Development of an Open Source Land Records System

for Urban Centres in Ethiopia

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FIG Working Week
Helsinki, 29 May - 2 June 2017

FIG

Fasilo Land Office – Bahir Dar, Ethiopia

Land records in Ethiopia are kept in paper format and are generally unorganised

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IULHFMS (Integrated Urban Land Holding File Management System) project

July 2015 - October 2016

Focus on 3 cities in Ethiopia: Mekele, Bahir Dar and Dire Dawa

Goals: reorganisation and digitalisation of land records, file analysis, map analysis, system development

The core function of the system is the encoding of (scanned) documents from the archive files

Eight basic document types:

- Title deed certificate

- Agreement

- Suspension and cancellation

- Mortgage

- Means of acquisition

- Payment receipt

- Building permit

- Compensation and valuation

For each type of document, data entry screens were created where officers could enter the required information.

Components:

- PostgreSQL database as data store
- Image server to store scanned images
- LibreOffice Base as front end; links to PostgreSQL and the image server

Database server:
PostgreSQL

Image server
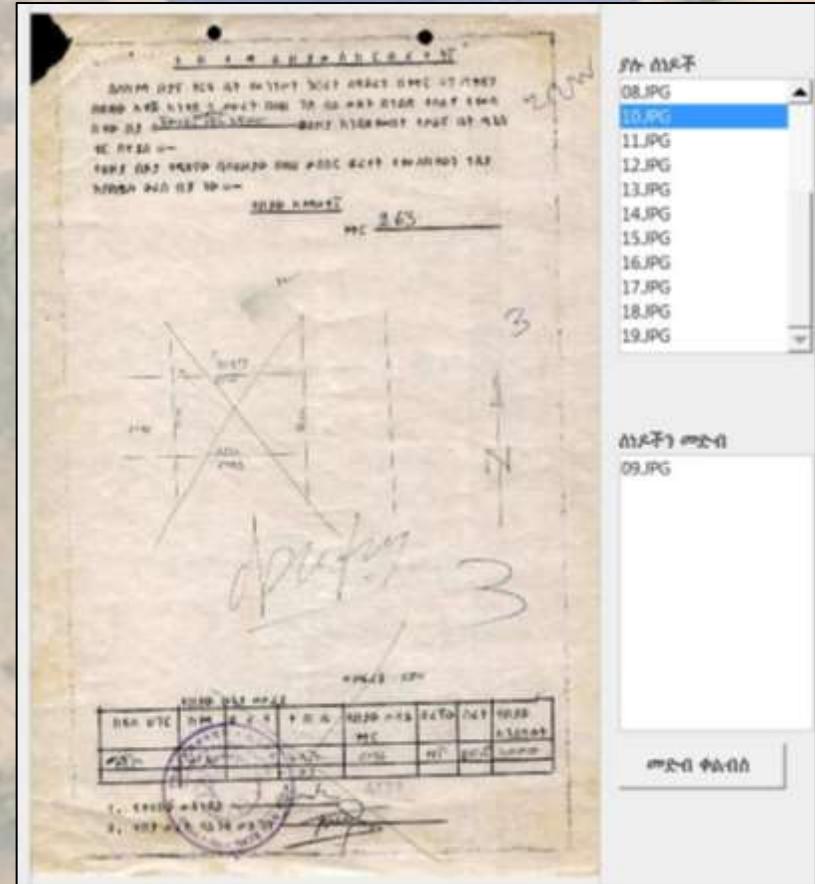
Front end:
LibreOffice Base

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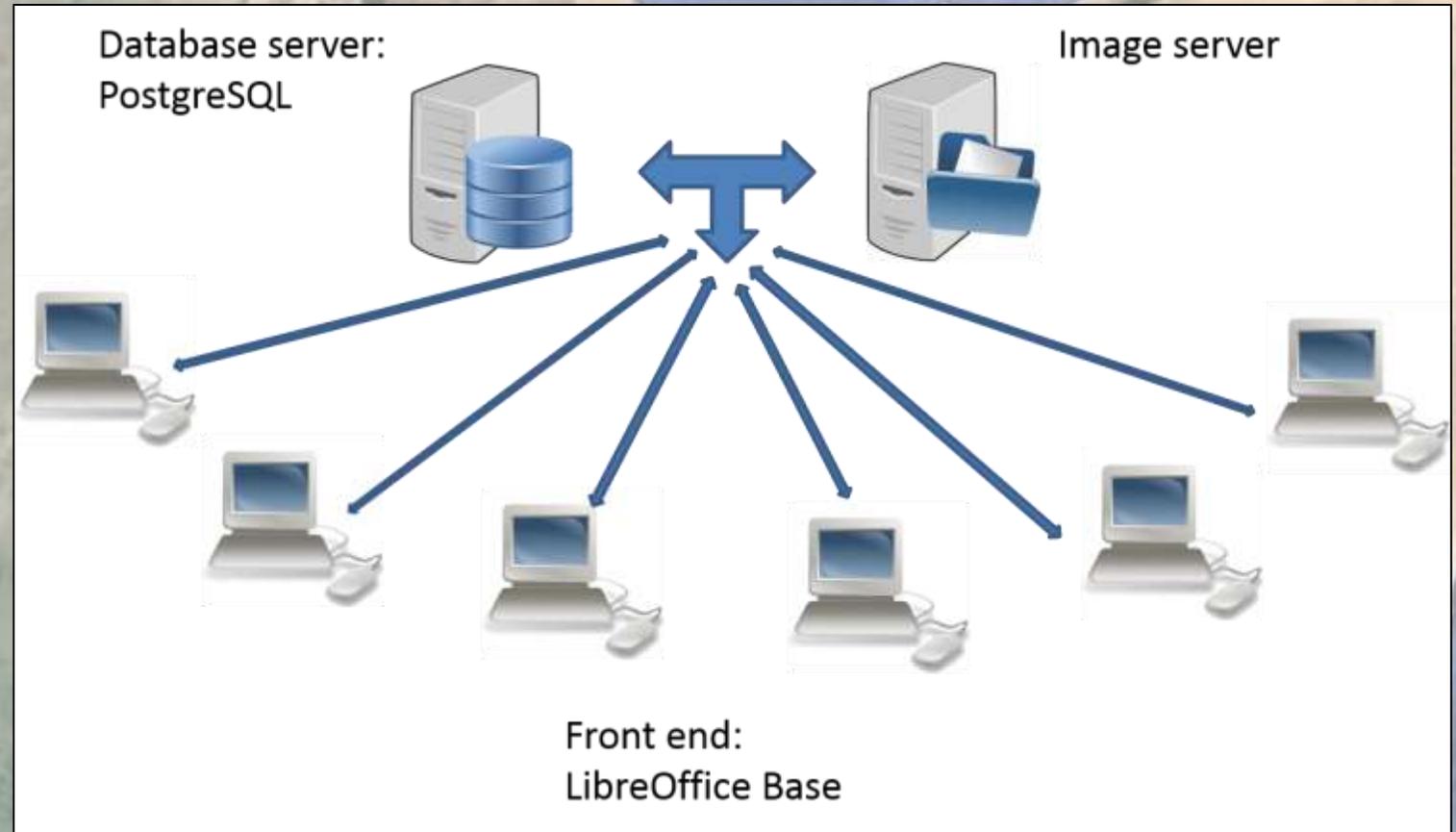
Door to door verification and assigning of unique parcel identification numbers (UPIN)

The land records are digitalised using scanners and digital cameras, and organised by parcel number.

Lists of parcel numbers and file numbers were uploaded into the system, so that the images could be correctly linked to the land records.

User tools

- View all images of a parcel/file
- Add and edit documents for a parcel/file
- Assign / unassign images to files
- View and print reports
- Change password

Supervisor tools

- Link scanned images to the database
- Add / remove users
- Assign UPIN records to users, to be encoded
- View encoded records by user and by date (monitoring)
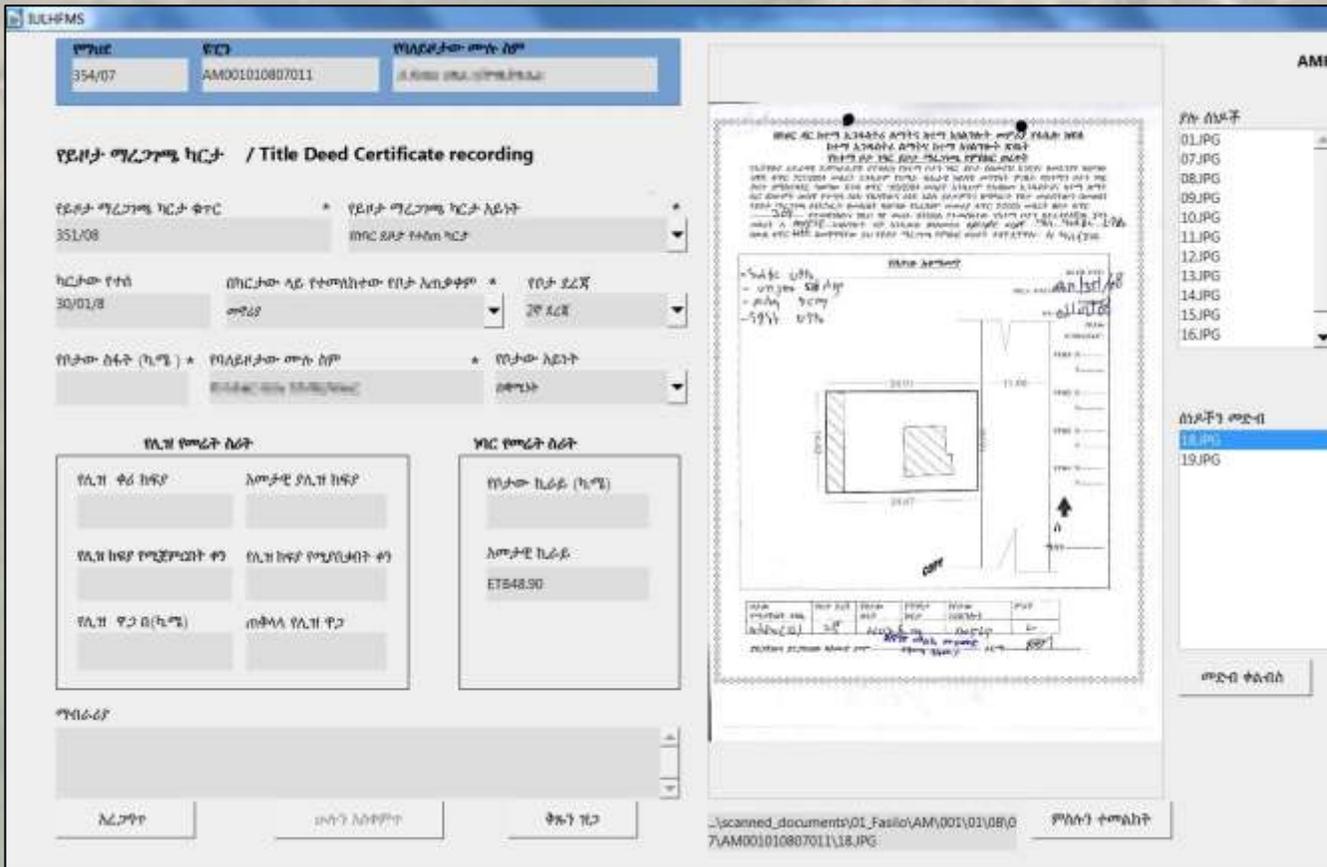
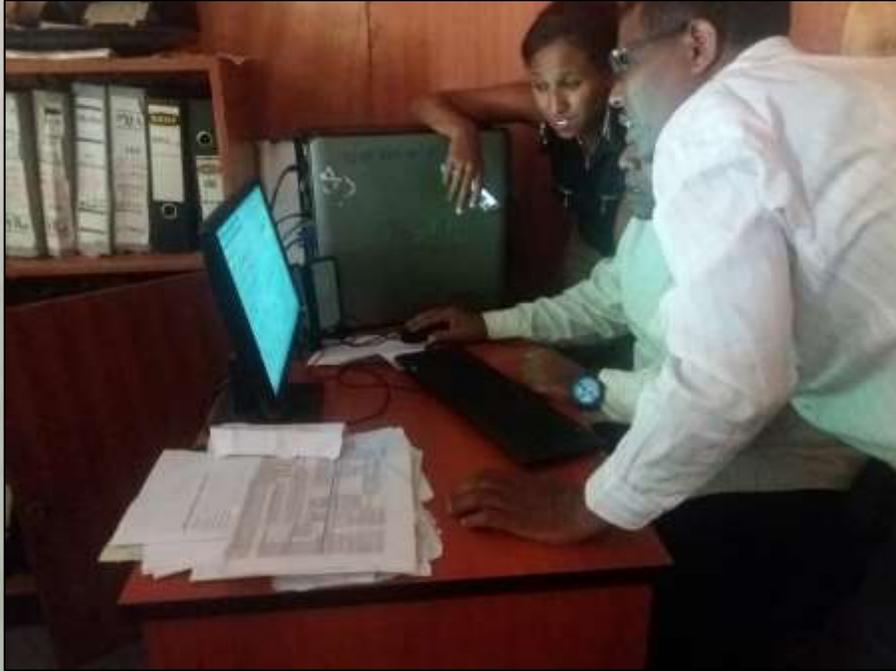The interface was localised to support Amharic and Tigrinya, and handling of dates in Ethiopian calendar format

Outlook and evaluation

IULHFMS operational in Bahir Dar, Mekele and Dire Dawa

Expected to be installed in 95 cities and 800 rural woredas in Ethiopia

In a WB review of land systems in Ethiopia, IULHFMS received the highest ranking and was considered the best option going forward to support systematic registration

Open source systems are a viable alternative to high end proprietary systems that may be more expensive to maintain.

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