Social Tenure Domain Model

Technical Implementation

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EMBRACING OUR SMART WORLD
WHERE THE CONTINENTS CONNECT:
ENHANCING THE GEOSPATIAL
MATURITY OF SOCIETIES

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- STDM as a **Concept** – Bridging the gap to represent people to land relationships independent of the level of formality, legality and technical accuracy.

- STDM as a **Model** – It is a 'specialization' of the ISO-approved Land Administration Domain Model (LADM).

- STDM as an **Information Tool** – It provides the front-end interface for applying the STDM Concept and Model.
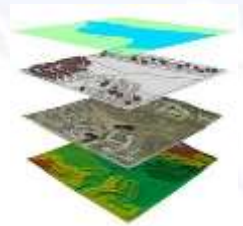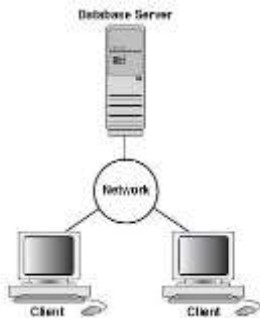
FACILITATED BY:

- Based on free and open source

- Provides core GIS functionality

- Customizable framework

- Multiuser capabilities
- Can be integrated with external applications e.g. financial systems, persons register
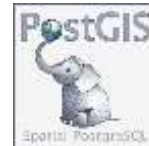
- Database Server = **PostgreSQL**

  Rationale:

    – Best DBMS with regard to total cost of ownership (TCO)

    – Supports database replication

    – Customizable in multiple languages e.g. Python, R, Ruby, V8 JavaScript

    – Short cycle of new releases ~ 15 months

    – Confidence by top tech companies: Microsoft[*], Apple, Fujitsu, etc.

- Spatial Extension = **PostGIS**

  Rationale:

    – Provides over a 1000 functions for storing, querying, manipulating both vector and raster data.

    – Standards compliant (OpenGIS specification)

- Desktop GIS = **QGIS**

  Rationale:

  – Rich feature set of vector editing functions for managing spatial units

  – Ever growing number of users and developers

  – Huge volume of support manuals and tutorials

  – Built-in support for PostgreSQL/PostGIS spatial databases

  – Provides a sophisticated plugin architecture that supports customization using Python or C++

  – New stable version releases every 4 months

  – Online repository of third-party extensions

  – Current version for STDM 2.18

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DEPLOYMENT OPTIONS
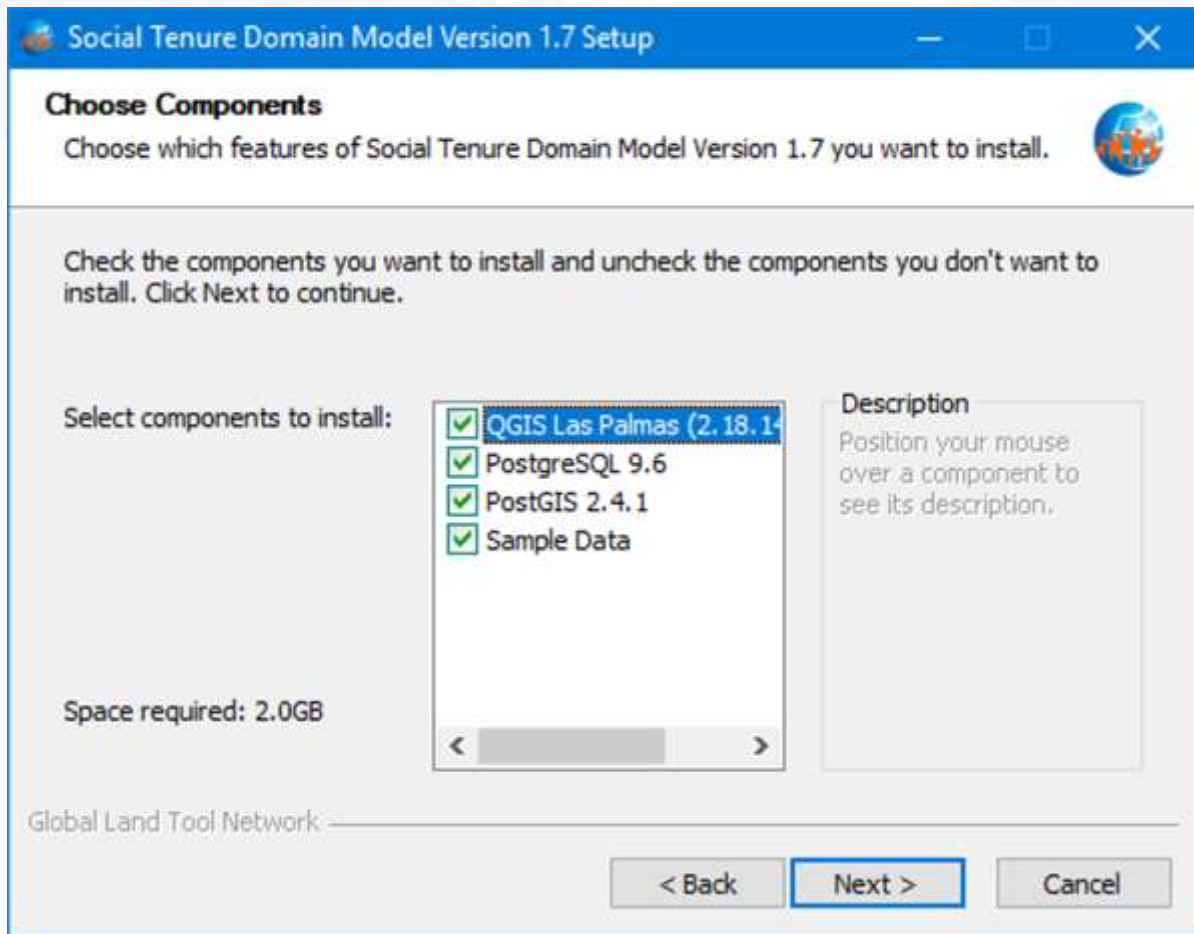
- Standalone installation (PostgreSQL, PostGIS, QGIS/STDM)
- Server installation (PostgreSQL, PostGIS)
- Client installation (QGIS/STDM)

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GLOBAL LAND TOOL NETWORK

SOME FEATURES OF VERSION 1.7…

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- Users can create tables/entities and define relationships without programming

GeoODK Implementation Workflow in STDM

COMPOUND TENURE RELATIONSHIPS

Conceptual model

Implementation in STDM
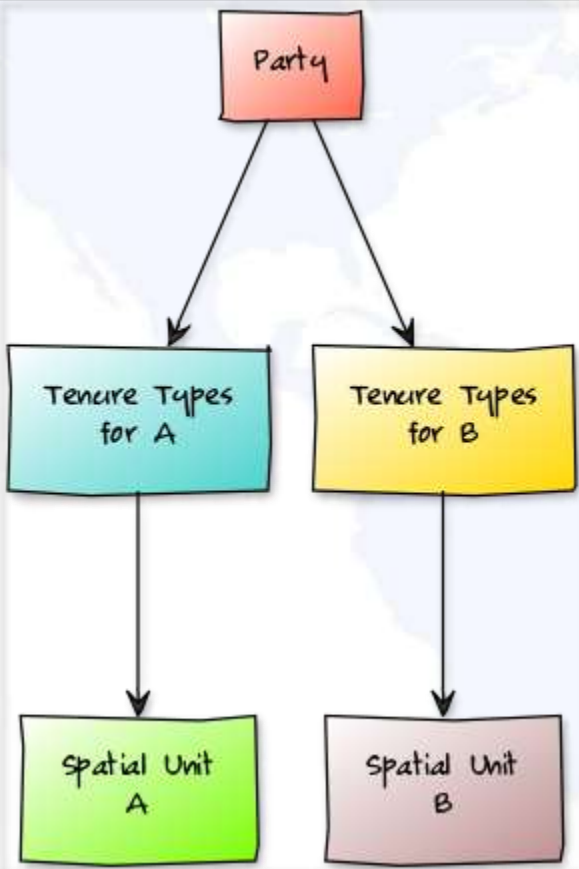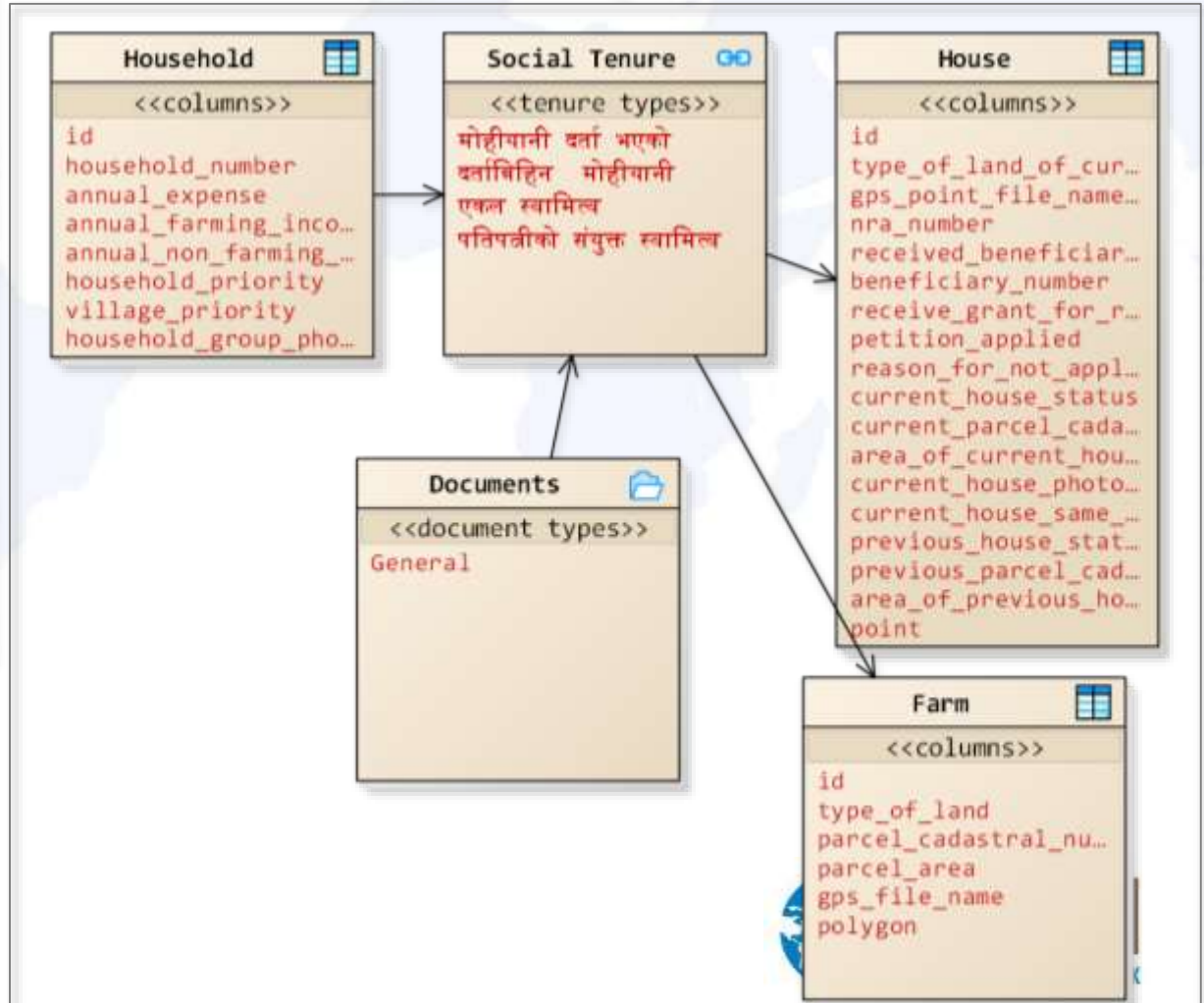
In addition to: **Tenure Type, Share, Start and End Dates**

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AUTO-GENERATED DATA ENTRY FORMS

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VISUALIZATON OF SPATIAL DATA
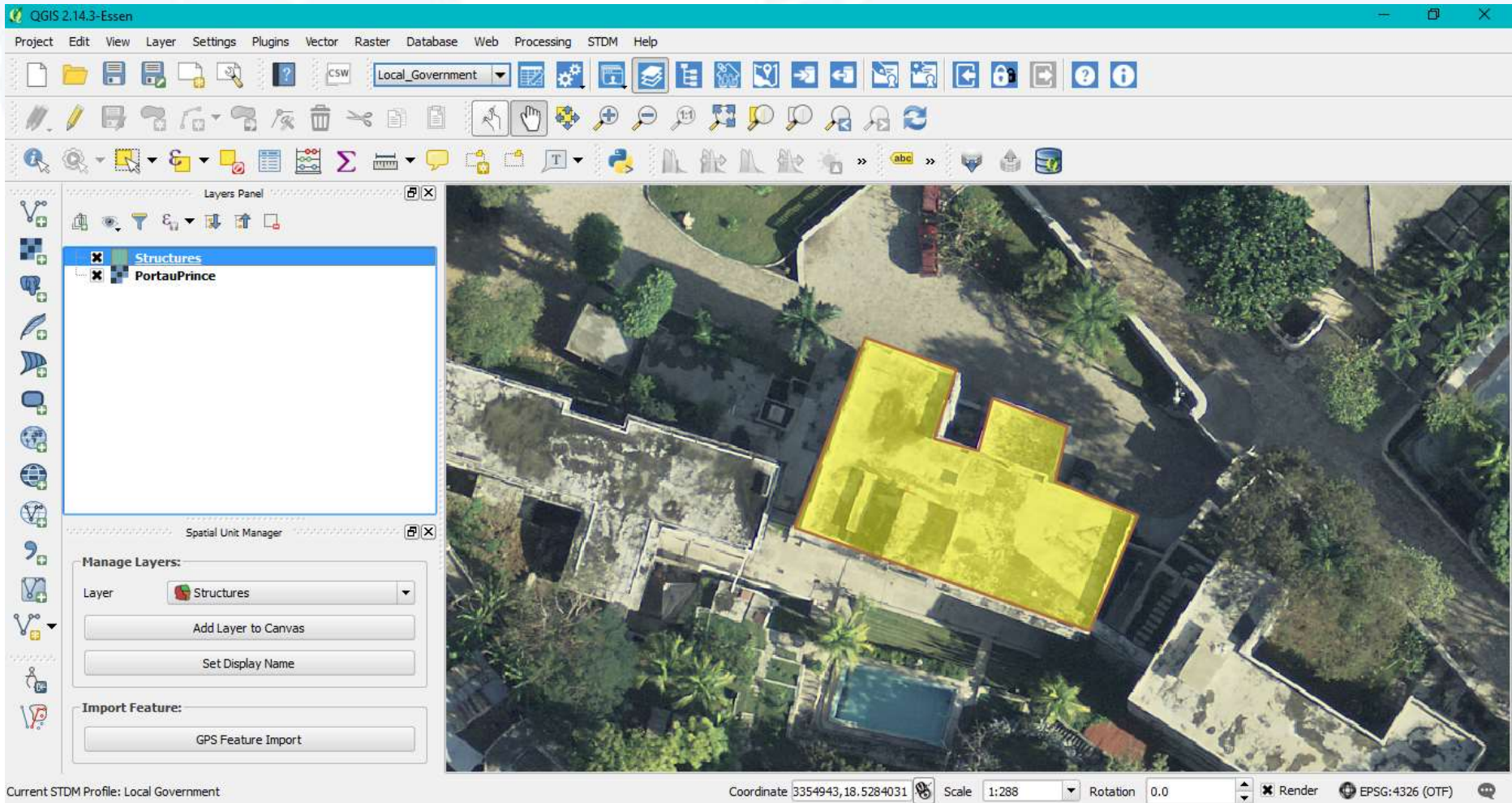
MANAGING TENURE INFORMATION

SAMPLE DOCUMENT OUTPUTS

MULTILINGUAL SUPPORT

- French, Portuguese, German, Arabic

FACILITATED BY:

- Writing code

- Finding and fixing bugs

- Testing new releases

- Documenting experiences

- Translation of software and

  resource materials

FACILITATED BY:

ROADMAP

- New version releases (version 2.0 in October 2018)

- Follow up on recommendations of STDM Advisory Committee

- More strategic partnerships (i.e. academic institutions, user and developer communities)

- Documentation and continuous assessment of STDM

- Focus on country-level capacity development initiatives

ONLINE RESOURCES

- For more information, please visit **www.stdm.gltn.net** or subscribe to: lists.osgeo.org/cgi-bin/mailman/listinfo/stdm-user
- To receive important news and updates around STDM in general, subscribe to: lists.osgeo.org/cgi-bin/mailman/listinfo/stdm-announce
- If you find an issue working with STDM, please report it so that developers can check and fix it. To report a bug, subscribe to: lists.osgeo.org/cgi-bin/mailman/listinfo/stdm-dev or post it in GitHub at: https://github.com/gltn/stdm/issues
- To browse the source codes or extend the core platform, access the repository here: https://github.com/gltn/stdm

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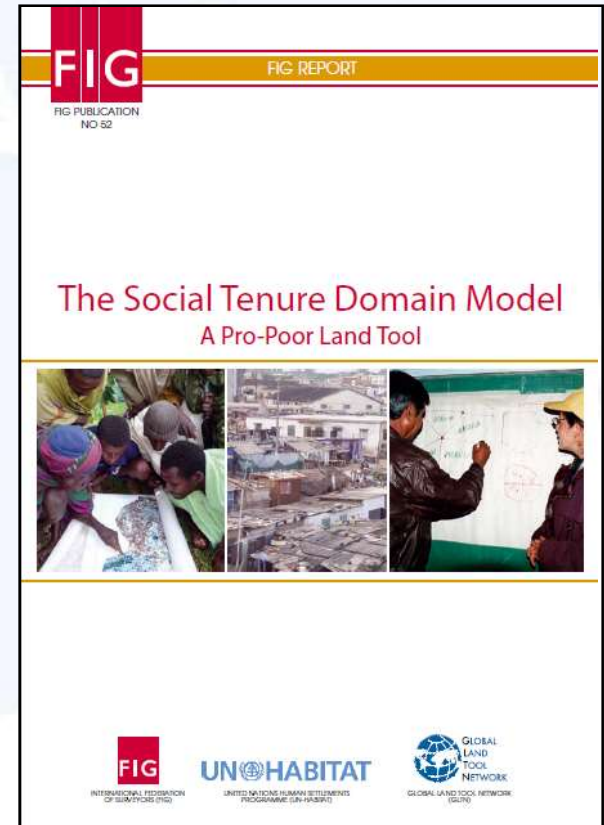
THANK YOU!

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