Open Tenure Crowd Sourcing Software

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

Once the community has discussed and agreed to the way tenure right claims will be collected, moderated and displayed a Community Server will be established (possibly as a cloud-based server) and community members with specific roles in this process will be trained.

Typically the recording of tenure rights will include these stages:

• Community information dissemination;
• Community Recorders download details of existing tenure rights and fit-for-purpose map imagery;
• In-the-field recording of claim details including mapping of claims and the collection of document images and photos;
• Upload claims to Open Tenure Community Server;
• Display of claims and the potential submission of challenges to claims on Community Server;
• Review of claims (and associated challenges);
• Moderation of claims (community endorsed) including modification of claims based on community based consensus;
• Publishing of community endorsed tenure rights on Community Server.

Open Source Software facilitates implementation of the VGGT by:

• Identify and safeguard tenure rights not recorded by formal land administration;
• Engage with all tenure right holders in tenure governance processes including customary tenure rights not currently protected by law;
• Exercise self-governance for communities with customary tenure systems;
• Protect against unauthorized use of land, fisheries and forest resources;
• Ensure citizen and community involvement in State processes impacting on tenure rights;
• Support participatory gender sensitive processes impacting on tenure rights.

FAO’s Strategic Framework

The implementation of the Voluntary Guidelines for the Responsible Governance of Tenure is a major area of work within FAO’s Strategic Framework.

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:

- Identify and safeguard tenure rights not recorded by formal land administration;
- Engage with all tenure right holders in tenure governance processes including customary tenure rights not currently protected by law;
- Exercise self-governance for communities with customary tenure systems;
- Protect against unauthorized use of land, fisheries and forest resources;
- Ensure citizen and community involvement in State processes impacting on tenure rights;
- Support participatory gender sensitive processes impacting on tenure rights.

Citizens and Communities Empowered to Record their Tenure Rights
Open Tenure Development

Open Tenure was developed through a FAO managed project funded by UK DFID. The project deliverables include:

- Development of open source software that supports a crowd sourcing approach to the recording of tenure rights by individuals and communities;
- Field testing of OpenTenure;
- Preparation of a guide on a community based crowd sourcing approach to the recording of tenure rights using Open Tenure.

Potential Uses for Open Tenure in Land Administration

Open Tenure could be used with little or no modification as an in-the-field map and data recorder in support of:

- Systematic registration;
- Building permit inspection;
- Regulated spatial planning;
- Land consolidation;
- Restitution;
- Expropriation;
- Logging disputes and their resolution;
- Digital lodgement for property registration;
- Property Valuation;
- Climate change.

Open Tenure Client Functionality

The same functionality has been implemented in all 3 types of client devices providing Open Tenure tenure rights data entry:

- Record contact details for person or organization claiming tenure rights (including images of collaborating ID/registration documents and photos);
- Record shares and details of other rightholders (where there are multiple rightholders);
- Recording of images of documents supporting claim;
- “Fit for Purpose” mapping of tenure right using down-loaded map imagery on the mobile device augmented by GPS position fixes and a selection of map edit tools;
- Selection of map imagery sources;
- Recording Challenges to tenure right claims;
- “Open Data” downloads of previously recorded tenure rights from Open Tenure Community Server;
- Claim uploads (direct or as encrypted file by email) to an Open Tenure Community Server;
- Tenure right claim Map generation;
- Tenure right claim Summary generation;
- Claim status updating;
- Easy software language localization (Arabic, French, Spanish, Portuguese & Russian Language).

Open Tenure Community

Open source components have been used to create the initial Open Tenure Server based on Geo-server and the FAO SOLA system that has been suitably modified to be web-based. The database schema is a LADM (ISO19152) compliant variation of the SOLA database schema, imagery map layers utilize WMS and data is exchanged with Open Tenure clients by way of JSON packages.

Functionality includes:

- New user registration and user role definition;
- “Open Data” uploading from and downloading to Open Tenure client devices for the community’s area of interest;
- Community based tenure rights claim review;
- Community based tenure rights claim moderation;
- Web access to submitted tenure right claims;
- Email notifications of claim submission and processing;
- Internet Café Claim recording (replicating Open Tenure client functionality).

Field tested in Oddar Meanchey Community Forest, Cambodia.

Open Tenure Client Hardware

Recommended specifications for each Open Tenure client option:

1. An Android Tablet
   - 7’’ tablet
   - Android version 4.4
   - 1GB RAM
   - 8GB of disk available
   - Rear camera
   - GPS sensor
   - Compass sensors

2. iPad
   - iPad 2 (or newer, recommend iPad mini or newer)
   - iOS 7.0 or later
   - 16GB of disk available

3. Internet Connected PC
   - Internet connection
   - One of the common web browsers

FOR INFORMATION
WWW.FLOSSOLA.ORG
OPEN TENURE TEST COMMUNITY SERVER
OT.FLOSSOLA.ORG
ISSUE TRACKING
www.flossola.lighthouseapp.com/projects/118887-opentenure/overview
DOWNLOAD OPEN TENURE
www.github.com/OpenTenure/ot-releases