



*Presented at the FIG Working Week 2016,
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OPEN TENURE SOFTWARE FOR COMMUNITY TENURE RECORDING, LAND ADMINISTRATION & POST DISASTER RESPONSES

Neil Pullar, Consultant



OPEN TENURE
by SOLA



Paper Conclusions

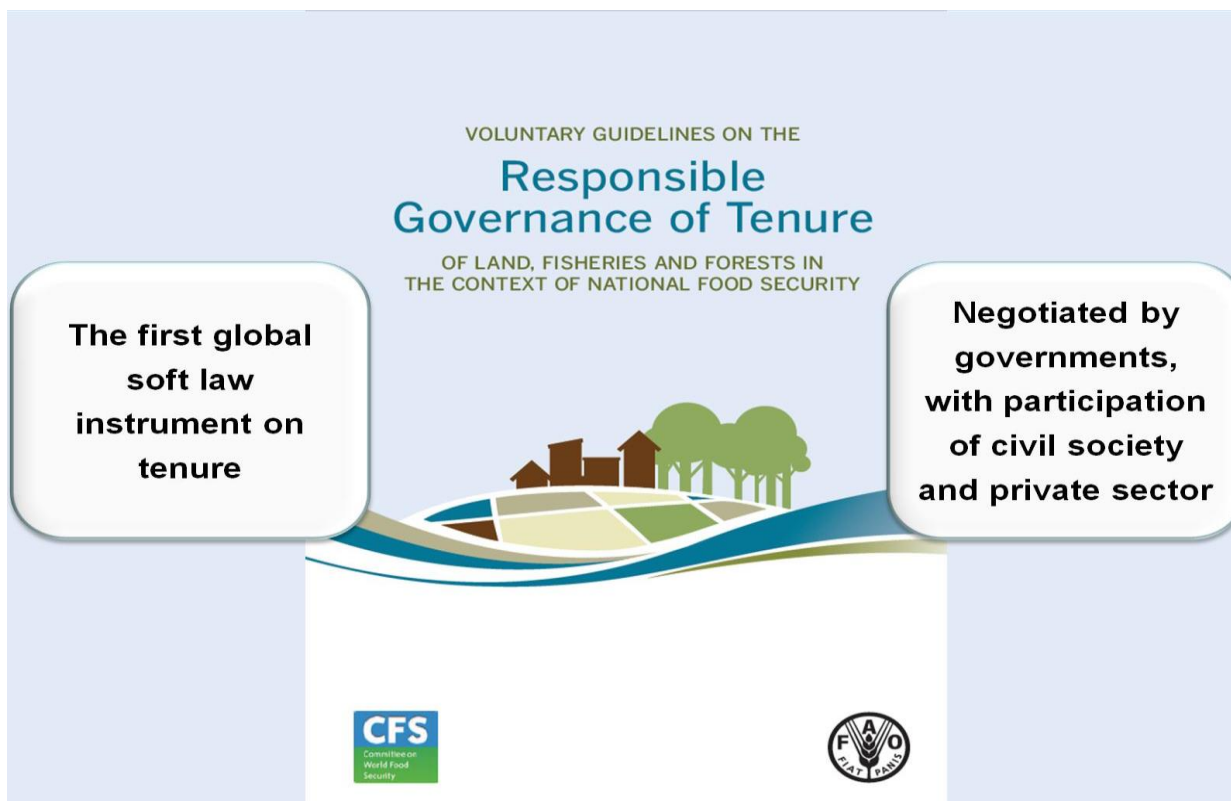
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2. Community engagement including “free, prior and informed” consent should be mandatory
3. Use of Local Software Developers
4. Resolution of map imagery used needs to be appropriate
5. Boundaries should be defined in terms of physical features visible on map imagery





Voluntary Guidelines on Responsible Governance of Tenure of Land, Fisheries and Forests



[FIG & FAO Joint Technical Session – Thursday 11-12.30](#)





Voluntary Guidelines on Responsible Governance of Tenure of Land, Fisheries and Forests (VGGT)

Open Tenure open source software is an Enabling Technology for the implementation of the VGGT in that:

- Identifies and safeguards tenure rights not recorded by formal land administration
- Engages with all tenure right holders in tenure governance processes
- Exercises self-governance for communities with customary tenure systems
- Protects against unauthorized use of land, fisheries and forest resources
- Ensures citizen and community involvement





The SOLA Open Source Software



REGISTRY

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



OPEN TENURE

Provides for the in-the-field capture of tenure rights by communities and individuals using mobile devices.



COMMUNITY

Stores and provides web access to community collected tenure data. Also manages processes leading to the community recognition of tenure rights.



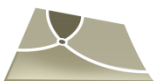
SYSTEMATIC

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.



STATE LAND

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



ADMIN

System administration functionality.





Completed Open Source Software Solutions





Open Tenure Key Features

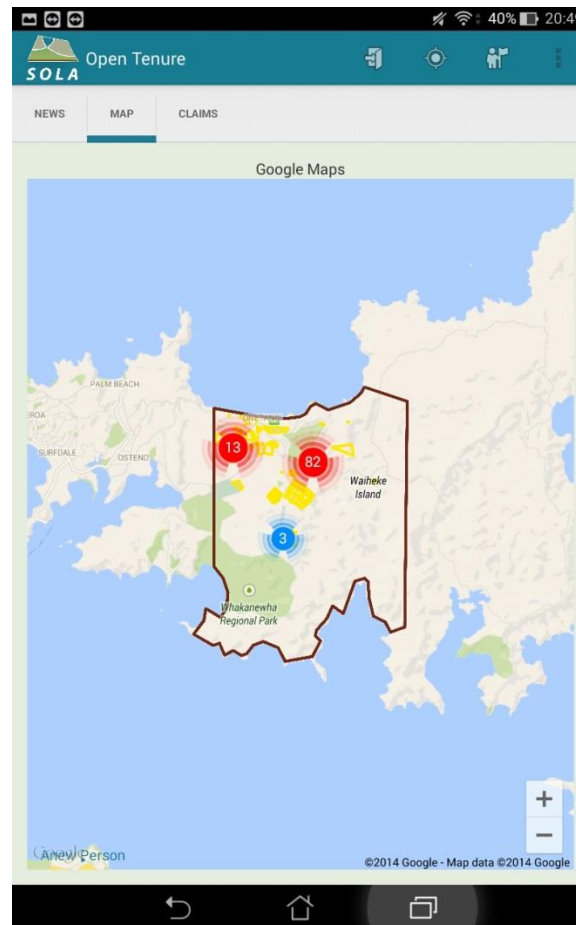
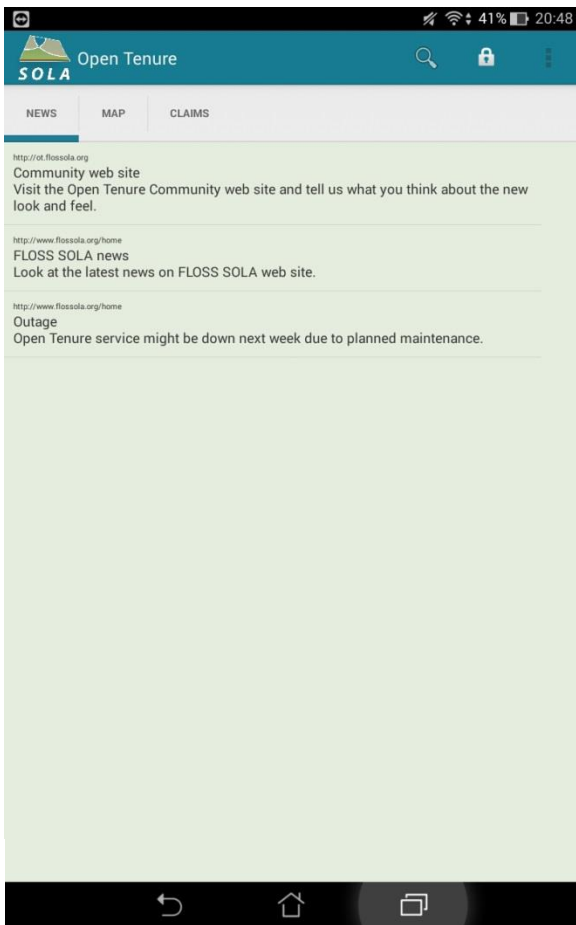
Open Tenure was specifically designed to support community tenure recording that includes the following features:

- Mobile application for Android and iOS devices
- Allows citizen recording of tenure rights (crowd sourcing)
- Record claimant (and share) details, mapping of boundaries and collect documents and photos to support claims
- Display various map imagery data sources
- Online and offline operation
- Ability to add further fields (and tabs) to record community
- Claims uploaded to the Community Server for moderation by the community





Open Tenure – Welcome Page and Community Map





Open Tenure – List of Claims & Claim Details

Open Tenure

NEWS COMMUNITY MAP LIST OF CLAIMS

Type some characters to filter the list

created

- Olive Grove, Created by:Neil Pullar

unmoderated

- Claim 1, Created by:FAO, Uploaded by: test
- Claim 2, Created by:G2, Uploaded by: test
- Claim 829 1, Created by:GMS , Uploaded by: test
- Claim 9 03 2, Created by:Chuyen Tran, Uploaded by: test
- Claim 9062147, Created by:G9062148, Uploaded by: chuyentt
- Claim 9071839, Created by:G9071840, Uploaded by: chuyentt
- Claim 9071844, Created by:G9071845, Uploaded

Open Tenure: Demonstration...

CLAIM MAP DOCUMENTS ADJACENCIES CHALLENGES OWNERS

Claim name *
Demonstration Example

Claim type *
Ownership

Land Use
Residential

Date claim applies from (YYYY-MM-DD)
1958-03-16

Area
990 m2

Notes
Insert Claim's notes

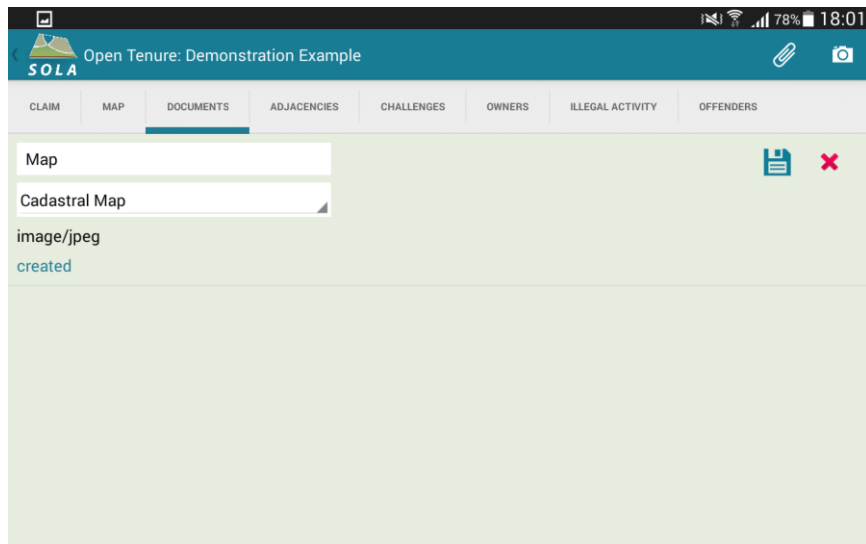
Claimant *
Neil Pullar
Modify Claimant

Select Claim to Challenge





Open Tenure – Claim Map & Claim Documents





Open Tenure Reserve Mapping , Kebbi, Nigeria

The screenshot displays the SOLA Community Server v1.3 interface. At the top, there is a navigation menu with 'Home', 'Dashboard', 'Registration', 'Claims', and 'Map'. The main content area is titled 'Claim #15110032' with a 'on public display' indicator. Below the title are buttons for 'Edit', 'Challenge', 'Delete', and 'Print'. A secondary navigation bar includes tabs for 'Claim', 'Claimant', 'Map', 'Documents', 'Owners', 'Adjacencies', 'Comments', 'Certificate of Occupancy', and 'Gazetted Reserves'. The 'Map' tab is active, showing an aerial satellite view of a land plot outlined in cyan. The plot is labeled with the claim number '#15110032' and its area '(47000 m2)'. On the left side, a 'Layers' panel is visible, containing several checked options: 'Current claim', 'Community area', and 'Claims'. Under 'Claims', there are sub-options for 'Unmoderated claims', 'Claims for review', 'Reviewed claims', and 'Moderated claims'. At the bottom of the layers panel, there are radio buttons for 'Google Map' and 'Google Earth', with 'Google Earth' selected. The interface also includes standard map controls like 'Zoom to extent', 'Zoom in', 'Zoom out', 'Pan', and 'Maximize'.





Post Disaster Considerations

1. Crowd source mapping was used after Haiti earthquake
2. Open Tenure captures full range of STDM data plus community/situation specific data fields without software changes
3. Open Tenure is designed for use by “Community Recorders”
4. By default UAV generates (super) high resolution imagery
5. Pre disaster and post disaster map imagery needs to be geo-referenced consistently
6. Need for community solutions as land affected by disaster is often outside formal land administration systems





Paper Conclusions

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- Government of Germany
- Government of Italy





FOR INFORMATION

www.flossola.org



FLOSSOLA Open Source
Software Community

Copy of this paper and power point is available on the SOLA Open Source Community website

Plus access to demonstration versions of the SOLA desktop software

User Name / Password [test/test](#)

DOWNLOAD OPEN TENURE FROM:



OPEN TENURE
by SOLA

