Towards Actualizing the Continuum of Land Rights in Support of Sustainable Development Goals

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Key Words: Continuum of Land Rights, STDM, Participatory enumerations, Security of tenure, Sustainable Development goals

ABSTRACT

Pro-poor approaches to land administration are increasingly gaining impetus and getting promoted in global agreements, national land policies and NGO's briefs. The 2030 Agenda for Sustainable Development covers four prominent land targets on poverty, food security, land degradation and gender. In addition, the role of land is well captured in the New Urban Agenda (NUA), with its social, ecological and economic functions well-articulated in the recently adopted document (Habitat III), which outlines a very prominent role for land tenure security and property rights in pursuit of sustainable land governance interventions for the next 20 years. Improved land governance and achievement of sustainable development underpin these global covenants. The need for efficient land management and administration systems and the recognition of the complexity of land rights cannot be overemphasized.

In most developed nations, land records are generally well kept and cover most of the territories. This however is not the case in developing countries where bridging the gap between formally registered land ownership units and those not registered or unaccounted for is far from being actualized. The existing cadastral divide demands the need for low-cost, high-speed, fit-for-purpose land administration designs in those contexts where property rights identification and registration is lagging. The Social Tenure Domain Model (STDM) is a pro-poor, gender responsive, participatory and affordable land information system for capturing person/s to land relationships cognizant of the land rights continuum.

This paper cites experiences in actualization of the continuum of land rights concept and how to accommodate all forms of land rights and claims, (formal, intermediate and non-formal) and ensure that all realities on the ground in terms of the tenure relationships are captured regardless of the law or technical limitations. It will also show how this approach is providing an opportunity to include the lower income groups to incremental access and improvement of tenure security in Africa and Asia and Latin America.

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1. INTRODUCTION

Until recently, land administration systems in Sub-Saharan Africa were based on the conventional land and cadastral mapping introduced during the colonial era which was not conducive to local conditions and capacities, and which as described by Simbizi, Bennet and Zavenbergen (2016) favour the rich and maintain the status quo. Despite the many years dedicated to land registration initiatives in developing countries, often at huge costs, only about 30 per cent of land ownership units are formally registered or accounted for. It is also estimated that it would take approximately 600-1000 years to capture the remaining land units with conventional approaches, (Augustinus, 2015). Currently only 30% of the land in developing countries is captured in the conventional cadastre, (Augustinus, Lemmen and Van Oosterom, 2006). Most of the poor are part of the 70% who have no legal, documented and registered land rights. What they have are informal, customary, unwritten and over-lapping land rights and claims (Antonio, 2013).

Insecurity of land tenure and property rights is cited as a precipitating, if not primary, cause of contemporary global poverty and inequality, (Mennen,2015). Many of the challenges experienced in the world today such as unequal access to land; insecurity of tenure; unsustainable land use, weak institutions for dispute and conflict resolution among others, exhibit a clear land dimension and can only be addressed from a land governance perspective. Land has increasingly re-emerged as a focus of attention when discussing both economic and human development which makes addressing land governance very critical. Land is indeed one of the most essential pillars of human existence and it is widely held that secure land tenure is a key determinant for human development. It is fundamental to shelter and livelihoods, and for the realization of human rights, food security, poverty reduction, economic prosperity and sustainable development.

The conventional global approach to land systems cannot meet the needs of the majority of people living with insecure tenure and have largely failed to supply information necessary for sustainable livelihoods both in cities and rural areas alike. Globally there are many examples where the land use rights of informal settlement residents, slum dwellers, families and groups living under customary tenure, indigenous people, pastoralists, refugees etc. are not capable of being integrated into a conventional land administration system. Innovative solutions to this challenge therefore, and which work at scale, are needed. These solutions are what the Global Land Tools Network (GLTN) calls land tools. Land tools are a practical way to solve a problem in land administration and management (GLTN, 2012). These tools are vehicles to facilitate accomplishment of principles, policies and legislation into effective action with regards to land.

The Land and GLTN Unit, located within the Urban Legislation, Land and Governance (ULLG) Branch of UN-Habitat, has the mandate to develop, test and disseminate pro-poor and gender responsive approaches in regard to urban land, innovative residential tenures, affordable land

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management and/ administration systems, and land related legal and regulatory/legal frameworks and tools. GLTN understands land as having a rich diversity and expands this understanding by embracing the extremities that exist between tenure arrangements. In this context, GLTN and partners promote the "*continuum of land rights*", a concept that makes it possible to recognize, record and administer a variety of appropriate and legitimate land tenure forms to achieve security of tenure for all (Du Plessis, Augustinus, Barry, et. al 2016).
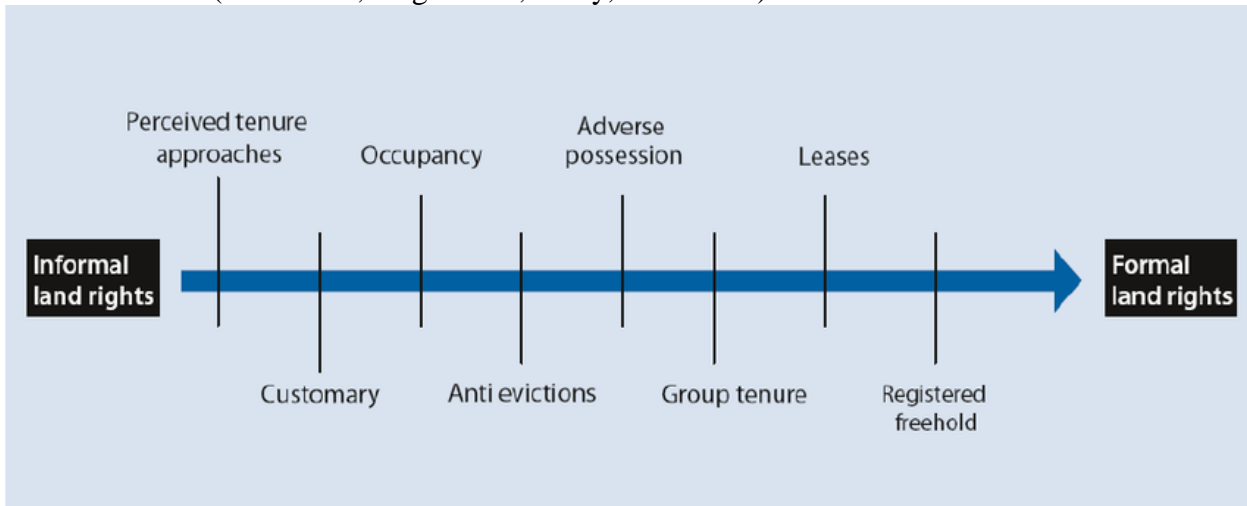

Figure 1: The Continuum of land rights (UN HABITAT/GLTN 2012)

GLTN advocates a "paradigm shift" on land (1) away from seeing land as a purely technical matter; (2) towards pro-poor, gender-responsive, accountable and sustainable land administration; and (3) which provides for a continuum of legitimate, inclusive land tenure forms aimed at achieving tenure security for all (Du Plessis, 2016).

The continuum concept is by its nature inclusive. Tenure can take a variety of forms along the continuum, including: documented as well as undocumented, formal as well as informal, for individuals as well as groups, including pastoralists and residents of slums and other settlements, which may be legal or extra-legal. The rights do not lie on a single line, and they may overlap. The continuum also argues that registered freehold should not be seen as the preferred or ultimate form but as one of a number of appropriate and legitimate forms which could be customary, leasehold, group tenure and others). The most appropriate form at a given time depends on the context.

Efforts to address the need for securing land and property rights have really gained momentum with the recognition of land in the past 2015 agenda SDGs and in other development strategies such as the newly adopted Habitat III Agenda (October, 2016). The SDGs have the potential to play a critical role in building solidarity and commitment to land and property rights reform. Securing land and property rights are seen here as very critical in achieving developmental goals and transforming our world. Within four prominent goals in the SDGs lie several land related sub-goals and targets which have the potential to effect change for sustainable development and clearly links land to a wide set of development objectives. Goal 1, "end poverty in all its forms everywhere," identifies the explicit link between poverty alleviation and access of the poor to means to strengthen land tenure security. Insecure land rights frustrate the poor's attempt to feed themselves and climb out of poverty. Sub-goal 1.4 goal calls for equal rights to economic resources, as well as access to basic

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services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance to all men and women, in particular the poor and the vulnerable by 2030. Goals 2, "End hunger, achieve food security and improved nutrition and promote sustainable agriculture" underlines the importance of secure and equal access to land and other productive resources, in inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment to small scale food producers in particular women, indigenous peoples, family farmers, pastoralists and fishers by 2030. Securing access to land rights is of critical importance especially with the realization that approximately 2.5 billion people live on and use land which they have no secure legal rights on, (Global Call to Action, 2016). Much of this land is used by communities and claimed through customary means. Goal 5, "Achieve gender equality and empower all women and girls", recognizes women's land rights as a primary driver for achieving income, health, and empowerment objectives. Women spend a lot of time working on the land and yet have limited rights of ownership, access and control. Protecting women's land rights requires both legal and policy reforms to strengthen women's access, including inheritance, divorce, and other laws; and ensuring practice reflects laws, which often requires support to reform of customary systems (Mennen, 2016). Goal 11, "Make cities and human settlements inclusive, safe, resilient and sustainable" points out to the long-standing impasse of property rights for informal urban settlements and stresses on the urgency of mitigation measures towards the effects of climate change.

The aforementioned goals offer an enormous opportunity to make progressive steps on the land agenda towards transforming our world. Crafting context-appropriate land rights strategies and approaches is essential in realizing these goals. The continuum of land rights offers a powerful and practical alternative to the dominant focus on titling of individually held private property. It offers an inclusive approach now widely accepted, as part of a significant paradigm shift in understanding of land tenure. In the New Urban Agenda (Habitat III) as adopted in Quito in October 2016, there is strong commitment to the continuum: *"We commit to promote, at the appropriate level of government, including sub-national and local government, increased security of tenure for all, recognizing the plurality of tenure types, and to develop fit-for-purpose, and age-, gender-, and environment-responsive solutions within the continuum of land and property rights, with particular attention to security of land tenure for women as key to their empowerment, including through effective administrative systems."* (Para. 35)

All GLTN tools are built upon this foundation where different tenure systems are seen to operate across the continuum, either by individual and/or group claims, and plots or dwellings within a settlement and may change over time (Antonio, 2013). A typical example is the implementation of Social Tenure Domain Model (STDM) which encompasses Participatory Enumerations; Gender Evaluation Criteria; Pro-poor Land Recordation; Fit for Purpose Land Administration; and the Continuum of Land Right concept. GLTN through its partners has successfully piloted and implemented various land tools such as the Social Tenure Domain Model (STDM), Participatory Enumerations, and the Gender Evaluation Criteria (GEC) in different developing countries such as Colombia, Democratic Republic of Congo (DRC), Kenya, Namibia, the Philippines, Uganda and Zambia. GLTN is also providing light backstopping on STDM implementation in Afghanistan, Iraq, Somalia and Sudan.

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2. GLTN TOOLS

One of the most successful tools by the GLTN is the Social Tenure Domain (STDM), a pro-poor, gender responsive, participatory and affordable land information system for capturing person/s to land relationships cognizant of the land rights continuum. STDM supports all forms of land rights and claims; formal, intermediate and non-formal, (Augustinus et al, 2006). It provides innovative options for the inclusion of the urban and rural poor and the marginalized in the land tenure and property rights debate. It is a unique domain that provides a new way of thinking and ensures that 'realities" on the ground in terms of the tenure relationships are captured and recognized. STDM supports the plurality of tenure types and the continuum of land rights. It should however not be confused to be a tenure system. It does not change any laws or traditions, nor is it an alternative law or policy or tenure. It is however a tool that can be used to strengthen tenure security, recording of rights regardless of what the existing law or technical limitations. The concept of STDM comes from a point that the rural, the urban poor and the marginalized, always hold land and rights in a very complex manner that conventional systems cannot match with. As already pointed out, these groups of people are neglected on the formal system of recording or rights registration in many cases, and hence the need for STDM to fill this gap. It is a very flexible tool that can fit into the existing tenure systems but also even with no legal or technical certainties.

GLTN and partners have also incorporated participatory enumerations in data collection approaches particularly in the urban context to gather information required for planning/ provision of basic infrastructure and services, upgrading of slums and generally the improvement of land tenure in informal settlements. *Count Me In – Surveying for tenure security and urban land management* (UN Habitat, 2010), outlines how "participatory enumerations" - a data-gathering process, designed and conducted by the people being surveyed ensures the involvement of the locals from inception, design and management of the information from their settlements. This tool provides, fosters transparency and build trust which serves to improve the data as well as a self-empowerment process where these communities come to own the whole process. It is an innovative approach also known as c*ommunity mapping, people's census and self-surveys*. In all countries where STDM has been piloted and/or implemented, participatory enumerations have been used as an effective tool to mobilize communities towards seeking locally engineered solutions to social problems such as inadequate basic services, evictions and pushing for secure tenure.

3. STDM EXPERIENCES IN AFRICA

Uganda's Informal Settlements
In Uganda, the STDM intervention commenced in July 2011, initiated by UN Habitat/GLTN in partnership with the Government of Uganda (GOU) through the Ministry of Lands, Housing and Urban Development (MoLHUD) and Slum/Shack Dwellers International (SDI) through local partners ACTogether Uganda and the National Slum Dwellers Federation (NSDFU). The intervention was a complementary initiative to the ongoing *Transforming Settlements of the Urban Poor in Uganda* (TSUPU) program, implemented by the Government of Uganda, the Uganda Alliance and others and funded by Cities Alliance. The pilot aimed to address the land information requirements of women and men living in slum communities, to build their capacity for using and

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applying the land information systems based on free and open-source software packages, and to mainstream the thinking behind the continuum of land rights.

Two cells, Bufumbo and Mission in Namakwekwe Ward, Northern Division were selected and after a series of community meetings to build local partnerships, an enumeration was conducted. The enumeration captured data from 1,183 households and revealed gaps in terms of accessibility to basic community services, (toilets, water points, health centres access roads,) and how these were interlinked to tenure security issues. After analysis of the data collected, community priorities were listed showing the most pressing needs as expressed by the locals of the two cells. The need for sanitation services topped the list.

Building on these successes the SDI alliance in Uganda scaled up work on community driven data gathering and sharing using the STDM tool in 2013/2014. In this phase of the STDM project in Uganda, four learning centers were established in Masaka, Entebbe, Tororo and Mbale which have been instrumental in broadening the appreciation and applications of STDM in Uganda. These centers play a critical in upscaling STDM usage in these municipalities and are now serving as anchors of activity and learning in the 14 municipalities participating in the World Bank supported Uganda Support to Municipal Infrastructural Development (USMID) program ending in 2018. The centers have been equipped with computers, printers and cameras to promote co-management of information between communities and professionals, build capacity within municipalities where communities and Municipal Development Forums (MDFs) analyze their settlements' situation using STDM data collected by the communities, making information available and sharing the same with other stakeholders to inform engagements at settlement and city level. The centers are providing planning data within these municipalities through regular data updating processes. Different model settlements were identified to be planned using the STDM generated information in Mbale (Namboozo), Tororo (Naluwerere), Masaka (Katafali) and Entebbe (Kigungu).

STDM activities have served to create awareness on land and steer thinking behind the continuum of land rights. Community members have heightened awareness on their land rights. No certificates of occupancy or of legitimate residency have been issued as yet but there is perceived tenure security which community feel is 'secure enough' to fulfill their needs. Many report not feeling threated by evictions clearly because they now know the municipal council know of their existence on their particular settlements. STDM data has provided a sense of security especially with the settlement upgrading programmes such as the provision of access roads, sanitation facilities, water points, electric poles among others.

The STDM process has formed a basis for dialogue between local communities and cities in negotiations for improving tenure security, inclusive planning and enhancing access to basic services and infrastructure. The provision of essential services in the settlements by the municipal authorities suggests a level of settlement recognition such as a case of officially recognizing informal settlements accompanied by the provision of public services, such as access roads, electricity, water supply and sanitation. These services create a high level of perceived tenure security without a formal change of legal status and have encouraged local improvements and investment. Communities in Uganda suggest that though the threat of eviction is highly unlikely they still feel pressured to secure registered titles/ formal titles.

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Kenya's Informal Settlements

In Kenya, STDM has been successfully piloted and implemented in Nairobi and Mombasa in support of informal settlements improvements. This work is concentrated in Mashimoni in Nairobi and Kwa Bulo and Mnazi Moja settlements in Mombasa.

The Mashimoni settlement has been a member of the slum dwellers movement commonly known as the slum dwellers federation and heavily involved in the struggle to protect settlers from eviction. Through a self-help settler managed association called *Muungano* originally set up as a savings association, with a bank account for accumulating funds for welfare needs of its members, communities in Mashimoni mobilized themselves towards finding solutions to the many social problems experienced in the slums including the perennial question on who owned the land they reside on (Makau and Lines, 2017). An initial response from the Land Registry indicated that the *de facto* settlers did not exist, that the land was empty of registered private owners and remained on the official maps as owned by the Ministry of Defence (Pamoja Trust, 2016). The challenge of the communities was to get governmental entities to respect community residents' claims of legitimate rights to the land and to the structures on the land, and thereby get access to governmental programs and provision of public services to their recognized settlements.

Pamoja Trust established in 2000 from a need to support a growing anti-eviction movement which had developed in the late 1990s, began working with the Mashimoni settlement residents in 2009 on an enumeration of all structures in the settlement using an aerial photo to show governmental officials that there are people with legitimate claims to the land and structures already, trying to live securely and peacefully in the settlements. While the updating of this grassroots enumeration Pamoja Trust and community members became aware of the STDM tool offered by GLTN in 2011. This tool proved to be a big help to organizing the socio-economic data on settler structures previously recorded on paper in a map based on GIS.

The findings in Mashimoni revealed that about 50% of the approximately 1,900 structures in the 9.5 acres in the Mashimoni settlement are occupied by people who pay rent to those who control access to the structures, the landlords. This information system provided data on real conditions in the settlement, which in turn informed continuous dialogues of community leaders with County and Ministry officials. An STDM GIS produced map was presented to the Ministry who later accepted the claims of informal settlement occupation as "real". For the time being, the security of tenure of the residents in Mashimoni has been improved by removing the threat of forced evictions throughout the settlement as a result of these dialogues.

This new tool also effectively communicated to County and Ministry officials the extent and seriousness of informal owner-settler (landlords) investments and their existing rights to the land and structures as well as the extent of renter rights to structures. Currently, the World Bank supported Kenyan Informal Settlement Improvement Programme (KISIP) is working with the Settlement Executive Committee (SEC) and offering the much needed funds and expertise for investing in public services and infrastructure in this settlement.

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The community in Mashimoni is negotiating for the regularization of tenure and the legal recognition of Mashimoni residents by the relevant land actors; National Land Commission, Ministry of Lands Housing and Urban Development and the County Government of Nairobi. The land should be transferred from the Ministry of Defence to the County Government of Nairobi who will then work towards granting the Mashimoni community recognition of residence in the settlement. Community members believe that STDM has provided confidence on incremental recognition of their land rights and will make future formal land registration easier.

Building on the successes of Mashimoni, GLTN supported Pamoja Trust to pilot and implement the STDM in two settlements of Mombasa; Mnazi Moja and Kwa Bulo. The County Government of Mombasa notes with appreciation the advantages of using STDM for settlements improvements and has resolved to use STDM in other settlements within the county. The County government is also in support of the issuance of certificates of occupancy for the community, which will most likely happen in 2017. Household and spatial data collection has also commenced in Dogo Kundu and Shika Dabu, two additional settlements in Mombasa based on these positive experiences. Preparing for the Certificates of Occupancy has awakened a sense of community purpose to protect themselves from arbitrary eviction and to promote the future development of the settlement. The Certificates in Mombasa are to be signed by the Chief Officer of the Ministry of Land in the County Government, based on the Constitutional provision for County Government being responsible for land tenure in the County.

Zambia
In Zambia, through a collaboration with Huairou Commission and its local network organizations, GLTN has supported implementation of Social Tenure Domain Model (STDM) to document customary rights in Chibombo District, (Mungule chiefdom), and in the Chisamba district, (Chamuka Chiefdom) with lessons feeding into the ongoing land policy process. The project is led by local women's grassroots organization. The implementation involved training on mapping and enumerations and sensitization of stakeholders on STDM, which led to comprehension of the concept and broad acceptance of the tool in the two Chiefdoms.

On 30th November 2016, Chief Chamuka inaugurated the issuance of land occupancy certificates to forty (40) community members of Bulemu Village in an event that brought together local, national and international stakeholders on land and aired by the national media, thus expanding the traction of awareness on STDM tool. The certificates provide an effective tool in curbing cases of land disputes and monitoring land allocation by headmen. Chief Chamuka appealed to the national government to come up with a new legislative framework that regulates customary land administration. The issuing of certificates in Mungule chiefdom has not been as successful in Chamuka because the Chieftainess of Mungule was not ready to commence with certification of the land in her chiefdom. However, the STDM project steering committee has positively engaged the traditional authorities to make them realize that STDM brings about a win-win situation where they, (leaders), factually know the geographical extent of the land under their jurisdiction, as well as the accurate boundaries of their villages (also beneficial to community). Additionally, the positive engagement because of STDM has made leaders/chiefs realize that they were rapidly losing control of their ancestral lands through the massive conversions from customary to state land.

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Photo 1: Community members from Chamuka Chiefdom pose with their land occupancy certificates

The case of STDM implementation in Zambia provides a good example of communities having their *de facto* claim to land recognized to enhance tenure security. The fact that STDM provides a platform where community members are able to engage their leaders on land matters, particularly women and youth is a great achievement. Women are getting recognized in land discussions and addressing gender bias customary practices. The STDM process has helped reduce internal conflicts on land ownership boundaries through the availability of land maps validated by the communities. The success in Chamuka and Mungule Chiefdoms has led to great demand for this tool and process by other headmen and women who want STDM implemented in their areas. The Surveyor General, who was involved right from the initial stages of the project, has expressed his desire for his officers to learn the t STDM and stakeholders from the government have been consulted through his office and the Ministry of Lands throughout the process. This engagement has highlighted the added value of the STDM and its potential to address critical gaps in pro-poor policy formulation and implementation.

Namibia
In Namibia, GLTN support has resulted in increased understanding and capacity on the continuum of land rights approach and in the use and application of pro-poor and gender responsive land tools.

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The STDM and participatory enumerations are being implemented in support of piloting the Flexible Land Tenure System (FLTS) in Freedom Squire, Gobasis where community has lived in the settlement for more than 15 years, without any security of tenure and facing possible evictions from the municipality. An agreement by the Local Authority in Gobabis to allow for the *in-situ* upgrading of their informal settlement, provides an opportunity for the process to demonstrate how a community can work with their Local Authority and other stakeholders in securing tenure. The Flexible Land Tenure Act in 2012 aims to, among other reasons, create alternative forms of land titles that are simpler and cheaper to administer than existing forms of land title which have in the past excluded the middle and low-income groups. Approximately one thousand, (1000), households are expected to receive security of tenure by registering their rights using the STDM.

4. STDM EXPERIENCES IN LATIN AMERICA

Columbia
Habitat for Humanity International (HfH) and GLTN joined efforts to implement the Social Tenure Domain Model (STDM) pilot in Ciudadela Sucre community, located in the Municipality of Soacha, Colombia in 2013. STDM was tested on its capability, as a progressive land records tool to implement a comprehensive neighborhood upgrading project. This implementation in provides a good example where community sourced information has been accepted by local authority in their support to improving the living conditions of communities in neighbourhoods whose settlements required upgrading. The data was collected through community mapping workshops in 10 neighbourhoods and household surveys. The project, 'STDM Pilot Implementation in Soacha, Colombia' has been given support to the Comprehensive Neighbourhood Upgrading program to respond to multi-sectorial needs, informed by community-based decision-making, reflective of the social, economic, and physical features of their settlements. Through this pilot, the Ciudadela Sucre community was able to identify and rank their neighbourhood challenges and formulate solutions to these issues. It also enabled them look into the opportunities available to upgrade their settlements. Information generated using STDM has also elevated the topic of housing improvements and neighbourhood upgrading at both the local and national level.

5. STDM EXPERIENCES IN ASIA

Philippines
Three partners in the republic of the Philippines; LinkBuild, Inc., Technical Assistance Movement for People and Environment, Inc., and Homeless Peoples' Federation are collaborating in the implementation of the Social Tenure Domain Model (STDM) to enhance community development initiatives in the cities of Muntinlupa and Valenzuela. These partners are working towards making land information in urban poor communities available and updated, and going further to share this kind of information with local and national governments for inclusion in the planning process, national and local upgrading programs and selection of the best options to provide tenure security for the urban poor under existing regulations. Communities have been trained on STDM and are actively engaged in entering their community data at the STDM learning center in Muntinlupa. They are familiar with their own land information, which information has continued to empower them while negotiating with local governments regarding development programs on upgrading and improving the tenure security situation. Data collected; spatial and household information has been

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validated and communities are using the data to rank and prioritize interventions that can inform settlement planning.

Various local government units have expressed interest in the tool and have committed to support activities on STDM to address the need for comprehensive data on informal settlements. The academia is also keen to study the STDM, both as a tool and as a concept as a way to further students' Research and Extension Programs through actual practice of participatory community work. It is also encouraging to see the Presidential Commission for the Urban Poor – Field Operations Division for Mindanao, which serves as the direct link to the government in policy formulation and program implementation, addressing the needs of the urban poor also participating in these trainings. It should be noted that technical improvements on land governance such as the STDM only work where there is political will to make them effective and sustainable.

6. RURAL, AGRICULTURAL ORIENTED APPLICATION OF GLTN TOOLS

Goal 2 on the SDGS, "ending hunger, achieving food security, improving nutrition and promoting sustainable agriculture" underlines secure access to land as an incentive to invest. Land rights must therefore extend beyond ownership. As described in the FAO's Voluntary Guidelines on the Responsible Governance of Tenure (FAO, 2012), any other way of looking at land rights would ignore people's relationship to land and natural resources. Extending land rights beyond ownership recognizes the many facets of land rights and usage which can be formal or informal, statutory or customary, private or based on common property, permanent or temporary; legally recognized or not.

GLTN is collaborating with the International Fund for Agricultural Development (IFAD) to improve knowledge management strategies and approaches towards a pro-poor and gender-sensitive land and natural resource tenure rights system in selected Eastern and Southern African countries. Within this cooperation, GLTN is supporting learning and capacity development for better land administration and increased farm productivity in two counties in Kenya; Bomet and Kirinyaga. In Kirinyaga county at the Mwea Irrigation Scheme, STDM and participatory enumerations have been implemented to geo-spatially enumerate rice out growers in the Ndekia expansion zone (outside the gazetted irrigation scheme land) with the aim of including the out growers in the scheme's register for ease of management on irrigation water services and other agricultural extension services. Also within this County, in the Upper Tana Natural Resources Management Project (UTaNRMP), STDM is being utilized to develop a plan for strengthening the monitoring and evaluation system for the project.

In Bomet, STDM has been used to support geo-spatial enumeration of smallholder dairy producers and the mapping of key communal natural resource, (salt licks points, water points, and cattle dips among others). The resultant data is being utilized to inform sustainable resource management of dairy production. It will also help secure boundaries of communal resources from encroachment and determine optimal animal carrying capacity of the grazing and drinking areas to prevent resource over-exploitation and degradation.

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In Uganda, STDM and participatory enumerations tools have been implemented to map the boundaries of their oil palm plantation, determine the relationship of production and tenure security and to resolve boundary related disputes in the IFAD-supported project, Vegetable Oil Development Project (VODP) in Kalangala District. The farmers in Kalangala are squatter farmers who were formerly fishermen and charcoal makers. They do not own the land on which the oil palm is cultivated. There have been instances where land owners have wanted the land back but these tenants have expressed the need to have the land exclusively for their use. With the implementation of STDM and participatory enumerations, the famers are now able to get an accurate measure of the sizes of their gardens which helps with more accurate use of inputs leading to increase productivity per acre.

In all these cases on rural, agricultural oriented application, the relevance of these two land tools is seen to improve tenure security through landholder involvement in the data gathering and presentation to government planning and project implementation entities. Legally registered individual land rights are not always best for poor rural people. As is the case in the Ugandan project, sometimes improved tenancy arrangements meet the needs of farmers better than private ownership.

Documenting and defending tenant rights to land are also being negotiated on this project. The Ministry of Agriculture, Animal Industries and Fisheries through which the VODP is delivered, is now sharing experiences on these tools and is collaborating with the Ministry of Lands, Housing and Urban Development, particularly in addressing land tenure issues where such issues as tenant rights can be discussed/addressed.

7. CONCLUSION

The use of land tools cited here highlights various aspects on how land tools are used towards the actualization of continuum concept. In the Namibian context, the Flexible Land Tenure Act 2012 provides for issuance of Starter Title, Landhold Title and Freehold Title in an informal settlement. All the titles can subsist independently, meaning there is no compulsion to upgrade from starter title of landhold title. The community members who cannot afford the expenses related to Freehold title are assured of tenure security with any of the titles. This is a situation where the National Government has taken steps to implement the continuum concept in order to meet the needs of the urban poor.

In other countries the concept is not easily accepted at the National level where there are strong inclinations towards conventional approaches. The arguments for conventional approaches range from prevailing legal frameworks, professional standards and possible loss of revenue for professionals. The Fit-For -Purpose approach, which espouses the STDM and the continuum of land rights, recommends adoption of legal frameworks, spatial frameworks and institutional frameworks to meet the requirements of the time. In terms of revenue, the economy of scale show that once the large percentage of communities are aware of their land rights, they will engage professional for other relevant land transactions. To increase awareness amongst communities "bottom-up" approaches have been adopted to prove the concept. This entails communities taking the responsibilities of mapping and enumerations and sharing the results with relevant land agencies, usually starting at the local level. The accounts above show that this has been successfully done for

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instance in Columbia, and Kenya Uganda which has led to uptake of the tools and inclusion in government initiatives such as the Comprehensive Neighbourhood Upgrading program in Columbia, TSUPU and USMID in Uganda and KISIP in Kenya.

The use of the tools in customary land certification in Zambia is strategically poised to inform the broader land reform process on what approaches can be used for customary land administration and improving coverage of land records. There are discussions about possible systematic titling whose effect will lead to customary land being turned to state land. Understandably this is not popular with customary chiefs who perceive that approach as taking land from their jurisdiction which will lead to the demise of traditional leadership. Based on the experiences of using land tools the stakeholders will be better informed to adopt a fit for purpose approach.

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