in New Zealand, 910,000 in Denmark, 1,411,687 in the Netherlands and 2,500,000 in Norway) but all were much larger than will be the case in Ethiopia, excluding the 5 largest cities. Information was collected in preparing CoFLAS on three categories of staff: management/IT/administration; registration staff and cadastral staff. The number of registered properties in the systems in the counties for each of these three staff categories is summarized in the table below.

Table 7: Key Information on Staff Allocation from CoFLAS[6]

	Denmark	Netherlands	New Zealand	Norway	Sweden	Thailand
Registered Properties/Management etc staff	39,000	13,408	36,448	-	82,221	8,604
Registered Properties/Registration staff	22,750	20,167	32,030	10,000	16,444	7,354
Registered Properties/Survey staff	54,600	17,615	34,097	8,333	9,867	10,842
Transfers/Registration Staff	1,258	598	-	-	1,007	358
Transactions/Registration Staff	17,108	1,331	9,382	-	19,558	1,506
Transfers/Registered Property	5.5%	3.0%	0.0%	0.0%	6.1%	4.9%
Transactions/Registered Property	75.2%	6.6%	29.3%	0.0%	118.9%	20.5%

Based on this and other information gathered, the following table sets out the basis for estimating staff requirements under CoFLAS.

Table 8: Basis for Estimating the Total Staff Requirements under CoFLAS

Number of staff in the office	High Level of Staffing/Office	Medium Level of Staffing per Office	Low level of staffing per office
Number of management/ administration/other non-technical staff relative to total registration and survey/ cadastre staff	About the same as the number of registration and survey/cadastre staff	About half the number of registration and survey/cadastre staff	About 10% of the number of registration and survey/cadastre staff
Registration staff per 100,000 properties covered by the office	Manual records, complicated registration process, limited role for private sector	Efficient registration process, possibly computerised, limited role for private sector	Computerised records, efficient registration process, substantial role for private sector
	10	5	3

[6] In preparing CoFLAS, the term 'transfer' was used to denote the change in ownership of a property through sale, gift or succession. The broader term 'transaction' covered all requests for land services, including the registration of a transfer. There was some variety in what types of transactions were recorded, but the most important in terms of revenue, were transfers and mortgages. In the table it is clear that New Zealand were not able to report on transfers and Norway could not report on either transfers or transactions. This data was not available.

Number of staff in the office	High Level of Staffing/Office	Medium Level of Staffing per Office	Low level of staffing per office	
Survey/cadastre per 100,000 properties covered by the office	Survey/cadastre not automated, limited role for private sector	Survey/cadastre automated, limited role for private sector	Survey/cadastre automated, limited role by government	LAS services provided without cadastre
	10	5	3	0

Table 9 sets out a summary of the information that was gathered during the field visits on proposals for the staffing of the new agency to support the legal cadastre. These proposals for new staff seem much higher than that suggested by CoFLAS and, more importantly, seem inappropriate given the estimated number of properties in the urban centres as set out in Annex 5 and 6. The BPR for the creation of the new institution may include other land administration functions such as valuation and planning and development control. Most of the institutions cited in the international examples used to prepare CoFLAS included this valuation function in the staff numbers (with respect to assessing fees and transfer taxes). The planning and development control function is really a function of the rights creating institution and a decision to include this role in the institution responsible for the legal cadastre needs to consider the long-term roles of the two institutions. At this stage it seems logical to assume that planning and development control would remain with the rights creating institution.

Table 9: Summary of available information on staffing proposals

Region	Current staff numbers
Addis Ababa	Addis Ababa: in the long term the landholding Registration and Information Agency suggested 700 staff may be needed. Bole sub-city: 72 positions in the Land Development and Management Bureau, and 92 positions in the Land Tenure Management Agency.
Amhara	Amhara regional level has 48 approved positions of which only 8 are filled. Approved positions for 40 town administration offices are between 55-65 each. The proposed organizational structure for Bahir Dar has 53 positions
Oromia	Oromia – *unknown* Adama – 90 approved in the Land Development and Management Bureau (40 filled). 98 additional staff have been contracted separately to assist in the short-term.
SNNPR	SNNPR Regional agencies have 46 approved staff positions, with 20 positions filled. Hawassa ULPRIA has 15 staff.
Tigray	Tigray Land Development and Administration Department has 16 staff Mekele: 151 staff in the Land Development and Administration unit (city and sub-Cities). 11 staff in the Land Management Unit (18 approved positions) of the Kedamayweyane sub-city)

The following table of staffing requirements for the legal cadastre offices providing services to the public based on an office typology that has been prepared based on CoFLAS (set out in Table 11) and the estimated number of properties set out in Annex 5 and 6. Note that this estimate is only for the legal cadastre offices providing services and it excludes the staff in MoUDH, Addis Ababa City Administration, Dire Dawa City Administration and the Regional Governments that will be supporting the legal cadastre.

Table 10 - Estimated staff required to provide legal cadastre services in the 200 major cities

	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
	Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
Addis Ababa (10 Sub-Cities)	200	100	100	400	50	50	50	150
23 Cities	280	140	140	560	140	79	79	298
Next 176 cities)	281	320	320	921	143	203	203	549
Total	**761**	**560**	**560**	**1,881**	**333**	**332**	**332**	**997**

There will be a requirement to support the staff providing legal cadastre services in the cities. This will include staff in MoUDH as well as staff in Addis Ababa and Dire Dawa City Administrations and Regional Administrations. These staff would number in the range of 1,000 to 1,500 staff. In addition, training will be required for the staff undertaking SAR. As documented above it will require at least 86,000 person-months of input to complete the legal cadastre throughout Ethiopia if the process is as efficient as that in Thailand or Romania. If this is undertaken over 5-10 years this will require the equivalent of 800 to 1,600 full-time staff. These staff are likely to be mostly contract staff with a core of permanent staff employed by the Cities.

7.8 Facilities

Regarding office space, whilst there are no global standards, many government agencies internationally have established guidelines for office space allocation. The approach adopted in CoFLAS suggests an estimate of the likely office space required for LAS based on estimated staff, an allowance for a visitor/customer area plus an allowance for a record storage area:

(a) General working space: 10 m^2/estimated staff in the office, plus
(b) Front office for visitor/customer traffic and waiting areas, information/assistance areas: 20 m^2; and
(c) Record storage area based on the estimate for the number of properties in the area covered by the office. An initial estimate suggests that 600 parcel files/m^2 might be an appropriate assumption

Given the anticipated number of registered properties in the urban centres listed in Annexes 5 and 6 it seems that the best approach might be to develop standards for office space, staff, equipment and other key resources for a limited number of standard office types, perhaps with standards for offices with 100,000, 50,000 and 10,000 properties and other arrangements for towns with less than 10,000 properties. The following office typology is proposed as an initial suggestion for reasonable staffing levels for 5 office typologies under two scenarios based on the top two levels from CoFLAS as set out above in Table 8. This typology and the estimated number of properties in 2016 in Addis Ababa, the 23 Cities and the rest of Ethiopia has been used in estimated the requirements for capacity building as set out in Section 7.12.

Table 11 - Proposed Office Typology

Detail		Office Type 1	Office Type 2	Office Type 3	Office Type 4	Office Type 5
Role of Office		front/back office	front/back office	front/back office	front office only	front office only
Approximate number of properties		100,000	50,000	20,000	10,000	5,000
Staff numbers based on a high level of staffing, with largely manual processes as set out in CoFLAS.	Manag./admin./ other	20	10	5	1	1
	Registration	10	5	4	2	1
	Survey	10	5	4	2	1
Staff numbers based on a medium level of staffing, with an efficient system as set out in CoFLAS.	Manag./admin./ other	10	5	2	1	
	Registration	5	3	2	1	1
	Survey	5	3	2	1	1
Nominal useable space (m^2)		520	270	170	80	55

7.9 Operating the legal cadastre under a self-financing arrangement

The provision of land administration services is typically a public service provided by government. Land sector agencies in many developing countries face many challenges including the ability to provide affordable, cost-effective, efficient and sustainable services. However, if the land sector agency is in fact providing services that are valued by their clients then the clients will pay for the services. In most countries the annual fees and charges collected by the land sector agency exceed the annual operating costs. The land sector agency in many countries operates under a self-financing arrangement with the agency able to retain some or all the collected fees and charges and is able to use these funds to pay for some or all operating costs. There are obviously checks and balances on what fees and charges can be levied, what funds can be retained and what these retained funds can be used for.

As Ethiopia plans the roll-out of the legal cadastre for urban centres throughout the country, the adoption of a self-financing arrangement will provide a useful framework to ensure that the investment in the infrastructure and capacity is sustainable.

In looking at applying a self-financing arrangement we need to review the expected revenue under various scenarios and work out the best way of providing services using the available revenue. The information gathered in preparing CoFLAS provides the basis for this analysis.

7.10 Expected revenue

The standard for payments under the legal cadastre are set out in Standard 6/2015 which became effective in January 2015. There are two types of payments under the standard: (a) payment for sporadic registration; and (b) payment for landholding certificate (both by sporadic and systematic adjudication).

The fees for sporadic registration include:

(a) Fees for collection and verification of documents: application fee plus 8% of service fee for field surveying and measurement
(b) Fees for field surveys and measurement: benchmark of 100 m^2 based on 1 hour for survey team, plus one hour for equipment plus transportation costs for the surveyors. This increases by 10% for every increase in area of 100m^2.
(c) Fees for public notice: fee for cost of print media plus the public notice in the adjudication section.
(d) Fee based on estimated market value of the land: 0.1% of the average annual bid price for class of land.

(e) Payment for possible damage to third parties: 0.1 times the total estimated payment for (a) to (d) above.

As sporadic first registration is a one-off fee that does not contribute directly to the long term sustainability of the offices providing legal cadastre services it is not particularly useful to attempt to project future income.

The fees for landholding certificates specified in Standard 6/2015 are:

(a) For first time issuance: 10% of the cost of printing the 2 copies of the certificate
(b) Request for replacement of certificate: as above plus the cost of public notice
(c) Registering mortgages/debts and injunction orders: cost of application form plus service cost
(d) Bank file verification: cost of forms plus service cost.

The standard does not provide clear guidance on the fees that might be charged.

The actual revenue that might be collected from offices providing legal cadastre services will depend on a number of factors, including: the number of properties covered by the office; the types and values of the properties covered by the office; the level of market activity; the schedule of fees and charges; and the level of participation in the formal system.

The review of well-established land administration systems undertaken as CoFLAS was developed provide some parameters that could be used to predict future revenue for the legal cadastre in Ethiopia. These parameters included:

(a) Property turnover (that is the number of registered transfers per annum per registered property) ranged from 3% to 6.1%
(b) The revenue from registered transfers as a percentage of total revenue ranged from 52% to 68%,
(c) The revenue from registered mortgages as a percentage of total revenue ranged from about 30% to 33%.

The taxes, charges and fees for the registration of a transfer are typically based on the value of the property. Based on international experience systems to register property transfers with total taxes, charges and fees of up to 5% of property value operate fairly successfully with good participation. Above this rate, problems start to occur such as lack of participation, under-declared property values or the use of other mechanisms such as irrevocable power of attorney to transfer property outside the formal system. The structure of the taxes, charges and fees levied under the different jurisdictions varies globally. Taxes, which may include stamp duty, actual or deemed capital gains taxes, and other taxes such as idle land taxes or speculation levies for property held for short periods, typically constitute much of the total cost to the applicant for the registration of a transfer. The fee for registration, which is typically set to recover the cost of providing the service, is generally in the range of 0.1 to 1.0 percent of the property value.

There will always be a wide range in property values but any model projecting revenue has to start somewhere. The following estimates for property values have been used in the initial models here:

(a) In regional cities such as Bahir Dar the average price of residential property, commercial property and mixed services such as offices are 1.5m birr, 4.0m birr and 2.5m birr respectively

(b) In Addis Ababa the average value of residential property, commercial property and services such as offices are 2.5m birr, 7.0m birr and 4.5m birr respectively.

The average property values will depend on the mix of residential, commercial and office properties. The following table illustrates the average property values based on the above estimates under three different mixes of the three property types.

Table 12: Estimation of average property values

City	Property Types (value birr)			Mix of Property Types (value birr)		
	Residential	Commercial	Office	.33x.33x.33	.5x.25x.25	.66x.14x.2
Addis Ababa	2,500,000	7,000,000	4,500,000	4,666,667	4,125,000	3,530,000
Regional City (Bahir Dar)	1,500,000	4,000,000	2,500,000	2,666,667	2,375,000	2,050,000

The following table estimates the average revenue per registered property using the most conservative values in the above table for a range of turn-over, fee rates and percentage of revenue from transfers. Note that the turn-over rates and fee rates are relatively low and thus the estimates in this table will be conservative.

Table 13: Estimation of average revenue per registered property

Average Property Value	Turnover	% revenue from transfers	Transfer fee	Estimated Annual Revenue/ Registered Property
3,500,000	3%	50%	1.0%	2,100
2,000,000	3%	50%	1.0%	1,200
3,500,000	2%	50%	1.0%	1,400
2,000,000	2%	50%	1.0%	800
3,500,000	1%	50%	0.5%	350
2,000,000	1%	50%	0.5%	200
3,500,000	1%	60%	0.5%	292
2,000,000	1%	60%	0.1%	33
1,000,000	1%	50%	0.1%	20

The following table sets out the projection of the total annual revenue from legal cadastre offices with varying numbers of properties where the average revenue/registered property is 20, 200, 500, 1,000 and 2,000 birr/registered properties.

Table 14: Projection of total annual revenue from legal cadastre offices across varying number of properties

Number of Properties	Total revenue (at 20 birr/property)	Total revenue (at 200 birr/property)	Total revenue (at 500 birr/property)	Total revenue (at 1,000 birr/property)	Total revenue (at 2,000 birr/property)
5,000	100,000	1,000,000	2,500,000	5,000,000	10,000,000
10,000	200,000	2,000,000	5,000,000	10,000,000	20,000,000
20,000	400,000	4,000,000	10,000,000	20,000,000	40,000,000
50,000	1,000,000	10,000,000	25,000,000	50,000,000	100,000,000
75,000	1,500,000	15,000,000	37,500,000	75,000,000	150,000,000
100,000	2,000,000	20,000,000	50,000,000	100,000,000	200,000,000
200,000	4,000,000	40,000,000	100,000,000	200,000,000	400,000,000
500,000	10,000,000	100,000,000	250,000,000	500,000,000	1,000,000,000

7.11 Expected annual operating costs

Once the initial investment in establishing the legal cadastre and undertaking SAR has been made, the major on-going operational cost will be salary costs. The following table summarises the average monthly salaries of key staff.

Table 15: Average monthly salaries of key staffing positions

Position	MoUDH	Addis Ababa	Bahir Dar
Director	6,362	8,200	6,547
Surveyor	5,635	5,300	3,500
GIS expert		7,200	3,909
Lawyer	5,635	5,565	3,909
Clerk	3,000	3,200	2,008
Assistant		3,000	
Contract Worker			80 birr/day

Although salary costs will be a major part of the on-going operational cost of the legal cadastre, there will be other costs for ICT, materials and operating costs etc. In reviewing the experience in a range of countries in preparing CoFLAS the salary and related social costs ranged from about 37% to 67% of the total annual operating costs. A range of staffing requirements are modelled in CoFLAS for an office with 100,000 properties. The most labour intensive is one for a high level of staffing in the office with a very manual process. This required 20 management/administration staff, 10 registration staff and 10 surveyors. It should be noted that MoUDH is planning for a significant investment in computerised systems so this level of staffing is likely to be more than will be required once CRPRS is installing and operating. The table below uses the average salary information and this level of staffing to project the total annual operating cost of an office with a range of non-salary operating costs.

Table 16: Projection of total annual office operating costs

	Number	Monthly Salary	Salary on-Costs	Annual Cost
Salaries				
Management staff	20	7,000	30%	2,184,000
Registration Staff	10	6,000	30%	936,000
Survey staff	10	6,000	30%	936,000
Sub-Total (salaries)	**40**			**4,056,000**
Total cost (salary 40% of cost)				**10,140,000**
Total cost (salary 50% of cost)				**8,112,000**
Total cost (salary 60% of cost)				**6,760,000**
Total cost (salary 80% of cost)				**5,070,000**

In the table above the annual operating costs for an office with 100,000 properties ranges from about 5 to 10 million birr. As noted above the projected revenue for an office with 100,000 registered properties was estimated at between 2 and 200 million birr (a large range that arises from differing assumptions on the average property value, the rate of annual turnover of properties and the rate charged for registering a transfer). These numbers indicate that provided steps are taken to get adequate revenue, setting the fee for a transfer to be in the range 0.5 to 1.0 percent of the property value, the legal cadastre should be able to operate under a self-financing arrangement even with the added cost of establishing the security fund that is provided for in Proclamation 818/2014. This is particularly so as the staffing in an office equipped with CRPRS is likely to be significantly less as indicated in the table below (annual costs from 2.5 to 5.1 million birr).

Table 17: Estimation of Annual Salary Costs

	Number	Monthly Salary	Salary on-Costs	Annual Cost
Salaries				
Management staff	10	7,000	30%	1,092,000
Registration Staff	5	6,000	30%	468,000
Survey staff	5	6,000	30%	468,000
Sub-Total (salaries)	**20**			**2,028,000**
Total cost (salary 40% of cost)				**5,070,000**
Total cost (salary 50% of cost)				**4,056,000**
Total cost (salary 60% of cost)				**3,380,000**
Total cost (salary 80% of cost)				**2,535,000**

7.12 Identifying and measuring the capacity building needs and outputs

MoUDH has recognised the need for human resource development and capacity building of employees in the land sector as a crucial component to successful and sustainable implementation of the urban legal cadastre. To date, 16 Occupational Standards (across Levels II to V) have been developed with defined units of competency on land and land related fields (a list of occupational standards is shown at Annex 7). These have been developed by FIULIPO together with the Ministry of Education Federal Technical and Vocational Education and Training (TVET) Agency. The development was largely outsourced to an international consortium under the leadership of the Regional Centre for Mapping of Resources for Development (RCMRD), and a 3rd Round Assessment has recently been tendered in order to update and revise existing tools whilst developing

new training materials for Level V. The RCMRD phase of the project - *Assessment and Training on Land and Land Related Fields* – documented in their Final Report (RCMRD, 2015) a total of 5,698 candidates participating across 5 centres of competency in 5 Regions, with 10,627 certificates of competency in total being issued across three levels of competency.

These figures, however, contrast somewhat with the targeted figures under GTP II which specify short- and mid-term training of 23,504 trainees over the 2015-2020 period, in courses of length 1 week through to 1 year. There are also 16,000 staff planned to be trained to implement the legal cadastre and 3,000 graduates to be certified. Whilst it is not clear what the targeted number of trainees was under GTP I, nor how successful the MoUDH was in achieving GTP I training goals, this figure is a significant increase on the numbers reported from the project. It is recommended that FIULIPO reviews these figures, capacity to train so many, and whether goals could be met with fewer trained.

There is clear capacity in Ethiopia's universities to train to degree level, albeit potentially not at the numbers required (Orgut 2010). GTP II recognises the strong need for capacity development, noting capacity building activities under Pillars 1, 3 and 4 that will potentially impact the urban legal cadastre. A variety of non-degree-level training methods are available, including on-the-job, training of trainers and the establishment of an Urban Leadership Centre of Excellence. The need for ongoing staff capacity development and public and stakeholder awareness are also noted and addressed.

From the GTP II document then, there is a strong focus on capacity building and training which will greatly support the establishment of the urban legal cadastre. Whilst it may not meet the Orgut (2010) estimated required figures, at least in the short- to medium- term, these figures themselves seem much higher than international standards.

The staffing estimates made under this study, based on a typology of office types that has been developed based on international experience and an estimate for the total number of properties in the 674 major urban centres in Ethiopia as documented in the 2007 Census, indicates that a much smaller number of staff need to be trained. The number of staff providing legal cadastre services in the 200 largest urban centres is estimated to be in the range of 1,000 to 1,900 (see Table 10). Capacity development will be required for staff in MoUDH, Addis Ababa and Dire Dawa City Administrations and Regional Administrations. These staff would number in the range of 1,000 to 1,500 staff, so the total staff requiring capacity building is in the range of 2,000 to 3,400 over a 5-10-year period. In addition, training will be required for the staff undertaking SAR. As documented above it will require at least 86,000 person-months of input to complete the legal cadastre throughout Ethiopia. If this is undertaken over 5-10 years this will require the equivalent of 800 to 1,600 full-time staff. The training required for this work is a short-intense training course of perhaps 2 weeks' duration. Additional training will be required in public awareness, ICT, dispute resolution and other areas that support the legal cadastre. However, the overall numbers that will require capacity building is much less that that planned to date.

7.13 Review of the Management Contract

FIULIPO, under the MoUDH, has recently twice requested tenders for a *Management Contract to Support the Implementation of the National Urban Real Property Registration and Information System.* As demonstrated in this report, this role is critical to the Ministry achieving the ECSPG and ultimately successfully and sustainably establishing the urban legal cadastre. Unfortunately, the Ministry has as yet been unable to award this contract.

The core objective of the management contract is to provide technical management services across the Federal, Regional and 23 cities real property registration office levels to implement the pilot projects. The scope of work is described across five core components; these can be summarized as:

1. Review/refinement of **operational procedures**: including the development and documentation of procedures and workflows, support and guidance to field adjudication/registration activities etc.
2. **Management & Business planning**: including providing support to management staff to develop and implement business plans and sustainability measures, identifying and managing revenue potential, implementing BPR and BSC measures and quality assurance and control**.**
3. **Public mobilisation/awareness** creation: including the design of a public media campaign and strategy and implementation plans
4. **Training/Knowledge transfer**: including the review of existing and design and implementation of new courses, training materials, delivery of training of trainers courses and review of TVET and university curriculum.
5. **Establishment of a baseline** for implementation and ongoing monitoring.

Clearly there is some overlap between what is already being implemented and what is planned for the management contractor to undertake, likely due to the delay in procurement. As a whole, there are no significant concerns with the TOR and it appears to encompass the core project management needs of implementing the urban legal cadastre, as well as identifying the need for input on establishing sustainable operations, including business planning, revenue creation and ongoing capacity development. It also addresses the need for improved public awareness. Whilst it's possible that the TOR could be clearer in terms of deliverables expected, it seems unlikely that the TOR itself is an obstacle to bidders. However, the proposed payment terms seem onerous, particularly the linkage of payments to specific registration targets in 23 cities, an activity that the Managing Contractor and even the Ministry have little direct control over.

Moving forward then, and given the criticality of this project management role the Ministry has several options. Firstly, there is the option to reduce the scope of this contract to focus specifically on the SAR process in the first instance, in order to quickly progress. This would necessarily engage with the key recommendations from this report. Secondly, or alternatively, the Ministry could re-tender the Management Contract as is for a third time, perhaps changing the contractual terms and releasing additional information (for example, this report) to provide additional clarity to bidders on key requirements. In doing so, the Ministry may wish to revisit the broader procurement process to determine if there are additional barriers to companies tendering. Finally, the Ministry may instead prefer to directly procure individual experts to undertake the specific roles identified in the TOR. This latter option might reduce the overall scope of work, but allow the Ministry better control and to move more quickly.

8 MAINTENANCE AND UPDATE OF THE LEGAL CADASTRE

A major focus of this study is on SAR and the creation of the legal cadastre. Given the status of records for urban landholdings in Ethiopia and the current pilots implement Proclamation 818/2014 this focus is important. However, it is important not to lose sight of the need to establish clear efficient processes to update the legal cadastre on a routine basis and to ensure that citizens do appreciate the benefits of keeping their land records up-to-date. Proclamation 818/2014 also provides for sporadic registration in the legal cadastre and it will be important that systems and processes are developed to respond to sporadic requests for registration in a timely efficient manner.

The planned development of the sophisticated ICT application CRPRS is the prime strategy for the implementation of a clear, efficient process to register urban landholdings and changes in rights, restrictions and responsibilities. However, this system will not be available until late 2017 at the earliest. A strong manual system to update the new legal cadastre is required. A comprehensive set of standard operating procedures and associated materials such as standard forms, guidelines, manuals and training material is required. This will address many of the concerns and queries raised during the discussions with stakeholders during the site visits. The material will also be essential in assisting to specify the design for CRPRS, as without any existing standards or specifications, the technical participants in the Agile process do not have a clear reference framework for ensuring that CRPRS will support their requirements.

Another issue is the format of the manual registers that are being developed in the Regions. Ministerial Directive 45/2014, Art 67, provides for 7 different registers, including a landholding register, a common building register, a complaints register and a register of requests for registration, and sets out the specific information that is recorded in each register. In many countries rights, restrictions and responsibilities are recorded against the property and there is no requirement for separate registries of responsibilities and restrictions. For example, in Thailand, which also maintains a parcel file with transactions, the title document records all the key parcel information and has a table on the back to record key details of transactions as they occur. This avoids the need to have a separate register or even multiple registers. The legal cadastre should record sureties and injunctions against that set out in the landholding rights registry.

Article 41 of Proclamation 818/2014 provides for the establishment of a security fund at the Regional level. The Proclamation provides that the Regions may add a levy of not more than one percent of the value of the transaction being recorded and also that the security fund may be used by the Regions for other purposes. The proposal to levy one percent is fairly high, but MoUDH and the Regions will need to consider how the security fund is established and how it operates as the legal cadastre is established.

A more fundamental issue is understanding the incentives for the public to keep the register up to date and their awareness of the necessity in doing this. Proclamation 818/2014 appears to render unregistered transactions void but there is almost certainly the need to increase public awareness of the benefits of being registered in the legal cadastre and the risks that they take in not registering transactions. The process to register transactions has to be straightforward and accessible by citizens. The fees charged need to be affordable, possibly with safeguards for the poor and disadvantaged. For example, there may need to be a simpler and lower cost process to register succession.

9 ICT REVIEW

The following is a summary of the comprehensive ICT review which is provided as a separate report as part of this consultancy. For detailed information on the systems assessed, the options for systematic registration systems and the ICT recommendations refer to the ICT Review Report.

The ICT review investigated a number of existing and proposed software systems related to land administration and in particular, the adjudication and systematic registration of urban land within Ethiopia. The goals of the ICT review were to;

1. Understand the scope and functionality of those ICT systems
2. Identify the elements of those systems that work well within the Ethiopian context as well as the elements that don't work well
3. Identify systems gaps or issues and propose appropriate ICT solutions to address those gaps.

9.1 ICT systems reviewed in June 2016

A summary of the ICT systems that made up the landscape of software applications supporting land administration and/or systematic registration within Ethiopia in June 2016 are listed in Table 7. This table provides a brief description along with an indication of the sector (urban or rural), scope (in terms of geographic area) and status (operational or in development) for each reviewed system.

Table 18: ICT Systems Reviewed

System	Agency	Sector	Scope	Status	Description
Cadastre and Real Property Registration System (CRPRS)	MoUDH	Urban	Ethiopia	In Development	CRPRS will be an integrated and unified platform supporting the legal cadastre across Ethiopia. It will cover all aspects of the Legal Cadastre and will serve as base for the Fiscal Cadastre and other systems that are going to build the National Land Information System.
Addis Ababa Cadastre Information System (AA-CADIS)	AALHRIA	Urban	Addis Ababa	Operational	AA-CADIS is comprised of two software applications; Real Estate Cadastre System (RECS) is a customized GIS for maintaining the Addis Ababa urban cadastre, and Real Property Registration System (RPRS) manages property rights, restrictions and responsibilities such as lease, permit, mortgage and court injunctions.
Interim Urban landholding and File Management System (IULHFMS)	MoUDH	Urban	Mekele, Bahir Dar & Dire Dawa	Operational	Software to create an integrated land records system of the existing land paper files, legal registries and base maps in three pilot cities.
Land Investment for Transformation (LIFT)	MoA	Rural	Amhara, Oromia, SNNPR, Tigray	Operational	Software supporting the rural land systematic registration program being conducted by Land Investment for Transformation (LIFT). Includes two software applications; Interim Mass Registration (iMASSREG) and Interim Woreda Rural Land Administration Information System (iWORLIAS). The goal of the program is to register 14 million rural land parcels in 5 years.
National Rural Land Administration Information System (NRLAIS)	MoA	Rural	Ethiopia	In Development	NRLAIS will be a comprehensive software system handling both systematic and sporadic registration of rural lands throughout Ethiopia.

System	Agency	Sector	Scope	Status	Description
Computerized Property Tax Administration System (CPTA)	MoUDH	Urban	Ethiopia	In Development	A computerized property tax system for urban land to facilitate equity based, efficient and fair taxation.
Archive Management System	AALHRIA	Urban	Addis Ababa	Operational	A simple document archive management system developed by the IT Administration Team within AALHRIA.
Public Web Portal	AALHRIA	Urban	Addis Ababa	In Development	A public web portal that will allow the general public to access a broad range of information about the AALHRIA and information on current and upcoming registration areas.

The ICT review report that was prepared after the mission in June 2016 describes these systems from an architectural perspective, with a focus on the capabilities, architecture and deployment model.

- Capabilities represent a high level summary of the features and functions supported by a software system. They are useful for linking detailed system requirements to business needs as well as indicating the general scope of a system.
- The architecture illustrates the main components of the software and describes the technology used to implement the system(s).
- The deployment focuses on the physical distribution of the software across servers, PCs and the network.

Other aspects of the systems such as testing, methodology, workflow, development environment and support model are also described by the ICT review report as appropriate.

9.2 Cadastre and Real Property Registration System (CRPRS)

The Cadastre and Real Property Registration System (CRPRS) represents a strategic national platform for implementation of the legal cadastre in the states of the Federal Republic of Ethiopia. It is currently being developed by the Information Network Security Agency (INSA) and is due for initial release in the second half of 2017. Once implemented it is intended to replace the existing regional and interim systems for urban land administration within Ethiopia (e.g. AA-CADIS, IULHFMS.) to become the primary repository for urban land registration information.

Given its strategic importance, CRPRS was a focus of the ICT review in June 2016. The specific areas that were assessed included the capabilities and architecture of CRPRS, the data model, software technologies, deployment model, testing coverage, development methodology, development environment, and the development progress to date.

9.2.1 CRPRS conclusions from the review in June 2016

The conclusions resulting from the ICT review of CRPRS in June 2016 were;

1. The technology (open source) and development approach (scrum/agile) used for CRPRS are aligned with international software development practices.
2. The Ethiopian Land Administration Domain Model (ELADM) is an appropriate choice for the core data model of CRPRS.
3. The CRPRS development environment includes essential components; source control (Git), issues/bug register (Jira), continuous build integration (Jenkins) and multiple staged environments to support deployment and testing.

4. The INSA Scrum Team has established their development environment and demonstrated the basic web scaffolding/skeleton for the CRPRS web applications. This is appropriate progress for 6 sprints (12 weeks' effort).

9.2.2 CRPRS Recommendations from June 2016 Review

The ICT review in June 2016 identified nine recommendations relating to CRPRS, however, only the two primary recommendations relating to the deployment model and MoUDH's involvement with the development of the CRPRS are discussed here.

Of particular interest was the deployment model for CRPRS and whether a centralized or decentralized model should be used. During the ICT review it was noted that Ethiopia suffers from an unreliable power supply and understrength telecommunications infrastructure. This presents major challenges to the implementation of a national level land administration system; however, the review recommends that a centralized deployment model for CRPRS should be favoured.

The reasons for this recommendation include;

- The centralized deployment model was preferred by IGN
- CRPRS will be a strategic national system that is likely to be operational for 10 to 15 years. In the medium term (3 to 5 years) it is probable the power supply network and telecommunications infrastructure within Ethiopia will be significantly improved to the point it is easily capable of managing the load required for CRPRS, well within the expected lifespan of CRPRS.
- CRPRS will be deployed to major urban centres which will be the first to benefit from infrastructure improvements.
- Several land specific mobile technologies are now available that could be used in an offline capacity to reduce the short term effect of unreliable infrastructure.
- Centralized national level IT system already exist in Ethiopia e.g. Ethiopian e-Government Services Portal, Ethiopian Airlines and Integrated Health Management System.

The ICT review also noted that INSA are using the Scrum methodology for the development of the CRPRS. Scrum is an iterative and incremental software development framework that allows software requirements and solutions to evolve through collaboration between self-organizing, cross-functional teams, as well as through continuous customer or stakeholder involvement. Scrum provides an opportunity for MoUDH to attend and participate in the Sprint Review sessions every two weeks. It is strongly recommended that MoUDH take this opportunity as it will allow them to see how the development of CRPRS is progressing and allow them to provide feedback that will help shape the software and ensure it is fit for the purpose it was designed.

9.2.3 IGN International Quality Assurance/Quality Control Review in August 2016

A two-person team from IGN International visited Ethiopia in early August 2016 to undertake a quality assurance/quality control review of CRPRS. This review found that INSA did not have a realistic plan for the development of CRPRS and was not providing appropriate updates to MoUDH on the status of the development of CRPRS. The review noted that the RAD produced by INSA had not been accepted by MoUDH, that the SAD was due to be delivered in August and that INSA planned to deliver the development plan and testing protocol after the acceptance of RAD and SAD documents by MoUDH. The review also found that many of the platforms required for development iterations were not opened for remote access. A new approach to the sprint iterations was proposed by the

review to address a range of problems including the lack of specification by INSA on what was being developed and the limited participation by MoUDH in the sprint process. The key recommendations made by the review included:

- All iterations done by INSA prior to all reference documents delivery and acceptance must be considered as test iterations. The development phase should start when all reference documents are accepted by the client.
- An internal team at MoUDH must be created rapidly to act as a counter-part for the SDCRPRS teams.
- All the needed INSA platforms must be accessible remotely before the start of any development iterations.
- Before a component development for release begins, the SDCRPRS is to produce a specification of this component that will translate the RAD requirements in implementation choices.

9.2.4 Decision on Central/Regional Deployment

During the September/October 2016 mission MoUDH and the regional governments agreed in a workshop that CRPRS be deployed on servers in the Regions with a central system in Addis Ababa providing backup. Whilst the accompanying ICT report to this document supports a centralised approach, there are no strict arguments against a decentralised approach in the deployment of CRPRS – simply that the approach chosen should be agreed upon by both INSA and IGN International. The telecommunications infrastructure in Ethiopia is weak which is a strong reason for decentralisation in the short-term.

9.3 Addis Ababa Cadastre Information System (AA-CADIS)

The Addis Ababa Cadastre Information System (AA-CADIS) was developed by Hansa Luftbild for the city of Addis Ababa to support cadastral and registration processes. AA-CADIS is comprised of two software systems, the Real Estate Cadastre System (RECS) and the Real Property Registration System (RPRS). The main feature of AA-CADIS is its decentralized architecture which is intended to allow each sub-city within Addis Ababa to operate without permanent network connections between headquarters and the sub-cities.

AA-CADIS is currently used by the Addis Ababa landholding Registration and Information Agency (AALHRIA) to support the systematic registration activities currently occurring within Addis Ababa. The sophisticated distributed architecture of AA-CADIS has proved to be more of a hindrance than a help for the bulk capture of adjudication files. The multi-stage workflow process is heavily dependent on communicating with the master system at headquarters at specific points. If communication cannot be completed, the workflow blocks further processing of the transaction which impedes processing of the adjudication files. In light of this finding, the ICT review recommends that AA-CADIS should not be used to support systematic adjudication outside of Addis Ababa.

There are no obvious technical changes that can be made to AA-CADIS to remove this bottleneck. In order to streamline the capture of adjudication files in Addis Ababa the ICT review also recommends that AALHRIA should consider;

(a). Centralizing the capture of all adjudication files at HQ to minimize the impact of WAN issues, or

(b). Ensuring two or more RPRS and RECS operators are available in each sub-city to support the capture of the adjudication files and assign dedicated technical support to the sub-cities so they can be on hand to assist when technical issues occur.

9.4 Software for systematic adjudication

A key finding of the ICT review in June 2016 was that a gap existed in the ICT landscape in relation to systems supporting the systematic adjudication process. None of the existing or proposed systems that were reviewed are ideally suited to support the systematic adjudication process of urban lands within Ethiopia. Seven options are discussed in the report for addressing this gap with the options evaluated and ranked. Those options include;

- Taking no action
- Using an improved manual system
- Extending CRPRS
- Extending IULHFMS
- Repurposing the LIFT systems
- Building a tactical solution
- Customizing an existing 3rd party solution

The highest ranking option is to improve the manual adjudication system and extend IULHFMS to provide functionality in support of the systematic adjudication process. Improving the manual system will speed up the adjudication activity and provide monitoring and tracking of the adjudication process. IULHFMS is expected to precede adjudication so it should already be deployed into the adjudication cities, acting as a transitional system until CRPRS becomes available. Improvements to the manual system will minimize the extent of changes required to IULHFMS, potentially limiting them to supporting capture of data from adjudication forms, generating landholding rights certificate and additional parcel states (i.e. adjudicated, registered, etc.).

10 TENURE IN URBAN ETHIOPIA

Proclamation 818/2014 is creating a legal cadastre by encouraging landholders with titles to apply to have their landholding adjudicated and registered. The proclamation provides for applications from:

- those holding titles issued by Cities under the permit or leasehold systems
- government institutions with a landholding right
- farmers with a landholding right issued by a competent authority
- unit holders in a condominium applying jointly.

Although the law clearly provides for applications from these groups, there is a lack of clarity in how the adjudication and registration is implemented in practice. This particularly applies to the way applications from farmers are processed. Clearer directions are also required for other land tenures such as land held by religious institutions and common use public land such as roads, streams and open space. Government institutions with landholding rights are expected to make applications for adjudication and registration but it seems unclear what happens if they do not.

Some landholders may be eligible for a title but have not applied for one. Some other landholders may also eligible for a title but they hold land in an area that needs to be regularized. Titles are issued by the right creating institutions of the Cities. Regularization may require input by the planning institution in the Cities. As the SAR under Proclamation 818/2014 can only register existing titles in a process that has tight timeframes, the issuance of titles and any necessary regularization must be undertaken prior to declaring an area for SAR.

Other landholders are not eligible to make an application for adjudication and registration in the legal cadastre. These landholders include residents in kebele housing, residents in housing estate established by social or community based organizations and individuals that have been allocated government land. The tenure matrix set out in Table 19 attempts to illustrate the various types of tenure that are evident in the urban sector in Ethiopia and suggests strategies for the inclusion of these tenure types in the legal cadastre.

There are no definitive figures that comprehensively quantify the various types of tenure by Region. A MoUDH report from July 2016 documented the readiness of the 23 cities across the four regions (Amhara, Oromia, SNNPR and Tigray) to commence systematic adjudication and registration (and ultimately establish the urban legal cadastre). It included comments on informal/illegal settlements (the Amharic term used in the report was ambiguous), with Tigray and Amhara reporting to have almost completed regularization. Other regions are facing challenges, particularly Oromia. From the document, the following figures were obtained:

- In 4 pilot cities of Tigray, all informal landholdings were reported to have been regularised.
- In Oromia, regularisation has not commenced in any of the cities. An implementation guideline for the region was started in October 2015. In addition to the 6 project cities, there are a significant number of informal landholdings in the 10 cities that surround Addis Ababa. A total 441,611 landholdings were reported as originally without documents; of these, 184,859 received legal documents. 123,893 informal landholdings were identified, and of these only 65,261 have been given legal documents.

Table 19 - Tenure Types with requirements for inclusion in the legal cadastre-

Generic requirements for SAR	**Legal changes:** Remove need for application for registration; register rights, restrictions and responsibilities (RRR) against property rather than in registers **Procedural changes:** Clarify and document process to resolve discrepancies; build capacity to resolve complaints and disputes; prepare clear guidelines and manual. **Pre-Conditions:** Undertake file management. Develop, test and implement a program to correct deficient titles.																
Specific requirements for SAR under different tenure types		Program to issue titles to eligible land holders		Develop and document clear guidelines	**Legal change:** Review Condominium Proclamation 370, relevant Regional Proclamations and Proclamation 818/2014. **Procedural change;** amend legal cadastre to restrict sale/mortgage of parcel; clarify and document process to register units.	Develop and document process to register < 5 units	**Procedural change:** develop and document clear guidelines		**Policy:** develop and document clear policy Develop, test and document clear process			**Procedure**: Prepare LDP if necessary and implement program of regularisation	**Policy:** develop and document clear policy	Develop and document clear guidelines		Implement program to issue titles and/or encourage government institutions to apply for adjudication and registration	Develop and document clear guidelines
Tenure Type	**Permit or Lease**	**Regularised and eligible for Permit or Lease**	**Embassies without title**	**Land held by religious institutions without title**	**Unit holder in condo > 5 units**	**Unit holder in condo < 5 units**	**Farmer with 'green card'**	**Farmer without 'green card'**	**Kebele housing**	**Rental housing agency housing**	**Housing provided by social/CBOs**	**Informal (eligible for permit or lease)**	**Informal (not eligible for permit or lease)**	**Public land allocated for individual use**	**Public use with title**	**Public use without title**	**Open use (roads, streams, lakes, parks)**
Category	**Private Use**														**Public Use**		
Estimated numbers for Addis Ababa	240,000				127,000				160,000	18,000					16,000		

- In the project cities of Amhara, a total of 31,717 informal landholdings were identified with 1000 still requiring regularisation. These were mainly found in Bahir Dar and Gondor city expansion areas.
- In SNNPR, regularisation has been completed for 23,082 landholdings in the five project cities, of a total 26,263. Hawassa city found a total of 17,920 identified informal landholdings, with 15,515 regularised. Legal documents have been issued for 4,313 landholdings from a total of 4,445 formalised landholdings without documents.
- In Harari city of Hareri region, 6,133 informal landholdings were identified and regularisation completed for 5,525 of these. 2,421 non-documented landholdings were identified and of these 923 have received documents.
- In Dire Dawa, all informal landholdings established prior to 2001 have been regularised. No data for other landholdings was reported.

Of concern, it was not made clear in the report what would happen to the areas not regularized – i.e. whether these would be regularized in the future or demolished.

In addition to the data above, the tenure information in Table 20 was received from the Land Development Bureau in Addis Ababa. The table summarizes the experience in Addis Ababa for 60,273 of the first 71,000 applications for registration in the legal cadastre since January 2015. The remainder includes about 4,000 condominiums which cannot be included in AA-CADIS.

Table 20 - Tenure from SAR in Addis Ababa

Tenure	#	%
Private with permit or lease	42,364	70.3%
Eligible but without certificate	262	0.4%
Rental Housing Agency	1,957	3.2%
Kebele housing	5,843	9.7%
Government institutions	251	0.4%
International institutions	6	0.0%
Roads	4,521	7.5%
Social/community based organisations	119	0.2%
Kebele without certificate	1,502	2.5%
Vacant	637	1.1%
River	99	0.2%
Religious institutions	53	0.1%
Association (villas)	884	1.5%
Green areas	9	0.0%
Informal	1,503	2.5%
Restricted by anticorruption	263	0.4%
Total	**60,273**	**100.0%**

The following table summarizes the information that was gathered on tenure situation in the cities that were visited during this review.

Table 21 - Summary of Tenure Situation in Cities Visited during the Study

	Addis Ababa	Adama	Mekele	Bahir Dar	Hawassa
Estimated housing units (2016)	934,730	88,320	81,303	76,897	58.042
Number of leases and permits	240,000	70,000	70,709		24,000
Leases as a % of titles	42%	10%	50%		35%
Number of condominium units	127,000	?	?		
Estimated of formal properties without titles or parcel files	25,000	9,000			
Estimated number of farmers	?	3,000			
Estimated number of informal housing units	>30,000	15,000			

11 KEY ISSUES AND POLICY RECOMMENDATIONS

The legal cadastre is being implemented in a complex institutional environment with implementation being undertaken by Cities with support from Federal and Regional Governments. Significant effort in recent years has been devoted to the development of a policy and legislative framework to support the legal cadastre, but there are key gaps and issues. SAR activity commenced in Addis Ababa prior to the promulgation of Proclamation 818/2014 and has continued since. MoUDH has prepared and commenced the implementation of a plan to undertake SAR in 23 major regional cities. However, there is no efficient process available to scale up this key activity. Based on this review it seems clear that some fundamental changes are required to scale up the SAR activity. Some changes in the law are required to support the registration of properties that have title. Some changes in the procedure also seem necessary.

There are pre-conditions for undertaking SAR that are essential. In many countries, the issues with inconsistencies or gaps in existing record systems are corrected as part of the systematic adjudication and registration process. Proclamation 818/2014, allowing only the adjudication of existing rights, makes it clear that this is not possible and any discrepancies between field data and office records – including any problems with just the office records themselves -must be resolved by the rights creator. This process clearly creates delays. Hence, file management and the correction of errors and gaps in the existing title records remain a precondition for SAR. A policy review of Proclamation 818/2014 is required to determine if the problems with existing records are such that legislative amendment is required to permit the correction of title records during SAR.

A key part of the MoUDH strategy to create the legal cadastre is the development of a sophisticated ICT system to hold and update the records and support the provision of efficient services to users. However, there are possible delays in the development and deployment of this ICT application. A manual system is being developed to update the legal cadastre but this is not specified clearly.

This section of the report sets out the key issues and policy recommendations. These issues and policy recommendations are structured under the set of possible project components that might be included in the project design. These components and activities have been formulated based on an assessment of the requirements to implement the legal cadastre in Ethiopia and international experience. This initial set of components is:

1. Strengthening and expanding the legal cadastre in Addis Ababa
2. Implementing SAR in an efficient and participatory manner in the 23 Cities
3. Strengthening the quality of services from the legal cadastre
4. Project management, policy formulation and monitoring and evaluation

11.1 Strengthening and expanding the legal cadastre in Addis Ababa

11.1.1 Resolve issues in Addis Ababa

Issue. There are significant ongoing challenges with the current activity in Addis Ababa, despite progress made and its foundations in informing the design of the 23 cities pilots. It appears that lessons documented from the initial two pilots in Bole and Nifas Silk-Lafto sub-cities have not adequately been addressed, including insufficient public awareness, limited organisation of both files and staffing, and lack of a strong process to deal with file/fieldwork discrepancies. As it commenced prior to Proclamation 818/2014, the preconditions have not adequately been met in all areas and this has in part contributed to the adjudication delays and the large backlog of files. Based on information

gathered in the review, it seems that adjudication is being declared in adjudication sections rather than adjudication neighbourhoods and public awareness campaigns would seem to have had limited effectiveness. Rather than continuing this activity and potentially resulting in a compromised outcome, it would be preferable to stop declaring new adjudication sections, review the reasons behind the current backlog of files, take action to clear the backlog and establish a process for streamlining activities that ensures that there is no future backlog.

Recommendation 1: Addis Ababa should concentrate on clearing the backlog and undertaking work on preconditions prior to declaring any more adjudication neighbourhoods.

Recommendation 2: The capacity of the right creator in Addis Ababa should be strengthened to support SAR through a program of title management, the correction of titles found deficient during file management and title issuance.

Recommendation 3: SAR in Addis Ababa should be implemented as set out in Proclamation 818/2014 with good public awareness, areas declared at the level of adjudication neighbourhoods and the process completed in less than five months.

11.1.2 Improved public awareness campaigns

Issue. Limited public awareness is a critical gap demonstrated in all site visits and discussions. Hawassa City demonstrated perhaps the strongest public awareness campaign, which commenced 6 months in advance and included discussions with people's representatives and the community, media campaigns including printed materials and signs (other cities had reported using television advertisements), a local office established in the sub-city and sensitisation activities occurring onsite up to 10 days prior to the collection of applications. These efforts resulted in 75% of applications received in the 10 day no penalty timeframe. Yet still there is significant potential for outstanding applications and absentee landholders to stall the process of regularization.

Recommendation 4: MoUDH should review the experience in Addis Ababa and SNNPR implementing Proclamation 818/2014, particularly with regards to levels of responses to the public notice calling for applications for registration of landholdings. This review should document the experience and lessons and recommend changes in the public awareness campaigns and/or SAR process that might increase public participation.

11.1.3 ICT in Addis Ababa

Issue. AA-CADIS is currently used by the Addis Ababa Landholding Registration and Information Agency (LHRIA) to support the systematic registration activities currently occurring within Addis Ababa. The sophisticated distributed architecture of AA-CADIS has proved to be more of a hindrance than a help for the bulk capture of adjudication files. The multi-stage workflow process is heavily dependent on communicating with the master system at headquarters at specific points. If communication cannot be completed, the workflow blocks further processing of the transaction which impedes processing of the adjudication files.

Recommendation 5: Independent experts should be engaged to review the ICT application in Addis Ababa and to develop an appropriate strategy to address the problems with the system and to support the implementation of the legal cadastre. The review should also consider the strategy to migrate from AA-CADIS to CRPRS.

11.1.4 Need for an improved manual records system in Addis Ababa

Issue. Difficulties with inputting data from SAR into AA-CADIS has meant that the legal cadastre in Addis Ababa is having to be maintained in a manual system. The paper based registration system in Bole sub-city was reviewed and found to be working, but the system is not sustainable. The office had about 5 or 6 transactions a day in October 2016 but their books were poorly structured and based on file numbers making it very difficult to trace from one transaction to the next for a particular property and the files themselves are not in any order or properly stored. The file number is not something that clients will know and otherwise searching for a record will require a slow and painstaking process. The large registers are already dilapidated and torn in places after only one year of use. Their design and structure is not in line with good practice. They can manage in October 2016 because there were only 1,100 registered properties, but as soon as numbers build up they will have complete chaos and be unable to find records in either the ledgers or the archives.

Recommendation 6: MoUDH should work with Addis Ababa to develop an improved manual system to record the legal cadastre and support on-going transactions until the records can be managed in a computerized system.

11.1.5 Strengthening the capacity of the right creator

Issue. In creating the new institution to develop and manage the legal cadastre a decision was made that it be a separate institution from the existing institution in the Land Development and Management Bureau that creates rights and has traditionally been responsible for maintaining the registers and parcels files that record landholding rights. In Addis Ababa the work to establish the legal cadastre started out with some cooperation between the new institution and the right creator but this has been discontinued. However, the SAR process to create the legal cadastre needs timely access to the parcel files in areas declared for SAR and needs the timely input from the rights creator to resolve discrepancies found between the information gathered and measurements made in the field and the information in the parcel files. The delays in getting access to files and in getting discrepancies resolved is a serious cause of delays in SAR. The project to implement SAR needs to provide support to the rights creator. This support will include file management, the development, testing and implementation of a process to resolve deficiencies in the parcel file information that is identified during file management and the development of clear guidelines to resolve discrepancies.

Recommendation 7: The project to develop the legal cadastre should include activities to strengthen the capacity of the rights creating institution.

11.1.6 Avenue of appeal to decisions made in resolving discrepancies

Issue. There is no avenue of appeal under Proclamation 818/2014 against decisions made by the rights creator. There is a Public Complaints Office in the City that handles complaints related to a wide range of issues including those arising from rights creation. However, this agency currently handles a lot of complaints with limited resources and typically does not have the knowledge necessary to resolve complaints made against decisions of the rights creator acting in support of SAR.

Recommendation 8: The project should include an activity to strengthen the capacity of the Public Complaints Office to enable the office to process the complaints from landholders who are aggrieved by decisions made by the right creator.

11.1.7 Possible activities under this component

The following activities could fall under this component:

(a). Investigating and resolving the backlog
(b). Strengthening the right creator (including file management, file correction, regularisation, resolving discrepancies)
(c). Raising public awareness and SAR
(d). Implementation of improved manual registration and records management
(e). The development of an ICT strategy and migration to CRPRS
(f). Strengthening the capacity of the Public Complaints Office

11.2 Implementing SAR in an efficient and participatory manner in the 23 Cities

11.2.1 Develop and implement plan for regularization

Issue. Art 10 (10) of Proclamation 818/2014 specifies that the adjudication of landholdings may only be carried out in a landholding adjudication neighbourhood that has a local development plan and where regularization of illegal holdings has been completed. This makes regularization an important pre-condition for SAR. To ensure that delays in regularization are not a constraint it will be important to have a plan for regularization and confirmation that the resources to implement this plan are available. The areas requiring regularization will need to be identified and a plan prepared for regularization. This plan will need to be costed.

Recommendation 9: The Urban Land Development and Management Bureau in MoUDH with assistance from the Regional Administrations should identify and map the scope of urban areas requiring regularization and should prepare and cost a plan to complete regularization.

11.2.2 Improved file management

Issue. One of the main objectives for the new legal cadastre is to address many of the problems with the existing system to record urban landholding rights in titles and parcel files. The existing parcel files are stored alphabetically which makes them hard to access. Many files are missing, damaged or incomplete. There is no standard for the specification of parcel files and this is a short-coming that is generally recognized. SNNPR has prepared a standard for parcel files in SNNPR.

The SAR process as set out in Proclamation 818/2014 can only confirm an existing right, hence getting access to the existing titles and parcel information is a key requirement and potential bottle-neck for the creation of the legal cadastre. This problem is recognized and MoUDH has a contractor managing files in Mekele, Bahir Dar and Dire Dawa. Under this contract, the existing parcel files have been re-indexed based on location rather than alphabetical order and key documents are being scanned. Software has been developed to facilitate access to the files and the information in the files. This software will also support the recording of transactions under the current system. This work is completed and the contractor provided a final report and manual in October 2016. The pilots in the three cities have found that a high percentage of files are deficient and that further work is required to correct these deficiencies prior to SAR. MoUDH sees that the methodology, material and tools, including the software, will provide the basis to scale up efforts to better manage parcel files in urban areas in Ethiopia. The Regional Governments have also taken steps to manage files. Oromia has contracted file management in Adama and Shashamane and is piloting the scanning of key

documents in parcel files. SNNPR has developed software to manage parcel files and to record transactions.

Recommendation 10: MoUDH should prepare a standard for parcel files, aligned with the requirements of SAR and encourage Regional and Cities to adopt the standard.

Recommendation 11: MoUDH in cooperation with Regional Administrations and Cities should develop a process to correct the deficiencies in parcel files that are identified during file management. This process when developed should be implemented as part of file management prior to declaring an area for SAR.

Recommendation 12: MoUDH should prepare a plan to scale-up file management and file correction. Funding should be provided to facilitate implementation given the critical nature of this task.

11.2.3 Need to have a process that can be scaled up

Issue. GTP II aims to develop and implement the legal cadastre in 91 cities by scaling up the work undertaken in GTP I in the first 23 cities. The current work in Addis Ababa is based on pilot work undertaken in two sub-cities. Although the process set out in Proclamation 818/2104 and the current activities has drawn on the lessons and experience from the pilots in Addis Ababa, there are clearly backlogs and difficulties in Addis Ababa that need to be addressed. The implementation of Proclamation 818/2014 is only now starting under the 23 cities project in 3 of the 4 regions. The pilot activity is most advanced in SNNPR, but the field visit has demonstrated that there are key issues that need to be resolved before there is an efficient, cost-effective, participatory process that can be scaled up. Unless the work in the 23 cities is carefully managed with clear guidance from the Ministry and Regional governments, there is the real risk of repeating the pilot experience in Addis Ababa. The implementation of pilots in the 23 cities should focus instead on developing a process that can be scaled up, rather than completing registration in the 23 cities.

Experience to date has demonstrated that the existing title records need to be improved before declaring systematic sections for SAR. This will require scaling up the file management process that was developed in the pilots commissioned by MoUDH in Mekele, Bahir Dar and Dire Dawa. File management will re-sort the files and identify files with missing or incorrect information. A new process will have to be developed to correct the files found deficient during file management.

The experience in Addis Ababa and in Hawassa demonstrated that some initial effort will be required in each Region to develop an understanding of the SAR process. MoUDH has prepared a manual for SAR (Standard 5/2015). This manual is a good start but it lacks the specific information and guidance to enable the immediate implementation of the process. This missing information includes specific information on the number and type of staff required in the office and the field for SAR and the expected productivity or output of these staff and the team in a form that can be used to monitor daily, weekly and monthly progress. A short, focused pilot program in each Region that is commencing SAR will build the understanding of the process and provide the information necessary to improve the manual to support scaling up SAR.

It is proposed that at least two pilots be undertaken in each region planning SAR. These pilots should be undertaken in two different areas, perhaps one in a more central well-established location and in an expansion area. The lessons from the pilots should be captured in stakeholder workshops at the end of each pilot that involve the community and community leaders from the adjudication neighbourhoods where SAR was undertaken. If there is the need to develop a better understanding

of the process and the parameters for scale-up a second round of pilots may be undertaken in the city. Two rounds of pilots should be sufficient to build the capacity for a scale up in the Region.

The initial pilots will be undertaken in Mekele, Bahir Dar and Dire Dawa, cities where file management has been undertaken. Pilots will be implemented in other regions once file management and file correction activity has been completed.

Recommendation 13: In a Region commencing SAR, at least 2 pilots - one in a well-established area and one in an expansion area - should be undertaken in the city in the Region where file management has been completed prior to scaling up SAR in other cities in the Region.

Recommendation 14: An arrangement should be established to share experience and knowledge in implementing Proclamation 818/2014. This arrangement would logically involve regular reports on the status, experience and key lessons from implementing Proclamation 818/2014 and regular meetings of key staff from Federal and Regional Administrations and pilot cities that are involved in the activity.

11.2.4 Support for the introduction of a fit-for-purpose approach

Issue. International best practice supports the use of fit-for-purpose approaches to systematic registration, including the use of satellite imagery over ground survey where possible. MoUDH is fully supportive of the use of photogrammetric methods, and the pilot results from Addis Ababa show that about 70% of parcels have been surveyed using photogrammetric methods. Despite this, a clear preference for ground survey was observed during site visits, possibly linked with concerns around the age and accuracy of line mapping and cadastral base maps. Reference was also made to the availability and training of photogrammetrists in the regions and to the lack of the equipment and skilled personnel necessary to complete all surveys by ground survey. There are limited options for undertaking aerial photography in Ethiopia, however the rapid development of photogrammetric drone technology will provide cheaper and more flexible options, particularly for smaller cities or portions of cities.

There was a significant investment in the aerial photography and cadastral base maps over Addis Ababa and the 23 cities. The photography over Addis Ababa was captured in 2011/12 and the photography over the 23 cities in 2013/14. Although this photography is approaching the preferred usage standard of no older than 5 years it would be best to continue to use this photography and fill in with ground survey or supplementary methods including drones. Future photography and base mapping should be planned such that it can be used in the field within five years of date of capture.

Recommendation 15: Although existing photography over Addis Ababa and the 23 Cities is approaching 5 years since it was captured, it would be best to continue to use the cadastral base maps made from this photography and fill in with ground survey or supplementary methods, including drones, as necessary.

Recommendation 16: Future cadastral base maps used in the field should be produced with photography that was captured less than 5 years prior to use and be used in the field without the vector base.

Recommendation 17: MoUDH should continue to advocate the use of photogrammetric methods in the field. The pilots should be used to demonstrate the ability of photogrammetric methods to produce appropriate maps in a timely and cost-effective manner.

11.2.5 Better use of existing spatial data

Many cities have good spatial data and textual data that could be better used to support SAR. Mekele, for example, has linked existing parcel maps to photomaps, initially using imagery from Google Earth but now using the new cadastral base maps. SNNPR is using existing spatial maps linked to parcel files for the pilots in Hawassa. The SAR process is very participatory in approach and will build community confidence in the legal cadastre. However, where the existing data is reliable, the use of this data will provide a good link to existing parcel files and will be a good starting point for discussions with landholders and the community.

Recommendation 18: Cities should be encouraged to overlay reliable existing cadastral data over the new cadastral base maps so that they can better plan the field activities.

11.2.6 Efficient process to resolve discrepancies in information found in the field and parcel files

Issue. Proclamation 818/2014 Art. 14 (2) requires any discrepancy found in the field with data in the title or existing parcel file must be referred to the right creating agency, however there is no guidance on how the discrepancy is resolved nor does there appear to be any avenue for appeal. Art. 14 (6) uncompromisingly states that no adjudication can be undertaken where the landholding is beyond the legally possessed landholding. This is modified a little by Directive 45/2014 but there needs to be clarity and adoption of a more pragmatic approach. There will always be differences in measurements and areas from different surveys, even recent surveys undertaken with the same equipment. These differences are likely to be more pronounced when comparing measurements using new more modern equipment with older, less accurate equipment. Any policy on what is a discrepancy should recognise these differences and minimise their impact. The impact of a strict interpretation on what is a discrepancy is evident in the backlogs in Addis Ababa. There are a range of options that might be taken to reduce the need to resolve discrepancies. These include:

a) adopt a more realistic interpretation of what is a discrepancy (for example, tolerating differences of plus and minus 10% or 20% where there is no objection from adjoining landholders and there is no adjoining public land)
b) implementing a simplified process to correct titles in files, perhaps implemented by right creation staff working with the adjudication teams
c) adopting a process for disputed registrations to mature to full registration, perhaps linked to the period specified in a statute of limitations.

There is a tolerance level set in the regulations, but this tolerance level only permits a discrepancy where the area measured in the field in no more than 10 percent less than that set out in the records. Where the field measurement for the parcel area is more than the recorded area or more than 10 percent less than the recorded area there is a discrepancy that needs to be resolved by the rights creator. There is no guidance on how a discrepancy is resolved.

Recommendation 19: MoUDH, with support from the city pilot projects should investigate strategies that can be adopted to reduce the number of discrepancies that arise in the adjudication process and the level of effort required to resolve these discrepancies.

Recommendation 20: MoUDH should develop clear guidelines for the types of discrepancies that are likely to arise during adjudication and prepare clear guidelines for staff in Cities to resolve these discrepancies.

11.2.7 Reviewing time limits and implications of the limits in Proclamation 818/2014 and associated instruments

Issue. Proclamation 818/2014 and associated legislation set out specific time limits for key activities. Landholders in neighbourhoods declared for systematic registration have 10 days to make application to have their landholding adjudicated and registered plus an additional 5 days with a reason for the delay. If the landholder misses this window of opportunity, then the only way to have the landholding registered is by application for sporadic registration. This increases the cost to landholders and decreases the overall efficiency of the systematic registration process. Right creating institutions have 15 days to respond to a request for clarification of a discrepancy between the data/measurements gathered in the field and the title/office records.

Recommendation 21: MoUDH (FURPRIA) should review the experience to assess the reason for low application numbers within the total 15-day period for applications and make clear recommendations for changes that will increase participation.

11.2.8 Prepare a comprehensive manual for the adjudication teams

Issue. MoUDH has developed a comprehensive set of materials in a very short period to support the implementation of Proclamation 818/2014. However, based on discussions with staff in the Regions, it seems that more material is required. Some of the queries raised by staff relate to fundamental matters that may not have been addressed. In Hawassa, staff requested clear guidelines for the registration of:

- government houses that have been allocated to individuals,
- property held by religious institutions and
- buildings used by multiple government agencies.

MoUDH has prepared an Urban Land Adjudication and Registration Standard (Standard 5/2015) that includes guidelines and 21 forms. This standard is a good base but there does not seem to be standards for key processes such as the formats and a standard layout for material in public posting. There seems to be value in developing the Standard into a comprehensive manual that provides clear guidance to staff in the adjudication teams. Much of the material that could be added to this manual may well already be available. However, it is expected that some matters are not covered as policy decisions have yet to be made. This policy may cover matters listed above, but will also cover important matters such as the interaction with the right creation agency, access to existing titles and files and the resolution of discrepancies between the information and measurements gathered in the field and that set out in the titles and parcel files. Some of this information is not clear to staff in the field as it seems that some of these issues have not been resolved. The preparation of a comprehensive manual will highlight the gaps in policy and focus attention on efforts to fill the gaps.

Recommendation 22: MoUDH (FURPRIA) with the right creating institution and with support from the Managing Contractor should prepare clear guidelines for staff in the adjudication and registration of: land held by farmers with and without 'green cards'; government houses allocated to individuals; kebele housing; other government land including roads and streams; property held by religious institutions; and other urban land tenures not under the lease or permit systems.

Recommendation 23: FURPRIA should, with support from the Managing Contractor and the Regional governments, develop Standard 5/2015 into a detailed manual in a format that is readily accessible and understandable to staff on the adjudication teams.

11.2.9 Possible activities under this component

The following activities could fall under this component:

(a). Strengthening the right creator (including file management, correcting files, regularisation, resolving discrepancies)
(b). Improved planning for SAR and piloting SAR in one city/region
(c). Raising public awareness for SAR and scaling-up
(d). Strengthening the capacity of the Public Complaints Office

11.3 Strengthening the quality of services from the legal cadastre

11.3.1 Raising public awareness and making the legal cadastre accessible

It is important that there is a clear understanding of the incentives for the public to keep the register up to date and their awareness of the necessity in doing this. Proclamation 818/2014 appears to render unregistered transactions void but there is almost certainly the need to increase public awareness of the benefits of being registered in the legal cadastre and the risks that they take in not registering transactions. The process to register transactions has to be straightforward and accessible by citizens. The fees charged need to be affordable, possibly with safeguards for the poor and disadvantaged. For example, there may need to be a simpler and lower cost process to register succession.

Recommendation 24: MoUDH with support from the Managing Contractor should develop a clear strategy to explain to the public the benefits of keeping their information in the legal cadastre up to date and prepare the information and materials to implement this strategy.

Recommendation 25: MoUDH with support from the Managing Contractor should develop a Service Charter that defines service delivery standards, the rights of customers, and how complaints from customers will be handled.

11.3.2 Prepare a comprehensive set of Standard Operating Procedures for the legal cadastre

Issue. With considerable effort undertaken by MoUDH to develop and refine the legal and regulatory framework of the urban legal cadastre, there remains a critical gap in implementation. In order to support staff to undertake a standardised and streamlined process to establishing the legal cadastre, there is a need for a comprehensive set of standard operating procedures and associated materials such as standard forms, guidelines, manuals and training material. This approach will address many of the concerns and queries raised during the discussions with stakeholders during the site visits. The material will also be essential in assisting to specify the design for CRPRS, as without any existing standards or specifications, the technical participants in the Agile process do not have a clear reference framework for ensuring that CRPRS will support their requirements.

There are inconsistencies and gaps in the RAD for CRPRS (detailed at 6.2.2). These include a lack of information about transactions and no mention of the registers set out in Ministerial Directive 45/2014.

Recommendation 26: As a matter of priority, MoUDH should develop comprehensive standard operating procedures for updating the legal cadastre in response to transaction applications. These procedures should be in a form that can be used in the development of CRPRS and be used by staff in the update of the legal cadastre both before and after CRPRS is deployed. If timing permits, this task should occur within the Management Contract.

Recommendation 27: MoUDH should have IGN International review this report and respond to the comments on the RAD that they prepared for CRPRS.

11.3.3 Development of CRPRS

Issue. A two-person team from IGN International visited Ethiopia in early August 2016 to undertake a quality assurance/quality control review of CRPRS. This review found that INSA did not have a realistic plan for the development of CRPRS and was not providing appropriate updates to MoUDH on the status of the development of CRPRS. The review noted that the RAD produced by INSA had not been accepted by MoUDH, that the SAD was due to be delivered in August and that INSA planned to deliver the development plan and testing protocol after the acceptance of RAD and SAD documents by MoUDH. The review also found that many of the platforms required for development iterations were not opened for remote access. A new approach to the sprint iterations was proposed by the review to address a range of problems including the lack of specification by INSA on what was being developed and the limited participation by MoUDH in the sprint process.

During the September/October 2016 mission MoUDH and the regional governments agreed in a workshop that CRPRS be deployed on servers in the Regions with a central system in Addis Ababa providing backup. There are no strict arguments against a decentralised approach, but the approach should be agreed by both INSA and IGN International. The telecommunications infrastructure in Ethiopia is weak which is a strong reason for decentralisation in the short-term.

Recommendation 28: INSA should implement all of the recommendations that relate to INSA's development of CRPRS as set out in the IGN International QA/QC review of August 2016 by the end of 2016. If MoUDH and IGN International are not satisfied that INSA has addressed the issues raised by the QA/QC review, then senior representatives of MoUDH, IGN and INSA should review the situation together and agree on action that will ensure CRPRS is available as soon as possible.

Recommendation 29: The proposal for the regional deployment of CRPRS should be reviewed by IGN International.

11.3.4 Active involvement of users in the Scrum process

Issue. The Scrum methodology is being used for the development of CRPRS. Scrum is an iterative and incremental software development framework that allows software requirements and solutions to evolve through collaboration of self-organizing, cross-functional teams, as well as through continuous customer or stakeholder involvement. A key premise of Scrum is to minimise up front design and rely on close stakeholder collaboration to direct the development effort, however there was little evidence that INSA, MoUDH and IGN International are collaborating closely on the development of CRPRS. This presents a significant risk as without regular involvement, discussion and feedback from all parties, the CRPRS development effort could easily be misdirected and fail to deliver on the functionally MoUDH require.

Recommendation 30: MoUDH (FURPRIA) should ensure a representative attends each INSA Sprint Review meeting and actively participate in the development of CRPRS. IGN International, as the advisors to MoUDH, should also participate in the Sprint Review meetings where possible.

11.3.5 Systematic registration systems gap and delays in CRPRS

Issue: There is a gap in the current ICT landscape in relation to systems supporting the systematic adjudication process. None of the existing or proposed systems that were assessed by the ICT review are ideally suited to support the systematic adjudication process of urban lands within Ethiopia. The reasons for this are;

1. CRPRS is currently in development and will not be available to support systematic adjudication before late 2017. In addition, the requirements for CRPRS do not include features to directly support the systematic adjudication process. The requirements are instead based around importing adjudication data (WF01) which assumes the data has already been captured in some other system.
2. AA-CADIS has a sophisticated distributed architecture with a number of moving parts that unnecessarily complicate the capture of adjudication files. The ICT review recommends that it should not be used to support systematic adjudication outside of Addis Ababa.
3. Of the systems assessed, IULHFMS is the best option for supporting systematic adjudication; however, it is designed to support digitization and organization of landholding files. It does not provide functionality to support the adjudication process such as reporting on adjudication progress or generating landholding certificates.
4. The LIFT systems provide much of the functionality required to support systematic adjudication, however they are designed to meet the requirements for rural land adjudication and would need to be extended to satisfy urban land requirements.

MoUDH has instructed Regional Governments to develop and implement manual procedures to establish and maintain the new urban property rights register, resulting in overly large register books in SNNPR and other regions – this may be cumbersome to update and maintain, and may ultimately delay the establishment of CRPRS regionally due to the time required to transcribe this information.

Moving forward, there is a need for clear instructions and a set of standard operating procedures to support the registration and updating of transactions in the registers. The IULHFMS could be extended to record transactions in areas where SAR has occurred while CRPRS is being developed. MoUDH has already commenced discussions with INSA, and INSA is now working on a document management system for SAR.

Recommendation 31: MoUDH and INSA should investigate and make a decision on the best strategy to develop an ICT application to support SAR and the registration of transactions in the legal cadastre while CRPRS is being developed.

11.3.6 Specifying new offices by adopting a clear typology of offices

Issue. There is a real cost to government in establishing and operating a network of offices providing land administration services. If the location of offices is linked to administrative jurisdictions rather than to perceived or actual demand for services there is a risk that resources will not be allocated optimally, with some offices having surplus capacity and other offices having insufficient capacity to meet the demand for services. One strategy to address this issue is to develop a typology of standard 'offices' with a defined capacity in terms of office space for customer service, operations and record archive, staff, vehicles, equipment and furniture, etc., and to establish such offices only where clear criteria is met. Thailand, which has a very efficient manual records system that provides services through a network of land offices, has adopted this approach. The title register in Thailand is maintained at provincial and branch provincial levels in Thailand. In 2014 there were 77 Provincial

Land Offices and 382 Branch Provincial Land Offices nationally, with each office maintaining the title register for its defined jurisdiction. There is a very limited number of standard 'types' of offices, particularly for the new branch offices. The criteria for opening a new office includes factors such as: the number of titles existing or expected, the availability of funds, the projected annual level of transactions and revenue, and the distance that customers have to travel to get to the offices. Where the criteria for establishing a new office is not met, then services must be provided from other locations which increases the cost to customers but avoids the risk of investing in underutilised resources. Other countries have adopted alternative arrangements for areas with low expected demand such as separating the front-office and back office functions and having the back office functions handled by a neighbouring office. A typology will be developed as the project design is prepared and this typology will provide the basis for a decision by MoUDH on a suitable set of office typologies. This typology will be developed on the basis that CRPRS will be implemented to support the registration of urban landholdings with Regional or larger city offices providing back-office support to surrounding smaller offices which would operate as front-offices.

Recommendation 32: MoUDH should adopt a limited typology of offices that are based on estimated properties in each office. The standards for office space, staff, vehicles, equipment and furniture specified for each office type should be based on expected demand for services within the overall objective that the system be self-financing.

11.3.7 Preparing a staffing plan

Issue. There is a clear willingness in the Regions to set up new institutions and recruit staff. The scale of the training set out in the MoUDH ECSPG indicates a willingness to invest in training and education. Whilst BPR processes exist and have been implemented in some cities, there is no clear existing staffing plan, and in the context of systematic registration and adjudication, insufficient basis (e.g. piloting) to determine the numbers of staff required to complete the task. The issue of insufficient, and insufficiently skilled, staff was frequently raised during site visits. There is a very limited private sector for surveying in Ethiopia, hence all TVET and tertiary education graduates are anticipated to be employed by government, and there is a need for a clear strategy to recruit, employ and train staff to meet the needs.

Preparation of a staffing plan may require additional pilots and review of these pilots (in the context of systematic registration) as well as close linkages with the office typology standard (Recommendation 6). This study has identified that between 1,000 and 1,900 staff will be required in the offices providing legal cadastre services in Addis Ababa and the 23 cities. There will also be a requirement for staff to support the staff providing legal cadastre services in the cities. These staff include staff in MoUDH as well as staff in Addis Ababa and Dire Dawa City Administrations and Regional Administrations. These staff would number in the range of 1,000 to 1,500 staff. In addition, training will be required for the staff undertaking SAR. As documented above it will require at least 86,000 person-months of input to complete the legal cadastre throughout Ethiopia if the process is as efficient as that in Thailand or Romania. If this is undertaken over 5-10 years this will require the equivalent of 800 to 1,600 full-time staff. These staff are likely to be mostly contract staff with a core of permanent staff employed by the Cities.

The staffing plan may require a review of the business process reengineering standards and implementation of the balanced score card process and should include an overview of skills required and training that may be necessary to meet skills requirements.

Recommendation 33: FURPRIA should consult with the Regional Administrations and Cities to prepare a staffing plan that lists the staff required to both establish the urban legal cadastre through SAR, and maintain the ongoing operation of the urban legal cadastre and sets out a strategy to source these staff through reassignment of existing staff, recruitment of new staff, contract employment of temporary staff or outsourcing activities to the private sector.

11.3.8 Aligning the capacity development plan to the staffing plan

Issue. A significant training program is set out in ECSPG to support the Urban Development and Housing pillar in GTP II. The Surveying and Mapping Project (project 4.3.1) contains a proposal to train 23,404 staff as part of a strategy to build 11 Regional survey and mapping units. There is also a proposal to provide short-term training to 16,000 urban sector professionals. This training plan should align with the staffing plan and the strategy set out in the staffing plan to source the necessary staff inputs. The training required for staff implementing SAR is likely to be an intense 1 or 2 week course on issues related to SAR such as land law, community dialogue, use of cadastral base maps, adjudication, dispute resolution etc.

Recommendation 34: Once a staffing plan to support the legal cadastre is available, a training plan to support the staffing plan should be prepared and this plan should be programmed under the ECSPG training activities.

11.3.9 Implementing programs to build capacity in the private sector

Issue. In many countries the private sector plays a significant role in the provision of land administration services, particularly cadastral surveying and mapping services. These services are typically provided under some system of registration that provides oversight of the private sector service providers and supports them in a range of areas including access to data/information, provision of guidelines and directions and training. There is currently only a very limited surveying and geospatial private sector within Ethiopia. The EMA has developed draft cadastral surveying regulations but there has been little progress in adopting and implementing these. Support for the private sector would greatly assist in alleviating government capacity concerns, and enable it to be better placed to respond to changing needs for services from government and the public.

Recommendation 35: MoUDH FURPRIA, with possible support from EMA, should implement systems to register private sector surveyors providing cadastral surveying and mapping services including a code of conduct and appropriate oversight mechanisms using the information prepared by EMA as a starting point.

11.3.10 Possible activities under this component

The following activities could fall under this component:

(a). Raising public awareness of the legal cadastre
(b). Developing and documenting standard operating procedures
(c). Developing, testing and deploying the ICT application CRPRS
(d). Developing the physical infrastructure to be able to provide legal cadastre services
(e). Developing the human resource capacity to be able to provide legal cadastre services
(f). Preparing a plan to scale-up SAR and establishing the spatial framework to implement this plan.

11.4 Project management, policy formulation and monitoring and evaluation

11.4.1 Efficient program management

Issue. The MoUDH has an ambitious plan to scale-up the effort to create a legal cadastre in urban centres nationally. The plan will be implemented by Cities with support from MoUDH and Regional Administrations. This implementation effort will require close coordination of efforts at the three levels of government. The project to create the legal cadastre is, however, only one of 35 projects included in the ECSPG that supports GTP II and GTP III. There are limited resources in MoUDH and the impact of this is evident in a number of areas. A key issue is inconsistency in some of the planning targets for the legal cadastre. The ECSPG has been prepared on the basis that it is scaling up the effort to establish a legal cadastre in 23 cities under GTP I. There have been delays in the 23-city project and these are not reflected in the plan. The road-map that was prepared in 2011 focusses on 86 cities. GTP II has a target of 91 cities. There needs to be clarity in the target and a realistic plan prepared to achieve the target. There is also no system in place for quality assurance and the capturing of lessons from experience in implementing Proclamation 818/2014. The Ministry needs assistance and this is clearly acknowledged in the proposal for a management contract to support the implementation of the legal cadastre and the ICT system. There had been several attempts to contract the management services, but as yet no company has been contracted. A review of the TOR raises no significant concerns about its content, however the Ministry may wish to either revise the scope or method of contract in order to ensure necessary services can be contracted as soon as possible. One option that might be considered is the contracting of individual experts to address immediate requirements.

Recommendation 36: The terms of reference and contractual arrangements for the Management Contract should be reviewed and it should be retendered as soon as possible.

Recommendation 37: The Managing Contractor should be given a copy of this report and asked to prepare a work plan to respond to the recommendations set out in this report.

Recommendation 38: MoUDH with support from the Managing Contractor should develop and implement a quality assurance system for the legal cadastre.

11.4.2 Agreement with Regions on funding arrangements

Issue. Delays to the budget were reported as influencing delays to development of cadastral base map production and GCP installation for the additional 30 cities. City planning processes were also shown to be delayed due to no budget availability to implement and to pay necessary compensation. Low staff retention rates were blamed on discrepancies in pay rates across Ministries. Proposed budgets and funding arrangements are included in the MoUDH proposals for GTP II however it is not clear where the funds are coming from. International practice measures unit costs of systematic registration, being cost per parcel, and this may provide a basis for estimating the costs and garnering agreement between MoUDH and regions. Ongoing operational budgets should be considered in the context of the office typology and staffing plan.

Recommendation 39: MoUDH should have discussions with the Regions to ensure there is clarity over budget responsibility and, where necessary, arrangements made for funding allocation, to ensure confidence in and sustainably funded processes.

11.4.3 Policy formulation and legislative reform

Issue. This review has highlighted areas where policy and legislation needs to be developed. Implementing regularisation of the various forms of informal tenure in Ethiopia will require changes in policy and legislation. Changes in policy and legislation will be required to streamline the SAR process and to simplify the registers in the legal cadastre. Policies on self-financing and office topologies needs to be investigated and considered by policy makers. Policy needs to be developed and legislation drafted for the process to clarify the rights recorded in the disputes register. The current and future institutional roles of the institution creating the legal cadastre and the rights creating institution need to be reviewed and clarified. There will be many other policy issues that will arise during the implementation of Proclamation 818/2014 and there needs to be a process to consider these issues and present recommendations to policy makers.

Recommendation 40: A policy formulation and legislation reform activity should be included in the project design.

11.4.4 Adopting a policy of self-financing

Issue. Land administration is a public good that provides services that are valued by users, particularly if the land administration services are provided efficiently and in a transparent manner. Many countries have adopted a policy that the institution providing land administration services can retain fees and charges and be self-financing. This arrangement requires some clear guidelines on the schedule of fees and charges and how these are changed over time and some checks and balances to ensure that fees and charges are not a barrier to participation, particularly by the poor and vulnerable. As many of the fees and charges are ad valorem, or based on property values, and the demand for services is cyclical and dependant on factors that are not under the control of government or the land administration institution such as land market activity, access to institutional credit, interest rates etc., there also needs to be some flexibility in predicting future revenue and costs. Often some surplus is retained for a defined period to cover market fluctuations. This arrangement has been effective in a range of OECD and developing countries in establishing systems that have the resources to innovate and provide efficient services that are valued by their customers.

In Ethiopia, a new institution is being established to register urban landholdings. The implementation of SAR programs and building, equipping and staffing the institution to manage the land records will require investment by Government, but the adoption in the medium-term of a policy of self-financing will provide the incentives to build efficient systems that provide effective services that are valued by customers.

Recommendation 41: MoUDH should adopt a policy that the legal cadastre once established be self-financing and develop a budget that demonstrates that the standard office types can be self-financing.

Recommendation 42: If a policy of self-financing is adopted, MoUDH should develop a corporate strategy and business plan to prove and guide its operation.

11.4.5 Clarifying rights recorded in the disputes register

Issue. The requirement that the right creating institution responds to queries within 15 days seems overly restrictive. Putting the claim in the disputed register where the right creating authority does not respond with 15 days is also not a solution. The law is silent on how the status of parcels placed

in the dispute register where there is no response from the right creating institution within 15 days is changed.

Recommendation 43: The process to clarify the status of landholdings recorded in the disputes register should be clearly set out in the law and associated instruments.

11.4.6 Simplify the registers in the legal cadastre

Issue. Ministerial Directive 45/2014, Art 67, provides for 7 different registers, including a landholding register, a common building register, a complaints register and a register of requests for registration, and sets out the specific information that is recorded in each register. In many countries rights, restrictions and responsibilities are recorded against the property and there is no requirement for separate registries of responsibilities and restrictions. For example, in Thailand, which also maintains a parcel file with transactions, the title document records all the key parcel information and has a table on the back to record key details of transactions as they occur. This avoids the need to have a separate register or even multiple registers. The legal cadastre should record sureties and injunctions against that set out in the landholding rights registry. Where the land information is computerised in a sophisticated ICT application such as CRPRS there is even less need for separate registers.

Recommendation 44: The legal cadastre should record rights, restrictions and responsibilities against the specified landholding to simplify the number of registers required. This change will require MoUDH to make an amendment to the law.

11.4.7 Suspension of transactions during SAR

Issue. The SAR process in an adjudication neighbourhood is supposed to be completed in 5 months and transactions are suspended while SAR is being undertaken. However, transactions related to 42,000 files in Addis Ababa have been suspended, many for more than a year. Increasing the period over which SAR is undertaken is contradictory with Proclamation 818/2014, as is allowing transactions to take place during the period of SAR.

Recommendation 45: MoUDH should investigate the reason why SAR is not being completed in 5 months and recommend action to be taken to ensure it can be completed within the 5 months, or less. If the period is increased MoUDH should look at whether alternative arrangements for transactions can be made. This may require a legal amendment.

11.4.8 Re-engineering of SAR process

Issue. The law requires two separate applications by the landholder, one for adjudication and one for registration, with the same evidence required for both applications. The difficulty in getting the applications for registration is one of the main causes for the delays in registration in Addis Ababa. In many counties once adjudication is complete registration occurs automatically without any requirement for an additional application.

Recommendation 46: MoUDH (FURPRIA) should change the SAR process to remove the requirement for the second application for registration and register landholdings from based on information collected on the initial application for registration of landholdings as adjudicated and posted. This will require an amendment to the law.

11.4.9 Institutions for legal cadastre and right creation

Issue. Proclamation 818/2014 created the new institution, the Urban Real Property Registration and Information Agency (Federal) and related agencies at the Regional level. The intent behind this was to address the early pilot learnings that identified a disconnect and a lack of clarity between land management and land administration functions. However, the continued separation of these institutions means that adjudication and survey/registration functions are undertaken separately, and the communication between land management and land administration agencies is limited. For example, in Addis Ababa it was reported that 6,600 titles required checking by the Title Administration Agency, with less than half having been completed. Under Proclamation 818/2014, titles marked for SAR must be frozen for transactions during this process – and whilst the process should take no more than 5 months, this has not been the case to date.

Options to address this rely on close coordination between the two agencies. There are a number of options to address the issue. These include:

a) Merge the two institutions
b) Transfer some roles to the adjudication teams (for example, the resolution of at least some of the lessor discrepancies between field and office information and data)
c) Basing staff from the right creating institution with the adjudication teams to resolve issues as they arise.

It is clear that a lot of thought has been devoted to the institutional arrangements and that key stakeholders have a fairly fixed position that the adjudication teams and right creator are two separate institutions that need to be kept separate. The best option therefore appears to be the co-location of land management (right creation) team members and land administration team members during the process of SAR.

Recommendation 47: To address the clear problems with the interface between the right creating institution and the institution creating the legal cadastre, some staff from the right creating institution should be assigned to work with the adjudication team with the authority to resolve common issues that arise in the process of SAR.

11.4.10 Clear process to register condominiums

Issue. The current urban legal cadastre does not include building data, which may complicate the registration and subsequent transactions relating to condominiums. Whilst building footprint information is contained in cadastral base maps and condominium rights are able to be stored against land parcels under LADM, there may be some concern from the legal profession regarding the requirement that mortgages are to be secured against buildings (not land parcels).

In addition, at present Proclamation 370/2003 (regarding condominiums) applies only to Addis Ababa and Dire Dawa. With the rapid expansion of condominium developments there is a need to ensure other cities are covered by Regional Proclamations. Proclamation 370/2003 only covers buildings or developments with 5 or more building units. It is not clear what happens when there is a building with less than 5 building units.

There is hence a need to review the existing Proclamation regarding any potential conflicts with Proclamation 818/2014 and with the proposed implementation of the CRPRS and approach to systematic registration. This should include any potential delays to the process of adjudication that might result from missing site plans or absentee landholders as well as consultation with Banks and

other stakeholders regarding mortgage and transfer procedures. The need to include buildings with less than 5 separately owned units and common elements should also be reviewed. The process of recording common property in the legal cadastre is not clearly specified nor does there seem to be a restriction on the sale or mortgaging of the parcel on which the condominium stands.

Recommendation 48: MoUDH (FURPRIA), together with the Region Administrations, should review Condominium Proclamation 370/2003, the relevant condominium legislation in the Regions and Proclamation 818/2014 to determine if amendments to any of these laws are required.

11.4.11 Possible activities under this component

The following activities could fall under this component:

(a). Project management (including support for project oversight and Managing Contractor)
(b). Improving the policy and legal framework for the legal cadastre
(c). Monitoring and Evaluation (including socio-economic study)

12 NEXT STEPS

The above recommendations list a number of key, strategic actions that need to be undertaken by MoUDH and its agencies. Many of these could be delegated to one or more consultants, for example, as part of the Management Contract TOR. This Issues and Policy Recommendation document has been prepared based on feedback from stakeholders and information gathered in the mission to Ethiopia from 26 September to 7 October 2016 and has been prepared to align with a Project Design document.

Both reports will be reviewed by the World Bank and then sent to GoE for review. The reports will be presented to policy makers in a third mission to Ethiopia planned for January/February 2017.

13 REFERENCES

Abdo, Muradu 2013 **Legislative Protection of Property Rights in Ethiopia: An Overview** Mizan Law Review Vol 7. No. 2 (2013)

Central Statistical Agency of Ethiopia 2007 **Population and Housing Census.** Available at www.csa.gov.et/newcsaweb/images/documents/pdf_files/regional/Oromya1.pdf

DHV Consultants 2006a, **Integrated Urban Lands Information Systems Development Project**, inception report prepared for Ministry of Works and Urban Development, June 2006.

DHV Consultants 2006b, **Integrated Urban Lands Information Systems Development Project**, framework report prepared for Ministry of Works and Urban Development, May 2006

Endo V (2009), Improving **Land Sector Governance in Peru**. Implementation of the Land Governance Assessment Framework. Report prepared for the World Bank, July 2009.

http://siteresources.worldbank.org/INTLGA/Resources/LGAF_Peru_Implementation_English.zip

Federal Democratic Republic of Ethiopia 2015 **Growth and Transformation Plan II** (2015/16 – 2019/20)

Gebeyehu Belay Shibeshi, **Analysis for Public Provision of Land Information: Registering and Cadastre in Ethiopia**, Background Report on the Land Governance Assessment Framework, 2016.

IGN 2015 **Requirements Analysis Document** Technical Supervision for Cadastre and Real Estate Property Registration System

Ministry of Urban Development and Construction (2011), **Urban Land Development and Management Policy Directions and implementation Strategies**, first draft report, March 2011.

Ministry of Urban Development and Construction (2011), **Regional States Land Reform Program Readiness Assessment Report** July 2016 (Amharic only)

Nkurunziza. 2015. **Implementing and Sustaining Land Tenure Regularization in Rwanda.** in T. Hilhorst and F. Meunier (eds.), How Innovations in Land Administration Reform Improve on 'Doing Business' World Bank, Washington DC.

Orgut (2010), **Study on Institutional Structure and Human Resource Development** Needs in the Sector of Land Administration in Ethiopia, final report prepared for Sida, 31 January 2010.

RCMRD (2015) **Assessment and Training on Land and Land Related Fields Project Final Report** December 2015

UN-HABITAT, GLTN (2015): **Costing and Financing of Land Administration Services (CoFLAS) in Developing Countries.** Nairobi. http://gltn.net/index.php/land-tools/gltn-land-tools/costing-and-financing-of-land-administration-services-coflas

World Bank, Government of Ethiopia and Cities Alliance (2015), **Ethiopia Urbanization Review**, report AUS6515, prepared for the Federal Democratic Republic of Ethiopia, June 16 2015.

ANNEX 1: GTP II DETAILS FOR ACTIVITIES RELATED TO THE LEGAL CADASTRE

6. Urban Map Production, Surveying and Land Use Right Registration Program									
6.1 Urban legal cadastre information development project									
No.	**Program /Project/ goal**	**Unit**	**Target**	**Target breakdown**				**Implementer**	
				2015/16	**2016/17**	**2017/18**	**2018/19**	**2019/20**	
6.1.1	Software for urban legal cadastre will be developed	Developed software	1	0.5	0.5				Project employees and managers, cadastral experts and the leadership
6.1.2	Network and data center infrastructure for legal cadastre information system will be developed	Number of towns that will have data center and network	91	23	14	14	20	20	
6.2 Urban map production and surveying capacity building project									
6.2.1	Experts that are able to implement the land development and management program	Number of trainees that participated in middle level training	10104	1500	2151	2151	2151	2151	Project employees and managers, cadastral experts and the leadership
		Number of trainees that participated in short term training	13400	1000	3100	3100	3100	3100	
6.2.2	Professional competence certified for 3000 graduates from higher learning institutions which have approved curricula for training on urban land administration	Number of professionals certified	3000				1000	2000	
6.2.3	Office buildings will be constructed for the federal, 5 regional states and Dire Dawa town administration urban land institutions	Number of constructed office buildings	91	7	7	14			
6.2.4	Supervision and support will be given for 238 towns so that they can produce base map by establishing geodetic control points and aerial photography to be used for establishing the urban cadastre.	Towns with base maps prepared	238	47	47	47	47	50	

6. Urban Map Production, Surveying and Land Use Right Registration Program									
6.2.5	Supervision and support will be given to prepare maps and establish address system in 250 towns	Number of towns with address system and maps	250	23	50	50	52	75	Modern property taxation agency experts and the leadership
6.3 Modern property based taxation system project									
6.3.1	Framework laws 12 in number will be prepared and implemented to modernize property market, property valuation and taxation system	Number of approved framework laws	12	12					Modern property taxation agency experts and the leadership
6.3.2	The income of 91 towns will be improved by implementing modern property based taxation system	Number of towns with property valuation system established and implemented	91	3	20	20	23	25	
6.3.3	Land Price Map will be prepared for 91 towns	Number of towns with land price map prepared	91	3	20	20	23	25	
6.4 Development of Urban Landholding Registration									
6.4.1 Preparation of Legal Frameworks, Standards and Operational Manuals									
6.4.1.1	Prepare, amend and get approval of 4 legal documents (laws) for the implementation of the legal cadastre	Number of Prepared, amended and approved legal documents	4	4					Cadastre Directorate and Property Rights Registration Directorate
6.4.1.2	Prepare and Improve 5 Standards to enable the implementation of the legal cadastre	Number of prepared or amended standard documents	5	2	3				
6.4.1.3	Prepare 8 Operational Manuals for Urban Landholding Rights and Cadastre Registration	Number of Prepared Operational Manuals	8	2	3	3			
6.4.1.4	Provide training to 16,000 implementing staff and agencies (35% or 5,600 women) on the prepared urban land registration laws and standards	Number of trainees	16,000	5,000	4,000	3,000	2,000	2,000	

6. Urban Map Production, Surveying and Land Use Right Registration Program									
6.4.2 Organization of Urban Landholding Registration Institutions									
6.4.2.1	Provide support for the establishment of coherent and uniform Urban Landholding Registration and Information Administration Structures in 91 Regional Cities	Number of Regional Cities which have established coherent and uniform structures	91	23	14	14	20	20	Cadastre Directorate and Property Rights Registration Directorate
6.4.2.2	Establish Uniform working procedures and organizational structures for Urban Landholding Registration in 91 Regional Cities	Number of Regional Cities which have established uniform working procedures and organization structures	91	23	14	14	20	20	Cadastre Directorate and Property Rights Registration Directorate
6.4.3 Implementation of urban Landholding Registration									
6.4.3.1	Successful urban landholding registration at the national level by introducing international best practices	Implemented urban land registration/ number of registered holdings	420,000		150,000	270,000			Property rights registration directorate branches
6.4.3.2	Completing preparatory works for land adjudication in 91 towns	Number of towns completed preparatory works for adjudication	91	23	14	14	20	20	
6.4.3.3	Adjudication of 1,600,000 landholdings in 91 towns	Number of towns implementing adjudication	91	23	14	14	20	20	
		Adjudicated landholdings in number	1,600,000	200,000	320,000	350,000	340,000	390,000	
6.4.3.4	Registration of 1,200,000 landholdings in 91 towns	Number of towns implementing landholding registration	91	23	14	14	20	20	
		Number of landholdings registered	1,200,000	150,000	200,000	250,000	300,000	300,000	
6.4.4 Promote Public Participation for Registering Urban Landholding									
6.4.4.1	Organize Various Platforms to create awareness of 5,000,000 community members for the implementation of the Urban Land Registration Program. (35%,1750000 Women)	Number of Community whose awareness is created	5,000,000	1000,000	1000,000	1000,000	1000,000	1000,000	Directorates Responsible for Public Relations

6. Urban Map Production, Surveying and Land Use Right Registration Program									
6.4.4.2	Evaluate the Organization and Direct Participation of 1,000,000 Rights Holders in 91 Regional Cities during Adjudication of their land rights and provide feedback	Number of Organized Participants	1,000,000	100,000	150,000	200,000	400,000	450,000	
6.5 Development of Urban Cadastre									
6.5.1 Matching/Integrating Urban Landholding Files with Orthophotos									
	Program /Project/ Goal	**Indicator**	**Overall Goal**	**Detailed Goal**					
				2008	**2009**	**20010**	**20011**	**20012**	
6.5.1.1	Establish Landholding Registers in Digital Form in 91 Cities	Number of Cities	91	23	14	14	20	20	Heads and Experts in the Cadastre Sector
6.5.1.2	Undertake Integration/Matching of Urban Landholding Files with Orthophotos in 91 Cities	Number of Cities	91	23	14	14	20	20	
		Number of Holdings	1,600,000	200,000	320,000	350,000	340,000	390,000	
6.5.1.3	Preparation of Maps based on Orthophotos for Adjudication of Landholding Rights in 91 Cities	Number of Cities	91	23	14	14	20	20	
6.5.1.4	Integrate Urban Landholding Files with Cadastre Base Maps and Parcel Identification Numbers in 91 Cities	Number of Cities	91	23	14	14	20	20	
6.5.1.5	Ensure that the integration of Urban Landholding Files with Orthophotoes and Cadastre Base Maps are undertaken in line with the required standard in 91 Cities and provide feedback	Number of Cities	91	23	14	14	20	20	
6.5.2 Preparation of Urban Cadastre Base Maps and Cadastre Index Maps as per Required Standards									
6.5.2.1	Follow-Up and Support the Expansion of Geodetic Control Points in 68 Cities	Number of Cities	68		20	22	26		Heads and Experts in the Cadastre sector
6.5.2.2	Follow-Up the Preparation of standardized Cadastre Base Maps in 68 Cities	Number of Cities	68		20	22	26		
6.5.2.3	Undertake Standardized Landholding Boundary Demarcation in 91 Cities	Number of Cities	91	23	14	14	20	20	
6.5.2.4	Follow-Up and Support the Preparation of Cadastre Index Maps in 91 Cities	Number of Cites	91	23	14	14	20	20	

6. Urban Map Production, Surveying and Land Use Right Registration Program									
6.5.2.5	Undertake Training of 4000 Professionals for the Preparation of Cadastre Surveying and Mapping in 91 Cities	Trained Professionals	4000	400	600	800	1000	1200	
6.6 System Development, Follow-Up and Quality Control									
6.6.1 System Development and Follow-Up Activities									
6.6.1.2	Undertake the Implementation of Urban Cadastre Information System	Number of Cities	91	23	14	14	20	20	Heads and Experts in Systems Development and Cadastre
6.6.13	Evaluate and Provide Feedback on the Effectiveness of Urban Landholding Rights Registration Procedures/Systems in 6 cities with the support of International Experts	Provision of Feedback	6		1	2	3		
6.6.2 Quality Control and Experience Benchmarking Activities									
6.6.2.1	Undertake Quality Control on Working Procedures on Urban Landholding Registration in 44 Cities and Identify Gaps	Number of Cities	44	6	8	9	10	11	Heads and Experts in systems development and Cadastre
6.6.2.2	Undertaking Study for Improving Working Procedures on Urban Landholding Registration in 9 Regions and 2 City Administrations	Number of Regions and City Administrations	4			2		2	Heads and Experts in Systems Development and Cadastre
6.6.2.3	Prepare 2 documents on the full implementation and Experience Benchmarking for Urban Landholding Registration	Number of Documents	2			1		1	Heads and Experts in Systems Development and Cadastre

ANNEX 2: OVERVIEW OF PAST ATTEMPTS AT LAND REGISTRATION AND LIS

It was made clear during the first mission to Ethiopia that the Ministry did not want this consultancy to focus on past failed experiences. However, past efforts provide an important context to the current situation and the efforts to develop a legal cadastre in the urban sector. Hence this section briefly notes the nature of recent efforts to improve urban land records and the key lessons that can be drawn from these efforts. This analysis is drawn from the literature and the information gathered from stakeholder discussions during the mission and the field visits to Addis Ababa, Mekele, Bahir Dar, Adama and Hawassa.

This brief review considers:

1. the GTZ-supported projects in a number of cities including Hawassa, Adama, Bahir Dar and Mekele;
2. the two pilot activities initiated in Addis Ababa (Bole and Nifas Silk-Lafto sub-cities) under a policy paper developed by MoUDH in 2011.

13.1.1 GTZ supported projects

Over the past decade, there have been a number of efforts to improve the urban cadastre. DHV (2006a:37) notes that the development of the cadastres emerged from initiatives in Addis Ababa in the mid-1990s and growing awareness of the importance of better records in the regional cities. Mekele started a parcel based LIS in response to the initiative of one individual, however the development of cadastres started in a serious way in 1998 when GTZ decided to support the Urban Management and Capacity Enhancing Project. At this time cadastral survey projects had commenced in the regional cities of Hawassa, Bahir Dar and Mekele. Whilst the GTZ project supported these projects by providing equipment, training and consultants to implement parcel based information systems, DHV (2006b:6) notes that all "the cadastre projects supported by GTZ in the cities of Adama, Hawassa, Bahir Dar and Mekele failed to fulfil their objectives and remain incomplete to this day." Identified problems included:

- funding constraints;
- lack of assurance of political and management support;
- lack of equipment; difficulty in recruiting and training technical staff; and
- a focus on land use and property condition rather than property rights.

The framework report for the Integrated Urban Land Information System (IULIS) Development Project also noted that the Cities lacked a clear distinction between the land management and land administration functions (DHV, 2006b:5), leading to ineffective systems and poor service delivery. It was noted that 90% of respondents to a questionnaire of customers of the urban planning and land administration departments in Adama, Addis Ababa and Hawassa were highly dissatisfied with the services provided.

Another issue that was highlighted during the first mission undertaken by LEI was that these initial efforts to create urban cadastres were too ambitious in the scope of information that they sought to include. This was reemphasised by the Minister during the in-country visits for this project, who stated that these early systems were attempting to capture and maintain more than 100 different spatial data types. The clear lesson from this experience was the need to prioritize the efforts around core data types, and this has largely been reflected in the design of the 23 cities pilots.

13.1.2 Addis Ababa

The GIS projects supported by GTZ built upon the work undertaken by Addis Ababa in applying GIS technology to land management. The GTZ-supported cadastre projects evolved at a time where the cities and municipalities were left to implement their own systems. In 2011, the then Ministry of Urban Development and Construction (MoUDC) prepared a first draft of a document that set out Urban Land Development and Management Policy Directions and Implementation Strategies (ULDMPDIS – MoUDC, 2011). The key issues that the strategy sought to address (MoUDC, 2011:4-7) were:

a) lack of transparency in the current urban land development and management system and poor service delivery
b) lack of a comprehensive legal framework
c) lack of sufficient data on land and land related real property
d) encroachment on land and expanding informal settlements
e) inability to provide serviced land to meet needs in a timely manner, and
f) inability of the lease negotiation system to meet needs and the lack of transparency in the direct land allocation process resulting in poor governance.

The ULDMPDIS plan was to pilot the initiative in Addis Ababa and to document the lessons from this experience for the Regions and other Cities. Hansa Luftbild was contracted to develop the Real Estate Cadastre System (RECS) and Real Property Registration System (RPRS) System for the Addis Ababa City Administration (collectively called AA-CADIS). Pilot systematic adjudication activity was commenced in Bole and Nifas Silk-Lafto sub-cities in Addis Ababa.

13.1.2.1 Bole Sub-city pilot

A review of the Bole pilot activity was undertaken by the Addis Ababa landholding Registration and Information Agency (LHRIA) in 2013. The pilot methods were initially tested across 50 landholdings, before expanding to a total of 500. Of the initial 50 parcels investigated, 17 did not fulfil the requirements (likely due to missing or incomplete files, though this was not specified) and the remaining 33 parcels were ultimately surveyed and adjudicated. The review documented early lessons as including a significant difference between what existed in the files and the situation in the field. The review also found ground control points were reported as not accurate enough for the surveys, there was a staffing skills-gap and a need to improve public awareness. Several of these challenges remained in the full pilot, despite efforts to capture lessons. Following this initial pilot, the second phase commenced for the remaining 450 parcels. Of these, only 88 were registered with 6 landholders receiving certificates. Ultimately 597 parcels in total were demarcated and surveyed, although it is not clear why this is more than was originally planned for. The review identified the following problems that from the 500 landholdings pilot:

- Insufficient public awareness, including landholders not present during adjudication
- Little training for the staff
- Poor organisation of both staff and files. Additionally, unforeseen construction activity on the pilot site impacted activities.
- Some of the forms and formats developed for the task were not clear
- Lack of enough personnel to copy documents
- Some of the files to be copied were incomplete
- Some of the flat owners in condominium sites did not have site plans

- Deviation in area from what is recorded in files and what is measured
- Weak stakeholder participation

13.1.2.2 Nifas Silk-Lafto Sub-city pilot

A review of the Nifas Silk-Lafto pilot was also undertaken by the Addis Ababa LHRIA in 2013. This pilot was undertaken in woreda 03 and comprised 28 blocks and 519 landholdings. Again, the pilot commenced in an initial sub-set of 50 contiguous landholdings. Prior to commencing the pilot activity, the existing parcel files were sorted and investigations undertaken in the field. Of the 519 landholding planned for the pilots, 469 were verified against the information in the existing parcel files, but 36 files lacked necessary information and for 4 landholdings the parcel maps held by landholders could not be located in the sub-city office. As a result, 40 landholdings had to be registered in the disputed property register as the holding demarcated and surveyed in the field could not be verified with the Right Creator.

During the field activity, the boundaries were demarcated and surveyed for 483 landholdings and a further 38 road parcels were also demarcated and surveyed. During the adjudication it was found that there were discrepancies with 376 landholdings and this information had to be sent to the Right Creator for resolution. This meant that only 107 landholdings were adjudicated. At the time of the review the Grievance Handling Tribunal had not been established so the adjudication results were not posted for public notice. At the time of the review RECS and RPRS had limited functionality, but an attempt was made to register the first 50 landholdings.

The problems identified during the review of the pilot in Nifas Silk-Lafto included:

- Missing property files and lack of necessary information in existing files
- Duplicate but inconsistent parcel maps
- Lack of documentation to support acquisition of the landholding
- Discrepancy in parcel dimensions measured in the field with information in parcel files
- Discrepancy between detail on the photomap and that in the field
- Green areas and roads indicated in the maps not evident in the field.

ANNEX 3: SITE VISITS TO OROMIA, AMHARA, TIGRAY AND SNNPR

13.1.3 Oromia (Adama)

There are 644 urban centres in Oromia, 564 of which have established land institutions for City Administration. The other urban centres are newly established. Urban centres are classified into 4 categories. Leases are in place in 44 urban centres, with the permit system operating in the other urban centres.

The Land Management Agency (LMA) is part of the Industry and Urban Development Bureau. The organization is currently undergoing a reorganization and the BPR is being finalized. Under the old structure the Land Management Agency had about 9,400 positions approved, but only about 35% of the positions were filled.

In 2012/13 a project unit was established to register urban landholdings. This was before Proclamation 818/2014 was in place, but the project is the main initiative to implement the legal cadastre work in the 6 urban centres in Oromia that are included in the 23 urban centres in the plan prepared by MoUDH. Oromia has selected a further 10 urban centres that surround Addis Ababa to be included in the next stage of the project.

Oromia has only started preparatory work such as arranging satellite imagery and ground control points (GCPs). A new agency to register urban landholdings had not been established at the time of the visit but a draft Proclamation had been prepared and it is expected that this will be approved at the next meeting of the legislature. The LMA understands that the institution must be established before the work starts. Some work has commenced on archive management. A contract has been let to manage archive records in Adama and Shashamane and this work was contracted to be completed by the end of June 2016. This work does not involve the scanning of documents in property files. Software has been developed for this activity.

Another activity that LMA saw needed to be undertaken prior to SAR was regularization. This work had started 2-3 years ago but the staff doing this work consider that there are legal gaps. The LMA staff saw that many steps were required before systematic registration could commence. There was limited capacity and the problem had been ignored for a long time. There was high staff turn-over, including staff who held senior positions. There were also problems with the definition of administrative boundaries. Oromia does not have any software for the legal cadastre and is waiting for the CRPRS software that is being developed by INSA.

13.1.3.1 Progress to date in Adama

Adama has a population of about 400,000 and is the second largest city in Ethiopia. The city has 18 kebeles and is one of 6 cities in Oromia that was included in the 23 city program planned by MoUDH.

Adama has about 70,000 formal properties in a Geodatabase GIS and a further 15,000 formal properties that are not in the system. About ten percent of the formal properties are leases. The city was implementing a program of file management and a program of regularization to prepare for the legal cadastre. In the previous 6 months' regularization had focused on about 15,000 informal properties in Adama. These informal settlements were in about half the City kebeles. About half the informal houses comply with the existing plan and can be formalized and about 6,000 permits have been prepared. The local regulations have to be amended to be able to formalize the informal settlements that do not comply with the plan. This amendment will involve amending the plan to

enable formalization. It was hoped that this change in legislation will be made soon and it is hoped that the rest of the properties can be formalized in the next 6 months.

In addition, there was agricultural land in 4 kebeles that needed to be certified. There were about 3,000 farmers who needed to be issued temporary certificates ("green cards'). The farmers in two kebeles had been covered and it was hoped that the rest can be covered in the next year. There are also about 9,000 old possessions in the city that do not have titles and files. These need to be processed before the legal cadastre can begin. However, the target of completing regularization is moving. The Structural Plan for Adama expired last year and a new plan is being prepared. The old plan covered 306.66 km^2 and the new plan will cover at least 380 km^2 so more regularization and compensation will be required.

The city has the cadastral base maps that were flown by INSA in 2012 and has surveyed 159 GCPs at 1 kilometre spacing in preparation for the legal cadastre. The region recently signed a contract for a new building for the institution that will be established to register urban landholdings that should be finished within 2 years.

Adama is one of two cities in Oromia that are being supported in implementing a file management project, rearranging the existing files in the city and kebeles that are stored on an alphabetical basis to a system where the files are stored on a block basis. A contractor was hired about 2 months ago and about 70% of the work was complete. The work was expected to be complete in late July. The contract was for 4 million birr and specifies a 2-month duration.

The inventory was being prepared by overlaying the existing spatial parcel information on the cadastral base maps provided by MoUDH. The contractor then sent staff to the field to go house-by-house to collect information from the landholders. About 80% of the field work was complete in June 2016. The information collected in the field was then matched to the files and at the time of the site visit about 70% of the matching was complete. The region has developed a Geodatabase application to input key data from the files. This software is purely for file management and does not include any ability to update the files to support transactions in the current system. In addition, the region is helping the City pilot the scanning of key documents from the files, including the titles, tax payments, and mortgages. About 1,000 files have been scanned and the results from this pilot will determine whether the rest of the files are scanned. It is estimated that it will take 3-5 months to scan key documents in all existing files. Problems that have arisen during the file management activity include:

- Some files could not be matched
- Some files were at the kebele and had to be transferred to the City
- There were missing files.

The Land Development and Management Department has 90 approved positions but only about 40 positions are filled. There are another 60 or so staff employed in the Kebele offices. The Land Development and Management Department has 4 core process and a support process. The core processes are: land development, settlement and banking (~12 staff at City level); land administration (~11 staff at City level); Integrated Cadastral Information (~13 staff at City level) and legal issues (4 staff at City level). The support process, which supports administration, finance, planning, reform and anti-corruption has 7 staff at City Level.

A key issue faced by the City is that the City has been assigned the same number of staff as other cities in Oromia, despite its size, and the demand for services far outstrips the ability to provide services. The City receives no subsidy and has limited funding from the Region and limited ability to retain revenue collected. The City has to date been able to retain only 25% of the revenue collected.

The Region has recently agreed to lift this to 85%, but this change will only apply from 2017. In Oromia VAT is collected at zonal level and the revenue is passed back to the Region.

The City has funded an additional 98 contract staff from City funds to assist the Department to implement the various activities such as file management, regularization, surveying parcels and helping with routine work. These contract staff were paid salaries which are less than that for permanent employees.

13.1.3.2 Backlogs in the Adama activity

Despite the additional contract staff, there are serious backlogs in the Department. There is a backlog of about 8,000 requests for houses. The applicants have paid for the service and many have been waiting for nearly 8 years for houses. In addition to the problem of a lack of staff there is a lack of budget. The 100m birr necessary to provide the houses has not been made available. There are also limited funds for compensation that this hinders the regularization activities and the supply of houses. There were requests last year from investors for 150 ha of land that the Department has not been able to meet and more land has been requested this year.

The following problems were identified in trying to implement the legal cadastre:

- The lease proclamation should be streamlined as under the current legislation it would take more than 4 years to complete regularization, a necessary precondition for implementing the legal cadastre
- The current legislation and procedures are unclear about how the farmers holding temporary certificates can be covered by the legal cadastre
- There should be instructions on renumbering kebeles to make the implementation of the legal cadastre more logical
- There is a lack of clarity about the objectives of the file management and legal cadastre activities.
- The staff saw that more technical equipment was required to implement the legal cadastre – they only have 2 total stations and more are required.
- The limited capacity of the private sector will hinder any attempt to outsource activities to the private sector.

13.1.4 Southern Nations, Nationalities and Peoples' Region (Hawassa)

SNNPR passed a Proclamation to establish the Urban Landholding Property Right Information Agency in 2013 and has established the agency at Regional, Zonal and City Administration levels. In SNNPR there are 14 zones and 28 Cities, 6 of which have been recently established. The agency has been established in the 22 well-established Cities. At the regional level the agency is established with three core processes (departments: cadastre, mapping and street addresses; land and land registration; and geo-information administration). At the regional level the agency has 46 approved positions, about 20 of which are filled. Staff have also been employed in the 22 well-established Cities.

SNNR has 5 cities included in the proposed 23 city program being implemented by MoUDH. The preconditions for commencing the legal cadastre in the 5 cities is substantially complete and is well underway in the other 17 well-established cities.

The work to date has concentrated on the 5 cities and has involved the training of technical staff and data analysis. The work on improving the file management was undertaken using the existing parcel data in AutoCAD and entering key data from the property files into a SQL Server application that had been developed. All 22 cities had CAD data for properties with annotations for each parcel with the right-holder, right and parcel area. This data was transformed to a Geodatabase format using a spatial join, with the parcels added as a feature code and the annotated information added as attributes. This work was undertaken intensively in Hawassa and in the other 4 cities, but was stopped about 2 years ago due to an instruction from MoUDH who had concerns about how the activity aligned with the work on creating the legal cadastre. The collection of the textual data in the SQL Server application continued and is summarized in the table below. The software is not set up to scan the files, but the title and landholders photo are photographed from the file and the parcel map from the title and the landholder photo are held in the SQL Server application. The review of the existing files established that there is a lack of standards for property files. A specification for a standardized property file has been prepared. A transition plan has also been prepared to transition from the existing Title Management arrangement to the new legal cadastre system. The Title Management institution will continue to exist after the creation of the legal cadastre, with the main role being the creation of rights. Manuals have been prepared for the activities required to create the legal cadastre, including public awareness, systematic registration and registration.

Table 22: Status of file management in the towns. Those highlighted are included in the 23 cities pilot.

City	Files in Office	Properties input into SQL Server application	%
Bonga	5,937	1,410	24%
Terdia	1,859	1,859	100%
Mezan Aman	9,027	2,760	31%
Jink	4,006	2,253	56%
Tep		630	-
Masha	2,500	900	36%
Worbe	7,033	1,251	18%
Sodo	16,976	10,724	63%
Bodit	5,150	475	9%
Areka		430	-
Dila	10,355	8,042	78%
Yerga Chafe	2,145	1,040	48%
Yerga Alem	5,030	1,333	27%
Alet Wondo	4,171	2,107	51%
Wolkite	6,732	5,400	80%
Butakera	6,000	3,758	63%
Hossana	16,817	11.237	67%
Arbaninea	13,128	4,722	36%
Samula	5,323	1,423	27%
Hawassa	23,701	20,094	85%
Durome	4,500	915	20%
Halaba	7,127	3,946	55%
Total	157,517	86,709	55%

The regional staff confirmed that a legal cadastre was the parcel and the right. The region also accepts existing permits, including permits issued under the Imperial regime and there is a policy to convert permits to leases when a transfer is requested. They knew about the Property Tax project being developed by MoUDH with funding from the Bill and Melinda Gates Foundation but this was not on their agenda. The regional government had purchased 2 DGPS systems, each with 4 rovers.

They had also purchased 2 total stations. The region was also densifying the GCPs from the standard 1 kilometre spacing to block level. In discussions with the staff there is a clear focus on surveying by ground survey. In part this is due to concerns about the accuracy and reliability of the vector line maps produced for the cadastral base maps.

SNNPR has printed register books to register the legal cadastre manually. About 9 register books are specified, including books to register rights, disputes, and mortgages/court injunctions. There is also a manual to support the process. These register books are very large and it is not clear that they are in a form that can readily update the register until CRPRS is available. There is a good regional ICT centre in Hawassa and the region plans to have a central database for the region, although the region is waiting for CRPRS. The region agrees with MoUDH that a new network will be required as Woreda-Net is not adequate for the task.

Figure 5 - Register Books in Hawassa

SNNPR had undertaken pilot systematic registration work in the five cities, covering 24 neighbourhoods. This work covered about 4,000 parcels where applications had been obtained but field demarcation and surveying had not started. The information has not been linked to existing files and the results have not been adjudicated and posted.

The key lessons from these pilots included:

- Many property rights have not been created and the system needs to accommodate this
- Absent landholders are a problem
- The size of the parcels as occupied frequently differ from that specified in the right – mostly the land occupied is in excess of the right granted. The system needs to accommodate this.

- There are many parcels that do not have files
- There needs to be a mechanism to share lessons so that the policy/legal framework can be reviewed and procedures amended.
- There needs to be clear specifications and guidelines for the registration of:
    - government houses that have been allocated to individuals,
    - property held by religious institutions and
    - buildings used by multiple government agencies.
- There are problems with the cadastral base maps, both in the accuracy of the line maps produced prior to field work with changes in development since the photography was captured.

Other concerns expressed by staff included:

- There is a lack of clarity in the provisions for registering property – particularly where the right is not recorded or where there is a difference in the occupation and right.
- There is a lack of clarity in the process and procedures to update the legal cadastre.
- There is limited technical capacity, particularly in surveying and this is a major constraint in starting the work.

The major work going forward was the completion of the pilots, the finalization of the precondition tasks, the capturing of the lessons from the pilots and the preparation of a detailed plan to scale up the activity.

13.1.4.1 Progress to date in the Hawassa City Administration

The City of Hawassa has 8 sub-cities and includes about 24,000 properties, which includes 8,442 leases. The City started work implementing Proclamation 818/2014 about 2 years ago, but has only started in earnest this year. The city has undertaken public awareness campaigns, established a ULPRIA agency with 15 staff, 6 of whom are assigned to the current pilot. The BPR with 3 core processes and the Balanced Score Card has been approved.

The City has selected 1 kebele for the pilot which consists of 2 katenas (adjudication sections). Work has started in the first katena, Millennium One which has 996 parcel files. The pilot has started in the first neighbourhood Muluwonge which has 172 parcel files. This area was selected as it was in a well-planned part of the city and was expected to be an easy start for the pilots.

The public awareness campaign for the pilot started about 6 months ago with discussions with people's representatives and the community. Different promotion materials have been used as well as media campaigns. The public awareness has been intensive in the past 2 months. A local office was opened in the sub-city and the work in Muluwonge started 11 days prior to visit to SNNPR with the collection of applications. Under Proclamation 818/2014 the applications can be collected for the first 10 days without any penalty and then for the next 5 days with a penalty. Six staff have been assigned to the pilot, 2 surveyors, 2 IT staff, 1 GIS and 1 administration person.

At the time of the visit, application forms had been collected from the landholders for 132 of the 172 files. Copies of relevant pages from the property files had been provided to the team working on the pilot and this is being matched against the information collected on the application forms. The team was chasing the landholders who have not submitted applications, most of whom were absent landholders. landholders who are abroad must submit a form authorizing someone to represent them

and this form must be certified by the Ministry of Foreign Affairs. Two such forms had been received. The team was chasing the other 38 landholders, mostly through the tenants occupying the properties.

The team was currently checking the information in the applications against the property files before commencing demarcation and surveying in the field. The team had maps produced from the City GIS for planning purposes and was using the SQL Server application to search the property file information. For one application the team has not been able to get a copy of the property file. This was being chased in the City Administration. The next steps were the field demarcation and surveying, adjudication and posting.

The 6 staff have been able as a team to gather 13 applications per day, and plan to increase this to 15 applications per day. Once the work is scaled up there was the expectation that the 6 staff could collect 15-17 applications per day.

The City planned to continue the pilot activity in a further 4 neighbourhoods to complete the work in Millinium One Ketena which was expected to have 996 properties.

13.1.4.2 Lessons to date from the Hawassa pilot

Although the pilot was only part complete, the following lessons were drawn from the work:

- The public awareness campaign is very important and more effort is required on raising public awareness. Possible suggestions included involving elder groups in the activity.
- Most people have been able to bring documents from their homes. However, those who had mortgaged their properties could not submit their documents and there was difficulty in getting the bank to provide a letter documenting the holding. More public awareness with the banks was required.
- The SQL Server database with the property information was very useful (but the teams had yet to go to the field to demarcate and survey the parcels).

The City Administration was very supportive of the activity and had adopted a policy that where a landholder had a valid title but occupied a larger area than set out in the right in the property file the right would be amended to accord with the land that was occupied. The region had considered options to outsource some of the work, but decided against this. The City accepts this decision and will assign the necessary staff but has the ability to hire contract staff.

Once the pilot is complete the agency will prepare a detailed plan and submit it to the City Administration for funding support. The General Manager of Municipal Services indicated that the City supported the activity and would provide funding.

The Master Structural Plan for Hawassa expires at the end of 2017. The City is starting the preparation of the new structural plan. An office has been established, staff contracted and IT, base mapping and HRSI was being procured. The current structural plan covers 157.2 km^2 and it is expected that the new structural plan will cover about 340 km^2. The previous structural plan also had a significant expansion, but this expansion was mainly over government owned land. The new structural plan will be over agricultural land held by farmers and compensation will be required. Local Development Plans and Neighbourhood Development Plans will be prepared with the Structural Plan and these will guide the process of changing land use and issues such as compensation for rural landholders and for existing landholders who will lose land due to changed land use and land acquisition for purposes such as the widening of carriageways.

The City Land Management Department noted the benefits that had arisen from the SQL Server of existing property information. This software was being used to record transactions. There was a GIS of all properties in the City that had been generated in Geodatabase from the previous AutoCAD files. This information was being maintained.

13.1.5 Tigray (Mekele)

Tigray has a proclamation in place for the new agency to implement the SAR (legal cadastre) project. This proclamation was passed in 2012 and the institution was established in 2013. The cadastral project has 3 departments, a systems development department with 7 staff, a capacity building department with 6 staff and a cadastral survey department with 7 approved positions with 3 positions filled.

The Land Development and Administration Department which administers the 16 use cases has 16 staff. Tigray has 101 urban centres (urban settlements with a population of more than 2,000). There are 62 towns that have a leasehold system and the rest have permit systems.

Tigray has 4 urban centres in the program of 23 urban centres that is planned by MoUDH. The Urban Development Bureau has been concentrating on these 4 urban centres plus another 8 urban centres. The Bureau has been working on the preconditions for the implementation of the legal cadastre work and has substantially completed the preconditions for the 4 cities.

The work improving the file management was undertaken using the 1/2,000 scale cadastral base maps provided by MoUDH for the 4 towns and HRSI for the other 8 towns. The base mapping was used to layout the blocks and identify existing properties. Staff were then sent to the field to collect information from the landholders. This information was checked against the files in the Title Administration offices. The data is maintained in a spreadsheet which is linked to the base map in ArcGIS. The status in June 2016 of the file management for the 12 towns is summarized in the table below.

Table 23: File management status in the 12 towns. Towns highlighted are those included in the 23 cities pilot.

Urban Centre	Files in Office	Properties identified in field	Files organised by block	%
Humera	6,700	6,700	6,700	100%
Korem	4,800	4,800	4,800	100%
Abiy Addi	5,629	5,430	5,430	96%
Shire	13,333	11,530	11,530	86%
Mekele	70,538	64,493	60,394	86%
Axum	13,000	10,000	10,000	77%
Adwa	11,000	6,047	6.047	55%
Shiraro	4,795	4,795	1,467	31%
Alamata	9,100	4,550	2,400	25%
Wik'ro	8,047	8,047	2,064	26%
Adigrat	14,280	8,000	11,561	81%
Maychew	5,675	5,139	0	0%
Total	157,797	139,591 (89%)	104,785 (67%)	

Tigray Region plans to start pilot work in 2 neighbourhoods (about 400 parcels) in Mekele in the next month. The work will be undertaken by the Region. The standards and the manual provided by MoUDH was being translated into Tigrinya language. The region was planning on sending staff to the field, although there was no documented plan for this. The staff in the region were planning to survey by ground survey.

The main concerns expressed by the staff was the delay in the ICT application. The staff said that MoUDH had advised that the work could start with manual processes to manage the new system. There was also an issue with some of the cadastral base maps being based on photography that was older than 5 years. The cadastral base maps also do not cover the full areas of key cities including Mekele.

13.1.5.1 Progress to date in Mekele City Administration

The Urban development Office is one of 15-16 sectors that report to the City Administration. The Urban Development Office includes the: Land Development and Administration; Planning; Social services; local economic development; the tax project. There are 7 sub-cities and 33 kebeles in Mekele. There are about 151 staff in the Land Development and Administration unit in the City and Sub-Cities.

There are 421 neighbourhoods, 5,056 blocks and 70,709 parcels in the city. The parcels are about 50/50 leases/permits with the new sub-cities having the most leases and most property in the old city being held by permits.

The City has a requirement that permits are changed to leases when property is transferred. The lease price is based on city land grading maps and there is no requirement for the new leaseholders to pay the 20% down-payment, they just have to make the equal lease payments over the term of the lease (30 years commercial, 50 years residential, 80 years social, 15 years agriculture, 80 years industry).

The city recognizes existing permits that have been issued in the past, including permits issued under the Imperial regime. The city prepares local development plans as a means of regularizing informal tenure and bringing agriculture landholders into the city as defined by the master plans which are prepared every 10 years. About 23 local development plans have been prepared under the current masterplan which is about to be replaced. The local development plans have formalized almost all informal settlers, especially in the inner city. The plans have also been used to issue agricultural landholders with residential parcels up to 500 m^2. In peri-urban areas some farmers are issued with temporary certificates. The legal basis for the formalization is Proclamation 455/2005 and the manual is 01/2008. The new structure master plan has been prepared and needs council approval. This master plan increases the area of Mekele from 192 km^2 to about 350 km^2.

13.1.6 Amhara (Bahir Dar)

Amhara passed Regulation no. 136/2015 to establish the Urban Landholding Registration and Information Agency in 2015 and regulation no. 137/2015 to establish offices at City Administration levels. In Amhara there 461 town centres organized in six levels of Cities.

1. Metropolitans- 3 (Bahir Dar, Dessie and Gondar)
2. Medium town administrations - 11 in number
3. Small town administrations - 26 in number
4. Municipal town administrations - all woreda towns
5. Sub municipal town administration and
6. Emerging towns

The implementation of Proclamation 818/2014 has started only in14 towns. There is a plan to increase the number of towns to 20.

The agency has been established in the 40 well-established Cities. At the regional level the agency is established with five core processes (departments: cadastre surveying and mapping; landholding registration; base map preparation; land valuation; and geo-information administration). At the regional level the agency has 48 approved positions, about 9 of which are filled. The approved positions for the 40 town administration offices are between 55 and 65 depending of their level.

Amhara has 6 cities included in the proposed 23 city program being implemented by MoUDH and has substantially completed the preconditions for the 6 cities and has started work on the preconditions for a further 8 cities.

The work to date has concentrated on the 14 cities and has involved the training of technical staff and data analysis. The work on improving the file management was undertaken using the method developed in Bahir Dar town as a model. Contractors have been employed to reorganize files, identify mismatching files, assign temporary UPIDs, and scan necessary documents. All 40 cities had CAD data for properties with annotations for each parcel with the right-holder, right and parcel area. The implementation of the legal cadastre is at a preparatory stage. One sub-city in each town administration has been selected as a pilot. The plan is to roll-out after learning from these pilots.

ANNEX 4: ORGANISATIONAL STRUCTURES FOR MOUDH, REGIONAL ADMINISTRATIONS AND CITIES

The following are some of the organisational structures obtained for the MoUDH, Regional and Cities. Given the current state of transition, these may need to be reviewed and updated for proposed organisational structures under the BPR. It should be noted that the organizational structures will vary slightly between regions, as will staffing numbers, although rights-creation and registration functions will remain separated. The same will occur at city-level.

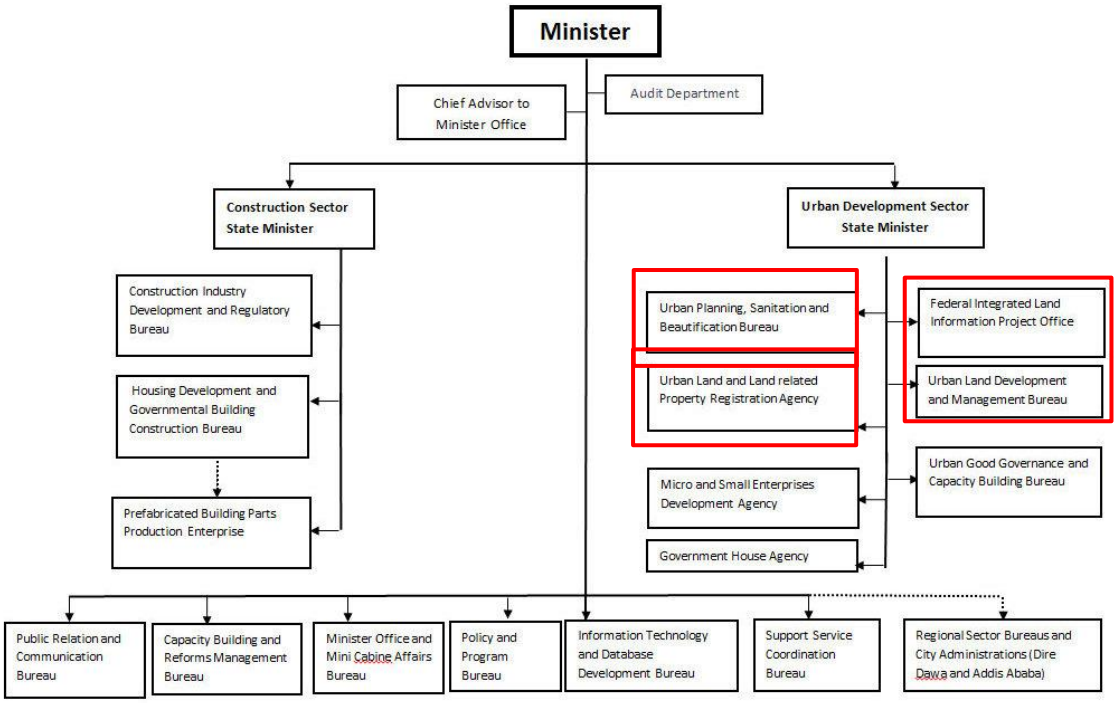


Figure 6: Organisational structure for the MoUDH with key agencies shown in red. The structure may be slightly outdated, or there may be slight variations in translation.

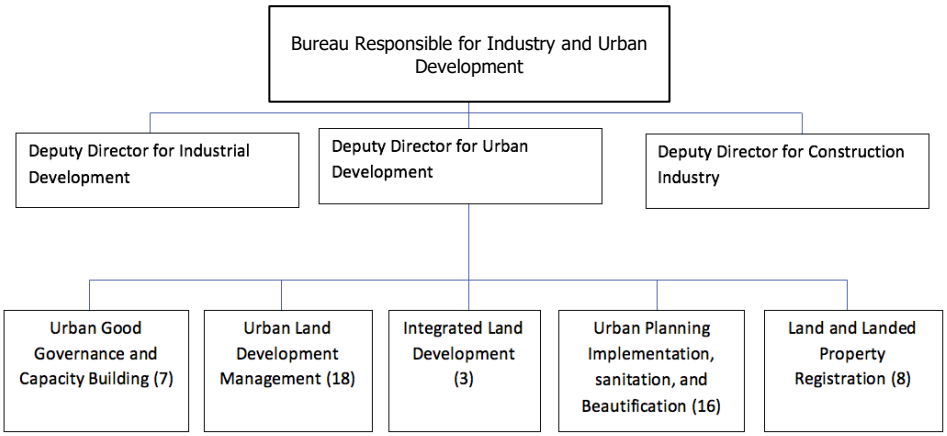


Figure 7: Organisational structure for the Bureau of Industry and Urban Development, Amhara where the Urban Land Development Management agency is the rights creation agency, whilst the Land and Landed Property Registration agency is the registration agency. The BPR for the new institution in Amhara defined five departments (cadastral surveying and mapping; landholding registration; base map preparation; land valuation; and geo-information administration) with 48 approved positions, with only 8 filled. The number of departments in Amhara is more than in other Regions. In Tigray there are three departments.

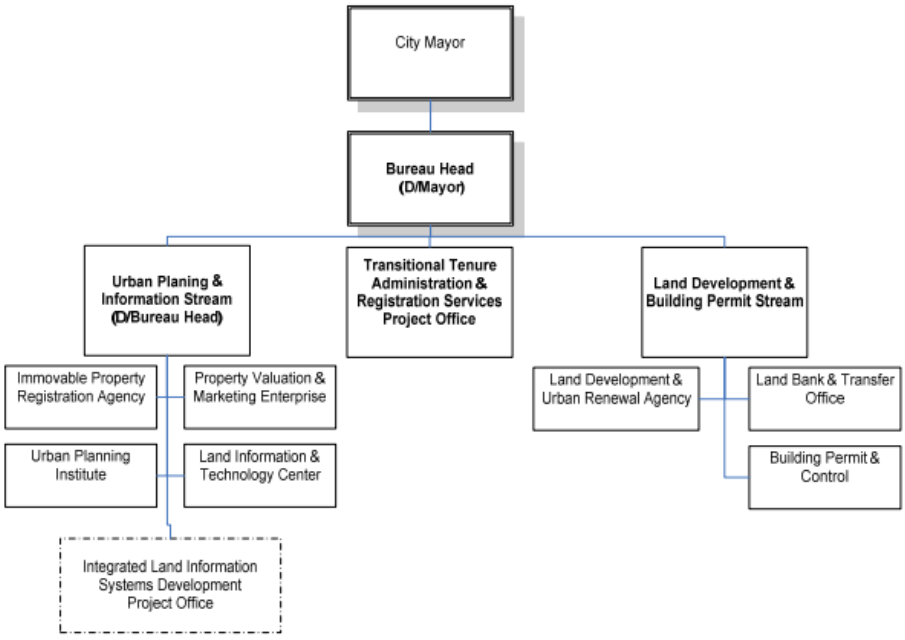


Figure 8: Organisational structure for Addis Ababa City Administration

ANNEX 5: ESTIMATED NUMBER OF PROPERTIES IN ADDIS ABABA AND THE 23 CITIES BASED ON 2007 CENSUS

These tables have been prepared based on data from the Central Statistical Agency of Ethiopia 2007 Population and Housing Census.[7] The 2016 estimates for the number of households in based on the 2007 census numbers with an annual growth rate of 4.5%. The figures below only set out housing units and exclude commercial and public sector properties. The estimated staffing requirements for offices is based on the office typology set out in Section 7.8.

[7] www.csa.gov.et/newcsaweb/images/documents/pdf_files/regional

Table 24 - Estimated Properties in the Sub-Cities in Addis Ababa

No	Sub-City	Area of Sub-City (sq.km)	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)				Office Space (sq. m)		
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total	Required	Existing	Shortfall
	KOLFE KERANIYO SUB CITY		93,334	138,703	1	20	10	10	40	5	5	5	15	520		520
	YEKA SUB CITY		87,346	129,804	1	20	10	10	40	5	5	5	15	520		520
	NEFAS SILK-LAFTO SUB CITY		75,079	111,575	1	20	10	10	40	5	5	5	15	520		520
	BOLE SUB CITY		76,298	113,386	1	20	10	10	40	5	5	5	15	520		520
	GULELE SUB CITY		57,839	85,954	1	20	10	10	40	5	5	5	15	270		270
	ADDIS KETEMA SUB CITY		49,040	72,878	1	20	10	10	40	5	5	5	15	270		270
	KIRKOS SUB CITY		52,582	78,142	1	20	10	10	40	5	5	5	15	270		270
	ARADA SUB CITY		47,365	70,389	1	20	10	10	40	5	5	5	15	270		270
	LIDETA SUB CITY		44,351	65,910	1	20	10	10	40	5	5	5	15	270		270
	AKAKI KALITI SUB CITY		45,750	67,989	1	20	10	10	40	5	5	5	15	270		270
	TOTAL		628,984	934,730		200	100	100	400	50	50	50	150	3700		3700

No	Urban Centres	Region	Area of City (sq.km)	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)				Office Space (sq. m)		
							Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total	Required	Existing	Shortfall
1	Debremarkos	Amhara		18,479	27,462	2	10	5	5	20	5	3	3	11	270		270
2	Bahir Dar			51,744	76,897	1	20	10	10	40	10	5	5	20	520		520
3	Gondar			50,818	75,520	1	20	10	10	40	10	5	5	20	520		520
4	Dessie			29,152	43,323	2	10	5	5	20	5	3	3	11	270		270
5	Kombolcha			15,262	22,681	2	10	5	5	20	5	3	3	11	270		270
6	Debrebirhan			19,463	28,924	2	10	5	5	20	5	3	3	11	270		270
7	Bishoftu	Oromia		26,806	39,836	2	10	5	5	20	5	3	3	11	270		270
8	Adama			59,431	88,320	1	20	10	10	40	10	5	5	20	520		520
9	Assela			19,480	28,949	2	10	5	5	20	5	3	3	11	270		270
10	Jimma			30,016	44,607	2	10	5	5	20	5	3	3	11	270		270
11	Nekemit			19,398	28,827	2	10	5	5	20	5	3	3	11	270		270
12	Shashemane			22,686	33,714	2	10	5	5	20	5	3	3	11	270		270
13	Hawassa	SNNP		39,057	58,042	2	10	5	5	20	5	3	3	11	270		270
14	Dilla			12,316	18,303	2	10	5	5	20	5	3	3	11	270		270
15	Welayetasodo			17,072	25,371	2	10	5	5	20	5	3	3	11	270		270
16	Arbaminch			18,073	26,858	2	10	5	5	20	5	3	3	11	270		270
17	Hosaena			16,082	23,899	2	10	5	5	20	5	3	3	11	270		270
18	Mekele	Tigray		54,709	81,303	1	20	10	10	40	10	5	5	20	520		520
19	Axum			12,838	19,078	2	10	5	5	20	5	3	3	11	270		270
20	Adigrat			15,972	23,736	2	10	5	5	20	5	3	3	11	270		270
21	Shire			13,551	20,138	2	10	5	5	20	5	3	3	11	270		270

No	Urban Centres	Region	Area of City (sq.km)	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)				Office Space (sq. m)		
							Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total	Required	Existing	Shortfall
22	Harrar	Hareri		27,414	40,740	2	10	5	5	20	5	3	3	11	270		270
23	Dire Dawa	Dire Dawa City Administration		51,594	76,674	1	20	10	10	40	10	5	5	20	520		520
			-	641,413	953,201		280	140	140	560	140	79	79	298	7,460	-	7,460

ANNEX 6: ESTIMATED NUMBER OF PROPERTIES PER URBAN CENTRE BASED ON 2007 CENSUS (excl. Addis Ababa and 23 Cities)

This table has been prepared based on data from the Central Statistical Agency of Ethiopia 2007 Population and Housing Census.[8] The 2016 estimates for the number of households in based on the 2007 census numbers with an annual growth rate of 4.5%. The figures below only set out housing units and exclude commercial and public sector properties. At this stage it is proposed that no office be established in urban centres that are projected to have less than 4,500 properties in 2016. This means at this stage that the legal cadastre will cover 200 cities. The estimated staffing requirements for offices is based on the office typology set out in Section 7.8.

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
24	JIJIGA WEREDA-URBAN	SO	23,265	34,574	3	5	4	4	13	3	2	2	7
25	DEBRE TABOR/TOWN/WEREDA-URBAN	AM	13,531	20,108	3	5	4	4	13	3	2	2	7
26	ZIWAY/BATU/TOWN/WEREDA-URBAN	OR	12,876	19,135	3	5	4	4	13	3	2	2	7
27	AMBO/TOWN/WEREDA-URBAN	OR	12,770	18,977	3	5	4	4	13	3	2	2	7
28	ROBE/TOWN/WEREDA-URBAN	OR	12,654	18,805	3	5	4	4	13	3	2	2	7
29	WOLDIYA/TOWN/WEREDA-URBAN	AM	12,451	18,503	3	5	4	4	13	3	2	2	7
30	ADWA/TOWN/WEREDA-URBAN	TI	12,114	18,003	3	5	4	4	13	3	2	2	7

[8] www.csa.gov.et/newcsaweb/images/documents/pdf_files/regional

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
31	ARSI NEGELE WEREDA-URBAN	OR	11,596	17,233	3	5	4	4	13	3	2	2	7
32	SEBETA/TOWN/WEREDA-URBAN	OR	11,554	17,170	3	5	4	4	13	3	2	2	7
33	BURAYU SPECIAL WEREDA-URBAN	OR	11,377	16,907	3	5	4	4	13	3	2	2	7
34	HARO MAYA WEREDA-URBAN	OR	11,233	16,693	3	5	4	4	13	3	2	2	7
35	LOME WEREDA-URBAN	OR	10,972	16,305	3	5	4	4	13	3	2	2	7
36	WOLISO/TOWN/WEREDA-URBAN	OR	9,641	14,327	3	5	4	4	13	3	2	2	7
37	GAMBELLA/TOWN/WEREDA-URBAN	GA	9,595	14,259	3	5	4	4	13	3	2	2	7
38	DUGDA WEREDA-URBAN	OR	9,298	13,818	3	5	4	4	13	3	2	2	7
39	DUBTI WEREDA-URBAN	AF	9112	13,541	3	5	4	4	13	3	2	2	7
40	KOBO WEREDA-URBAN	AM	9,092	13,512	3	5	4	4	13	3	2	2	7
41	GOBA/TOWN/WEREDA-URBAN	OR	9,068	13,476	3	5	4	4	13	3	2	2	7
42	HULET EJ ENESE WEREDA-URBAN	AM	9,064	13,470	3	5	4	4	13	3	2	2	7
43	WUKRO/TOWN/WEREDA-URBAN	TI	8,993	13,364	3	5	4	4	13	3	2	2	7
44	CHIRO/TOWN/WEREDA-URBAN	OR	8,954	13,306	3	5	4	4	13	3	2	2	7
45	ODO SHAKISO WEREDA-URBAN	OR	8,908	13,238	3	5	4	4	13	3	2	2	7
46	ALAMATA/TOWN/WEREDA-URBAN	TI	8,848	13,149	3	5	4	4	13	3	2	2	7
47	MIZAN AMAN/TOWN/WEREDA-URBAN	SN	8,761	13,020	3	5	4	4	13	3	2	2	7
48	METEMA WEREDA-URBAN	AM	8,737	12,984	3	5	4	4	13	3	2	2	7
49	BUTAJIRA/TOWN/WEREDA-URBAN	SN	8,566	12,730	3	5	4	4	13	3	2	2	7
50	NEGELE/TOWN/WEREDA-URBAN	OR	8,316	12,358	4	1	2	2	5	1	1	1	3

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
51	DANGILA WEREDA-URBAN	AM	8,141	12,098	4	1	2	2	5	1	1	1	3
52	DODOLA WEREDA-URBAN	OR	8,128	12,079	4	1	2	2	5	1	1	1	3
53	BURE WEREDA-URBAN	AM	7,837	11,647	4	1	2	2	5	1	1	1	3
54	GUANGUA WEREDA-URBAN	AM	7,819	11,620	4	1	2	2	5	1	1	1	3
55	DEBUB ARI WEREDA-URBAN	SN	7,797	11,587	4	1	2	2	5	1	1	1	3
56	FINOTE SELAM/TOWN/WEREDA-URBAN	AM	7,745	11,510	4	1	2	2	5	1	1	1	3
57	METU/TOWN/WEREDA-URBAN	OR	7,660	11,383	4	1	2	2	5	1	1	1	3
58	KAFTA HUMERA WEREDA-URBAN	TI	7,527	11,186	4	1	2	2	5	1	1	1	3
59	FICHE/TOWN/WEREDA-URBAN	OR	7,497	11,141	4	1	2	2	5	1	1	1	3
60	BULE HORA WEREDA-URBAN	OR	7,436	11,051	4	1	2	2	5	1	1	1	3
61	AMIBARA WEREDA-URBAN	AF	7338	10,905	4	1	2	2	5	1	1	1	3
62	ASOSSA WEREDA-URBAN	BG	7,285	10,826	4	1	2	2	5	1	1	1	3
63	BOSET WEREDA-URBAN	OR	7,245	10,767	4	1	2	2	5	1	1	1	3
64	YEKI WEREDA-URBAN	SN	7,184	10,676	4	1	2	2	5	1	1	1	3
65	MAYCHEW/TOWN/WEREDA-URBAN	TI	7,101	10,553	4	1	2	2	5	1	1	1	3
66	WELKITE/TOWN/WEREDA-URBAN	SN	7,040	10,462	4	1	2	2	5	1	1	1	3
67	GIMBI/TOWN/WEREDA-URBAN	OR	6,914	10,275	4	1	2	2	5	1	1	1	3
68	LIMUNA BILBILO WEREDA-URBAN	OR	6,897	10,250	4	1	2	2	5	1	1	1	3
69	DALE WEREDA-URBAN	SN	6,873	10,214	4	1	2	2	5	1	1	1	3
70	CHILGA WEREDA-URBAN	AM	6,822	10,138	4	1	2	2	5	1	1	1	3

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
71	HOLETA/TOWN/WEREDA-URBAN	OR	6,714	9,978	4	1	2	2	5	1	1	1	3
72	DENBI DOLLO/TOWN/WEREDA-URBAN	OR	6,693	9,946	4	1	2	2	5	1	1	1	3
73	ADAMA WEREDA-URBAN	OR	6,663	9,902	4	1	2	2	5	1	1	1	3
74	FOGERA WEREDA-URBAN	AM	6,658	9,894	4	1	2	2	5	1	1	1	3
75	DEMBIA WEREDA-URBAN	AM	6,609	9,822	4	1	2	2	5	1	1	1	3
76	AHIFEROM WEREDA-URBAN	TI	6,604	9,814	4	1	2	2	5	1	1	1	3
77	BOLOSO SORE WEREDA-URBAN	SN	6,455	9,593	4	1	2	2	5	1	1	1	3
78	BANJA SHEKUDAD WEREDA-URBAN	AM	6,437	9,566	4	1	2	2	5	1	1	1	3
79	MECHA WEREDA-URBAN	AM	6,405	9,518	4	1	2	2	5	1	1	1	3
80	GIDA KIREMU WEREDA-URBAN	OR	6,213	9,233	4	1	2	2	5	1	1	1	3
81	DENDI WEREDA-URBAN	OR	6,203	9,218	4	1	2	2	5	1	1	1	3
82	ALABA WEREDA-URBAN	SN	6,095	9,058	4	1	2	2	5	1	1	1	3
83	GODE WEREDA-URBAN	SO	6,072	9,024	4	1	2	2	5	1	1	1	3
84	HUMERA/TOWN/WEREDA-URBAN	TI	5,971	8,873	4	1	2	2	5	1	1	1	3
85	LAY GAYINT WEREDA-URBAN	AM	5,966	8,866	4	1	2	2	5	1	1	1	3
86	SEKOTA/TOWN/WEREDA-URBAN	AM	5,941	8,829	4	1	2	2	5	1	1	1	3
87	LIBOKEMKEM WEREDA-URBAN	AM	5,932	8,816	4	1	2	2	5	1	1	1	3
88	AGARO/TOWN/WEREDA-URBAN	OR	5,919	8,796	4	1	2	2	5	1	1	1	3
89	ENEMAY WEREDA-URBAN	AM	5,861	8,710	4	1	2	2	5	1	1	1	3
90	HABRU WEREDA-URBAN	AM	5,825	8,657	4	1	2	2	5	1	1	1	3

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
91	DOLO ODO WEREDA-URBAN	SO	5,811	8,636	4	1	2	2	5	1	1	1	3
92	MIESO WEREDA-URBAN	OR	5,807	8,630	4	1	2	2	5	1	1	1	3
93	HABRO WEREDA-URBAN	OR	5,793	8,609	4	1	2	2	5	1	1	1	3
94	YILMA NA DENSA WEREDA-URBAN	AM	5,715	8,493	4	1	2	2	5	1	1	1	3
95	ROBE WEREDA-URBAN	OR	5,664	8,417	4	1	2	2	5	1	1	1	3
96	BAKO TIBE WEREDA-URBAN	OR	5,661	8,413	4	1	2	2	5	1	1	1	3
97	KEWET WEREDA-URBAN	AM	5,593	8,312	4	1	2	2	5	1	1	1	3
98	ADOLA/TOWN/WEREDA-URBAN	OR	5,545	8,240	4	1	2	2	5	1	1	1	3
99	SAWULA/TOWN/WEREDA-URBAN	SN	5,534	8,224	4	1	2	2	5	1	1	1	3
100	AWUBERE WEREDA-URBAN	SO	5,497	8,169	4	1	2	2	5	1	1	1	3
101	DEBARK WEREDA-URBAN	AM	5,492	8,162	4	1	2	2	5	1	1	1	3
102	DEMBECHA WEREDA-URBAN	AM	5,441	8,086	4	1	2	2	5	1	1	1	3
103	CHELIYA WEREDA-URBAN	OR	5,413	8,044	4	1	2	2	5	1	1	1	3
104	GINIR WEREDA-URBAN	OR	5,392	8,013	4	1	2	2	5	1	1	1	3
105	BONGA/TOWN/WEREDA-URBAN	SN	5,355	7,958	4	1	2	2	5	1	1	1	3
106	SAESI TSADAMBA WEREDA-URBAN	TI	5,212	7,746	4	1	2	2	5	1	1	1	3
107	ADAMI TULU JIDO KOMBOLCHA WEREDA-URBAN	OR	5,209	7,741	4	1	2	2	5	1	1	1	3
108	KUYU WEREDA-URBAN	OR	5,190	7,713	4	1	2	2	5	1	1	1	3
109	DAMOT GALE WEREDA-URBAN	SN	5,189	7,711	4	1	2	2	5	1	1	1	3
110	WEGERA WEREDA-URBAN	AM	5,136	7,633	4	1	2	2	5	1	1	1	3

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
111	FENTALE WEREDA-URBAN	OR	5,119	7,607	4	1	2	2	5	1	1	1	3
112	GONDAR ZURIYA WEREDA-URBAN	AM	5,087	7,560	4	1	2	2	5	1	1	1	3
113	GEDEB ASASA WEREDA-URBAN	OR	5,072	7,537	4	1	2	2	5	1	1	1	3
114	DEDER WEREDA-URBAN	OR	5,053	7,509	4	1	2	2	5	1	1	1	3
115	BEDELE/TOWN/WEREDA-URBAN	OR	4,963	7,375	5	1	1	1	3		1	1	2
116	KEMISE/TOWN/-WEREDA-URBAN	AM	4,950	7,356	5	1	1	1	3		1	1	2
117	KALU WEREDA-URBAN	AM	4,947	7,352	5	1	1	1	3		1	1	2
118	AWASH FENTALE WEREDA-URBAN	AF	4931	7,328	5	1	1	1	3		1	1	2
119	SHIRARO/TOWN/WEREDA-URBAN	TI	4,904	7,288	5	1	1	1	3		1	1	2
120	SEMEN ACHEFER WEREDA-URBAN	AM	4,873	7,242	5	1	1	1	3		1	1	2
121	NEJO WEREDA-URBAN	OR	4,837	7,188	5	1	1	1	3		1	1	2
122	DODOTA WEREDA-URBAN	OR	4,836	7,187	5	1	1	1	3		1	1	2
123	BEDESA/TOWN/WEREDA-URBAN	OR	4,833	7,182	5	1	1	1	3		1	1	2
124	LASTA WEREDA-URBAN	AM	4,760	7,074	5	1	1	1	3		1	1	2
125	KOREM/TOWN/WEREDA-URBAN	TI	4,732	7,032	5	1	1	1	3		1	1	2
126	DURAME/TOWN/WEREDA-URBAN	SN	4,716	7,008	5	1	1	1	3		1	1	2
127	ABI ADI/TOWN/WEREDA-URBAN	TI	4,684	6,961	5	1	1	1	3		1	1	2
128	HITOSA WEREDA-URBAN	OR	4,611	6,852	5	1	1	1	3		1	1	2
129	WERE LEHE WEREDA-URBAN	TI	4,605	6,843	5	1	1	1	3		1	1	2
130	EFRATA GIDIM WEREDA-URBAN	AM	4,574	6,797	5	1	1	1	3		1	1	2

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
131	DABAT WEREDA-URBAN	AM	4,552	6,765	5	1	1	1	3		1	1	2
132	ANKASHA GUAGUSA WEREDA-URBAN	AM	4,505	6,695	5	1	1	1	3		1	1	2
133	ALETA WENDO WEREDA-URBAN	SN	4,486	6,667	5	1	1	1	3		1	1	2
134	DERA WEREDA-URBAN	AM	4,464	6,634	5	1	1	1	3		1	1	2
135	RAYA AZEBO WEREDA-URBAN	TI	4,443	6,603	5	1	1	1	3		1	1	2
136	LUDE HITOSA WEREDA-URBAN	OR	4,434	6,589	5	1	1	1	3		1	1	2
137	TEHULEDERE WEREDA-URBAN	AM	4,370	6,494	5	1	1	1	3		1	1	2
138	MERAB ARMACHOHO WEREDA-URBAN	AM	4,333	6,439	5	1	1	1	3		1	1	2
139	BABILE WEREDA-URBAN	OR	4,303	6,395	5	1	1	1	3		1	1	2
140	ADA BERGA WEREDA-URBAN	OR	4,280	6,360	5	1	1	1	3		1	1	2
141	MINJAR SHENKORA WEREDA-URBAN	AM	4,270	6,346	5	1	1	1	3		1	1	2
142	BATI WEREDA-URBAN	AM	4,255	6,323	5	1	1	1	3		1	1	2
143	ASAYITA WEREDA-URBAN	AF	4250	6,316	5	1	1	1	3		1	1	2
144	YABELO WEREDA-URBAN	OR	4,209	6,255	5	1	1	1	3		1	1	2
145	MERTI WEREDA-URBAN	OR	4,190	6,227	5	1	1	1	3		1	1	2
146	DEGEHABUR WEREDA-URBAN	SO	4,182	6,215	5	1	1	1	3		1	1	2
147	DARO LEBU WEREDA-URBAN	OR	4,167	6,193	5	1	1	1	3		1	1	2
148	WENDO GENET WEREDA-URBAN	SN	4,142	6,155	5	1	1	1	3		1	1	2
149	KEBRI BEYAH WEREDA-URBAN	SO	4,128	6,135	5	1	1	1	3		1	1	2
150	LAY ARMACHOHO WEREDA-URBAN	AM	4,050	6,019	5	1	1	1	3		1	1	2

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
151	ENARJ ENAWGA WEREDA-URBAN	AM	4,025	5,982	5	1	1	1	3		1	1	2
152	MUNESA WEREDA-URBAN	OR	4,012	5,962	5	1	1	1	3		1	1	2
153	SULULTA WEREDA-URBAN	OR	4,009	5,958	5	1	1	1	3		1	1	2
154	DIGLUNA TIJO WEREDA-URBAN	OR	4,004	5,950	5	1	1	1	3		1	1	2
155	TOKE KUTAYU WEREDA-URBAN	OR	3,990	5,930	5	1	1	1	3		1	1	2
156	MERHABETE WEREDA-URBAN	AM	3,943	5,860	5	1	1	1	3		1	1	2
157	SILTI WEREDA-URBAN	SN	3,942	5,858	5	1	1	1	3		1	1	2
158	LIMU KOSA WEREDA-URBAN	OR	3,874	5,757	5	1	1	1	3		1	1	2
159	KEBRIDEHAR WEREDA-URBAN	SO	3,862	5,739	5	1	1	1	3		1	1	2
160	HADERO TUNITO WEREDA-URBAN	SN	3,831	5,693	5	1	1	1	3		1	1	2
161	SODO WEREDA-URBAN	SN	3,796	5,641	5	1	1	1	3		1	1	2
162	META WEREDA-URBAN	OR	3,788	5,629	5	1	1	1	3		1	1	2
163	ANTSOKIYA GEMZA WEREDA-URBAN	AM	3,741	5,559	5	1	1	1	3		1	1	2
164	MENZ GERA MIDIR WEREDA-URBAN	AM	3,741	5,559	5	1	1	1	3		1	1	2
165	MISRAK ESTE WEREDA-URBAN	AM	3,740	5,558	5	1	1	1	3		1	1	2
166	KOFELE WEREDA-URBAN	OR	3,715	5,521	5	1	1	1	3		1	1	2
167	BECHO WEREDA-URBAN	OR	3,684	5,475	5	1	1	1	3		1	1	2
168	TULO WEREDA-URBAN	OR	3,626	5,389	5	1	1	1	3		1	1	2
169	JELDU WEREDA-URBAN	OR	3,600	5,350	5	1	1	1	3		1	1	2
170	SHIRKA WEREDA-URBAN	OR	3,599	5,348	5	1	1	1	3		1	1	2

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
171	SHAMBU/TOWN/WEREDA-URBAN	OR	3,582	5,323	5	1	1	1	3		1	1	2
172	ENEBSE SAR MIDIR WEREDA-URBAN	AM	3,489	5,185	5	1	1	1	3		1	1	2
173	DEBUB ACHEFER WEREDA-URBAN	AM	3,487	5,182	5	1	1	1	3		1	1	2
174	SOKORU WEREDA-URBAN	OR	3,468	5,154	5	1	1	1	3		1	1	2
175	KIMBIBIT WEREDA-URBAN	OR	3,448	5,124	5	1	1	1	3		1	1	2
176	JABI TEHNAN WEREDA-URBAN	AM	3,424	5,088	5	1	1	1	3		1	1	2
177	MISRAK BELESA WEREDA-URBAN	AM	3,421	5,084	5	1	1	1	3		1	1	2
178	TACH ARMACHOHO WEREDA-URBAN	AM	3,406	5,062	5	1	1	1	3		1	1	2
179	WONBERMA WEREDA-URBAN	AM	3,377	5,019	5	1	1	1	3		1	1	2
180	MISRAK BADAWACHO WEREDA-URBAN	SN	3,373	5,013	5	1	1	1	3		1	1	2
181	SENDAFA/TOWN/WEREDA-URBAN	OR	3,349	4,977	5	1	1	1	3		1	1	2
182	LANFURO WEREDA-URBAN	SN	3,339	4,962	5	1	1	1	3		1	1	2
183	EBINAT WEREDA-URBAN	AM	3,335	4,956	5	1	1	1	3		1	1	2
184	WERE ILU WEREDA-URBAN	AM	3,334	4,955	5	1	1	1	3		1	1	2
185	AWABEL WEREDA-URBAN	AM	3,309	4,917	5	1	1	1	3		1	1	2
186	SHINILE WEREDA-RURAL	SO	3,272	4,863	5	1	1	1	3		1	1	2
187	TARMA BER WEREDA-URBAN	AM	3,259	4,843	5	1	1	1	3		1	1	2
188	YIRGACHEFE WEREDA-URBAN	SN	3,212	4,773	5	1	1	1	3		1	1	2
189	ALEFA WEREDA-URBAN	AM	3,203	4,760	5	1	1	1	3		1	1	2
190	ADABA WEREDA-URBAN	OR	3,160	4,696	5	1	1	1	3		1	1	2

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
191	AGARFA WEREDA-URBAN	OR	3,156	4,690	5	1	1	1	3		1	1	2
192	MEDEBAY ZANA WEREDA-URBAN	TI	3,146	4,675	5	1	1	1	3		1	1	2
193	TAHTAY MAYCHEW WEREDA-URBAN	TI	3,142	4,669	5	1	1	1	3		1	1	2
194	ATSBI WONBERTA WEREDA-URBAN	TI	3,111	4,623	5	1	1	1	3		1	1	2
195	SORO WEREDA-URBAN	SN	3,110	4,622	5	1	1	1	3		1	1	2
196	CHENCHA WEREDA-URBAN	SN	3,108	4,619	5	1	1	1	3		1	1	2
197	MEKET WEREDA-URBAN	AM	3,098	4,604	5	1	1	1	3		1	1	2
198	BORA WEREDA-URBAN	OR	3,061	4,549	5	1	1	1	3		1	1	2
199	HINTALO WAJIRAT WEREDA-URBAN	TI	3,052	4,536	5	1	1	1	3		1	1	2
200	DALE WABERA WEREDA-URBAN	OR	3,029	4,501	5	1	1	1	3		1	1	2
201	KACHA BIRA WEREDA-URBAN	SN	3,023	4,492									
202	KOMBOLCHA WEREDA-URBAN	OR	3,000	4,458									
203	ASEGEDE TSIMBILA WEREDA-URBAN	TI	2,952	4,387									
204	GURSUM WEREDA-URBAN	OR	2,949	4,382									
205	KERSA WEREDA-URBAN	OR	2,944	4,375									
206	ADI ARKAY WEREDA-URBAN	AM	2,944	4,375									
207	MILE WEREDA-URBAN	AF	2939	4,368									
208	SIMADA WEREDA-URBAN	AM	2,938	4,366									
209	WERE JARSO WEREDA-URBAN	OR	2,901	4,311									
210	GOMMA WEREDA-URBAN	OR	2,872	4,268									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
211	MENESIBU WEREDA-URBAN	OR	2,842	4,223									
212	OMONADA WEREDA-URBAN	OR	2,834	4,212									
213	DERASHE WEREDA-URBAN	SN	2,832	4,209									
214	CHINAKSAN WEREDA-URBAN	OR	2,825	4,198									
215	DOLO MENA WEREDA-URBAN	OR	2,766	4,111									
216	PAWE SPECIAL WEREDA-URBAN	BG	2,760	4,102									
217	EJERE WEREDA-URBAN	OR	2,746	4,081									
218	TENTA WEREDA-URBAN	AM	2,742	4,075									
219	MACHAKEL WEREDA-URBAN	AM	2,735	4,064									
220	SHEBEDINO WEREDA-URBAN	SN	2,699	4,011									
221	MORETNA JIRU WEREDA-URBAN	AM	2,684	3,989									
222	WELKAYIT WEREDA-URBAN	TI	2,643	3,928									
223	DARA WEREDA-URBAN	SN	2,612	3,882									
224	GULO MEHEDA WEREDA-URBAN	TI	2,602	3,867									
225	DEJEN WEREDA-URBAN	AM	2,568	3,816									
226	FAGITA LEKOMA WEREDA-URBAN	AM	2,539	3,773									
227	SIRE WEREDA-URBAN	OR	2,534	3,766									
228	SEHARTI SAMRE WEREDA-URBAN	TI	2,498	3,712									
229	LAELAY ADIYABO WEREDA-URBAN	TI	2,479	3,684									
230	DEBERE LIBANOS WEREDA-URBAN	OR	2,475	3,678									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
231	ALE WEREDA-URBAN	OR	2,470	3,671									
232	GIMBO WEREDA-URBAN	SN	2,467	3,666									
233	GUAGUSA SHIKUDAD WEREDA-URBAN	AM	2,457	3,651									
234	GINDE BERET WEREDA-URBAN	OR	2,433	3,616									
235	DEBRE ELIAS WEREDA-URBAN	AM	2,432	3,614									
236	GORO GUTU WEREDA-URBAN	OR	2,407	3,577									
237	MELKA BELO WEREDA-URBAN	OR	2,407	3,577									
238	SHASHEMENE ZURIYA WEREDA-URBAN	OR	2,405	3,574									
239	MENZ MAMA MIDIR WEREDA-URBAN	AM	2,394	3,558									
240	DEBRESINA WEREDA-URBAN	AM	2,389	3,550									
241	MESEKAN WEREDA-URBAN	SN	2,386	3,546									
242	MEREB LEHE WEREDA-URBAN	TI	2,386	3,546									
243	KOCHIRE WEREDA-URBAN	SN	2,382	3,540									
244	TSELEMTI WEREDA-URBAN	TI	2,375	3,529									
245	GONCHA SISO ENESE WEREDA-URBAN	AM	2,353	3,497									
246	TSEGEDE WEREDA-URBAN	TI	2,347	3,488									
247	GIDAN WEREDA-URBAN	AM	2,346	3,486									
248	BORE WEREDA-URBAN	OR	2,317	3,443									
249	KONSO WEREDA-URBAN	SN	2,313	3,437									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
250	ABALA WEREDA-URBAN	AF	2301	3,420									
251	LALO ASABI WEREDA-URBAN	OR	2,298	3,415									
252	SIBU SIRE WEREDA-URBAN	OR	2,288	3,400									
253	LEGAMBO WEREDA-URBAN	AM	2,287	3,399									
254	ELIDAR WEREDA-URBAN	AF	2254	3,350									
255	TACH GAYINT WEREDA-URBAN	AM	2,252	3,347									
256	BEDENO WEREDA-URBAN	OR	2,228	3,311									
257	GORO WEREDA-URBAN	OR	2,216	3,293									
258	CHOLE WEREDA-URBAN	OR	2,200	3,269									
259	AWARE WEREDA-URBAN	SO	2,199	3,268									
260	KELELA WEREDA-URBAN	AM	2,199	3,268									
261	MAREKA WEREDA-URBAN	SN	2,187	3,250									
262	BORICHA WEREDA-URBAN	SN	2,180	3,240									
263	BENSA WEREDA-URBAN	SN	2,178	3,237									
264	BAMBASI WEREDA-URBAN	BG	2,171	3,226									
265	DEGUA TEMBEN WEREDA-URBAN	TI	2,171	3,226									
266	HAWZEN WEREDA-URBAN	TI	2,168	3,222									
267	AMIGNA WEREDA-URBAN	OR	2,158	3,207									
268	SEKELA WEREDA-URBAN	AM	2,154	3,201									
269	DEKSIS WEREDA-URBAN	OR	2,153	3,200									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
270	DANGUR WEREDA-URBAN	BG	2,145	3,188									
271	CHEHA WEREDA-URBAN	SN	2,139	3,179									
272	MERAB BELSA WEREDA-URBAN	AM	2,124	3,156									
273	DERA WEREDA-URBAN	OR	2,122	3,153									
274	GODARE WEREDA-URBAN	GA	2,117	3,146									
275	DIGA WEREDA-URBAN	OR	2,101	3,122									
276	JAWI WEREDA-URBAN	AM	2,088	3,103									
277	ABEY CHOMEN WEREDA-URBAN	OR	2,078	3,088									
278	ALAJE WEREDA-URBAN	TI	2,076	3,085									
279	YEM SP. WER. WEREDA-URBAN	SN	2,073	3,081									
280	BASO LIBEN WEREDA-URBAN	AM	2,071	3,078									
281	MANDURA WEREDA-URBAN	BG	2,066	3,070									
282	MIDA WOREMO WEREDA-URBAN	AM	2,061	3,063									
283	DELANTA WEREDA-URBAN	AM	2,060	3,061									
284	TAKUSA WEREDA-URBAN	AM	2,040	3,032									
285	DEBUB BENCH WEREDA-URBAN	SN	2,033	3,021									
286	AMARO WEREDA-URBAN	SN	2,024	3,008									
287	BIBUGN WEREDA-URBAN	AM	2,017	2,997									
288	KERCHA WEREDA-URBAN	OR	2,014	2,993									
289	CHENA WEREDA-URBAN	SN	2,013	2,992									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
290	JIMA RARE WEREDA-URBAN	OR	2,010	2,987									
291	KONTA WEREDA-URBAN	SN	1,992	2,960									
292	GIMBICHU WEREDA-URBAN	OR	1,954	2,904									
293	TAHTAY ADIYABO WEREDA-URBAN	TI	1,953	2,902									
294	DEGA DAMOT WEREDA-URBAN	AM	1,949	2,896									
295	ANFILO WEREDA-URBAN	OR	1,936	2,877									
296	TANQUA ABERGELE WEREDA-URBAN	TI	1,936	2,877									
297	SEBETA HAWAS WEREDA-URBAN	OR	1,930	2,868									
298	JIMA ARJO WEREDA-URBAN	OR	1,919	2,852									
299	WUCHALE WEREDA-URBAN	OR	1,902	2,827									
300	KERSA ENA MALIMA WEREDA-URBAN	OR	1,890	2,809									
301	WEREBABU WEREDA-URBAN	AM	1,878	2,791									
302	ILU WEREDA-URBAN	OR	1,852	2,752									
303	GIRAWA WEREDA-URBAN	OR	1,817	2,700									
304	DENBEL WEREDA-URBAN	SO	1,809	2,688									
305	DALOCHA WEREDA-URBAN	SN	1,805	2,682									
306	JEJU WEREDA-URBAN	OR	1,792	2,663									
307	SHALA WEREDA-URBAN	OR	1,783	2,650									
308	YAYU WEREDA-URBAN	OR	1,781	2,647									
309	TENA WEREDA-URBAN	OR	1,779	2,644									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
310	JAMA WEREDA-URBAN	AM	1,779	2,644									
311	WENAGO WEREDA-URBAN	SN	1,770	2,630									
312	AKAKI WEREDA-URBAN	OR	1,768	2,627									
313	FARTA WEREDA-URBAN	AM	1,758	2,613									
314	ENKELO WABE WEREDA-URBAN	OR	1,757	2,611									
315	BOKE WEREDA-URBAN	OR	1,756	2,610									
316	TIYO WEREDA-URBAN	OR	1,752	2,604									
317	HIDABU ABOTE WEREDA-URBAN	OR	1,751	2,602									
318	ANCHAR WEREDA-URBAN	OR	1,748	2,598									
319	BALE GASEGAR WEREDA-URBAN	OR	1,748	2,598									
320	ERER WEREDA-URBAN	SO	1,738	2,583									
321	ANGOLALA TERA WEREDA-URBAN	AM	1,738	2,583									
322	TIBARO WEREDA-URBAN	SN	1,723	2,561									
323	URAGA WEREDA-URBAN	OR	1,704	2,532									
324	GEDEB WEREDA-URBAN	SN	1,699	2,525									
325	BEGI WEREDA-URBAN	OR	1,692	2,514									
326	GOLOLCHA WEREDA-URBAN	OR	1,683	2,501									
327	ALJE SACHI WEREDA-URBAN	OR	1,678	2,494									
328	DIBATE WEREDA-URBAN	BG	1,671	2,483									
329	SEKA CHEKORSA WEREDA-URBAN	OR	1,666	2,476									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
330	MEKDELA WEREDA-URBAN	AM	1,658	2,464									
331	DEGEM WEREDA-URBAN	OR	1,648	2,449									
332	GULISO WEREDA-URBAN	OR	1,644	2,443									
333	MASHA WEREDA-URBAN	SN	1,628	2,419									
334	SAYINT WEREDA-URBAN	AM	1,626	2,416									
335	CHORA WEREDA-URBAN	OR	1,612	2,396									
336	MAREKO WEREDA-URBAN	SN	1,588	2,360									
337	SHASHAGO WEREDA-URBAN	SN	1,587	2,358									
338	KINDO KOYISHA WEREDA-URBAN	SN	1,581	2,350									
339	GUNA WEREDA-URBAN	OR	1,581	2,350									
340	BERBERE WEREDA-URBAN	OR	1,579	2,347									
341	AMEYA WEREDA-URBAN	OR	1,566	2,327									
342	ARBEGONA WEREDA-URBAN	SN	1,565	2,326									
343	IMIBERI WEREDA-URBAN	SO	1,561	2,320									
344	JANAMORA WEREDA-URBAN	AM	1,554	2,309									
345	GUDURU WEREDA-URBAN	OR	1,544	2,295									
346	FIK WEREDA-URBAN	SO	1,527	2,269									
347	BOJI DIRMEJI WEREDA-URBAN	OR	1,523	2,263									
348	AMBASEL WEREDA-URBAN	AM	1,508	2,241									
349	KELAFO WEREDA-URBAN	SO	1,507	2,240									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
350	ENEMORNA ENER WEREDA-URBAN	SN	1,507	2,240									
351	GASERA WEREDA-URBAN	OR	1,504	2,235									
352	CHIFRA WEREDA-URBAN	AF	1497	2,225									
353	BONKE WEREDA-URBAN	SN	1,497	2,225									
354	TEGEDE WEREDA-URBAN	AM	1,493	2,219									
355	GEZEGOFA WEREDA-URBAN	SN	1,491	2,216									
356	JIMA GENETE WEREDA-URBAN	OR	1,490	2,214									
357	DEBAY TILATGEN WEREDA-URBAN	AM	1,490	2,214									
358	GONCHA WEREDA-URBAN	AM	1,487	2,210									
359	DIRE WEREDA-URBAN	OR	1,483	2,204									
360	MERAB ABAYA WEREDA-URBAN	SN	1,479	2,198									
361	SINAN WEREDA-URBAN	AM	1,478	2,196									
362	DENIBOYA WEREDA-URBAN	SN	1,470	2,185									
363	QUARIT WEREDA-URBAN	AM	1,469	2,183									
364	DANO WEREDA-URBAN	OR	1,456	2,164									
365	ANGACHA WEREDA-URBAN	SN	1,453	2,159									
366	KURFA CHELE WEREDA-URBAN	OR	1,442	2,143									
367	ANKOBER WEREDA-URBAN	AM	1,440	2,140									
368	HUMBO WEREDA-URBAN	SN	1,437	2,136									
369	ARTUMA FURSI WEREDA-URBAN	AM	1,402	2,084									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
370	GUDEYA BILA WEREDA-URBAN	OR	1,402	2,084									
371	CHEKO WEREDA-URBAN	SN	1,395	2,073									
372	KUTABER WEREDA-URBAN	AM	1,393	2,070									
373	KILTE AWLALO WEREDA-URBAN	TI	1,389	2,064									
374	BURJI WEREDA-URBAN	SN	1,386	2,060									
375	BULEN WEREDA-URBAN	BG	1,385	2,058									
376	BURE WEREDA-URBAN	OR	1,382	2,054									
377	DEDO WEREDA-URBAN	OR	1,381	2,052									
378	WENBERA WEREDA-URBAN	BG	1,381	2,052									
379	GURAFERDA WEREDA-URBAN	SN	1,380	2,051									
380	ETANG SPECIAL WEREDA-URBAN	GA	1,375	2,043									
381	OFA WEREDA-URBAN	SN	1,355	2,014									
382	DAMOT WOYIDE WEREDA-URBAN	SN	1,353	2,011									
383	GOG WEREDA-URBAN	GA	1,344	1,997									
384	TIRO AFETA WEREDA-URBAN	OR	1,344	1,997									
385	GECHI WEREDA-URBAN	OR	1,343	1,996									
386	SAYA DEBIRNA WAYU WEREDA-URBAN	AM	1,341	1,993									
387	LARE WEREDA-URBAN	GA	1,340	1,991									
388	KEMASHI WEREDA-URBAN	BG	1,338	1,988									
389	ABICHUNA GNAA WEREDA-URBAN	OR	1,337	1,987									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
390	DEHANA WEREDA-URBAN	AM	1,334	1,982									
391	ZIWAY DUGDA WEREDA-URBAN	OR	1,331	1,978									
392	WADLA WEREDA-URBAN	AM	1,327	1,972									
393	QUARA WEREDA-URBAN	AM	1,325	1,969									
394	BEREHET WEREDA-URBAN	AM	1,322	1,965									
395	MISHA WEREDA-URBAN	SN	1,319	1,960									
396	MESELA WEREDA-URBAN	OR	1,312	1,950									
397	WEGIDI WEREDA-URBAN	AM	1,310	1,947									
398	BASKETO WEREDA-URBAN	SN	1,301	1,933									
399	GUBALAFTO WEREDA-URBAN	AM	1,297	1,927									
400	GEWANE WEREDA-URBAN	AF	1295	1,924									
401	JILE TIMUGA WEREDA-URBAN	AM	1,292	1,920									
402	KORE WEREDA-URBAN	OR	1,291	1,919									
403	SHEBEL BERENTA WEREDA-URBAN	AM	1,285	1,910									
404	AYISHA WEREDA-URBAN	SO	1,280	1,902									
405	HULA WEREDA-URBAN	SN	1,280	1,902									
406	NENSEBO WEREDA-URBAN	OR	1,279	1,901									
407	GIDAMI WEREDA-URBAN	OR	1,279	1,901									
408	LIMU SEKA WEREDA-URBAN	OR	1,277	1,898									
409	SHEKO WEREDA-URBAN	SN	1,276	1,896									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
410	DAMOT SORE WEREDA-URBAN	SN	1,271	1,889									
411	KERSA WEREDA-URBAN	OR	1,271	1,889									
412	DOYO GENA WEREDA-URBAN	SN	1,257	1,868									
413	SHEBE SENBO WEREDA-URBAN	OR	1,257	1,868									
414	KUCHA WEREDA-URBAN	SN	1,255	1,865									
415	TOCHA WEREDA-URBAN	SN	1,254	1,864									
416	BULE WEREDA-URBAN	SN	1,254	1,864									
417	ALAMATA WEREDA-URBAN	TI	1,252	1,861									
418	SIGAMO WEREDA-URBAN	OR	1,245	1,850									
419	HURUMU WEREDA-URBAN	OR	1,230	1,828									
420	GOBU SEYO WEREDA-URBAN	OR	1,223	1,817									
421	MAJI WEREDA-URBAN	SN	1,222	1,816									
422	BOH WEREDA-URBAN	SO	1,214	1,804									
423	SEMEN BENCH WEREDA-URBAN	SN	1,211	1,800									
424	GERA WEREDA-URBAN	OR	1,210	1,798									
425	MIDGA TOLA WEREDA-URBAN	OR	1,208	1,795									
426	GIBE WEREDA-URBAN	SN	1,205	1,791									
427	GOLA ODA WEREDA-URBAN	OR	1,197	1,779									
428	AFDEM WEREDA-URBAN	SO	1,196	1,777									
429	NOLE KABA WEREDA-URBAN	OR	1,195	1,776									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
430	GUMA WEREDA-URBAN	OR	1,193	1,773									
431	DECHA WEREDA-URBAN	SN	1,191	1,770									
432	BONA ZURIYA WEREDA-URBAN	SN	1,176	1,748									
433	JARDEGA JARTE WEREDA-URBAN	OR	1,174	1,745									
434	KEMBA WEREDA-URBAN	SN	1,174	1,745									
435	DEDESA WEREDA-URBAN	OR	1,165	1,731									
436	DEBEWOIN WEREDA-URBAN	SO	1,159	1,722									
437	MERAB AZERNET WEREDA-URBAN	SN	1,158	1,721									
438	ASEKO WEREDA-URBAN	OR	1,157	1,719									
439	HARU WEREDA-URBAN	OR	1,151	1,710									
440	GANTA AFESHUM WEREDA-URBAN	TI	1,150	1,709									
441	ALELTU WEREDA-URBAN	OR	1,146	1,703									
442	HARSHIN WEREDA-URBAN	SO	1,142	1,697									
443	DUNA WEREDA-URBAN	SN	1,140	1,694									
444	ALBUKO WEREDA-URBAN	AM	1,129	1,678									
445	AYIRA WEREDA-URBAN	OR	1,128	1,676									
446	MANA WEREDA-URBAN	OR	1,128	1,676									
447	HAWA GELAN WEREDA-URBAN	OR	1,127	1,675									
448	BEYEDA WEREDA-URBAN	AM	1,127	1,675									
449	FEDIS WEREDA-URBAN	OR	1,119	1,663									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
450	NUNU KUMBA WEREDA-URBAN	OR	1,118	1,661									
451	HARENA BULUK WEREDA-URBAN	OR	1,115	1,657									
452	GUNAGUDO WEREDA-URBAN	SO	1,114	1,656									
453	WADERA WEREDA-URBAN	OR	1,112	1,653									
454	META ROBI WEREDA-URBAN	OR	1,105	1,642									
455	SIRARO WEREDA-URBAN	OR	1,104	1,641									
456	UBA DEBRE TSEHAY WEREDA-URBAN	SN	1,103	1,639									
457	AMURU WEREDA-URBAN	OR	1,101	1,636									
458	TELETELE WEREDA-URBAN	OR	1,092	1,623									
459	BDOLOBAY WEREDA-URBAN	SO	1,087	1,615									
460	DAWO WEREDA-URBAN	OR	1,078	1,602									
461	SHAY BENCH WEREDA-URBAN	SN	1,070	1,590									
462	GISHE WEREDA-URBAN	AM	1,061	1,577									
463	MIRAB IMI WEREDA-URBAN	SO	1,060	1,575									
464	DARIMU WEREDA-URBAN	OR	1,051	1,562									
465	TIKUR ENCHINI WEREDA-URBAN	OR	1,046	1,554									
466	SETEMA WEREDA-URBAN	OR	1,041	1,547									
467	GEMCHES WEREDA-URBAN	OR	1,038	1,543									
468	WARDER WEREDA-URBAN	SO	1,032	1,534									
469	KILTU KARA WEREDA-URBAN	OR	1,024	1,522									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
470	ZIQUALA WEREDA-URBAN	AM	1,022	1,519									
471	DALE SADI WEREDA-URBAN	OR	1,006	1,495									
472	JARSO WEREDA-URBAN	OR	1,005	1,494									
473	GOLOLCHA WEWREDA-URBAN	OR	1,002	1,489									
474	ABOBO WEREDA-URBAN	GA	1,001	1,488									
475	SANKURA WEREDA-URBAN	SN	991	1,473									
476	AFKER WEREDA-URBAN	SO	987	1,467									
477	DAMOT PULASA WEREDA-URBAN	SN	977	1,452									
478	HAGERE MARIAM KESEM WEREDA-URBAN	AM	968	1,439									
479	ABAYA WEREDA-URBAN	OR	950	1,412									
480	DUGIDA DAWA WEREDA-URBAN	OR	947	1,407									
481	LEKA DULECHA WEREDA-URBAN	OR	943	1,401									
482	MENZ KEYA GEBREAL WEREDA-URBAN	AM	942	1,400									
483	GELADIN WEREDA-URBAN	SO	937	1,392									
484	JIBAT WEREDA-URBAN	OR	927	1,378									
485	EZHA WEREDA-URBAN	SN	911	1,354									
486	DAWA CHEFA WEREDA-URBAN	AM	910	1,352									
487	TOLE WEREDA-URBAN	OR	906	1,346									
488	GESHA DEKA WEREDA-URBAN	SN	905	1,345									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
489	ENSARO WEREDA-URBAN	AM	903	1,342									
490	WOLMERA WEREDA-URBAN	OR	900	1,337									
491	SERU WEREDA-URBAN	OR	899	1,336									
492	MUSTAHIL WEREDA-URBAN	SO	895	1,330									
493	NONO WEREDA-URBAN	OR	895	1,330									
494	LIMU WEREDA-URBAN	OR	894	1,329									
495	MOJANA WADEREA WEREDA-URBAN	AM	894	1,329									
496	ADADILO WEREDA-URBAN	SO	890	1,323									
497	ENDAMEHONI WEREDA-URBAN	TI	882	1,311									
498	LIBEN WEREDA-URBAN	OR	882	1,311									
499	DABO HANA WEREDA-URBAN	OR	877	1,303									
500	SEWEYNA WEREDA-URBAN	OR	876	1,302									
501	TELO WEREDA-URBAN	SN	875	1,300									
502	MIYU WEREDA-URBAN	OR	874	1,299									
503	KEDIDA GAMELA WEREDA-URBAN	SN	873	1,297									
504	DOBA WEREDA-URBAN	OR	872	1,296									
505	GORO WEREDA-URBAN	OR	839	1,247									
506	GERBO WEREDA-URBAN	SO	822	1,222									
507	MALGA WEREDA-URBAN	SN	822	1,222									
508	SEDEN SODO WEREDA-URBAN	OR	820	1,219									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
509	GASHAMO WEREDA-URBAN	SO	817	1,214									
510	GENJI WEREDA-URBAN	OR	817	1,214									
511	ISARA WEREDA-URBAN	SN	814	1,210									
512	YAYA GULELE WEREDA-URBAN	OR	814	1,210									
513	BERAHILE WEREDA-URBAN	AF	807	1,199									
514	LOMA WEREDA-URBAN	SN	804	1,195									
515	MELEKOZA WEREDA-URBAN	SN	803	1,193									
516	SUDE WEREDA-URBAN	OR	800	1,189									
517	JARSO WEREDA-URBAN	OR	797	1,184									
518	HORO WEREDA-URBAN	OR	796	1,183									
519	RAYITU WEREDA-URBAN	OR	787	1,170									
520	DIMA WEREDA-URBAN	GA	786	1,168									
521	MENJIWO WEREDA-URBAN	SN	782	1,162									
522	DITA WEREDA-URBAN	SN	774	1,150									
523	DINSHO WEREDA-URBAN	OR	768	1,141									
524	GUMER WEREDA-URBAN	SN	767	1,140									
525	GOZAMIN WEREDA-URBAN	AM	766	1,138									
526	GELANA WEREDA-URBAN	OR	765	1,137									
527	DEGUNA FANIGO WEREDA-URBAN	SN	764	1,135									
528	MEYU WEREDA-URBAN	OR	760	1,129									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
529	HAMER WEREDA-URBAN	SN	756	1,123									
530	DALIFAGI WEREDA-URBAN	AF	753	1,119									
531	DERAMALO WEREDA-URBAN	SN	753	1,119									
532	MEDA WELABU WEREDA-URBAN	OR	749	1,113									
533	BABO GAMBEL WEREDA-URBAN	OR	745	1,107									
534	DEGA WEREDA-URBAN	OR	744	1,106									
535	GOLINA WEREDA-URBAN	AF	743	1,104									
536	KOKOSA WEREDA-URBAN	OR	714	1,061									
537	DASENECH WEREDA-URBAN	SN	711	1,057									
538	MEINIT SHASHA WEREDA-URBAN	SN	707	1,051									
539	LEGAHIDA WEREDA-URBAN	AM	707	1,051									
540	GUBA KORICHA WEREDA-URBAN	OR	706	1,049									
541	BORECHA WEREDA-URBAN	OR	704	1,046									
542	WEYIB WEREDA-URBAN	SO	703	1,045									
543	ARERO WEREDA-URBAN	OR	699	1,039									
544	BITA WEREDA-URBAN	SN	697	1,036									
545	WOLISO WEREDA-URBAN	OR	696	1,034									
546	GUBA WEREDA-URBAN	BG	695	1,033									
547	BOREDA WEREDA-URBAN	SN	678	1,008									
548	BELOJEGONFOY WEREDA-URBAN	BG	670	996									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
549	UDET WEREDA-URBAN	SO	668	993									
550	DANAN WEREDA-URBAN	SO	665	988									
551	FERFER WEREDA-URBAN	SO	665	988									
552	MULO WEREDA-URBAN	OR	664	987									
553	BONEYA BUSHE WEREDA-URBAN	OR	662	984									
554	EROB WEREDA-URBAN	TI	661	982									
555	SASIGA WEREDA-URBAN	OR	658	978									
556	JIMMA HORO WEREDA-URBAN	OR	654	972									
557	LALO KILE WEREDA-URBAN	OR	649	964									
558	IBANTU WEREDA-URBAN	OR	647	962									
559	MAO KOMO SPECIAL WEREDA-URBAN	BG	646	960									
560	NADER ADET WEREDA-URBAN	TI	646	960									
561	MEINIT GOLDEYA WEREDA-URBAN	SN	643	956									
562	ARORESA WEREDA-URBAN	SN	642	954									
563	FILTU WEREDA-URBAN	SO	640	951									
564	BARE WEREDA-URBAN	SO	632	939									
565	SIRBA ABAY WEREDA-URBAN	BG	632	939									
566	ANDERACHA WEREDA-URBAN	SN	630	936									
567	GORCHE WEREDA-URBAN	SN	628	933									
568	AFDERA WEREDA-URBAN	AF	617	917									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
569	ANEDED WEREDA-URBAN	AM	614	912									
570	WULBAREG WEREDA-URBAN	SN	604	898									
571	ABE DONGORO WEREDA-URBAN	OR	603	896									
572	ZALA WEREDA-URBAN	SN	602	895									
573	SEMEN ARI WEREDA-URBAN	SN	598	889									
574	KONDALA WEREDA-URBAN	OR	594	883									
575	WANTAWO WEREDA-URBAN	GA	591	878									
576	SEYO NOLE WEREDA-URBAN	OR	587	872									
577	ODABULDI GULI WEREDA-URBAN	BG	580	862									
578	GORO BEKEKSA WEREDA-URBAN	SO	576	856									
579	MIDAKEGN WEREDA-URBAN	OR	574	853									
580	HOMA WEREDA-URBAN	OR	569	846									
581	MERAB ESTE WEREDA-URBAN	AM	568	844									
582	SODO DACHA WEREDA-URBAN	OR	565	840									
583	BILO NOPHA WEREDA-URBAN	OR	565	840									
584	KOKIR GEDABANO WEREDA-URBAN	SN	562	835									
585	HABABO GUDURU WEREDA-URBAN	OR	549	816									
586	MEYU MULUKE WEREDA-URBAN	SO	543	807									
587	SHILABO WEREDA-URBAN	SO	541	804									
588	LEGEHIDA WEREDA-URBAN	OR	540	802									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
589	KERSA DULA WEREDA-URBAN	SO	537	798									
590	YUBDO WEREDA-URBAN	OR	535	795									
591	ASAGIRT WEREDA-URBAN	AM	534	794									
592	HADELE ALE WEREDA-URBAN	AF	524	779									
593	ARGOBA SPECIAL WEREDA-URBAN	AF	517	768									
594	CHERE WEREDA-URBAN	SN	512	761									
595	BENA TSEMAY WEREDA-URBAN	SN	511	759									
596	WONCHI WEREDA-URBAN	OR	508	755									
597	BERO WEREDA-URBAN	SN	502	746									
598	ABUNA GINDEBERET WEREDA-URBAN	OR	500	743									
599	KONABA WEREDA-URBAN	AF	497	739									
600	SEGEG WEREDA-URBAN	SO	490	728									
601	BURSA WEREDA-URBAN	SN	487	724									
602	TELALAK WEREDA-URBAN	AF	483	718									
603	SAYILEM WEREDA-URBAN	SN	473	703									
604	ANALIMO WEREDA-URBAN	SN	469	697									
605	NONO SELE WEREDA-URBAN	OR	461	685									
606	HUKA/HALU/WEREDA-URBAN	OR	457	679									
607	GURSUM WEREDA-URBAN	SO	445	661									
608	WENSHO WEREDA-URBAN	SN	434	645									

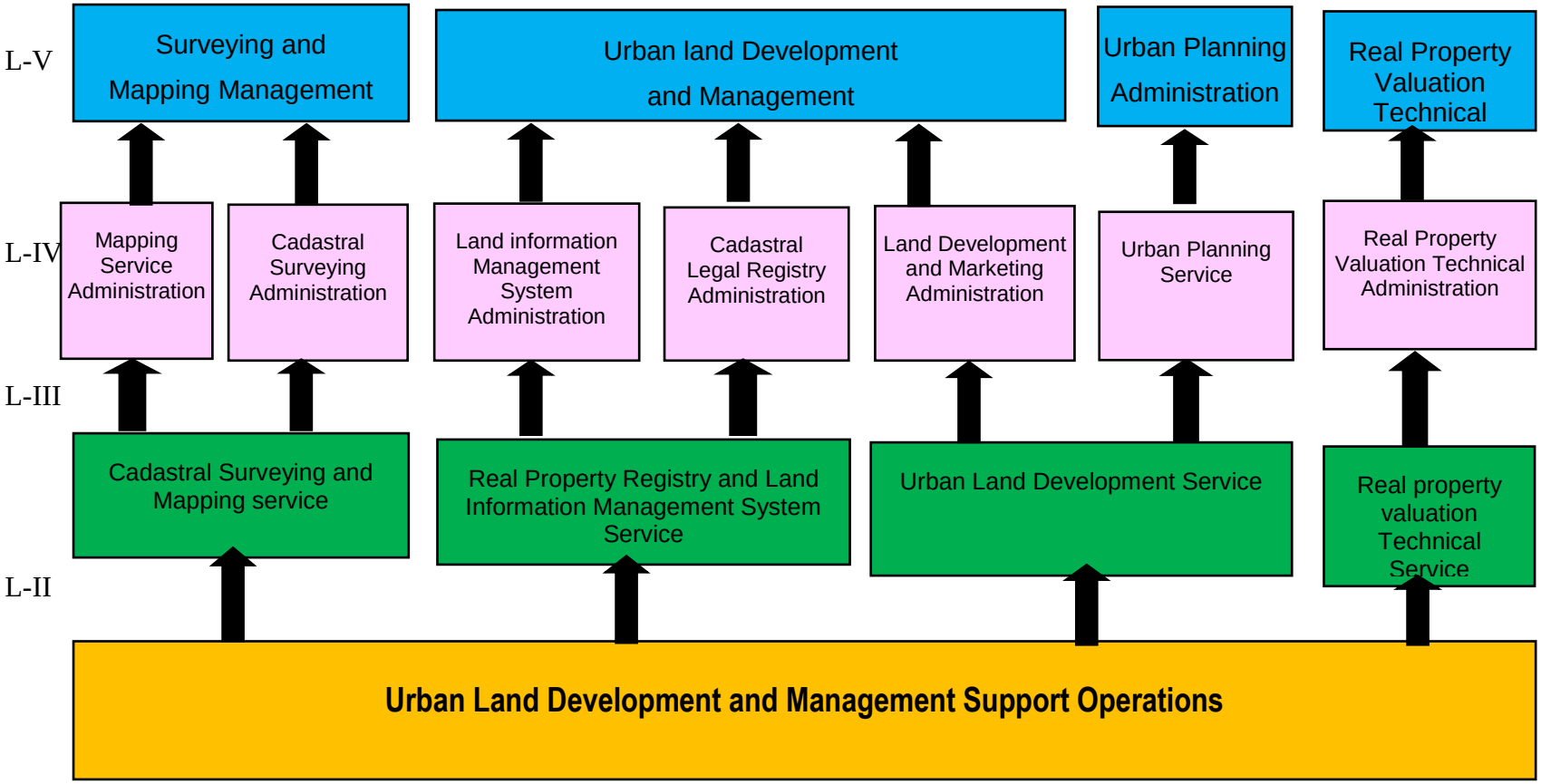
No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
609	DAWA HAREWA WEREDA-URBAN	AM	432	642									
610	AGELO METI WEREDA-URBAN	BG	431	641									
611	BICHO WEREDA-URBAN	OR	427	635									
612	JIKAWO WEREDA-URBAN	GA	426	633									
613	LEMO WEREDA-URBAN	SN	412	612									
614	GEWATA WEREDA-URBAN	SN	412	612									
615	ELFATA WEREDA-URBAN	OR	411	611									
616	MERAB BADWACHO WEREDA-URBAN	SN	407	605									
617	DAWE WEREDA-URBAN	AF	405	602									
618	BASONA WERANA WEREDA-URBAN	AM	400	594									
619	GAWO KEBE WEREDA-URBAN	OR	395	587									
620	AWURA WEREDA-URBAN	AF	393	584									
621	HAMBELA WAMENA WEREDA-URBAN	OR	390	580									
622	GENABOSA WEREDA-URBAN	SN	387	575									
623	GURADAMOLE WEREDA-URBAN	OR	379	563									
624	CHETA WEREDA-URBAN	SN	378	562									
625	MENGE WEREDA-URBAN	BG	369	548									
626	SELAMAGO WEREDA-URBAN	SN	361	536									
627	KINDO DIDAYE WEREDA-URBAN	SN	347	516									
628	BOJI CHEKORSA WEREDA-URBAN	OR	341	507									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
629	YASO WEREDA-URBAN	BG	337	501									
630	DULECHA WEREDA-URBAN	AF	336	499									
631	DALOL WEREDA-URBAN	AF	334	496									
632	YEMALOGI WELEL WEREDA-URBAN	OR	334	496									
633	LOKO ABEYA WEREDA-URBAN	SN	322	479									
634	SERER WEREDA-URBAN	SO	319	474									
635	EWA WEREDA-URBAN	AF	317	471									
636	LIBEN WEREDA-URBAN	OR	313	465									
637	DIMA WEREDA-URBAN	OR	309	459									
638	DIDU WEREDA-URBAN	OR	308	458									
639	CHEWAKA WEREDA-URBAN	OR	304	452									
640	HOMESHA WEREDA-URBAN	BG	298	443									
641	SHERKOLE WEREDA-URBAN	BG	296	440									
642	LEGEHIDA WEREDA-URBAN	SO	291	432									
643	ALICHO WERERO WEREDA-URBAN	SN	283	421									
644	CHORA BOTOR WEREDA-URBAN	OR	273	406									
645	SEMUROBINA GELALO WEREDA-URBAN	AF	271	403									
646	GAMBELLA ZURIYA WEREDA-URBAN	GA	267	397									
647	MUHOR NA AKLIL WEREDA-URBAN	SN	262	389									
648	ENDEGAGN WEREDA-URBAN	SN	259	385									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
649	SHEKOSH WEREDA-URBAN	SO	256	380									
650	SURMA WEREDA-URBAN	SN	237	352									
651	GIRJA WEREDA-URBAN	OR	231	343									
652	DEGEHAMEDO WEREDA-URBAN	SO	230	342									
653	AMBO ZURIYA WEREDA-URBAN	OR	226	336									
654	DIHUN WEREDA-URBAN	SO	223	331									
655	TERU WEREDA-URBAN	AF	205	305									
656	BOLOSO BONIBE WEREDA-URBAN	SN	205	305									
657	EREBTI WEREDA-URBAN	AF	203	302									
658	MEGALE WEREDA-URBAN	AF	203	302									
659	KURMUK WEREDA-URBAN	BG	191	284									
660	MALE WEREDA-URBAN	SN	187	278									
661	YALO WEREDA-URBAN	AF	172	256									
662	BABILE WEREDA-URBAN	SO	166	247									
663	DAWE KACHEN WEREDA-URBAN	OR	154	229									
664	DAWUNT WEREDA-URBAN	AM	153	227									
665	MULO WEREDA-URBAN	SO	152	226									
666	GURADAMOLE WEREDA-URBAN	SO	147	218									
667	DANOT WEREDA-URBAN	SO	144	214									
668	AKOBO WEREDA-URBAN	GA	122	181									

No	Urban Centres	Region	Housing Units Census 2007	Estimated Housing Units 2016 (4.5% growth pa)	Office Typology	Staffing (manual process, high level of management)				Staffing (automated process, medium level of management)			
						Mgr & Admin	Regis.	Cadastre	Total	Mgr & Admin	Regis.	Cadastre	Total
669	JOR WEREDA-URBAN	GA	115	171									
670	HAMERO WEREDA-URBAN	SO	103	153									
671	SELEHAD WEREDA-URBAN	SO	99	147									
672	AFAMBO WEREDA-URBAN	AF	65	97									
			1,620,627	**2,408,406**		**281**	**320**	**320**	**921**	**143**	**203**	**203**	**549**

ANNEX 7: ORGANISATIONAL STANDARDS FOR TVET TRAINING ON LAND



ANNEX 8: DOING BUSINESS - REGISTERING PROPERTY IN ETHIOPIA

The following two tables setting out the measures for efficiency and quality in registering property in Ethiopia are from the 2016 Doing Business Report.[9]

1. Measure of efficiency

	Procedure	Time to Complete	Associated Cost
1	**Verify the owner of the property and obtain the Carta and plan at the sub-city office** *Agency:* Sub-City Office Since 2005 the Land Registry has been decentralized into 10 sub-cities. Due diligence is conducted at the sub-city where the warehouse is located. This search will provide information on the owner of the building, date of construction of the building, the basic area of the property, whether the property is affected by encumbrances. At the same time, the carta and plan of the warehouse will be provided; the buyer needs to submit the sale agreement to obtain them. At the time of due diligence, the lawyer of the buying company will also check that the other company is properly registered.	4 days	200 ETB
2	**Evaluation of the sale price by the sub-city** *Agency:* Sub-City Office The parties will bring the sale agreement to the sub-city. The sub-city official will check that the price included in the sale agreement corresponds to the Master list of price. If the price in the sale agreement is greater than the Master list price, the greater price will be accepted. If not, then the Master price will be applicable. Each sub-city has a fee schedule depending on the location of the building. In the event that the price in the sale agreement is not the same as the one indicated by the sub-city, Stamp duty will be paid based on the amount indicated by the sub-city and not on the amount written in the sale agreement.	1 day	no cost
3	**The seller must obtain tax clearance from Tax Authorities** *Agency:* Tax Authority The seller must obtain tax clearance on the property (not income tax) from Tax Authorities for transfer tax. This institution has also been decentralized.	14 days	no cost
4	**Payment of Stamp duty at the Land Administration Office** *Agency:* Land Administration Office Stamp duty is set by Proclamation 110/1998. Upon payment, the buyer will be given a receipt that he must bring back to the office of Documents Authentication and Registration. In the case where the property is not registered in the property master list of the municipal land administration, a land survey is required.	1 day	2% of the property value for the Stamp duty and 4% of the property value for the ownership title transfer tax

[9] http://www.doingbusiness.org/data/exploreeconomies/ethiopia/registering-property/ accessed on 4 October 2016

	Procedure	Time to Complete	Associated Cost
5	**Payment of capital gains tax at Inland Revenue Service** *Agency:* Inland Revenue Service The seller pays the capital gain tax at the Customs and Inland Revenue Authority. The tax amount is calculated based on a set scale.	1 day	not counted
6	**Execution of the sale contract at the office of Documents Authentication and Registration** *Agency:* Office of Documents Authentication and Registration The parties go to the office of Documents Authentication and Registration where they sign the sales agreement in front of the officials. They must provide the following documents • The seller gives the Title deed of the building • A copy of the ID of both managers • The power of attorney of each manager to ensure that they do have the power to sell/buy this warehouse at the specific amount. • A copy of the Business License for each PLC.	1 day	10 ETB for the service charge + 51 ETB for the power of attorney
7	**Apply for registration of property and obtain title deed in the buyer's name** *Agency:* Land Administration Office The buyer company brings the authenticated sale contract to the Land Administration Office for the final transfer. The buyer submits the authenticated agreement, the former title deed & ID card/Passport copy with the application for the title deed registration to the office of documents authentication and registration to avoid forgery. The buyer also needs to place an ad in the newspaper declaring the purchase and asking anyone who objects to come forward. The notice period for the ad is 15 days. Once this is lapsed, the buyer applies for transfer of deed.	30 days	ETB 100

2. Measure of Quality

	Answer	Score
Quality of the land administration index (0-30)		**4.5**
Reliability of infrastructure index (0-8)		**0.0**
What is the institution in charge of immovable property registration?	Addis Ababa City Administration	
In what format are the majority of title or deed records kept in the largest business city—in a paper format or in a computerized format (scanned or fully digital)?	Paper	0.0
Is there an electronic database for checking for encumbrances (liens, mortgages, restrictions and the like)?	No	0.0
Institution in charge of the plans showing legal boundaries in the largest business city:	Cadastre department at the Addis-Ababa Sub City Administration	
In what format are the majority of maps of land plots kept in the largest business city—in a paper format or in a computerized format (scanned or fully digital)?	Paper	0.0
Is there an electronic database for recording boundaries, checking plans and providing cadastral information (geographic information system)?	No	0.0
Is the information recorded by the immovable property registration agency and the cadastral or mapping agency kept in a single database, in different but linked databases or in separate databases?	Separate databases	0.0
Do the immovable property registration agency and cadastral or mapping agency use the same identification number for properties?	No	0.0
Transparency of information index (0–6)		**0.0**
Who is able to obtain information on land ownership at the agency in charge of immovable property registration in the largest business city?	Only intermediaries and interested parties	0.0
Is the list of documents that are required to complete any type of property transaction made publicly available–and if so, how?	Yes, in person	0.0
Link for online access:		
Is the applicable fee schedule for any property transaction at the agency in charge of immovable property registration in the largest business city made publicly available–and if so, how?	Yes, in person	0.0
Link for online access:		
Does the agency in charge of immovable property registration commit to delivering a legally binding document that proves property ownership within a specific time frame–and if so, how does it communicate the service standard?	No	0.0
Link for online access:		

	Answer	Score
Is there a specific and separate mechanism for filing complaints about a problem that occurred at the agency in charge of immovable property registration?	No	0.0
Contact information:		
Are there publicly available official statistics tracking the number of transactions at the immovable property registration agency?	No	0.0
Number of property transfers in the largest business city in 2014:		
Who is able to consult maps of land plots in the largest business city?	Only intermediaries and interested parties	0.0
Is the applicable fee schedule for accessing maps of land plots made publicly available—and if so, how?	Yes, in person	0.0
Link for online access:		
Does the cadastral or mapping agency commit to delivering an updated map within a specific time frame—and if so, how does it communicate the service standard?	No	0.0
Link for online access:		
Is there a specific and separate mechanism for filing complaints about a problem that occurred at the cadastral or mapping agency?	No	0.0
Contact information:		
Geographic coverage index (0–8)		**0.0**
Are all privately held land plots in the economy formally registered at the immovable property registry?	No	0.0
Are all privately held land plots in the largest business city formally registered at the immovable property registry?	No	0.0
Are all privately held land plots in the economy mapped?	No	0.0
Are all privately held land plots in the largest business city mapped?	No	0.0
Land dispute resolution index (0–8)		**4.5**
Does the law require that all property sale transactions be registered at the immovable property registry to make them opposable to third parties?	No	0.0
Is the system of immovable property registration subject to a state or private guarantee?	Yes	0.5
Is there a specific compensation mechanism to cover for losses incurred by parties who engaged in good faith in a property transaction based on erroneous information certified by the immovable property registry?	No	0.0

	Answer	Score
Does the legal system require a control of legality of the documents necessary for a property transaction (e.g., checking the compliance of contracts with requirements of the law)?	Yes	0.5
If yes, who is responsible for checking the legality of the documents?	Registrar; Notary; Lawyer.	
Does the legal system require verification of the identity of the parties to a property transaction?	Yes	0.5
If yes, who is responsible for verifying the identity of the parties?	Registrar; Notary; Lawyer.	
Is there a national database to verify the accuracy of identity documents?	No	0.0
For a standard land dispute between two local businesses over tenure rights of a property worth 50 times gross national income (GNI) per capita and located in the largest business city, what court would be in charge of the case in the first instance?	Sub-City First Instance Court of Addis Ababa, City Government	
How long does it take on average to obtain a decision from the first-instance court for such a case (without appeal)?	Less than a year	3.0
Are there any statistics on the number of land disputes in the first instance?	No	0.0
Number of land disputes in the largest business city in 2014:		