



GLTN

GLOBAL LAND TOOL NETWORK

SECURING LAND AND PROPERTY RIGHTS FOR ALL

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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THE SOCIAL TENURE DOMAIN MODEL

- 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.

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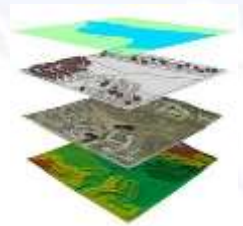
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KEY FEATURES OF THE TOOL



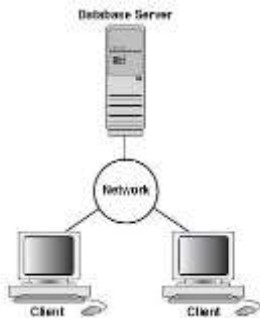
- Based on free and open source



- Provides core GIS functionality



- Customizable framework



- Multiuser capabilities
- Can be integrated with external applications e.g. financial systems, persons register

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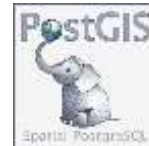
- Database Server = **PostgreSQL**



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)

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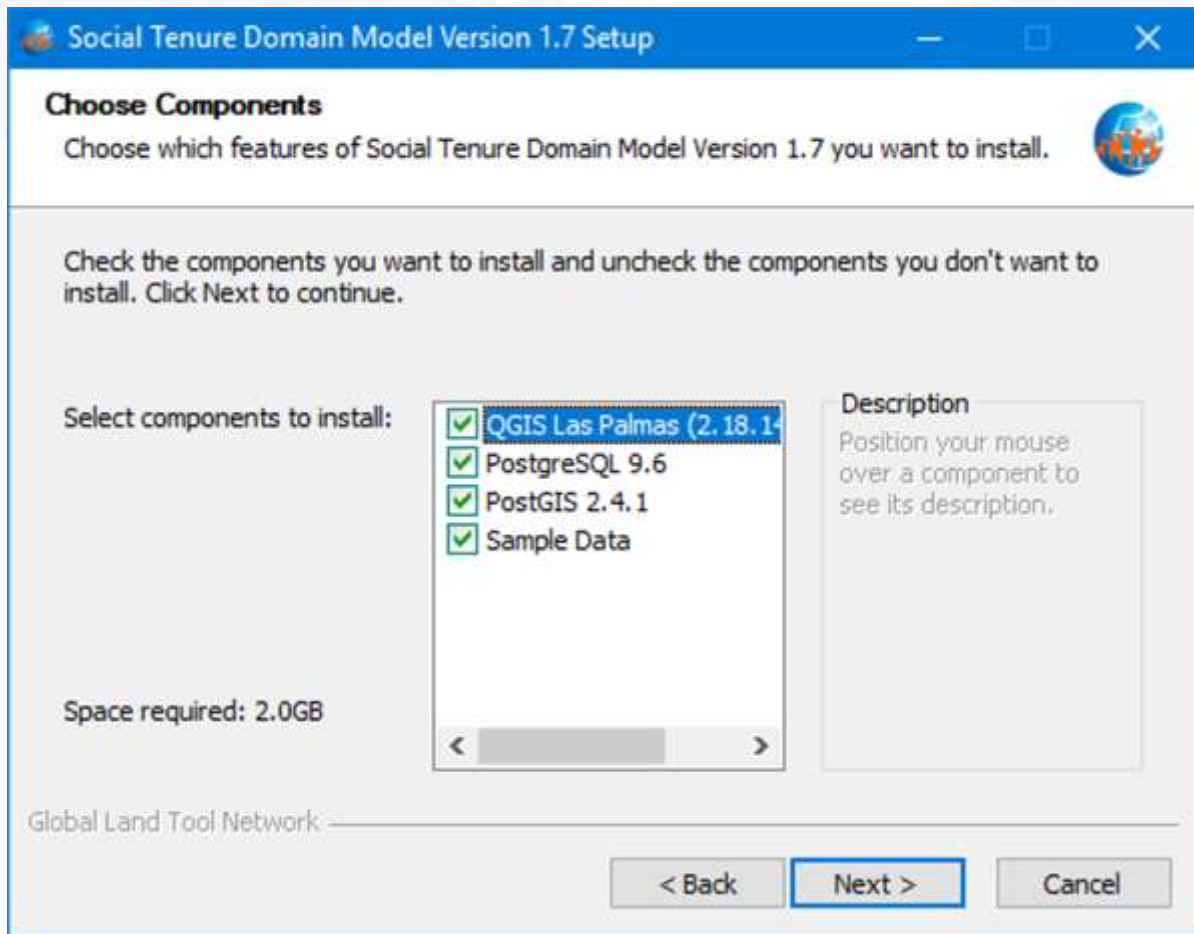
- Desktop GIS = 

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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SOME FEATURES OF VERSION 1.7...

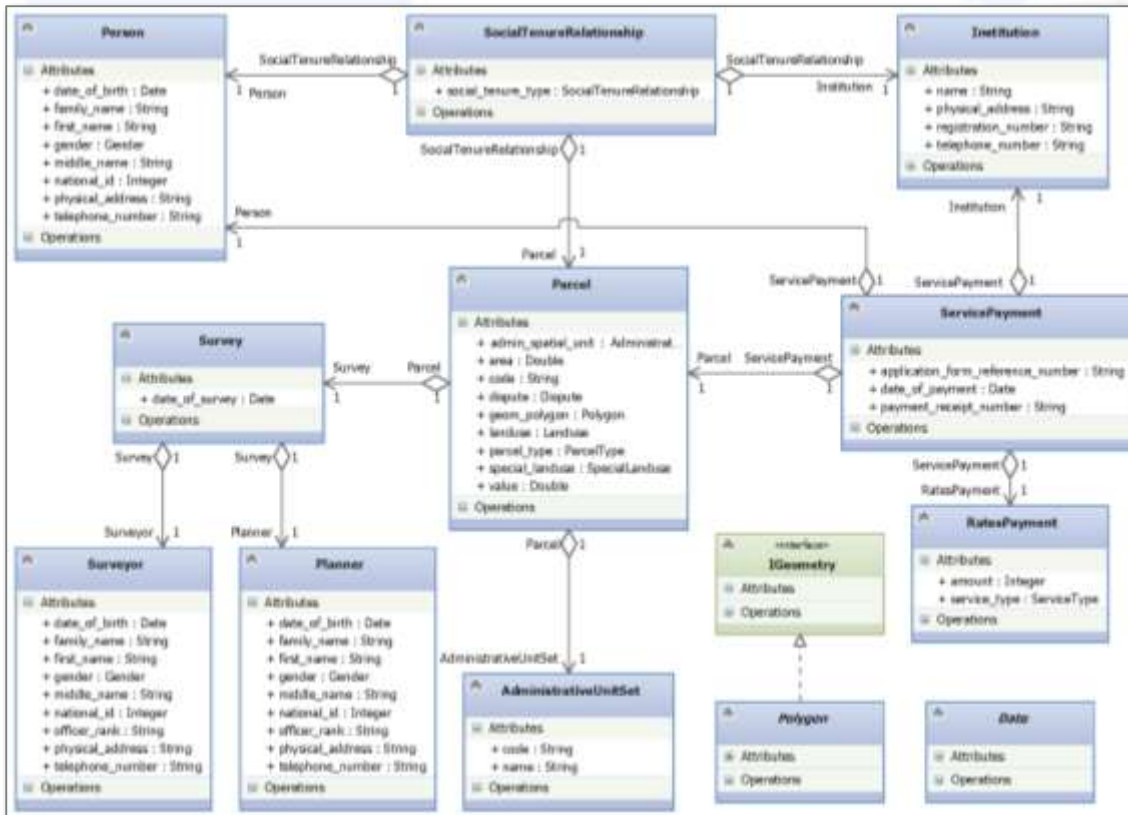
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DATA MODEL CUSTOMIZATION

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



Configuration Wizard
Entity Customization
Add or edit entity columns, lookups and lookup values

Entities

- Enumerator
- Witness
- Parcel
- Structure
- Survey
- Household
- Household Member

Columns

	Name	Data Type
1	code	Varying-length Text
2	geom	Geometry
3	landuse	Multiple Select Lookup

Lookups

- check_social_tenure_relationship_document_type
- check_tenure_type
- check_household_member_document_type
- check_household_document_type
- check_parcel_document_type
- check_gender
- check_marital_status
- check_household_head_relation
- check_settlement_choice

Values

- Photo
- Identification card

Options < Back Next >

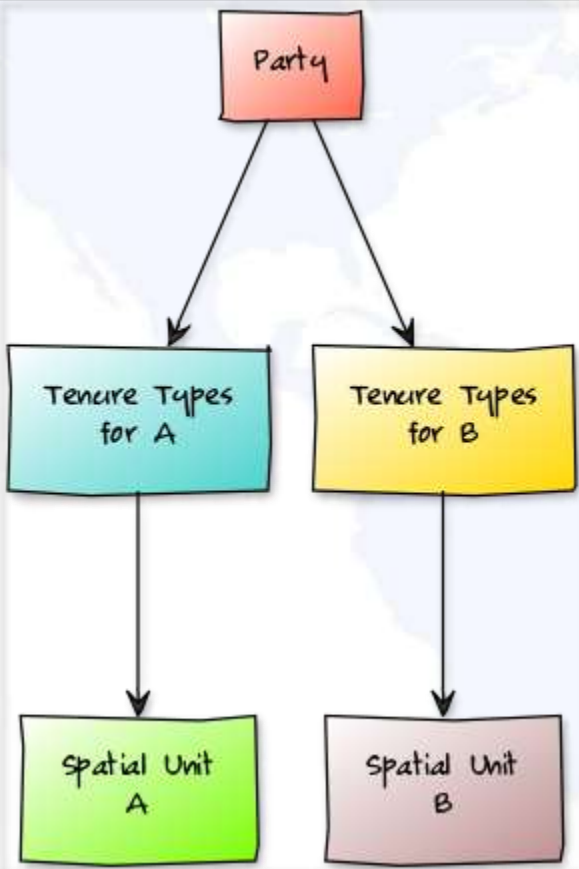
GEOODK MOBILE INTEGRATION

GeoODK Implementation Workflow in STDM

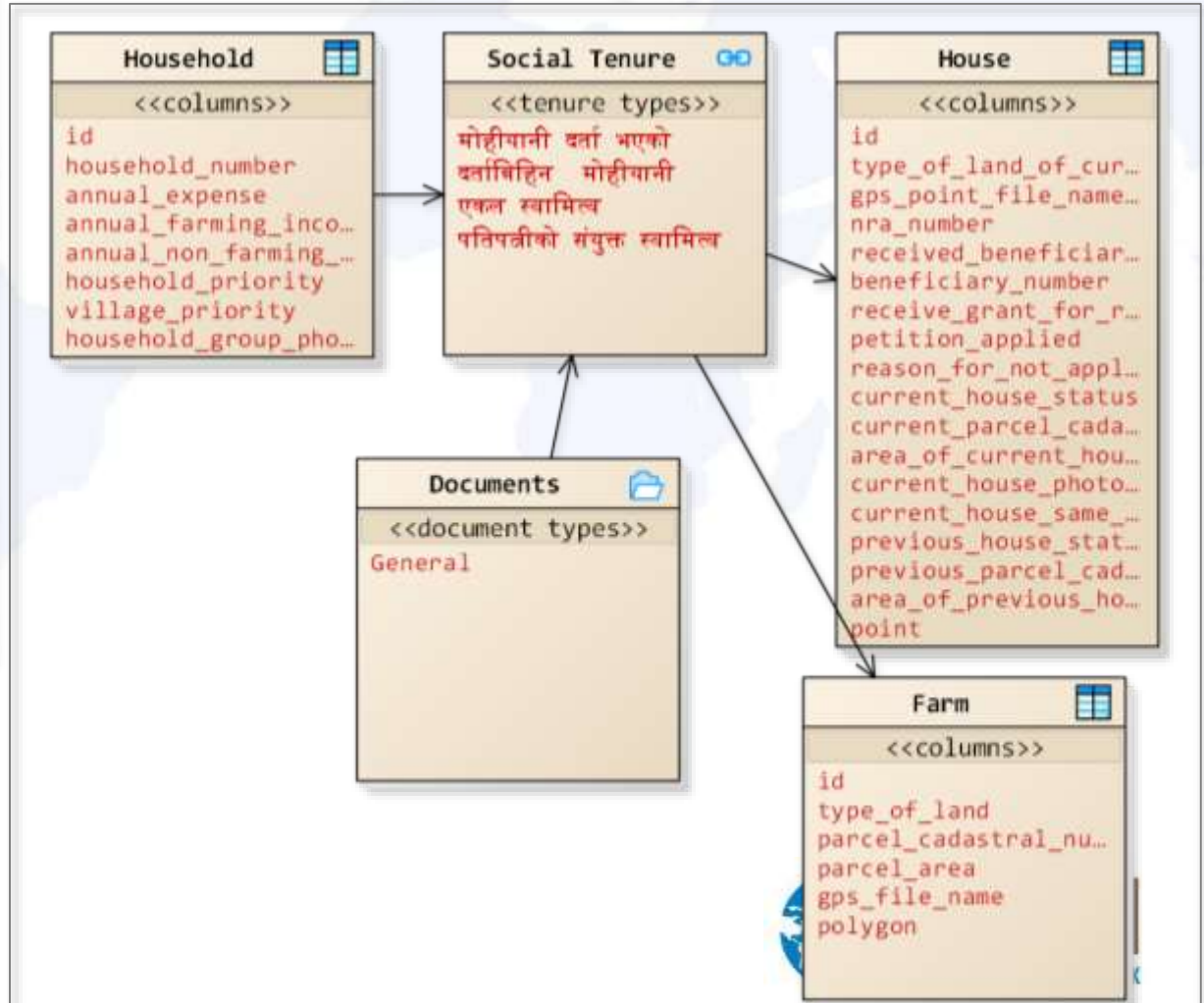


COMPOUND TENURE RELATIONSHIPS

Implementation in STDM



Conceptual model



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CUSTOM TENURE ATTRIBUTES

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

Custom Tenure Attributes Editor

Tenure type:

Attributes:

	Name	Data Type
1	farm_parcel_owners_full_name	Varying-length Text
2	no_hh_sharing_production	Whole Number
3	production_per_to_landlord	Percent
4	farm_land_document_type	Single Select Lookup
5	farm_land_document_id	Varying-length Text

New Social Tenure Relationship

Fill out the custom tenure information form for each party record. You need to select a party record to enable the form.

TST34BV

Farm Parcel Owners Full Name

No Hh Sharing Production

Production Per To Landlord

Farm Land Document Type

Farm Land Document ID

Save Cancel

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AUTO-GENERATED DATA ENTRY FORMS

Farmer Editor

Primary Supporting Documents

Number HJ76R3

First Name * James Farmer identifier number as specified by the association.

Last Name * Musori

Gender * Male

Admin Spatial Unit Kalangala (KAL)

Marital Status Married

Income 34000

Productivity 1234,50

Dob 6/8/1981

History

Inherited land.

Savings

- Bank
- House
- SACCO
- M-Shwari
- Stock Market

Household KL45RT

Please fill out all required (*) fields.

Save Cancel

Farmer Editor

Primary Supporting Documents

Select document type Farmer Card Add document...

Farmer Card National Identity

IMG_2813.JPG (8M)

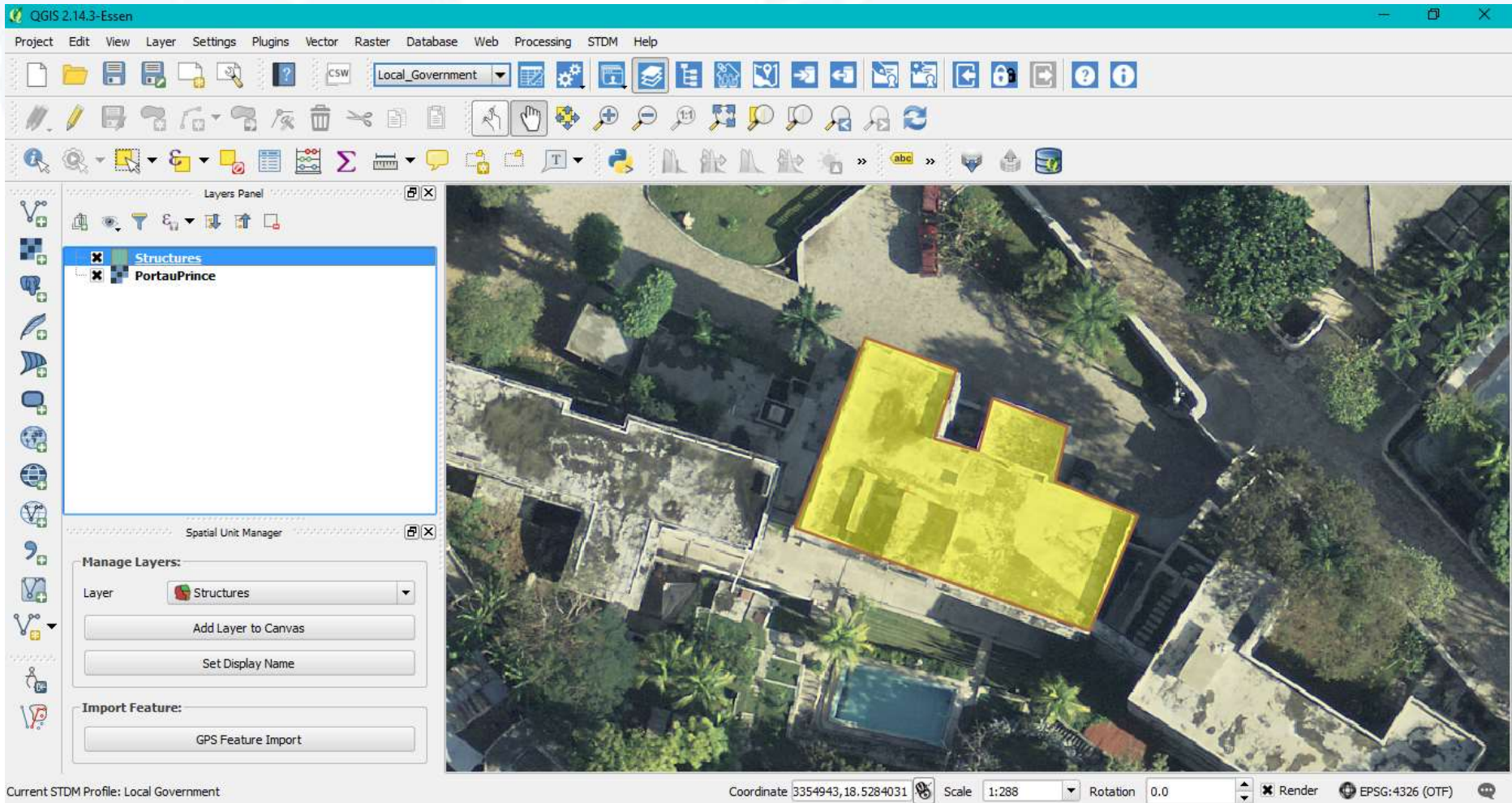
Please fill out all required (*) fields.

Save Cancel

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VISUALIZATION OF SPATIAL DATA



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MANAGING TENURE INFORMATION

The screenshot displays a software interface for managing tenure information. The main window is titled "New Social Tenure Relationship" and contains a form for entering data for a specific party record. The form includes a navigation pane on the left with a tree view showing the hierarchy: Social Tenure Relationship 1, Party, Spatial Unit, Tenure Information, Custom Tenure Inform..., Supporting Documents, and Validity Period. The main area shows the form for the "Alice" party record, with fields for Dispute Status, Period Of Stay In Years (0.000000), and Dispute Type. A "Save" button is located at the bottom right of the form.

Fill out the custom tenure information form for each party record. You need to select a party record to enable the form.

Alice Clement David Peter

Dispute Status

Period Of Stay In Years 0.000000

Dispute Type

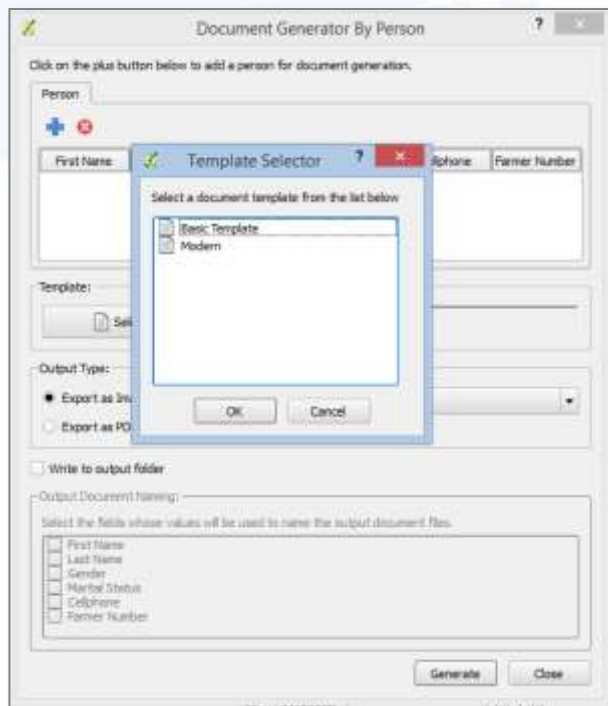
Save

Search Results:

- Person**
 - Middle Name: Alice
 - Last Name: Akeno
 - National ID: 3454364
 - Gender: Female (F)
 - Date Of Birth:
 - Marital Status: Married
 - Household Relation: Wife
 - Telephone Number: 711516003
 - Address: Nairobi
 - Residence Area:
 - First Name: Tya
- Social Tenure Relationship**
 - Tenure Type: Owner
 - Validity Start: 12/02/17
 - Validity End: 12/02/17
 - Tenure Share (%): 50.000000
 - Farm Tenure Type:
- Custom Tenure Information**
 - Dispute Status: None
 - Period Of Stay In Years: 0.000000
 - Dispute Type: None
- Structure**
 - Code: A1
 - Name: House A
 - Ownership Type: 1
 - Recognition Status: 2
 - Location: None

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SAMPLE DOCUMENT OUTPUTS



Ref. No. 47

Certificate of Customary Land Occupancy



Mungule Chieftom
 Chibombo District




Legend

- MANK 018
- Neighbour's Parcel

Parcel size: 2.018 acres





The persons listed below are the bonafide occupants of parcel number **MANK 018** highlighted in the map above.

First Name	Last Name	Tenure Type	Signature
Bella	Nydeti	Joint ownership with spouse	
Frank	Sanda	Joint ownership with spouse	
Prizer	Sanda	Child of owner	
David	Sanda	Child of owner	

Issued on this day at Kakoma Palace

.....

Chieftainess

.....

Village Headperson

.....

STDN Committee

Disclaimer: This document is not a title deed. Title deeds are only issued by the President of the Republic of Zambia through the substantive office of the Commissioner of Lands. The rights cannot be transferred from the persons listed in this document. In case of any changes, this document will be rendered null and void, and a new certificate will need to be issued in consultation with the Chieftainess. The Village Act gives the Chieftainess the authority to issue this document.

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MULTILINGUAL SUPPORT

- French, Portuguese, German, Arabic

Importer dans STDM

Source de données
Indiquez l'emplacement du fichier source et du type de données représentatif.

Source:

Ensemble de données Parcourir

Type de répertoire de destination

Données textuelles Données spatiales

< Précédent Suivant > Annuler

Importar para STDM

Fonte de Dados
Especifica a localização do arquivo de origem e o tipo de dados representativo.

Origem:

Conjunto de dados Procura

Tipo de Destino Repositório:

Dados de Texto Dados de Espaço

< Recuar Avançar > Cancelar

Nach STDM importieren

Quelldaten
Geben Sie den Speicherort der Quelldatei und Datentyp an.

Quelle:

Datensatz Browse

Ziel-Repositorium

Textdaten Räumliche Daten

< Zurück Weiter > Abbrechen

استيراد لتمودج ملكية الحياة الاجتماعية

مصدر البيانات
حدد موقع الملف المصدر ونوع البيانات التمثيلية.

المصدر:

بيانات بحث ..

نوع مستودع الوجهة:

المعلومات النصية المعلومات المكانية

إلغاء < التالي > رجوع

CAPACITY DEVELOPMENT



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SUPPORT FROM OPEN SOURCE COMMUNITY

- Writing code
- Finding and fixing bugs
- Testing new releases
- Documenting experiences
- Translation of software and resource materials



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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

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ONLINE RESOURCES

- For more information, please visit www.stdm.gltm.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/gltm/stdm/issues>
- To browse the source codes or extend the core platform, access the repository here: <https://github.com/gltm/stdm>

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THANK YOU!

GLTN Secretariat

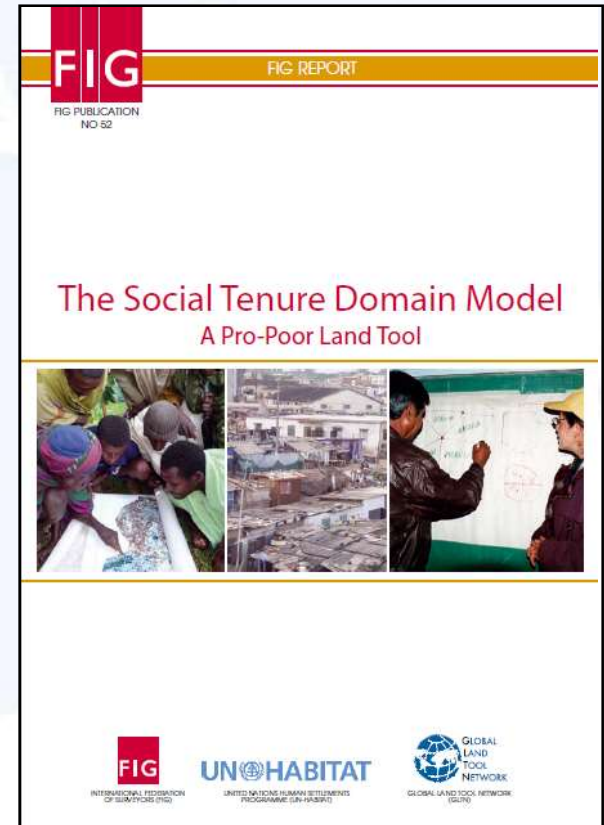
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