A Strategic Objective for FAO

Building capacity and supporting initiatives to improve responsible governance in tenure and administration of land and other natural resources

Voluntary Guidelines for Responsible Governance of Tenure (VGGT)

The Voluntary Guidelines promote secure tenure rights and equitable access to land, fisheries and forests as a means of eradicating hunger and poverty, supporting sustainable development and enhancing the environment.

They were officially endorsed by the Committee on World Food Security on 11 May 2012 and since then have been acknowledged by many important fora.

Open Source Software facilitates implementation of the VGGT by:

- Addressing VGGT Section 17 (Records of Tenure Rights) and supporting most other VGGT sections
- Directly improving transparency to tenure rights
- Improving service delivery
- Recording tenure rights across continuum of rights
- Supporting both STDM and land
- administration processes
- Simplifying processes
- Implementing standards like LADM (ISO 19152)

Making affordable, sustainable and fit-for-purpose computerized cadastre and land registration systems available to all countries.

Open Source Land Administration Software

Solutions for Open Land Administration (SOLA) software

SOLA supports cadastre and registration functions and services provided by a typical land office.

It gives land administration agencies an enterprise level system incorporating international best practice and standards. SOLA is designed to facilitate the essential customisation that is always required to meet specific needs of a country.

FAO encourages software development skills transfer to ensure in-country expertise to maintain and extend local implementations of SOLA.

Open Tenure Crowd Sourcing Software

Open Tenure supports a crowd sourcing approach to the collection of tenure related details by communities.

OPEN TENURE

"Community Recorders" using tablet and smart phone devices loaded with the Open Tenure mobile application can field capture tenure details (rights, spatial units and party including people-land relationships).

These details are then transferred to a "Community Server" making this data accessible through the internet and subject to a community based moderation process.

Open Tenure as Android
+ iOS (iPad) versions are now available

See FAO latest Community Server available now at **ot.flossola.org**

FAO Food and Agriculture Organization of the United Nations   **SOLA**

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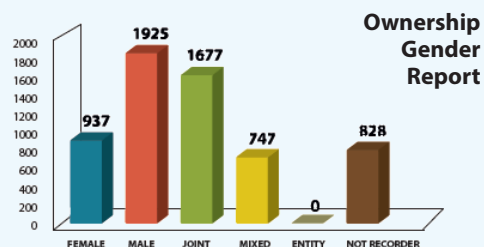
SOLA Implementations

Lesotho

The Land Administration Authority has implemented a Lease Management System supporting all their cadastral and registration processes as well as lease preparation and management.

Samoa

The Ministry of Natural Resources & Environment implemented SOLA to integrate their land registration and cadastral mapping systems. SOLA also supports a new Unit Titles Act (condominium registration).

Nigeria

SOLA was used in the Presidential Technical Committee on Land reform systematic registration pilots and the subsequent scale-up in a number of States. Satellite imagery was added to SOLA for boundary definition.

Ownership Gender Report

Bar chart values: FEMALE 937, MALE 1925, JOINT 1677, MIXED 747, ENTITY 0, NOT RECORDER 828

Languages included in SOLA Applications

- Albanian
- Amharic (Ethiopia)
- Arabic
- Brazilian
- Chinese
- English
- French
- Khmer (Cambodia)
- Russian
- Spanish

SOLA Project Goals (2010 – 2012)

SOLA was initially developed through a FAO managed project funded by the Ministry for Foreign Affairs of Finland. The project goals were:

- Development of an open source enterprise software application that supports core cadastre and registration functions;
- Support for the customisation of the initial SOLA software in pilot countries and its implementation;
- Establish an open source community of users and developers around the SOLA software.

SOLA Software Applications

Registry – integrated registration and cadastral functions in a typical district land office including case management of service requests.

Systematic Registration - systematic (first time) registration tasks to produce public display listings and maps, generate title certificates and digital transfer of this data to a district land office.

Admin - system administration functionality.

State Land - state land tasks for lease administration, acquisition, disposal and management of state land and other properties.

Community Server to store and provide web access to community collected tenure data. Also manages processes leading to the community recognition of tenure rights.

Open Tenure – provides for the in-the-field capture of tenure rights by communities and individuals using mobile devices.

SOLA Implementations

World map with labels: NEPAL, CAMBODIA, NIGERIA, UGANDA, ETHIOPIA, SAMOA, LESOTHO, TONGA

Software Architecture

Key Features

- 3 Tier (Presentation – Java Web Start; Services – Web Services; Data Layer – Postgresql with POSTGIS Extension);

- Leverage Open Source Components & non-proprietary industry standards (ISO 19152 – LADM, Open GIS Consortium Simple Feature Type definition, wms (for using orthophoto and satellite imagery);

- Use Modular Loosely Coupled Components (Service Oriented Architecture);

- Use Enterprise Application Framework.

FOR INFORMATION
WWW.FLOSSOLA.ORG

SOLA ISSUE TRACKING
www.flossola.lighthouseapp.com/projects/89377-sola/overview

DOWNLOAD SOLA REGISTRY SOURCE
www.github.com/SOLA-FAO

DOWNLOAD OPEN TENURE
www.github.com/OpenTenure/ot-releases

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