



**SECURING TENURE THROUGH LAND USE PLANNING:  
CONCEPTUAL FRAMEWORK, EVIDENCES AND EXPERIENCES FROM  
SELECTED COUNTRIES IN AFRICA, ASIA AND LATIN AMERICA.<sup>1</sup>**

Uchendu Eugene Chigbu<sup>A</sup>, Fahria Masum<sup>A</sup>, Anna Leitmeier<sup>A</sup>,  
Samuel Mabikke<sup>B</sup>, Danilo Antonio<sup>B</sup>,  
Jorge Espinoza<sup>C</sup>, Anita Hernig<sup>C</sup>

**Presenting Author Email: [ue.chigbu@tum.de](mailto:ue.chigbu@tum.de)**

**Paper prepared for presentation at the  
“2015 WORLD BANK CONFERENCE ON LAND AND POVERTY”  
The World Bank - Washington DC, March 23-27, 2015**

*Copyright 2015 by author(s). All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.*

- A. Chair of Land Management, Centre of Land, Water and Environmental Risk Management, Technische Universität München, Germany.
- B. Land and Global Land Tool Network Unit, Urban Legislation, Land and Governance Branch, United Nations Human Settlement Programme (UN-Habitat), Nairobi, Kenya.
- C. Sector Project Land Policy and Land Management, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), GmbH, Eschborn, Germany.

---

<sup>1</sup> This paper is part of an ongoing collaboration project between the TUM and GLTN through UN-Habitat and GIZ. We would like to acknowledge the following persons for their contributions to this research: Anthony M. Ntiador, Christopher Mulenga, Efren B. Saz, Fernando Órdenes, Juan Fernando Acuña and Washim Akhter. In addition, we received useful inputs and comments from Geoffrey Payne and Derek Osei Tutu.

**SECURING TENURE THROUGH LAND USE PLANNING: CONCEPTUAL  
FRAMEWORK, EVIDENCES AND EXPERIENCES FROM SELECTED  
COUNTRIES IN AFRICA, ASIA AND LATIN AMERICA.**

---

By

Uchendu Eugene Chigbu, Fahria Masum, Anna Leitmeier, Samuel Mabikke, Danilo Antonio, Jorge Espinoza, Anita Hernig

**Abstract**

Land registration and cadaster play crucial roles in improving tenure security. However, they are not enough to guarantee secure tenure for all people with a legitimate claim to land. Often, land use planning exists but is not formally linked with tenure security in practice. This paper argues for other options for improving tenure security in developing countries. It reports on a study that employs three methodological aspects – in-depth review of literature, an Expert Workshop, and evidential case studies. Its conclusion is that a complementary initiative would be to use land use planning as a tool for widening the margins of tenure security improvements. By way of output, it presents a conceptual proposal and experiences of land use planning as a means of securing tenure. The paper is relevant in three ways. First, it provides a starting point for filling the gap that exists in literature concerning the utilization of land use planning as a tool for improving tenure security. Second, it embeds the idea of using land use planning as a means for tenure security in the global debate. Third (and most importantly), it contributes to scalable approaches to improving tenure security and advances with securing, or protecting land rights.

**Keywords:** continuum, land tenure, land use planning, land rights, tenure security

## 1. INTRODUCTION

Conflicts between different land users have been rising over the past decades due to increasing global interests in land. The situation is best described in one word – inequality. This has “spurred a mass movement of people from rural to urban areas – and from developing to developed countries – in search of a better life” (FAO & UNEP, 1996: 5). In the search for answers to the inequality question, one particular element that has always reared its head up is land. Scholars, practitioners and policymakers agree that a strategy based on land is most realistic for tackling inequality and other socioeconomic challenges faced by communities in developing countries (see Deininger, 2003; Magel & Wehrmann, 2006). Although land in itself constitutes a strategy for tackling these challenges, it also poses many problems. Factors linked to climate change, such as desertification, changes that lead to loss of arable land and soil degradation are exacerbating pressures on land. So, in order to address these pressures, it is important to reassess how people use land, as well as people's relationships with respect to land and other natural resources. In this paper, we argue that a combination of land use planning and land tenure security measures can form an approach to improving the situation.

Land use planning and tenure security are essential for achieving global development goals, especially in the post-2015 period. It is crucial that individuals and communities have some level of certainty that governments and influential individuals would not infringe on their interests, ownerships, privileges and rights on land. If people's rights to land are recognized by others and protected in cases of particular challenges; incidences of competing claims, conflicts, evictions and food insecurity will reduce. Most importantly, it will lead to better use of land. Land tenure and land-use patterns affect the distribution of land and land-based assets among citizens and communities. When backed by tenure security, the process has far-reaching and sustainable implications for socio-economic development.

Currently, many developing countries are investing in land registration systems and improvement of land administration systems with the aim of reducing land conflicts and attaining efficient land markets. This constitutes a laudable initiative on the part of these governments towards developing reliable land records and improving tenure security of landowners, users and all that have legitimate interests in land. Often, land use planning exists but is not sufficiently linked with tenure security. We think that a complementary initiative would be for these governments to use land use planning to widen the margins of tenure security improvements. Why? Land use planning and tenure security status have one thing in common – both have a significant impact on land values. When combined or considered in combination, they exert significant impacts on land markets and the ability of households to obtain access to secure land. Its role in enabling efficient allocation, functional patterning and balanced distribution of land resources has profound impacts on social, economic and environmental development. Nevertheless, people-centered development is not sustainable in the absence of secure tenure on land. A critical question remains unanswered. Land use planning serves as

a tool for national, regional and local development. Can it also serve as another means for securing tenure?

Literature and research on land use planning as a means of securing tenure constitute a blind spot in answering this truly important question. Evidences from available researches point to land registration as the most effective way forward. De Soto's (2000) logic for issuing titling tends towards the idea that people become more secure, and their properties become useful collateral when recognized by a formal legal system. Experiences from De Soto's case studies in Peru show that this is not necessarily the case. Samuelson (2001) argued against this and referred to it as a "single bullet" approach to tenure security. Woodruff (2001) raised concerns regarding the exaggeration of the effectiveness of land titling by De Soto. Clift (2003) exposed the notion that titling can be biased against those who are landless or/and propertyless. In fact, issuing legal titles has not created a better housing market or better supply of credit for the poor in Bogotá. Davis (2006) concluded that De Soto's idea was ineffective and unrealistic. Among the various opposing voices against De Soto's idea, the most reasonable ones agree on one thing. That is, titling (whether in its real or pseudo forms) may not hold all the answers to the tenure security questions. Payne *et al.* (2009) reviewed whether land titling programs have achieved the benefits claimed by their proponents, and concluded that titling has failed to do so.

“Most experts today agree that rights recognition is more important than land titles” (Wehrmann & Antonio, 2011: 9). Granted that together, land registration and cadaster, play crucial roles in improving tenure security, they are not enough to guarantee secure tenure for all people with a legitimate claim to land. Often, the process of registration and titling is seen as the principal tool for land tenure security within policy debates. However, in many development contexts, land registration and titling are not a feasible option or are not functional enough due to political and financial constraints, among many other challenges. In certain contexts, formal and private land rights do not represent the only reality on the ground. This means that there is still tenure insecurity for a range of claimants on land with customary and traditional legal systems, non-registered land titles and in marginalized positions in the society. So, despite the relevance of land registration, cadaster and various other approaches available for addressing land tenure security, opportunities still exist for improvement. The difficulty of providing land tenure security based on conventional methods (e.g. through legal, technical and affordability issues) is overwhelming. Maybe where land use planning is done as a participatory process it can provide a less controversial approach to securing tenure.

This paper is part of an ongoing collaboration project between the Technische Universität München (TUM) and the Global Land Tool Network (GLTN) through United Nations Human Settlement Programme (UN-HABITAT) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). In

presenting our argument, we begin with a theoretical and conceptual overview of our thoughts on *land use planning and tenure security*. In doing this, we argue for a transition from land use planning and tenure security to *land use planning for tenure security*. Then we provide evidences and experiences that support our arguments through case studies conducted in Africa, Asia and Latin America. Finally, we conclude by presenting ideas on the next steps necessary for application and practice.

## **2. FROM LAND USE PLANNING AND TENURE SECURITY TO LAND USE PLANNING FOR TENURE SECURITY**

### **2.1 LAND USE PLANNING AND TENURE SECURITY**

The bulk of literature that exists on the subject of land use planning and tenure security is vast. Land use planning is known to be fraught with many definitional ambiguities. Despite this, some notable efforts have been made in defining land use planning in ways that make it understandable. FAO (1993: 1) described it as “the systematic assessment of land and water potential, alternatives for land use and economic and social conditions in order to select and adopt the best land-use options.” GTZ (1995: 5) explained it to be “an iterative process based on the dialogue amongst all stakeholders aiming to define sustainable land uses in rural areas. It also implies the initiation and monitoring of measures to realize the agreed land uses.” FAO & UNEP (1999: 14) referred to it as “a systematic and iterative procedure carried out in order to create an enabling environment for sustainable development of land resources which meets people’s needs and demands.” World Bank (2010: 109) defined it as “a public policy exercise that designates and regulates the use of land in order to improve a community’s physical, economic, and social efficiency and well-being”. These definitions lead to the idea that land use planning involves many actions and decisions undertaken to guiding the allocation and use of land; in order to situate or influence different land-based activities in patterns that enable improvements in peoples’ standard of living and the environment. It “facilitates the allocation of land to the uses that provide the greatest sustainable benefits” (see Agenda 21, paragraph 10.5).

Whatever the objective of land use planning is, the outcome usually involves “allocation and zoning of land for specific uses, regulation of the intensity of use, and formulation of legal and administrative instruments that support the plan” (World Bank, 2010: 108-109). A positive outcome is only possible when land use planning is done appropriately. This would mean doing it at different scales or levels, and within some guided principles. “Poor land use planning associated with insecurity of tenure and incompletely specified land rights leads to problems of air and water-borne pollution from agricultural and industrial land uses” (UN-HABITAT, 2008a: 17).

Tenure security can mean different things in different contexts. For one to grasp the idea of tenure security, it is important to know what tenure means. This is well captured in the *Bathurst Declaration* on Land Administration for Sustainable Development. The declaration defined tenure to mean “the

way in which the rights, restrictions and responsibilities that people have with respect to the land (and property) are held” (see FIG, 1999). On the other hand, tenure security entails the bundles of rights individuals and groups have to effective protection by the state against forced eviction, which under international law involves “the permanent or temporary removal against the will of individuals, families and/or communities from the homes and /or land which they occupy, without the provision of, and access to, appropriate forms of legal or other protection” (see UN-HABITAT, 2008a: 4; Sietchiping *et al.*, 2012: 1). We view tenure security as the greatest driver in the enjoyment of rights, interests and privileges on land by people. Improving or enhancing it in developing countries is very crucial to achieving development objectives, whether from a rural, urban, regional or national level. Long before now, some practitioners and organizations have called for scaling up tenure security at different levels and in flexible and diversified ways (Baharoglu, 2002; UN-HABITAT, 2004). As a genuine way forward, UN-HABITAT (2008) argued for the different range of possible forms of land rights (tenure) to be seen as a continuum (see Figure 1).

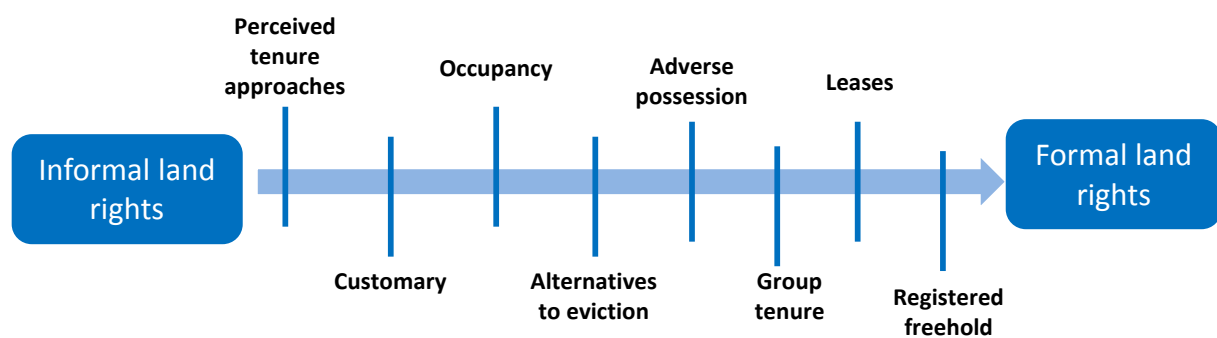


Figure 1: Continuum or range of land rights (UN-Habitat, 2008a)

At each point within this continuum exist different sets of rights with varying degrees of security, responsibility and restrictions. As shown in Figure 1 (starting from left to right), a range of tenure security options, from more informal situations to more formal ones exist. Experiences have shown that this continuum embraces people with little or no tenure security. This is particularly the case where such people have no documents, no contracts and little or no legal protection. They face eviction threats, rights infringement and tenure insecurity.

Devising other means of improving tenure security, in addition to the traditionally recognized ones (e.g. titling), is now imperative. In this regard, important ideas, solutions and approaches have been prescribed over time (see GTZ, 1995; Payne 2002, UN-HABITAT 2003; Home & Lim 2004; Augustinus & Deininger, 2006; World Bank, 2007; UN-HABITAT, 2008b; Deininger & Feder, 2009; Lemmen, 2010; Wehrmann & Antonio, 2011; FAO, 2012; GLTN/UN-HABITAT & IFAD, 2013; GLTN/UN-HABITAT *et al.*, 2014). Having considered all these ideas, and in recognition of the current global development circumstances, our position is that land use planning has potential to serve

as a tool for improving tenure security. In taking this position, we do recognize that we are deviating from the traditional idea of viewing land use planning and tenure security as two separate tools for human settlement development.

## **2.2 LAND USE PLANNING FOR TENURE SECURITY**

Land tenure security is hardly mentioned as one of the key objectives of land use planning. However, we think that if land use planning is all about making decisions on land then it should be linked to improving or ensuring tenure security. Some of the land use planning decisions include defining land uses, allocation, reallocation of land uses, etc. Although land use planning and tenure security are usually independent concepts, both could be combined for the benefit of people and the environment. The two concepts should co-exist and co-apply within the context of development needs of a people. The question that arises is, is it really an aim for land use planning to improve tenure security? Specifically, we suggest that land use planning should be used as a means for improving tenure security. Hence, our idea of land use planning for tenure security. The idea calls for including tenure security as part and parcel of land use planning objectives. Tenure security should be inbuilt in land use planning processes as the design life and strategies are fixed for long term tenure, especially for infrastructure and provision of socioeconomic amenities within human settlements. This is not always the case in developing countries. This could be made possible by introducing tenure security as a relevant aspect of the land use planning objectives and principles.

Tenure security, from a land use planning perspective, is diverse. It varies in the different countries, customs or cultures, and under different scenarios. However, it can even be diversified beyond its traditional contexts towards the protection of property rights enjoyment, possession and management interests and use privileges. It should include the context of physical security of property. By physical security, we mean the security of lives and property –i.e. in the context of human security or safety of people and the built and natural environment. It entails the context of fair values and compensation for property losses. For instance, if a municipality rezones private land, say from agriculture to residential (as municipalities routinely do all over the world), the value of the re-zoned land increases substantially. Tenure security could hinge on the question, who captures (most of) the added value – municipality, landowner or developer? The process would entail the subdivision of large farm parcels into many smaller residential plots. Usually, the landowner has to sell the re-zoned farmland to the municipality or private developer. In case the farmer and the municipality or developer cannot agree on a price, the court would set the price. Tenure security under this scenario could mean the certainty that the seller would receive a reasonable financial compensation for the farmland, but not a right to keep on farming on the same parcel. In practice most farmers under this situation cannot always afford to buy a new farm in the same area, but usually could elsewhere, depending on the market for farmland.

There are other scenarios where the reallocation or re-zoning of land during land use planning can lead to loss of land or communal land use rights. Tenure security in such situations can mean compensating owners for their losses in kind or cash. Tenure insecurity or informality can result in a total lack of compensation or receiving unfair compensation. It could also mean a loss of rights, privileges and interests on the land. What we are saying here is that tenure security and/or insecurity are naturally embedded in land use planning. A conscious effort, towards exploring the tenure security opportunities in land use planning should be a primary concern.

**3. TOWARDS A CONCEPTUAL PROPOSAL FOR LAND USE PLANNING FOR TENURE SECURITY**

Since land use planning as a means for tenure security improvements is either non-existent or poorly explored, we propose a conceptual framework for combining the two. In making our proposition, we identify some important aspects of land use planning for consideration in reducing tenure insecurity.

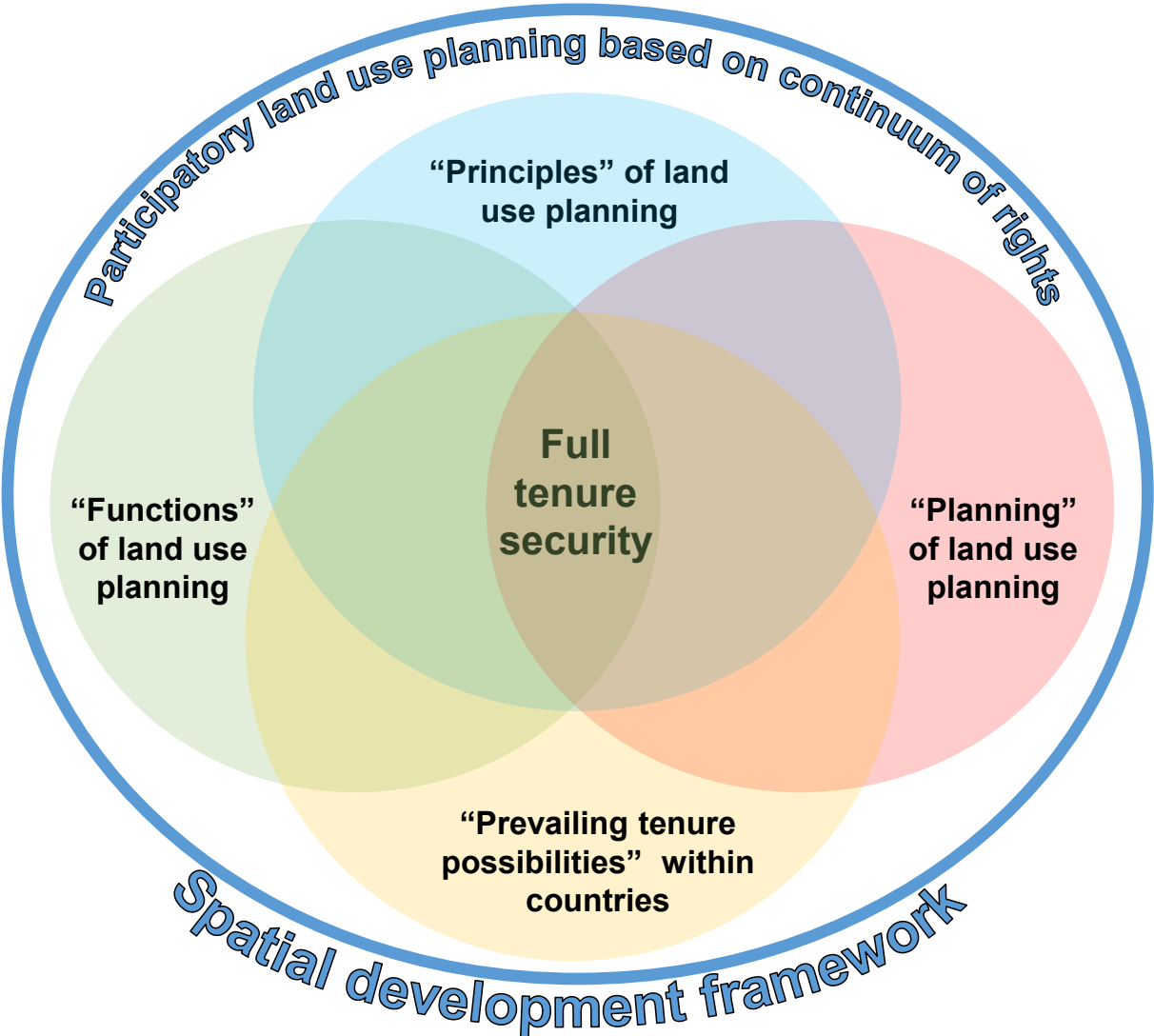




Figure 2: Conceptual framework for land use planning for tenure security (authors' illustration)

In Figure 2, we hinge our framework on the fundamental ideas behind *planning*, *functions* and *principles* (as aspects of land use planning) and *prevailing tenure realities within countries*. In addition, we consider *participation* (through participatory land use planning as a process) *based on the continuum of land rights* (as a concept) and *spatial development framework* (as an overall guide). *Planning* in this context means “the assembly and analysis of information, the formulation of objectives and goals, the development of specific interventions” (UN-HABITAT, 2008b: 6). It also embraces policy issues that can give legality or/and formality to land use planning. *Functions* of land use planning entails the needs or aims for indulging in land use planning. This can vary from country-to-country and community to community. For the purpose of illustration, we identify four functions of land use planning that directly links to tenure security. (1) Its capacity to identify or determine land areas, parcels and uses and users. (2) Its propensity to enable documentation of land areas, parcels, rights, restrictions and responsibilities. (3) The opportunities it provides for stakeholder involvement, compensation of claims and community participation. (4) Its impact on land value, land markets and credit opportunities. One may ask, what makes land use planning appealing in all of these, since some of them are traditionally taken care of by land administration system in some countries? Land use planning is appealing under this situation because it can provide or work as an intermediate option in the absence of a functioning cadaster and registration system. It can also complement both cadaster and registration.

Concerning the issue of *principles*, we consider them to be the fundamental rules, norms or values on which the land use planning process should be enforced. Many principles are necessary for ensuring tenure security through land use planning. Principles worth mentioning include visioning, people-centeredness, public interests, sustainability, continuity, participation, inclusiveness, governance, gender responsiveness and equitability. Others are legality, climate change responsiveness, flexibility, efficiency, feasibility, transparency, acceptability, responsiveness to local realities, pro-poverty, etc.

We posit that if the *continuum of rights* (refer to Figure 1 for details) is included as a core principle for land use planning, it will make it tenure security sensitive. In this context, tenure security sensitiveness means attentiveness to land tenure in land use planning programs so that they embrace or become closely associated with land rights issues. Nevertheless, organizing land use planning entirely based on its planning, functions, principles and continuum of land rights elements will not be sustainable when not participatory and guided by a spatial development framework. As a result, we consider *participation* as a necessary tool for making it people-centered and efficient. After all, land use planning (or development) is done for people. Tenure security is meant for people. In practice, land

use planning has used participation to involve all stakeholders in the process in order to reach consensus on the best use of land (GIZ, 2012).

On the other hand, a spatial *development framework* is a prerequisite because it helps direct development (in general) towards fit-for-purposes results. It is usually the highest level of spatial planning within a country. Through its lower level plans (ranging from spatial development plans and local area plans to land use plans) it guides both land use decisions and development frameworks (Todes *et al.*, 2010). In the context of land use planning for tenure security, a spatial development framework will serve as a statutory development guide for local level development. It can enable spatial frameworks to link with land use decision-making in ways that support tenure security.

Our primary argument in Figure 2 is that full tenure security could be attained by strengthening aspects of land use planning based on a continuum of rights concept and guided by spatial development framework and participation. Full tenure security will depend on the ability of practitioners to strike a balance between all six elements shown in Figure 2. A range of tenure options (whether legal, formal or informal) are possible in other situations where a balance is not struck between these elements. This could be possible if the prevailing tenure realities and possibilities available in any particular country, together with the level of participation involved (based on a continuum of rights), can enable it. More so, the capacity of land use planning to enable a range of tenure securities will largely depend on the following issues:

- Its ability to remedy unclear land borders.
- Its position to discourage forceful evictions or avoid expropriation.
- Its capacity to use citizens' participation as a tool for resolving land conflicts.
- Its contribution towards keeping or produce records concerning ownerships and rights (including privileges and interests).

Apart from enhancing documentation of land rights (including restrictions, responsibilities, etc.), it can also link it to registration and titling. It can cover “a range of measures that aim to distribute land more equitably, settle people on state-owned land, or recognize and protect customary rights (Heinrich Böll Foundation & Institute for Advanced Sustainability Studies, 2015: 46). It can provide opportunities for promoting gender responsiveness and inequitable principles on land tenure through stakeholder involvements and meetings. Moreover, integrating all stakeholders of land into a meaningful land use planning process may increase people's sense of responsibility, mitigate conflicts and competition over land, and help to achieve sustainable and secure land distribution. We envisage that this is possible when land use planning processes are participatory and inclusive, and recognize the concerns of

disadvantaged groups (e.g. women, indigenous, pastoralists and the landless). There are evidences and experiences in support our idea of land use planning for tenure security in developing countries.

#### **4. METHODOLOGY**

Our study used qualitative case study approaches. In-depth review of literature from key Institutions (like FAO, GIZ, World Bank, etc.) was conducted on the topic to identify gaps. Country case studies involving specific land use planning projects were investigated. Data selection techniques varied from case to case. However, they involved purposive selection of respondents who were interviewed using semi-structured questions. Field visits enabled us to gain direct experiences and situations in the different countries surveyed. Particularly, we evaluated land use planning projects in these countries to ascertain their impacts on tenure security. Finally, an International Consultative Workshop was specially organized to discuss the relevance of these case studies.

##### **4.1 INTERNATIONAL CONSULTATIVE WORKSHOP ON LAND USE PLANNING**

A workshop was held on the 25th - 26th September 2014 (in Feldafing, Germany) concerning this subject. In the Workshop, TUM and GLTN (through UN-HABITAT and GIZ) and their partners held Expert Group Discussions on the development of an Operational Guide for land use planning for tenure security. It is hoped that the proposed Operational Guide (that is currently being developed by the TUM) will serve as a new tool for improving tenure security in developing countries.

The workshop was attended by 27 experts selected due to their expertise in the field of land management, particularly in land use planning and tenure security. Together, these experts (through guided discussions facilitated by TUM) explored how land use planning processes and products can enhance tenure security. As part of its assignments, the workshop discussed six case study researches conducted by TUM and its partners (and funded by the GLTN) in Africa, Asia and South America. The case studies involved Ghana and Zambia (in Africa), Bangladesh and The Philippines (in Asia), and Brazil and Chile (in South America). In addition, a related project done by the GIZ in The Laos was discussed. The following case studies presented in this paper were derived from that Workshop. We use these case studies to buttress our argument for land use planning for tenure security. They present real-life cases on the issue. In presenting these case studies, we are merely showcasing evidences and experiences from particular countries. We do not claim that the findings would necessarily be same in all developing countries or in all land use planning projects. The case studies point to the fact that land use planning has the potential to improve tenure security rather than impede it. We present three of the case studies here in summarized forms.

## 5. CASE STUDY 1: GHANA'S LAND ADMINISTRATION PROJECT<sup>2</sup>

Ghana has experienced a rapid increase in urbanization rates, population growth and high levels of rural-urban migration over the past decade. A lack of adequate land use planning in the country has led to “tenure problems and contestation of rights to land” (Nyasulu, 2012: 1). Awutu Breku, the capital of Awutu Senya District in Central Region of Ghana, provides a suitable case for studying the linkages between land use planning and land tenure security. It is a peri-urban town and one of the settlements where tenure security challenges are most evident in Ghana. It is also one of the Districts that has implemented land use planning projects.

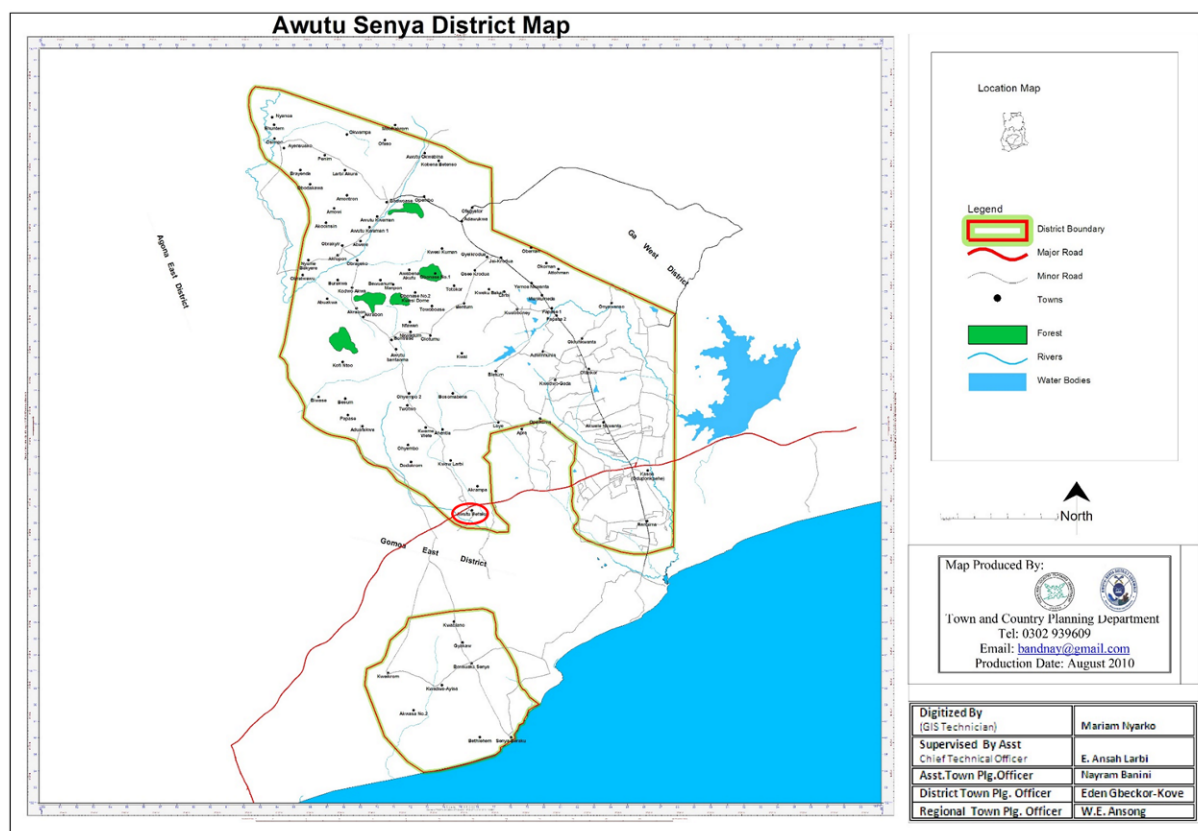


Figure 3: Awutu Breku in the Awutu Senya District map

In Awutu Breku (encircled in red color in Figure 3), a Land Use Project was done as part of the Land Administration Project in Ghana. It was designed to improve land titling, registration, valuation and information's systems for human settlement, among other objectives. Phase 1 started in 2003 and ended in 2010 while the Phase 2 is ongoing (from 2011-2016). This case study investigates the impact of land use planning for tenure security in Phase 1. Its aim was to identify incidences of tenure security through land use planning within the area. It depended on data collected through semi-

<sup>2</sup> This research was carried out in 2014 by TUM and its partners. The project under investigation was sponsored through a multilateral aid. The multilateral organizations that funded the project include the Canadian International Development Agency (CIDA), Department for International Development, Deutsche Gesellschaft für Internationale Zusammenarbeit, KfW Bankengruppe (KfW), Nordic Development Fund and The World Bank.

structured interviews and documentary evidences at all levels – national, regional and district or local levels. The project area involved 987 parcels owned by 3 landowning families. In the context of Ghana, a land-owning family may vary considerably in household numbers. Some land-owning families are between 10-300 households. Although only three land-owning families were affected by the project, the district comprised of 25 land-owning families.

One of the most challenging methodological issues in assessing the use of land use planning as a tool for securing tenure in the Land Administration Project is the question of linkage and impact. In this case, the question hinged on determining the relationship land use planning shares with tenure security and the impact it has on it. It was addressed by identifying the tools employed in the Land Administration Project and the extent to which it affected the tenure security of landowners and users. It involved studying the before-and-after aspects of the Land Use Project. A major limitation to the study was that it was conducted within a short timeframe in order to contribute to the land use planning studies of the GLTN, GIZ and TUM. However, the study found two critical issues concerning land use planning and tenure security.

**1. Peri-urbanization led to a weakening of the tenure security of rural landowners:** As one of the respondents put it, “Awutu Breku provided escape for some residents of Accra to flee from their inner city challenges”. The situation caused developers to engage in building more tenement and business properties. Another respondent said that “those who lacked the financial and social capital needed to develop their land” felt threatened by the influx of those who could. Social capital, in this sense, implies having the social privileges or protection (usually accessed through traditional chieftaincy titles) in cultural landholdings. Several conflicts arose because of poorly conducted land transactions. There was an absence of political will (efforts on the part of the local authority) in protecting farmlands from encroachments by residential developers. These weakened the rural security of tenure most of the landowners enjoyed previously.

**2. Land use planning led to a formalization of tenure of informal developments:** Land use planning is a core portion of Ghana’s Local Government Act of 1993 (Act 462). The Act reposes the mandate of local planning in the authority of the District Assemblies. Citizens of the districts are to seek for planning for their land before development. The Project adopted land use planning as a land tool for putting in place necessary land governance “principles, policies and legislation into effect” (Augustinus, 2014: 4). However, due to high demand for land development, and delays in the formal planning of the communities, the residents proceeded to develop their lands before the area was planned. In cases where development preceded planning, land use planning was made to cater for the existing developments. In doing so, the citizens view land use planning, from the perspective of development protection –that is, a tool for legalizing or formalizing informal or illegal developments.

In situations where the development or developed area was recommended for demolition as a result of post-development planning, citizens perceived the approval of their developments as a form of tenure security. In cases where planning preceded development, citizens were made to follow the guidelines prescribed by land use planning. In this situation, they considered land use planning as a development control. By following land use planning guidelines, they also perceived their developments with a greater sense of tenure security.

The procedure of the land use planning initiative involved three levels (national, regional and district or local) based on Ghana’s Spatial Development Framework (SDF). The SDF was officially adopted as a policy about 3 years ago, long after the pilot project had commenced. However, the concept of the SDF was integrated into the implementation of the land use project. The SDF enabled the formulation of structural plans at the regional level and production of local plans at the local level. Stakeholder participation was done at the regional and local levels. Based on the local plans, planning and building permits were conducted (based on site plans) and utility mapping, street naming and numberings (geocoding) exercises were enforced. At the local or community level, this helped in bringing to reality the core objectives of the project. Tenure security issues formed a component of the land use project through its linkage to registration and titling as critical policy issues for implementation. The overall impact of the project resulted in four-pronged tenure security options (see Figure 4).

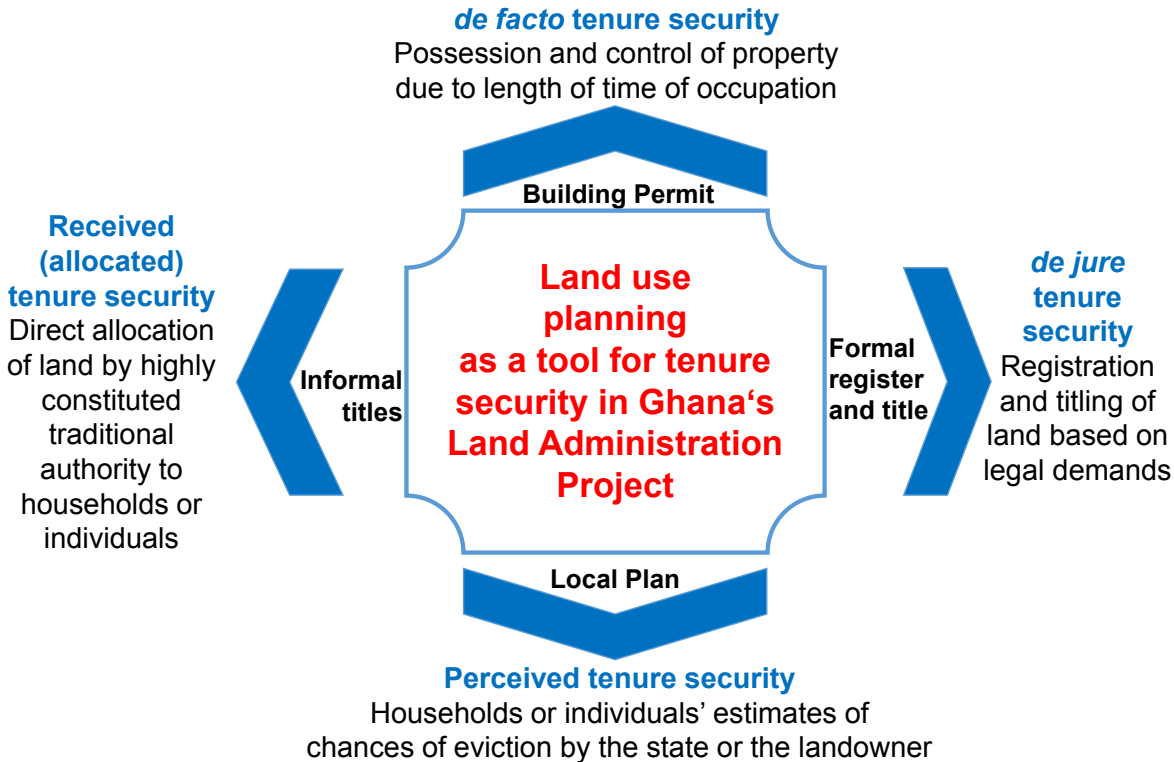


Figure 4: The quadripartite role of land use planning in securing tenure (authors’ illustration)

The project served as a tool for facilitating tenure security in four ways (as illustrated in Figure 4). First, the issuance of permits to landowners or users for the improvements on land (e.g. building) increased their *de facto* tenure security over their land. Second, the project increased *de jure* tenure security of landowners because it required individuals to embark on registration and titling of their lands. This was one of the existing legal demands to which the project had to conform. Third, the local planning authority in Awutu Breku prepared a local plan that identifies land parcels and locations. This local plan serves as a public reference material for land identification, thereby giving land users and owners a higher perception of tenure security. The reason being that unlike before, now they know that their land and its location are traceable within the local land plan. Fourth, in areas of Awutu Breku where traditional authorities allocated land to individuals, these individuals received (due to transfer of property) the tenure security previously enjoyed by the traditional authorities. The reason for this sense of security is due to their belief that no one can evict them from the land they bought or rented directly from traditional authorities except the chiefs. A tenure security arising from this sort of scenario can be called *received or allocated* tenure security, usually documented as customary titles.

One of the major limitations of this project was that it neither shared synergies nor had any direct link to the Customary Land Secretariat Project, which was meant for recording customary rights. Within the lifecycle of the Phase 1, the Customary Land Secretariat Project (funded by DFID) was being implemented in the same pilot area. If these two projects had been well linked, it probably would have had more impact on tenure security in the area.

## **6. CASE STUDY 2: LAND USE PLANNING IN LAO PDR<sup>3</sup>**

Prior to the land use planning project in Lao Peoples Democratic Republic (PDR), the rural population of Lao had very limited formalized land rights. Land titles had been issued only in urban and peri-urban areas. Cash crop production, commercial plantations and other investments in land were affecting traditional land rights of the rural population and especially of ethnic minorities. Without officially recognized land titles, farmers were to lose access to valuable land resources for individual or communal use. A land use planning initiative was, for this reason, necessary. Its objective at the village and village cluster level was to improve land and natural resource management. And by zoning the land, prepare for surveying and issuing of land titles as a prerequisite to increased land tenure security in rural villages of Lao PDR. It therefore served as intermediate, preparatory and complementary steps in improving tenure security.

The approach or procedure involved the introduction of land use planning at the village and village cluster level to identify village land and village boundaries clearly as well as to classify land use zones

---

<sup>3</sup> This project and research were carried out by the GIZ, and reported in “Land use planning: concept, tools and applications” published in 2012 (pages 221-223).

in a participatory approach. Based on the land use zones, an overall village land use agreement is signed by the district and village authorities. The final village land use plan and the land use agreement form the basis for systematic land registration of all state, communal and individual land in the village area. After surveying and registration, communal and individual titles were handed over to the villagers. It is important to note that according to a Decree in The Lao, no land titles can be issued without a land use zoning and land use planning exercise beforehand.

Land use planning has been implemented in over 90 villages in the Sayaboury Province of Lao PDR. In order not to undermine tenure security, the land use planning initiative took into account three main principles. They are participation of the local population and all gender groups; recognition of village rights; and respect for land use by ethnic minorities.

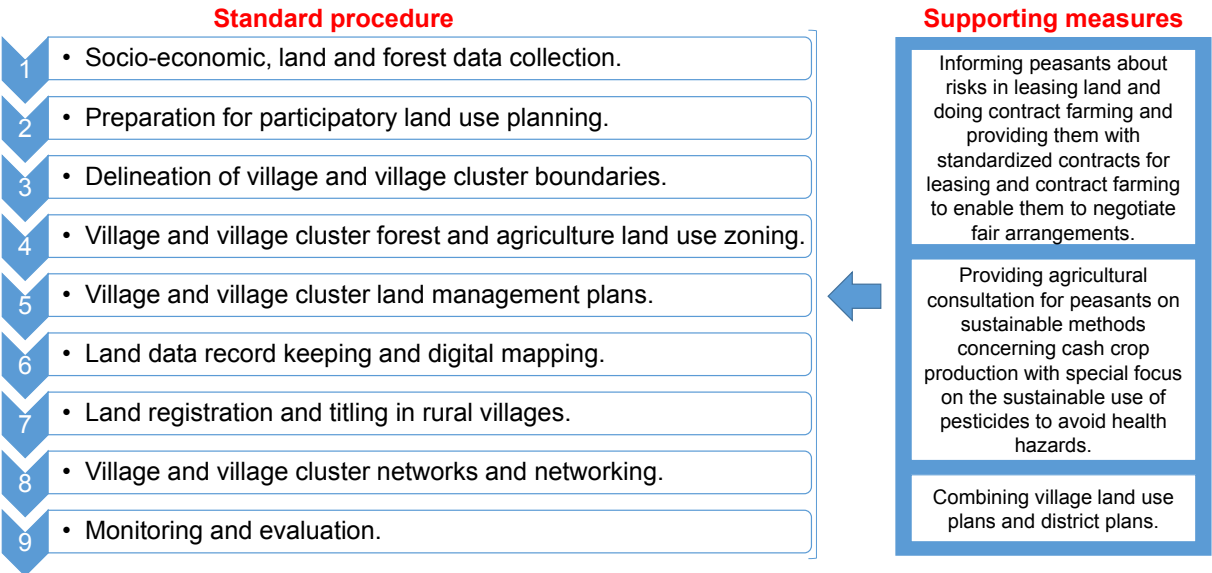


Figure 5: Procedure and measures for using land use planning for securing tenure (authors’ illustration)

As illustrated in Figure 5, the standard procedure consisted of different stages, some of which involved processes that enabled improvement in tenure security (refer to stages 3, 5, 6 and 7). Apart from the traditional land registration and titling; delineation of land boundaries and land data record keeping and digital mapping were typical procedure in land use planning that helped to enable improvement of tenure security. The delineation of boundaries was necessary for identifying village and village cluster boundaries. Measures such as accurate information dissemination and participation helped to improve the tenure security perceptions of landowners in the process. As at 2009, land certificates have been issued in 25 villages, and more were issued in about 20 villages in 2010. Although these land certificates are not legal equivalent of land titles, in the rural areas they serve as intermediate options. The challenge with the Lao PDR case study is that it focused on rural areas, so there was limited staff



resources at district level and complicated logistics in the remote rural areas of Laos. Additionally, the issuance of land title emanating from this project has not been fully tested at a larger scale.

### **7. CASE STUDY 3: DIGITAL ZONING CERTIFICATE PROGRAM IN CHILE<sup>4</sup>**

In Chile, most urban areas are either not covered by a municipal land use plan or are covered with one that is evidently outdated. In fact, only 25% of the municipalities have a land use plan that can be considered up-to-date. In addition, the coverage and quality of digital geographic information concerning land use and the instruments for land use planning vary among the different municipalities. The challenge posed by this situation was twofold. First, most municipalities do not have the necessary instruments for managing their territory. Second, citizens and entrepreneurs lack information on the land uses that are permitted in a particular area of their communes. These were major impediments to the establishment of new businesses because they hindered economic development. To improve the situation, the Digital Zoning Certificate (CEDIZ) programme was initiated by Chile's Ministry of Economy. The primary goal of CEDIZ was to foster small and middle size entrepreneurship by facilitating the establishment of enterprises and supporting modernization and optimization of public management processes.

CEDIZ's procedure involved the introduction of new land information technologies at municipal level and incorporating the available land use planning instruments into it. The system combines a set of tools that strengthens transparency of land use management – leading to improved administration and protection of the rights vested in land. CEDIZ consists of an online platform, which allows for a natural or juridical person to find out whether a specific use is allowed in a particular land parcel in order to obtain the Zoning Certificate. This Zoning Certificate is digitally signed by the Municipal Land Development Authority and is a prerequisite for applying for provisional permits, in accordance with Law N° 20.494. The basis for operation of CEDIZ is the urban parcellary map (CBPU) – which is essentially a cadaster index map that is being developed by the municipalities with the advice of the CEDIZ programme. So far, Chile does not have a cadaster and, as a result, the CBPU is the first attempt to establish such a system. Numerous capacity building activities are done as part of the CEDIZ programme in municipalities with the aim of empowering the professionals responsible for various tasks.

Our findings show that the CEDIZ programme is currently working with over 80 municipalities, which accounts approximately for 25% of the total. It is expected that all municipalities of the country will join this initiative in upcoming years. This case shows that in order for the state to promote economic development, there is need for introducing new technologies that allow for management and

---

<sup>4</sup> This research was carried out in 2014 by TUM and its partners.

dissemination of information in a more efficient and effective manner. However, this depends heavily on the capacities municipalities have as collectors and maintainers of relevant land information.

As a consequence of the increasing transparency brought about by CEDIZ in Chile's land administration system, information concerning rights and restrictions vested on land parcels are easily identifiable and accessible to the public. This has led to a strengthening of the overall land tenure system. As a consequence of systematizing land information at the parcel level, rights and restrictions vested on every parcel are displayed and enforced. Thus making this information available for the governmental (at every level), private institution and individual. In terms of planning, CEDIZ allows for a better management of land use by the municipalities. For example, the system also allows for identifying areas of different levels of economic activity. This provides decision makers with a clearer view of the areas that need promotion of certain kinds of development. This situation aligns to FAO's (2012) notion that conducting regulated spatial planning, and monitoring and enforcement of compliances with the plans are vital to tenure security. Prior to the implementation of CEDIZ, the processing time for the establishment of new businesses was 27 days in average (World Bank, 2009). This was far beyond the standards of the Organization for Economic Co-operation and Development. The process was too long, too complicated and costly. CEDIZ has reduced this time to just a few minutes.

The challenge of CEDIZ is that Chile does not have a cadaster, and has to rely on the CBPU. Currently the legal basis for the CBPU to serve as a cadaster does not exist, although it is to be expected that the policy makers will further develop this idea. However, the country has a land registration system that has been working for over two centuries and has thus proved to be effective on its own. Integration with the land registry has not yet taken place but is technically possible. This does not mean, however, that a cadaster system would not be a remarkable addition to the current public administration. A cadaster would strengthen land management tremendously, for example, by increasing transparency on land tenure and land use issues across the country. The information collected to build up the parcellary maps certainly leads to an improved knowledge of the status of land tenure and land use, and strengthens land management tasks carried by the local authorities.

## **8. CONCLUSION AND NEXT STEPS**

It is acknowledged that land tenure security status exerts significant impact on land prices and hence affordability. It is equally accepted that land use planning has a similar effect. We for this reason argued that these two aspects of land management should combine to exert an even greater impact, for better, on tenure security. Surprisingly, there is limited evidence of the two being considered in combination. What we have done is to discuss the implications for improving tenure security through land use planning and offered a conceptual framework and evidences from developing countries for possible application.

The case studies presented here, although not specially designed for tenure improvements, had tremendous effects in improving tenure security. We have no doubts that where conscious efforts are made towards tenure security improvements through land use planning, even better results may be realized. However, many improvements are still necessary. In Ghana, the role of land use planning for tenure security hinged on efficient application of local plans by the District Authorities. Notably, in their issuance of building permits for development and supervision of compliances to land use and property Byelaws in the area. Our study identified aspects that should be improved. Subsequent phases of land use planning projects need to consider a conscious effort towards delivering tenure security in harmonious form. It demands harmonizing all projects within a particular area or sector towards improving tenure security. In the Lao PDR, the role of land use planning for tenure security hinged on registration and titling. However, the status of these issued titles remain questionable. Wehrmann & Antonio (2011: 18) note “there is a wide gap between legal rights and tenure rights as perceived by the landholders.” The reasons being that the issued titles are intermediate instruments, rather than real titles that are obtainable only in urban and peri-urban areas of Lao PDR. As a result, the “titles” in rural Lao PDR grants only de facto tenure security. This “tenure security” nosedives towards “tenure insecurity” as holders become aware of the existence of another document called “real title” only available in urban and peri-urban areas. To improve this situation, we suggest a stronger infusion of tenure security elements in the land use planning design and processes. The Chile case shows that transparency in land information provides tenure security because individuals and organization quickly get access to the knowledge of restrictions and rights embedded on land parcels. This gives them the advantage of making decisions that are safe in their sales, purchase and use of land. Chile provides a typical case of how non-redundant spatial data management in the public sector can enable secure tenure (de Vries & Nyemera, 2010).

It is important to state that this paper neither argues against titling nor downplays the importance of intermediate options. In fact, it recognizes them but emphasizes that land use planning should be made to support them wherever or however possible. It acknowledges that titling has limits. Also, in contributing to scalable approaches to improving tenure security and advances with securing or protecting land rights, it brings into focus the role land use planning can play in improving tenure security. We have used the paper to show that integrating tenure security issues in land use planning can lead to real tenure security instruments, as well as other forms or intermediate tenure instruments. We understand that, for now, land use planning for tenure security is a nontraditional approach to improving tenure. We propose it knowing that the level of tenure security emanating from the process would primarily depend on cultural contexts, country perspectives, legal frameworks and individuals’ perceptions of tenure security. In addition, the sensitivity of professionals in land development and registration agencies towards a more holistic and participatory approach is crucial to its success. The

question of who should undertake the task is important. The process is highly multidisciplinary in nature. As a result, professional land surveyors or geodetic engineers with specialist training in land management have a central role to play in the process –in alliance with other land management professionals. The competencies of geodetic land managers in dealing with core land management functions (such as cadaster, planning, mapping, registries, Geoinformation, among many others) are invaluable in actualizing this process. Other major preconditions for the success may include regulatory frameworks available in different countries. This is why, in our conceptual framework we argued that a spatial development framework should guide it – while participatory planning based on a continuum of rights should form a significant aspect of its process. If well implemented, there is a tendency to uncover more secure issues dealing with tenure.

We consider the issue of tenure security as an ongoing concern in the global efforts towards sustainable development. So, we are exploring further ways to use land use planning for tenure security. At this point, what we have done is to present our idea to the global public for their scrutiny. Our next steps on this issue are to tackle the question of “how?” We expect that the feedback received from this paper and other on-going expert meetings associated with it would enable us to sharpen the Operational Guide being developed by TUM. The Operational Guide, when released, would present the “how to” aspects of improving tenure security through land use planning. The tool, which includes a training package, will serve the needs of developing countries. It will also be linked to other existing land tools for country level implementations

## **9. REFERENCES**

Augustinus, C. & Deininger, K. (2006). Innovation in Land Tenure, Reform and Administration in Africa. In *Land Rights for African Development: From Knowledge to Action*, pp. 14-16. CAPRI Policy Brief. CGIAR Systemwide Program on Collective Action and Property Rights: Washington, DC.

Augustinus, C. (2014). Land Tools. *Kadaster Abroad*, 17(3): p. 4.

Baharoglu, D. (2002). World Bank experience in land management and the debate on tenure security. Housing and Land Background Series. World Bank: Washington DC.

Clift, J. (2003). "People in Economics: Hernando de Soto". *Finance & Development*, December.

Davis, M. (2006). Planet of slums. Verso: London.

de Vries, W.T. & Nyemera, B.W. (2010). Double or nothing: is redundancy of spatial data a burden or a need in the public sector of Uganda. *Information research*, 15(4): 15.

Deininger, K. (2003). Land policies for growth and poverty reduction. Oxford University Press: Oxford.

Deininger, K. & Feder, G. (2009). Land Registration, Governance, and Development: Evidence and Implications for Policy. *The World Bank Research Observer*, 24(2): 233–266.

De Soto, H. (2000). The mystery of capital. Why capital triumphs in the west and fails everywhere else. Basic Books: London.

FAO (1993). Guidelines for land-use planning. Food Agricultural Organization Development Series 1. FAO: Rome.

FAO (1995). Planning for sustainable use of land resources: towards a new approach. FAO: Rome.

FAO & UNEP (1996). A new approach to land use planning and management. FAO: Rome.

FAO & UNEP (1999). The future of our land: facing the challenge. Guidelines for Integrated Planning for Sustainable Management of Land Resources. FAO: Rome.

FAO. (2012). Voluntary guidelines on the responsible governance of tenure of land, fisheries and forests in the context of national food security. FAO: Rome.

FIG (1999). The Bathurst Declaration on Land Administration for Sustainable Development. FIG Publication no. 21. FIG: Denmark.

GIZ (2012). Land use planning: concept, tools and applications. GIZ: Eschborn.

GLTN/UN-HABITAT, GIZ & TUM (2014). Land tenure security in selected countries – synthesis report: securing land and property rights for all. GLTN/UN-HABITAT: Nairobi.

GLTN/UN-HABITAT & IFAD (2013). Land and Natural Resources Tenure Security Learning Initiative for East and Southern Africa (TSLI-ESA) – Phase 1 Achievements, Lessons Learned and Way Forward. GLTN/UN-HABITAT: Nairobi.

GTZ (1995). Landnutzungsplanung: strategien, instrumente, methoden (Land use planning: strategies, instruments and methods). GTZ (now GIZ): Eschborn.

Heinrich Böll Foundation & Institute for Advanced Sustainability Studies. (2015). Soil atlas 2015. Heinrich Böll Foundation and Institute for Advanced Sustainability Studies: Berlin/Potsdam.

Home, R. & Lim, H. (Ed). (2004). Demystifying the mystery of capital: Land tenure and poverty in Africa and the Caribbean. Routledge–Cavendish: London.

Lemmen, C. (2010). The social tenure domain model: A pro-poor land tool. International Federation of Surveyors, Global Land Tool Network and UN-HABITAT: Copenhagen.

Magel, H. & Wehrmann, B. (2006). "It's all about Land" or "How International Networks Approach the Land Question". *ZfV*, 5: 57-61.

Nyasulu, T.U. (2012). Governance and customary land tenure in peri-urban Kasoa in Ghana. PhD Thesis. University of Bonn, Germany.

Payne, G. (Ed). (2002). Land, rights and innovation. Improving tenure security for the urban poor. Practical Action: London.

Payne, G., Durand-Lasserve, A. & Rakod, C. (2009). The limits of land titling and home ownership. *Environment & Urbanization*, 21(2): 443-462.

Samuelson, R.J. (2001). The Spirit of Capitalism. *Foreign Affairs*, 80 (1).

Sietchiping, R., Aubrey, D., Bazoglu, N., Augustinus, C. & Mboup, G. (2012). Monitoring tenure security within the continuum of land rights: methods and practices. Annual World Bank Conference on Land and Poverty, Washington DC, April 23-26.

The Republic of Ghana. (1993). Local Government Act of 1993. Government of Ghana: Accra.

Todes, A., Karam, A., Klug, N. & Malaza, N. (2010). Beyond master planning? New approaches to spatial planning in Ekurhuleni, South Africa. *Habitat International*, 34(41): 414-420.

UN-HABITAT. (2003). Handbook on best practices, security of tenure and access to land. Implementation of the Habitat agenda. UN-HABITAT: Nairobi.

UN-HABITAT. 2004. Urban land for all. UN-HABITAT: Nairobi.

UN-HABITAT. (2008a). Secure land rights for all. GLTN Publication: Nairobi.

UN-HABITAT (2008b). Enhancing urban safety and security global report on human Settlements 2007. Volume 2: Enhancing security of tenure: policy directions. UN-HABITAT: Nairobi.

United Nations (1992). AGENDA 21: United Nations Conference on Environment and Development, Rio de Janeiro, Brazil, 3 to 14 June 1992. United Nations: New York.

Wehrmann, B. & Antonio, D.R. (2011). Intermediate land tenure. Inferior instruments for second-class citizens? *Land Tenure Journal*, 1: 5-25.

Woodruff, C. (2001). Review: Review of De Soto's "The Mystery of Capital". *Journal of Economic Literature*, 39 (4): 1215-1223.

World Bank (2010). Safer homes, stronger communities: a handbook for reconstructing after natural disasters. World Bank: Washington DC.

World Bank (2009). Doing business 2010. World Bank: Washington, DC.

World Bank (2007). World development report 2008: agriculture for development. World Bank: Washington, DC.