



IMPLEMENTATION OF RESPONSIBLE LAND GOVERNANCE

*A LAND INFORMATION SYSTEM FOR SUSTAINABLE DEVELOPMENT
IN TURKANA COUNTY, KENYA*

SECURING LAND AND PROPERTY RIGHTS FOR ALL

IMPLEMENTATION OF RESPONSIBLE LAND GOVERNANCE

A LAND INFORMATION SYSTEM FOR SUSTAINABLE DEVELOPMENT IN TURKANA COUNTY, KENYA

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HS Number: HS/061/16E

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Cover Photos

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Editing and Layout:

Victoria Quinlan and Stefanie Freccia

Sponsors:

European Union, The Netherlands Government, Norwegian Government and Swedish International Corporation Agency (Sida)

Printing:

UNON, Publishing Services Section, Nairobi, ISO 14001:2004-certified

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EXECUTIVE SUMMARY

The development of the Land Information Management System (LIMS) for Turkana County has two main aims: 1) to pilot the use and application of the Social Tenure Domain Model in the context of a County Land Information System for managing tenure in an urban setting, and 2) to document the processes and build capacity on its use and capabilities, with the opportunity of scaling it up to also manage customary rights for communities within the county. The long-term objective is to address the land information requirements for women and men in pastoral communities. Consequently, this is meant to reduce conflict for grazing and water resources between communities; improve tenure security; form a basis for inclusive planning and enhancing access to basic services and infrastructure. The LIMS development is under the Food and Agriculture Organization's pilot project "Support for the responsible governance of land and natural resources in communal lands of Kenya", which is funded by the European Union and implemented directly by FAO in two predominantly pastoralist counties, Turkana and Tana River. The project is an implementation of the Voluntary Guidelines on Responsible Governance of Tenure of Land, Fisheries and Forests in the context of National Food Security and the Framework and Guidelines on Land Policy in Africa. The project contributes to FAO's strategic objective 2, that is, to increase and improve the provision of goods and services from agriculture, forestry and fisheries in a sustainable manner. The Voluntary Guidelines are intended to contribute to the global and national efforts towards the eradication of hunger and poverty, based on the principles of sustainable development and with the recognition of the centrality of land for development by promoting secure tenure rights and equitable access to land, fisheries, forests and other natural resources.

In the process of developing the Turkana County LIMS, existing maps and land records were gathered and analysed to examine their viability for use in the system. The existing billing system, managed by the Ministry of Lands, Physical Planning and Urban Area Management (MLPPUAM), and existing business processes were documented and reviewed for consideration in the design of the LIMS. Parallel to this, is the customization of the current version of STDM (version 1.1) to meet the data needs and requirements of the ministry. STDM was modified, with new features added to suit the Turkana County context. To enable them understand the underlying concepts and applications of GIS and the STDM-based LIMS, concerned staff from the county and sub-counties were trained on the use and application of the tool to support the Ministry's recordation and management of surveying and planning information. Guidelines were also developed, in consultation with key ministry technical staff, to support mapping activities and to clarify user access and roles in using and managing the LIMS. Overtime, technical backstopping has been continuously provided by FAO and GLTN to ensure that the necessary skills are sufficient for the county to manage the LIMS.

Challenges that were encountered include the following: 1) no hand-over of previously approved survey plans from the Turkana Municipal Council to the county government; 2) delayed disbursement of funds from the national government; 3) unstructured business processes; 4) lack of quality assurance procedures; insufficient staffing; 5) lack of equipment to implement mandate of the ministry; 6) absence of ICT strategy and infrastructure; 7) limited number of technical staff in the ministry; 8) limited capacity of ministry technical staff

particularly on modern technology; 9) apprehension on the use of the STDM tool; and 10) lack of aerial photographs and digital satellite imagery.

It is anticipated that the county LIMS will support the development of the Turkana County Spatial Plan. With the LIMS in place and a systematic, large-scale mapping strategy using modern technology such as satellite imagery, remote sensing, etc., a County Spatial Plan will be the basis for the formulation of land policies to allocate appropriate land use and promote the sustainable use of natural resources. It will also assist the

county government in implementing and realizing the County Integrated Development Plan and the Strategic Urban Development Plan for Lodwar sub-county. It is envisaged that the LIMS will eventually cover the whole of Turkana County and to do this, the system needs to be rolled out to its sub-counties. The prospect of adopting LIMS by other counties in Kenya is highly probable as this information system provides the most basic information to support planning, improvement of tenure security and the provision of basic services and infrastructure.



Turkana County MLPPUAM officers conducting community sensitization exercises on the Community Land ACT.
Photo © Lawrence Okello.



ACRONYMS

CAD	Computer-Aided Design
FAO	Food and Agriculture Organization
FIG	International Federation of Surveyors
GIS	Geographic Information System
GLTN	Global Land Tool Network
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
ITC	Faculty of Geo-Information Science and Earth Observation of the University of Twente
LADM	Land Administration Domain Model
LIMS	Land Information Management System
MLPPUAM	Ministry of Lands, Physical Planning and Urban Area Management
NLC	National Land Commission of Kenya
NLIMS	National Land Information Management System
STDm	Social Tenure Domain Model
TCG	Turkana County Government
TCGLMS	Turkana County Government Land Management System
UN	United Nations
UN-HABITAT	United Nations Human Settlements Programme
VGGT	Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security

ACKNOWLEDGEMENTS

We are grateful to our partners in the Turkana Country Government and the United Nations Food and Agricultural Organization (FAO) Representation in Kenya whose contributions made the finalization of this publication possible.

We wish to appreciate the team in the GLTN Secretariat facilitated by UN-Habitat. We are grateful to Oumar Sylla, Danilo Antonio and Cyprian Selebalo for providing strategic guidance and institutional support to the implementation of the Turkana Land Information Management System project. We acknowledge Rhea-Lyn Dealca as the principal author and Hellen Nyamweru's contribution towards the completion of this publication. We also appreciate Lawrence Okello, Wondimagegn Beshah and John Gitau for overseeing the implementation of the Turkana Land Information Management System.

We also wish to thank the FAO Kenya team, particularly Francisco Carranza, Justus Wambayi and Husna Mbarak, whose involvement in project coordination, implementation and completion was critical to the project's success. The guidance and support of the Ministry of Lands, Physical Planning and Urban Area Management through the leadership of Chief Officer of Lands of Turkana County, Mark Ewesit, enabled the seamless execution of this project. The invaluable consultations with the Ministry provided strategic direction while defining priority areas for the successful development of the Turkana Land Information Management System.

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INTRODUCTION



INTRODUCTION

The Food and Agriculture Organization (FAO) and the Global Land Tool Network (GLTN) both recognize the importance of prioritizing and addressing issues related, but not limited, to customary land because of its huge potential to contribute to poverty reduction and positive potential impacts at a global level. In this regard, the two agencies are supporting the Ministry of Lands, Physical Planning and Urban Areas Management (MLPPUAM) of the Turkana County Government in Kenya to develop and rollout a land information management system (LIMS) to manage urban and customary land tenure within the county. The LIMS development is based on the Social Tenure Domain Model (STDM), a pro-poor, gender sensitive and participatory land information system, with an initial pilot focusing on capturing tenure information in Lodwar town. The activity is under FAO's pilot project: "Support for the responsible governance of land and natural resources in communal lands of Kenya", funded by the European Union. The project is an implementation of the Voluntary Guidelines on Responsible Governance of Tenure of Land, Fisheries and Forests in the context of National Food Security (VGGT) and the Framework and Guidelines on Land Policy in Africa. It contributes to FAO's Strategic Objective 2; that is, to increase and improve the provision of goods and services from agriculture, forestry and fisheries in a sustainable manner. The Voluntary Guidelines are intended to contribute to global and national efforts to eradicate hunger and poverty, based on the principles of sustainable development and recognizing the centrality of land for development by promoting secure tenure rights and equitable access to land, fisheries, forests and other natural resources.

This report documents the experience of MLPPUAM in Turkana County in establishing a county LIMS based on STDM, which captures all types of land tenure

information and which is customizable to the needs and context of communities, sub-counties and counties. STDM has already had successful applications in the different counties in Kenya, such as Nairobi, Mombasa and Baringo in capturing land information in urban, peri-urban and rural settings for purposes of informal settlement upgrading, natural resources management and improvement of land tenure security. In these counties, participatory enumerations and mapping were conducted by community members themselves, who also managed and updated the database, with support from local non-government organizations involved in organizing these particular communities. The experience of the Turkana County Government (TCG) in pioneering STDM as a tool to build its land information system to support tenure security, land-use planning and local revenue collection will serve as a precedent for other counties to adopt the system as well.

BACKGROUND

The 2010 Constitution of Kenya provides for the devolution of resources and functions, and the creation of a whole new layer of county governments. There are three categories of land as provided for in the new constitution, namely: public land, private land and community land. The constitution further created new land administration and management institutions such as the National Land Commission, the environment and lands courts. It also delegated the responsibility of holding in trust unregistered community lands to the county governments.

The advent of devolution made planning a shared mandate between the national and county governments. Thus, planning at the county level is a requirement under the constitution and other subsidiary legislation such as the County Governments Act (2012). Devolving power and functions of government entails a better



Temporary huts or manyattas within Lodwar town. Photo © Rhea Lyn Dealca.

representation of citizens' opinions in decision making, equitable sharing of resources and improved service delivery. Devolution is an opportunity for counties to direct the vision and aspirations of their people. In the case of the Turkana County Government, devolution aims to make the county a prosperous, peaceful and just county with an empowered community enjoying equal opportunities to realize the social economic transformation of its people. With its devolved mandate to develop plans to manage its jurisdiction, including its natural resources and to ensure that activities promote sustainable development, the Turkana County Government must develop strategies based on available information to achieve these goals.

Accurate and current land information is a pre-requisite to developing and implementing projects and programmes on sustainable land management. Reliable and up-to-date spatial data on land provides the basis for spatial planning, environment and natural resources management and land administration. The county, with

the present challenges, needs a land information system which will provide policymakers with information not just on its constituents, but also with a visual overview of the different land uses that could serve as input to planning and person-to-land tenure relationships that can be a basis for programme development on securing land tenure.

DESCRIPTION OF TURKANA COUNTY

Turkana County is situated in the north-west part of Kenya. It borders West Pokot and Baringo Counties to the south, Samburu County to the south east, and Marsabit County to the east. Internationally, it borders South Sudan to the north, Uganda to the west and Ethiopia to the northeast. The county shares Lake Turkana with Marsabit County. The total area of the county is 77,000 km² and it lies between longitudes 34° and 36° 40' east, and between latitudes 10° 30' and 5° 30' north of the Equator. The county is administratively divided into 7 sub-counties, 30 wards, 56 locations



<https://www.yunbaoqao.cn/report/index/report?reportId=518460>



The MLPPUAM's vision is to have an efficient and effective land administration system that promotes security of tenure, equitable access and control of land for sustainable socio-economic development of the Turkana County. To reach its vision and mission, strategic objectives were formulated which include: 1) the development of spatial plans to provide the spatial framework to guide, coordinate development activities and management of all urban/towns within the county; 2) planning and management of urban infrastructure and services; 3) provision for planning and survey services; 4) facilitation of ownership rights; 5) establishment of a modern land registry; 6) formulation of the county's land policies and regulations for effective land governance; and 7) promotion of public participation and inclusiveness on land management and governance. Figure 2 shows the structure of MLPPUAM.