



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



IMPLEMENTATION OF THE NATIONAL LAND INFORMATION SYSTEM (NLIS) IN UGANDA: STRENGTHENING LAND GOVERNANCE

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Paper prepared for presentation at the
“2018 WORLD BANK CONFERENCE ON LAND AND POVERTY”
The World Bank - Washington DC, March 19-23, 2018

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Abstract

The Ministry of Lands, Housing and Urban Development (MLHUD), supported by the World Bank, has engaged a consortium led by IGN FI to implement the second phase of the National Land Information System from February 2015 to February 2020. The system integrates land registration, land administration, surveying and mapping, physical planning, property valuation and land records. Provided as a World Bank loan, the total cost of the NLIS is valued at US\$66 million including the construction of buildings. Established in fulfillment of Government of Uganda policies, the NLIS has demonstrated substantial improvements in service delivery, accountability, security and cost effectiveness. Almost US\$114 million in revenue has already been generated and the NLIS has resulted in a significant reduction in: 1) backdoor transactions, 2) forgeries and graft, and 3) challenges associated with missing land records and demonstrated a solid contribution to the development of Uganda.

Key Words: Uganda, National Land Information System, Service delivery, Sustainability and Governance.



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INTRODUCTION

Land governance involves the policies, laws, institutions, procedures and processes relating to the rights of individuals and institutions to own, access and control land. Land is becoming an increasingly salient development issue as a result of population growth, environmental challenges and rapidly increasing demands for renewable and non-renewable resources. Development partners, including the World Bank, have made a significant contribution in the promotion and supporting of national-scale land governance interventions in recent decades (Ravnborg 2016). These interventions have focused on land tenure security of individual ownership and titling to strengthen free land market mechanisms on the assumption that land allocated among the most efficient users will promote investment and economic development (Deininger 2003; De Soto, 2003; White, 2013). A broad range of innovative land management solutions have been implemented to ensure effective and sustainable management of land and strengthen tenure security. While many Western nations have already embraced technology as an efficient tool in land governance, the Republic of Uganda is among the first countries in Africa to computerize the management of land with the support of the World Bank as a key component of the Competitiveness and Enterprise Development Project (CEDP) to introduce reforms to improve the business environment in Uganda (Government of Uganda and PSFU, 2016).

This paper examines the implementation of the National Land Information System in Uganda and the implications for strengthening land governance. Following the success of the pilot 2010 to 2013 initiative to establish a National Land Information System (NLIS), The Ministry of Lands, Housing and Urban Development (MLHUD) engaged a consortium led by Institut Géographique National France International (IGN FI) to implement the second phase nationally from February 2015 to February 2020 known as the Design, Supply, Installation and Implementation of National Land Information System Infrastructure (DeSINLISI) Project. The NLIS has transformed MLHUD systems into digital format and integrated land registration, land administration, surveying and mapping, physical planning and property valuation and land records.

Provided as a World Bank loan, the total cost of the NLIS is valued at US\$66 million including the construction of buildings. Established in fulfilment of Government of Uganda policies, the NLIS and has demonstrated substantial improvements in accountability and service delivery in terms of time, security and cost effectiveness. Almost US\$114 million in revenue has already been generated and the NLIS has resulted in a significant reduction in: 1) backdoor transactions, 2) forgeries and graft, and 3) challenges associated



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with missing land records and demonstrated a solid contribution to titling and individual ownership strengthening the operation of a free land market and encourage investment to promote sustainable development in Uganda.

BACKGROUND

Since independence in 1962, the land size of Uganda has remained 248,000 square kilometers while the population has been increasing exponentially from six million people at the time of independence to approximately 34.6 million people (Republic of Uganda. 2014). It is projected that by the year 2035, Uganda's population will be 50 million people (Migereko, 2016). While approximately 18.2 percent of the population is already urbanized (UN Habitat and MLHUD, 2016), the rate of urbanization in Uganda is among the highest in the world. The majority of those in the rural areas pursue land acquisition for agricultural production for subsistence and economic livelihood, yet the same land is being competed for by other uses placing tremendous pressure on land governance. The ever increasing population, that directly depends heavily on land for survival is a compelling factor to exercise effective management and deal with land matters. The emerging opportunities in urban, peri-urban and rural areas associated with infrastructure development, fostering industry, commercial agriculture, mining, oil and gas production require the timely supply of reliable data on land use to ensure good governance (Migereko, 2016).

LAND GOVERNANCE IN UGANDA

Less than 20 percent of the land in Uganda is currently registered. Land legislation and administration in Uganda is a mixture of different statutory and customary tenure systems comprising colonial legacies, elements of reforms and an assortment of experimental initiatives implemented under successive post-independence governments. The 1995 Constitution of the Republic of Uganda outlines four different forms of land ownership comprising freehold, mailo,¹ leasehold and customary tenure systems (Republic of Uganda). Land laws and technical reforms have been put in place aimed at improving good land governance. This started with the enactment of the Constitution that was later followed by the 1998 Land Act and the Land Amendment Act of 2010. A comprehensive National Land Policy was approved by Cabinet in February 2013 with a Vision of: “a transformed Ugandan society through optimal use and

¹ Mailo is a form of freehold tenure mostly found in central Uganda.



management of land resources for a prosperous and industrialised economy with a developed services sector”.

Related reforms

Government reforms that enhance management of the land sector include:

- Review and amendment of land related laws that may be outdated or conflicting with the Constitution and the Land Act;
- Establishment of the Land Fund regulations whose purpose is to enhance access to land;
- Mechanisms to address land disputes in a speedy manner;
- Enactment of the Physical Planning Act 2010 which declared the whole country a planning area;
- Physical development plans for Kampala and upcoming urban centres;
- Targeted efforts to strengthen women land rights

The National Land Policy (NLP) aimed to harmonize the different tenure systems, facilitate equitable access to land, modify the rules of transmission of land rights under customary land tenure, guarantee gender equality and equity and ensure that the decisions of traditional land management institutions uphold constitutional rights and obligations with regard to gender equality to improve security of tenure (Republic of Uganda, 2013). Underscoring the importance of land governance in Uganda, President Museveni chaired all the six cabinet meetings which approved the National Land Policy in February 2013 (Migereko, 2016). Prior to the promulgation of the National Land Policy, the Land Sector Strategic Plan I (LSSPI) provided a framework for the implementation of land reforms and legislation including the 1995 Constitution; the 1998 Land Act and subsequent amendments; in addition to the integration of relevant plans and policies.

The Land Reform component under CEDP is a continuation and scale up of the reform process carried out under the Private Sector Competitiveness Project II (PSCP II) under the National Land Policy. One of the requirements of the National Land Policy is to establish and maintain a reliable and user-friendly Land Information System (LIS) as a public good for planning and national development. The transformation and computerisation of the land registry entailed an initial investment of US\$66 million which has already generated revenue amounting to over US\$113 million in four years. The revenue generations will be further enhanced with the full adoption, popularisation and rolling out of the National Land Information System (NLIS) rendering the sector a major source of revenue generation.



International Principles

The DeSINLISI Project is being implemented in full accordance with various international and regional principles associated with land governance complements other government objectives to strengthen government structures and procedures in the implementation of decentralization to deliver services closer to the people. The international principles comprise the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT); the Framework and Guidelines on Land Policy in Africa (F&G) along with Government of Uganda policies and programmes comprising the National Land Policy and the Land Sector Strategic Plan (LSSP). Good governance as such also contributes to the realisation of several Sustainable Development Goals (SDGs). (Migereko, 2016)

The Framework and Guidelines on Land Policy is a joint product of the partnership and collaborative effort of the African Union Commission (AUC), the UN Economic Commission for Africa (ECA) and the African Development Bank (AfDB) to promote Africa's socioeconomic development, through inter alia, agricultural transformation and modernisation. Initiated in 2006, the aim of the Land Policy Initiative (LPI) was to examine land policy issues and challenges in Africa with a view to developing a framework to strengthen land rights, enhance productivity and improve livelihoods. The Framework and Guidelines provides a clear overview of the historical, political, economic and social background of the land question in Africa and elaborates on the role of land as a valuable natural resource endowment in attaining economic development and poverty reduction. Based on lessons and best practices identified in land policy development and implementation across Africa, it outlines how the land sector should perform its proper role in the development process. The Framework and Guidelines promotes the need for a shared vision among all stakeholders of a comprehensive and coordinated land policy as a major factor in national development. It urges African governments to pay attention to the status of land administration systems, including land rights delivery systems and land governance structures and institutions, and to ensure adequate budgetary provision to land policy development and implementation. Progress will require the development of tracking systems and mechanisms of land policy formulation and implementation that will enable African governments learn from past successes and setbacks, and make timely readjustments to national land policy processes.

The Framework and Guidelines is much more than simply another document on land. It reflects a consensus on land issues; and serves as a basis for commitment of African governments in land policy formulation



and implementation and a foundation for popular participation in improved land governance. Its other fundamental purpose is to engage development partners in resource mobilization and capacity building in support of land policy development and implementation in Africa. (AUC-ECA-AfDB, 2010)

Government Objectives

The DeSINLISI initiative complements government objectives to strengthen government structures and procedures in the implementation of decentralization to deliver services closer to the people.

The National Land Policy (NLP) and the Land Sector Strategic Plan (LSSP) are intended to provide the operational framework for advancing land sector reforms necessary to frame and safeguard Uganda's land tenure system and rights for land users; streamline and modernize land delivery; encourage optimal use of land and natural resources; and facilitate broad-based socioeconomic advancement without overburdening and threatening the national ecological balance. The NLP is a dynamic document that will continue to direct attention to key issues and concerns in the land sector to ensure the cumulative effects of land sector reforms and intervention activities promoted by the MLHUD creates a positive environment for achieving national development goals. (Republic of Uganda, 2013a)

The principles of good land governance being pursued in Uganda include:

- Equitable access to land;
- Security of tenure to all members of the society with specific measures to enhance security of tenure and property rights of women;
- Transparent decision making regarding land and natural resources;
- Decentralised land administration; and
- Effective, efficient and responsive land administration services to all citizens. (Migereko, 2016)

IMPLEMENTATION TO DATE

The design, configuration and deployment of the second phase of the NLIS has been guided by a carefully planned roadmap of ICT activities and milestones that comprise 1) the modification and enhancement of existing functionalities, 2) a new critical functionality and 3) the utilization of new technologies. The implementation of NLIS involves four primary components (System Design; Data Conversion, Registration and Cadastral Data Integration; and Roll-Out and Establishment) in addition to training and public awareness as detailed below.



System Design: Component 1

The unique software framework design developed by IGN FI's partners for software development, Innola Solutions, Inc. and GEOFIT (Fr) is aligned with three other critical project components that focus on data conversion, registration and cadastral data integration, and capacity building and user training. The system provides a tightly integrated cadastral management functionality and data model to include the cadastral surveying tasks, land valuation and physical planning requirements for land registration review and approvals. The NLIS has been configured around an Open-Source and full-web (utilizing HTML5/CSS3/JavaScript) global land and property management solution in accordance with the general requirements of the NLIS solution that requires a secure, scalable and sustainable system. (Oput, 2017) The new system is composed of the currently implemented modules, integrated with external systems supported by an Open API and the design of exchange file formats incorporating land valuation and physical planning modules in addition to a daily case management system, mobile office, mobile money services for fees and secure corporate and public portals public to provide corporate and national uses with access to the system. (Oput, 2017)

Data Conversion: Component 2

The main goal of the conversion of spatial and non-spatial data into digital format; the rehabilitation, conversion and securing of land records, cadastral and other land administration data from Department of Land Registration, Department of Land Administration, Department of Physical Planning, and Department of Surveys and Mapping. This involves the production of the necessary digital data to be integrated into the NLIS in order to:

- Secure titles and registration documents by transferring them into digital form,
- Prepare digital non-geographic documents for document management system,
- Create a land information layer of topological land parcel polygons, and
- Link land parcels to title registers data by unique parcel identifiers.

Registration and Cadastral Data Integration: Component 3

The primary objective of this component has been to prepare and supply each Ministry Zonal Office (MZO) with an integrated, complete and consistent dataset containing Registration, Land Administration, Cadastre, Physical Planning and Valuation data allowing them to perform their daily duties using the new system. The primary inputs are data from Component 2 "Data Conversion," the orthophoto base map and other relevant data provided by external stakeholders such as the National Environmental Agency, Uganda Wildlife Authority and National Forestry Authority.



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System Roll-Out and NLIS Establishment: Component 4

The main objective of this component is to roll-out the NLIS to all twenty-one MZOs in addition to MLHUD Headquarters, Department of Surveys and Mapping and the National Land Information Centre (NLIC) and to provide public access to fast, efficient and secure land governance services. The inputs comprise the implementation, procured hardware and general software, databases released by the Component 3, staff trained and capacitated within Training and Capacity sub-component will constitute the inputs for the Component 4. The System roll-out and NLIS establishment encompasses: testing of the solution, training, deployment, and transfer to operations' environment.

As of January 2018, the Lira, Kabarole, Kibaale, Arua, Gulu, Mbale and Masindi MZOs were operational. The construction of the 10 new MZO buildings comprising Moroto, Soroti, Tororo, Luwero, Mpigi, Mityana, Rukungiri, Kabale and Mukono was expected to be completed by March 2018; Construction of the Wakiso MZO was expected to be completed by June 2018; and the upgrading of the NLIS in the Jinja, Mbarara, Masaka, Mukono and Kampala MZOs by September 2018.

Public Information and Awareness Campaign

Public Information and Awareness Campaign (PIAC) has been coordinated with other components of CEDP in close cooperation with MLHUD. The PIAC also includes measures to inform the MLHUD staff about the project activities and increase involvement of the personnel in decision making to foster a greater sense of ownership by the MLHUD and its staff. The primary objectives of the Public Information Campaign are to:

- Increase the public awareness regarding advantages of the formalisation of property rights;
- Inform the public about the advantages of a new system for land acquisition and registration;
- Promote new registration and cadastral services and encourage citizens of Uganda to formalise their property rights;
- Receive feedback on public acceptance and evaluate of the land administration services provided;
- Inform the project stakeholders including MLHUD staff, government agencies and business about the project progress, achievement and benefits for the stakeholders.
- Inform the public of the benefits of Physical Planning and permitted development rights.



The PIAC events and materials include public briefings, workshops, seminars and publications comprising the project web-page, signs, newsletters, press releases, leaflets, posters, radio and television. An important aspect of the PIAC includes internal information dissemination among MLHUD staff and offices. Certain materials have also been translated into vernacular language/s.

Training and Capacity Building

Training and capacity building is one of the important challenges of this project and essential to ensure the uptake, use and sustainability of the NLIS. A comprehensive training program has been implemented to ensure all staff engaged in the NLIS receive adequate and appropriate training to operate and maintain the system. The training and capacity building component is composed of workshops, seminars, study tours trainings and of On-The-Job training (OTJ). It focusses on the managers and technical personnel of the Ministry of Lands, Housing and Urban Development (MLHUD), National Land Information Centre (NLIC), Ministry Zonal Offices (MZOs) and District Land Officers (DLOs). The intent is to build an efficient operational network of collaborators for the MLHUD, the NLIC and the MZOs intended to become the reference in NLIS use for Ugandan stakeholders in all the fields relevant to land governance including: land administration, GIS systems, spatial data integration, satellite imagery, digital map for cadastral data management, property valuation, environment, sustainable development, land use, planning, GPS, etc. Over 260 MLHUD staff have been trained to operate and maintain the system in the nine Ministry Zonal Offices (MZOs) comprising Jinja, Mukono, Wakiso, Kampala, Masaka, Mbarara, Lira, Kaberole and Kibaale operational as of September 2017. The staff have been trained on a wide range of topics comprising all the tasks required to operate and maintain the NLIS. The objectives of the training are listed as follows: Facilitate learning amongst beneficiaries at each stage of the project as the components are being implemented; transfer essential technical elements to allow the beneficiaries to use and maintain the systems including the software conveniently and sustainably; and to coach trainers and monitor the transfer of skills and know-how.

The training aims to provide sufficient technical proficiency on the following topics:

- Fundamental knowledge of the GIS data management;
- Database management systems (including proposed in System solution);
- Data Conversion;
- GIS and spatial data analysis;
- Spatial data management and dissemination, metadata, etc.



- Managing data replication from the MZOs
- Provision of technical support to the MZOs (Level 1 support);
- Relational database management system (RDBMS) (back up, restore, etc) and use of 3rd Party back up software;
- NLIS Management and Administration

Four Study Tours have also been organized to Georgia (Register), Australia (Land Equity), UK (HM Land Registry) and France to provide participants with an opportunity to see firsthand the implementation of a Land Information System (NLIS) and examine the technical components of the land administration solution.

CHALLENGES TO PROJECT IMPLEMENTATION

As expected, the paucity of infrastructure including intermittent power supply and in some areas limited internet connectivity have presented challenges. (Ongom, 2017) These challenges have been handled to a large extent with the use of generators and batteries and the innovative application of technology to back-up and transfer data as internet connectivity allows. The challenges associated with infrastructure are expected to quickly diminish as government pursues an aggressive infrastructural development campaign focused on improving the delivery of roads, electricity and telecommunications across the country. (IMF, 2017) Infrastructure funding currently comprises almost 33 percent of the total Ugandan Government expenditure every year. (Kasaijia, 2016)

Among the most salient challenges in the roll out of the system are associated with human resources. The identification of capable personnel present a persistent challenge throughout the implementation of the programme. The prevalence of capable individuals with the requisite skills and experience was anticipated from the onset and is the reason training is a core component of the DeSINLISI Project. Nonetheless, the identification and recruitment of capable individuals for training has been subject to constant delays and should always be considered a priority in such initiatives. Another challenge, especially in the initial stages of the project was the mind-set of MLHUD staff and the personnel engaged in the implementation and management the NLIS (Ongom, 2017). While resistance to new work practices, especially digital technologies is well acknowledged, (Xiao, 2017; Scholz, 2017; IFC 2016) other reasons for this resistance were associated with the disruption to established patronage systems and the prevalence of corrupt



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practices. These challenges have been addressed with the effective implementation of an awareness campaign focused on raising the understanding among staff engaged in DeSINLISI Project and key stakeholders in addition to the security and accountability measures inherent in the NLIS system. Another area of resistance salient in the initial stages of implementation were associated with political leaders who were reluctant to identify or associate themselves with and new initiative susceptible to failure. This challenge was again addressed with an effective communication campaign raising awareness of the successful implementation of the project with a particular focus on the revenue raised.

IMPACT OF THE NLIS

National Land Information System (NLIS) has already made a profound contribution to the improvement of service delivery across the land sector with a substantial reduction in the time required for land transactions, minimization of opportunities for corruption, increase in accountability and strengthening of tenure security (Migereko, 2016). The results registered since the implementation of the NLIS include:

- Increase in the number of land transactions.
- Decentralization of the cadastral and registration services,
- Securing of land records and maps,
- Establishment of audit trail of land transactions,
- Improvement in the quality of records and their management,
- Instant retrieval of land related information,
- Better service delivery to the stakeholders,
- Improvement in public perceptions of land service delivery,
- Increased sustainability of land governance.

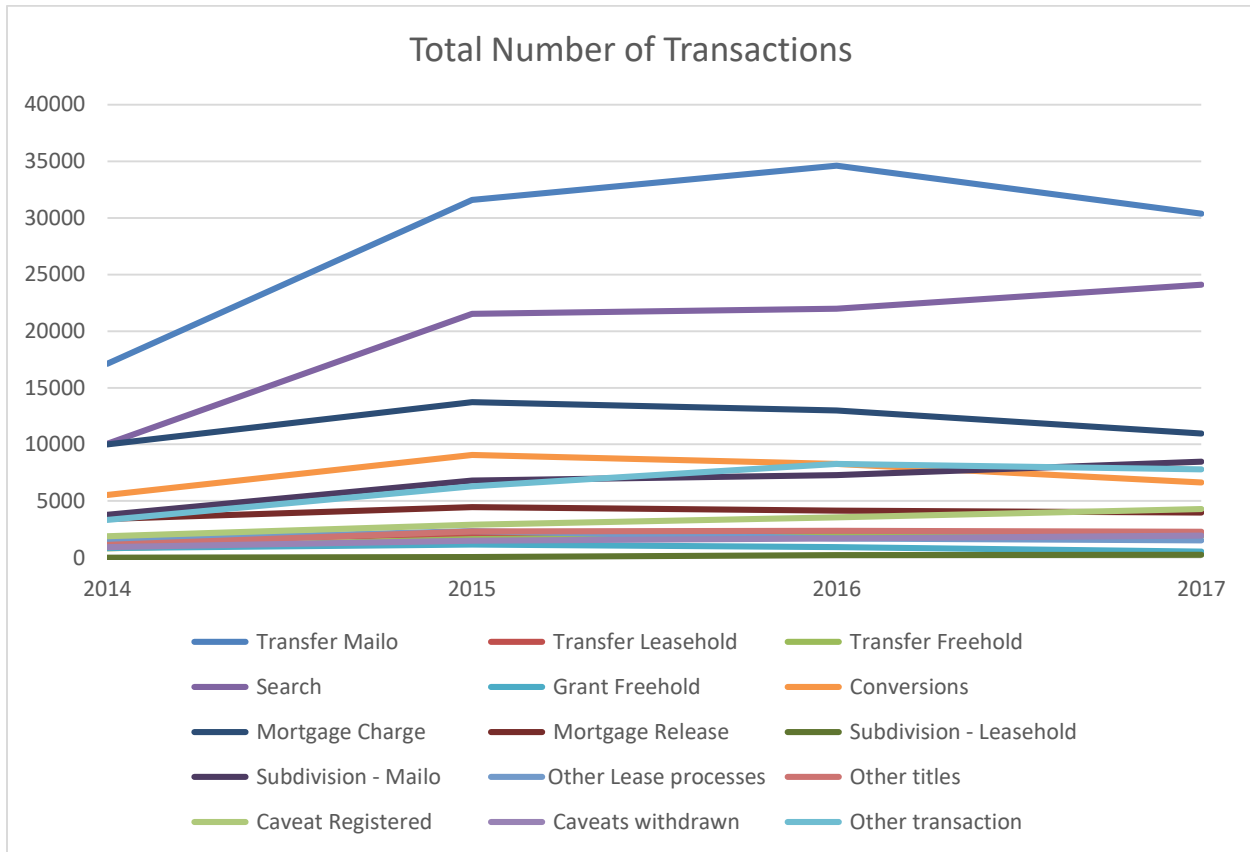
Increase in land transactions

The graph below illustrates the drastic increase in transactions recorded by the MLHUD between 2014 and 2017. The slight reduction in the transfer of mailo and leasehold titles reflects the dampening effect of the 2016 election period on the national economy and the general economic slowdown experienced in Uganda over the past year; however, the steady increase in the number of searches reveals increasing familiarity with the NLIS and activity in the land sector.



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Sustainability

The NLIS has made a substantial improvement in accountability and service delivery in terms of time, security and cost effectiveness. Clients already receive safer faster service and the enhancement of land governance procedures has resulted in a significant improvement in the revenue generated from US\$100,000 a month in 2012 to approximately US\$3 million a month in 2016/2017 with a total cumulative generated since the inception of the NLIS of US\$113.5 million by June 2017.

Financial Year	Total Revenue generated
FY 2012/13 (4 months)	\$2,560,000
FY 2013/14	\$31,381,000
FY2014/15	\$30,141,000
FY2015/16	\$13,535,000
FY2016/17	\$35,910,928
Total Revenue	\$113,527,928

Revenue Generated by MLHUD under the NLIS



The presidential and parliamentary elections in February 2016 resulted in a substantial reduction in economic activity due to tight lending conditions and lower investment flows resulting in a drop in land transactions and associated revenue (Deloitte, 2016; Soko 2016). The revenue generated has been dispersed to central government and local government institutions as prescribed by law and the generation of these revenues represents a very significant contribution to the sustainability of the system from a cost perspective.

While the full economic impact of the NLIS Project remains to be quantified with a comprehensive cost benefit analysis, the early returns realized by the NLIS Project run counter to persistent concerns relating to low returns from public investments in capital infrastructure (Manishimwe, 2018; World Bank Group, 2016) MLHUD has demonstrated an exceedingly high level of success in the effective and efficient implementation of the NLIS and managed the “turn around” of the initiative in an exceedingly short space of time with close support of the IGN FI and the World Bank. The cumulative generation of US\$113.5 million in revenue before completion of the project represents a 172 percent return on the US\$66 million investment presenting a stark contrast to public investment in other sectors such as roads, railway and energy projects that have experienced protracted implementation delays, cost over runs and minimal returns on investment (Muhumuza, 2016).

Improved Service Delivery

A significant improvement in delivery of land services has already been observed in land governance as a result of decentralization of land administration and management services to the Ministry Zonal Offices (MZOs). The interface with clients was enhanced, through the appointment of customer care officers and making the MZOs one stop centres for delivery of land services. Clients no longer have to travel to MLHUD Headquarters in Kampala, but can simply visit the MZO closer to their home. Transaction times have been reduced substantially. The World Bank Cost of Doing Business Report indicates that the number of days to complete a transaction was reduced from 77 days in 2010 to 42 days in 2018. During the same period, Uganda climbed in comparative ranking from 149 across 183 economies to 124 in 190 economies (World Bank, 2009; World Bank, 2017).

Payments for all land transaction are now tracked electronically. Access to the NLIS is strictly limited to authorized personal and mistakes entered into the NLIS can be traced to the individual responsible as their identity and all transactions and changes made within the system are indelibly recorded. The work



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performance of all staff utilizing the NLIS is recorded and available to monitor performance including log in times and the number of transactions completed on any particular day. Protected by state of the art security protocols, the NLIS authenticates titles and will not permit double plotting or double referencing for titles that were not uncommon the manual system of operation. All information added to the system is synchronized with existing data on neighbouring plots and appropriate zoning to prohibit the registration of land on forest reserves, waterways, wetlands, national parks, road reserves and other public land reserves. Systems are in place to detect illegitimate data and all information entered into the NLIS is subject to thorough and instantaneous cross referencing against data captured by other government agencies including National Identification and Registration Authority (NIRA), Uganda Revenue Authority (UNRA), Uganda National Bureau of Standards (UNBS), Kampala Capital City Authority (KCCA), Uganda National Roads Authority (UNRA), National Forestry Authority (NFA) and the National Environment Management Authority (NEMA).

Public confidence in the governments capacity to deliver land secure, efficient land governance has increased as a result of the improved accountability with multiple cross checks to ensure faster resolution of land disputes and the prevention, reduction or elimination of 1) backdoor transactions, 2) forgeries and graft, and 3) challenges associated with missing land records. According to the East Africa Bribery Index 2017 collated by Transparency International, while the incidence of bribery increased across the vast majority of other sectors examined, the probability of paying a bribe for land services plummeted from 46.5 percent in 2014 to 19.2 percent in 2017. Furthermore, the reported average value of bribes paid dropped from UGSH 550,113 (US\$150) to UGSH 130,590 (US\$36) over the same period (Transparency International, 2017). This represents a 76 percent decrease in only three years that can be directly attributed to the implementation of the NLIS Project (Transparency International, 2017). Land now presents less challenges to potential investors with increased security of tenure and reduced costs associated with property transactions.

CONCLUSION

The Government of the republic of Uganda, specifically the Ministry of Lands, Housing and Urban Development (MLHUD) has achieved remarkable success in the implementation of the NLIS to date with support from IGN FI and the World Bank. The NLIS has successfully integrated land registration, land administration, surveying and mapping, physical planning, property valuation and land records. Even before full completion, the NLIS has clearly demonstrated substantial improvements in service delivery,



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accountability, security and cost effectiveness with almost US\$114 million revenue generated since the commencement of the initiative against the total cost at US\$66 million including the construction of buildings. The NLIS Project has made a significant contribution in reducing backdoor transactions; forgeries and graft; and the challenges associated with missing land records. Furthermore, the NLIS has already resulted in a tremendous improvement in public perceptions of corruption associated with the land sector as quantified and acknowledged by the independent and internationally reputed civil society watchdog Transparency International well noted for its often critical views of government.

Reforms to policies, laws, institutions, procedures and processes relating to land implemented by the Government of Uganda including the implementation of the NLIS under the Competitiveness and Enterprise Development Project (CEDP) have strengthened the land tenure security of individual ownership and titling in support of free land market mechanisms on the assumption that land allocated among the most efficient users will promote investment and economic development.

Uganda is recognized as leader in the modernization of land governance. Government delegations from across Africa including Tanzania, Kenya, Ethiopia and Mali have visited the MLHUD to witness the implementation of the NLIS and consider ways they might implement similar systems. The NLIS reinforces and strengthens land governance at all levels and compliments a broad range of other government programs in the land sector and beyond. The implementation of the NLIS has already made a very positive contribution to the social and economic development of the country and provides a solid pillar for achieving Uganda's Sustainable Development Goals.



REFERENCES

AUC-ECA-AfDB Consortium, Framework and Guidelines on Land Policy in Africa: Land Policy in Africa: A Framework to Strengthen Land Rights, Enhance Productivity and Secure Livelihoods, African Union, Economic Commission for Africa and African Development Bank, Addis Ababa, Ethiopia, 2010, p. xi.

De Soto, Hernando, *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. Basic Books: New York, 2003.

Deininger, Klaus (2003) *Land Policies for Growth and Poverty Reduction*, Oxford University Press and the International Bank for Reconstruction and Development / The World Bank: Washington D.C..

Deloitte (2016) *Uganda Economic Outlook 2016: The Story Behind the Numbers*, Deloitte Touche Tohmatsu Limited, June, [<https://www2.deloitte.com/content/dam/Deloitte/ug/Documents/tax/Economic%20Outlook%202016%20UG.pdf>] accessed 18 January 2018.

Government of Uganda and Private Sector Foundation Uganda (PSFU) (2016) *About the Competitiveness and Enterprise Development Project: Enhancing Uganda's Competitiveness, Competitiveness and Enterprise Development Project (CEDP)*, March [<https://www.cedp.go.ug/wp-content/uploads/publications/CEDP-Brulletin-March-2016.pdf>] accessed 20 January 2018.

IFC, *What is Change Management and Implementation? White Paper*, 2016 [https://www.icf.com/-/media/files/icf/.../2016/change_management_framework.pdf] accessed 30 January 2018.

International Monetary Fund (IMF), (2017) *UGANDA: 2017 Article IV Consultation and Eighth Review Under the Policy Support Instrument—Press Release; Staff Report; and Statement by the Executive Director for Uganda*, IMF Country Report No. 17/206, [<http://www.imf.org/en/publications/cr/issues/2017/07/12/uganda-2017-article-iv-consultation-and-eighth-review-under-the-policy-support-instrument-45069>] accessed 20 January 2018.

Kasaijja, Matia (2016) *Developing infrastructure in Uganda*, National Budget Speech 2016/17, Infrastructure News, 13 June, [<http://www.infrastructurenews.com/2016/06/13/developing-infrastructure-in-uganda>] accessed 20 January 2018.

Manishimwe, Wilson (2018) *Uganda getting low value of returns from public investments: UDB Chairman*, New Vision, 22 January.

Migereko, Daudi (2013) "The national land policy will strengthen existing land laws," *The Monitor*, 13 February.



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Migereko, Daudi (2016) How Uganda is addressing land issues in the country, Speech presented at the World Bank Round Table Conference on Land Policy Process in Africa on the topic, Good Land Governance: Lessons from Uganda New Vision, 24th March, [https://www.newvision.co.ug/new_vision/news/1420403/uganda-addressing-land-issues-country] accessed 18 January 2018.

Muhumuza, Mark Keith (2016) Returns not matching govt investments - World Bank, Daily Monitor, 8 June, [<http://mobile.monitor.co.ug/Business/Returns-not-matching-govt-investments---World-Bank/1055106-3236644-format-xhtml-78ikfaz/index.html>] accessed 26 January 2018.

Ongom, Amongi Betty (2017) Improving Land Administration for Good Governance, Responsible Land Governance, Paper presented at the Responsible Land Governance: Towards an Evidence Based Approach, Annual World Bank Conference on Land and Poverty, World Bank Headquarters, Washington DC, 20-24 March.

Oput Richard; Aurélie Milledrogues; Patrick Stimpson; Sergiy Lizenko; Carol Roffer and Christopher Burke (2017) “Scaling Up a Pilot Land Management Initiative in Uganda to a National Land Information System (NLIS)” Republic of Uganda Ministry of Lands, Housing and Urban Development (MLHUD), and French National Institute of Geographical and Forestry Information-France International, (IGN FI/IGN-FI), Paper presented at the *Responsible Land Governance: Towards an Evidence Based Approach*, Annual World Bank Conference on Land and Poverty, World Bank Headquarters, Washington DC, 20-24 March 2017.

Ravnborg , Helle Munk; Rachel Spichiger; Rikke Brandt Broegaard; and Rasmus Hundsbæk Pedersen (2016) Land Governance, Gender Equality and Development: Past Achievements and Remaining Challenges, Volume 28, Issue 3, April [<http://onlinelibrary.wiley.com/doi/10.1002/jid.3215/full>] accessed 21 January 2018.

Republic of Uganda (1995) *Constitution 1995*, Chapter 15, Article 237, Section 3 (a, b, c, d).

Republic of Uganda (2013a) Land Sector Strategy Plan 2013 - 2023 Ministry of Lands, Housing and Urban Development Republic of Uganda, 20 December 2013.

Republic of Uganda (2013b) Uganda National Land Policy, Ministry of Lands, Housing and Urban Development (MLHUD), February.

Republic of Uganda (2014) National Population and Housing Census 2014, Uganda Bureau of Statistics (UBOS), Kampala.

Scholz, Roland W. (2017) Digital Threat and Vulnerability Management: The SVIDT Method, Sustainability, April, [https://www.researchgate.net/publication/315825009_Digital_Threat_and_Vulnerability_Management_T]



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he_SVIDT_Method] accessed 30 January 2018; IFC, What is Change Management and Implementation? White Paper, 2016 [https://www.icf.com/-/media/files/icf/.../2016/change_management_framework.pdf] accessed 30 January 2018.

Soko Directory, Impact of Ugandan Elections on Business in Uganda and in East Africa, 16 February 2016 [<https://sokodirectory.com/2016/02/impact-of-ugandan-elections-on-business-in-uganda-and-in-east-africa>] accessed 18 January 2018.

The World Bank Group (2017) Doing Business 2018, Reforming to Create Jobs, Economy Profile: Uganda, The World Bank Group: Washington, D.C..

The World Bank, Doing Business (2009) 2010: Uganda, The International Bank for Reconstruction and Development / The World Bank: Washington, D.C..

Transparency International-Kenya (2017) The East African Bribery Index 2017, Transparency International-Kenya, 2017, [<http://tikenya.org/wp-content/uploads/2017/09/East-African-Bribery-Index-EABI-2017-1-1.pdf>] accessed 23 January 2018.

UN Habitat and Ministry of Lands Housing and Urban Development (2016) Towards Achieving SDG 11 in Uganda: Making Cities And Human Settlements Inclusive, Liveable, Safe, Resilient Productive and Sustainable, The UN Habitat Uganda Country Program, April.

White, Ben; Saturnino M. Borras Jr.; Ruth Hall; Ian Scoones; and Wendy Wolford, eds., (2013) The New Enclosures: Critical Perspectives on Corporate Land Deals, Routledge: London.

World Bank Group (2016) Uganda Economic Update, From smart budgets to smart returns: Unleashing the power of public investment management, Seventh Edition, April.

Xiao, Chunhua (2017) The Reason and Coping Measures of Employees' Resistance to Information System, Journal of Human Resource and Sustainability Studies, 5, 87-93, [<https://doi.org/10.4236/jhrss.2017.51009>] accessed 1 February 2018;