



Factors Affecting Tenure Security for Legal Landholders in Urban Areas: The Case of Bahir Dar City, Ethiopia

Prosper Turimubumwe^{1,8} (<https://orcid.org/0000-0003-4510-4017>), Adane Mehari⁸ (<https://orcid.org/0000-0002-3728-1542>), and Behailu Melesse¹ (<https://orcid.org/0000-0003-2873-4877>)

⁷ Bahir Dar University, Institute of Land Administration, Ethiopia (Corresponding author)

⁸ University of Burundi, Architecture and Urban Planning

To cite this article: Turimubumwe, P, Mehari, A, & Melesse, B. (2021). Factors Affecting Tenure Security for Legal Landholders in Urban Areas: The Case of Bahir Dar City, Ethiopia. *Journal of African Real Estate Research*, 6(2), pp.62-82. <https://doi.org/10.15641/jarer.v6i2.1012> .

Abstract

Tenure security inland has been a focus for many countries and development partners to promote land-based investment. Considering *de jure*, *de facto* and the *perceived* land tenure security as a typology in tenure security, the study explores how landholders perceive land tenure security in Bahir Dar City, Ethiopia. For decades, the government of Ethiopia has tried successfully to provide *de jure* and *de facto* land tenure security in the country. The perception of land tenure security to landholders is low due to a lack of confidence in ownership. This stems from a fear of expropriation or unwilling relocation. The findings will assist decision-makers in refining their policies and decisions to increase the perception of tenure security to landholders. This will encourage landholders to invest more in their lands. This research applied a mixed research approach in data collection. Several 66 respondents, systematically selected, were surveyed and interviewed. This method was supplemented with direct observation in the case study area. To analyse the data, inferential statistics and descriptive analysis were applied to test the perception of tenure security. The findings showed that the aggregate contributions of the selected variables on the perception of fear of tenure security by landholders are significantly high. The study also revealed there are five significant predictor variables for the perception of tenure security in Bahir Dar City. In contrast to the above evidence, the results indicate that awareness of legal provision correlated negatively with security perception. These factors have negatively affected the city's physical, social, economic development and environmental management.

Keywords: tenure security, landholders, urban land, building type, plot, legal provision, security perception

¹ Corresponding authors' email address: prosper.turimubumwe@ub.edu.bi. ©2021 The Author(s). Published by UCT Library. This is an open access article under the CC BY 4.0 license. <https://creativecommons.org/licenses/by/4.0/>

1. Introduction

The 20th century saw a massive leap in the global population, which rose from 1.65 billion in 1900 to 6 billion in 2000 (Dumont, 1993). Although, specific projections suggest that it will stabilise at 9 billion by 2050 (Dumont, 2010; United Nations, 2019). Furthermore, current figures on urbanisation show that over half of the world's population has lived in urban areas since 2007 (UN-Habitat, 2008). It is estimated that 95% of the population growth between 2005 and 2030 will be absorbed by cities in developing countries, which urban areas will have to accommodate nearly 4 billion people in 2030 (Montgomery, 2008; United Nations, 2019). With this population boom, the needs for shelter, infrastructure (physical and social), and food will escalate.

In contrast, land as the means of production for these needs will remain inelastic. Some proposals have the view that governments should formulate and provide legal and institutional frameworks that address future land challenges (Gilbert, 1994; & De Soto, 2000). In developing countries, formulating land policies that can define legal modes of land occupation, land use, and land rights is more crucial than ever.

Moreover, these land policies should aim to balance the differences between functions and allocations of land; and between different interest groups (White Paper, 2009). Over time, responses and policies for improving land tenure security have included promoting customary land rights, tenure regularisation and formalisation, incremental tenure change, policy support for adverse possessions, and the adoption of anti-eviction laws to protect informal settlement residents (UN-Habitat, 2011). However, Landholders have not felt like they have land security. Van Gelder (2009) and van Gelder (2010) have noted that tenure security can be viewed in three forms, namely, *de jure* (legal), *de facto* (societal, political institutions or customary land tenure), and *perceived* land tenure, which is the way people feel regarding the likelihood of eviction.

Currently, development policies aimed at securing urban land tenure are often based on the idea that people should receive legal title to their properties. Additionally, other authors like Larson et al. (2013); and Holland et al. (2017) believe that land titling should be massively undertaken to avoid informality in land development and harness land tenure security for landowners. However, existing knowledge on the ground shows that even people with legal-based land tenure security still face challenges related to tenure security (Adam et al., 2020; Chigbu et al., 2019; Ghebru & Fikirte, 2019; Uwayezu & De Vries, 2018). Recent publications have disclosed that challenges such as land conflicts observed in urban areas are caused by the double allocation of plots and forgery of titles (Adam et al., 2020). Eviction or forced relocation with unfair compensation or delay of compensation (Uwayezu & de Vries, 2019) are still being observed by legal landholders.

For long ago, the government of Ethiopia accepted that the lack of land tenure security hampers the investment in land, escalates land-related conflicts, and can even undermine the agricultural sector (Tsegaye, 2017). In 2000, the government tried to respond to the problems by adopting policies and putting in place institutions that could address land issues in all regions of the country, but landholders still doubted their efficacy.

For example, in Bahir Dar City, landholders do not use sustainably or invest adequately in their lands (Abebe, 2020) (Ege, 2017). They do not think of using their land titles as collateral to access credits from different financial institutions even though these institutions allow it. The worst of all that hamper landholders from enjoying their land rights is that land in Ethiopia

cannot be sold in other countries, given that land is publicly owned (Gebeyu, 2013). This situation makes many landholders, particularly in urban areas, think of holding land with another person who is more influential economically and politically so that he can protect them from aggressors.

However, the factors that make landholders feel they have no land tenure security after *de jure* and *de facto* are met are missing in the existing body of knowledge. Therefore, considering the gap left by previous research on the topic, this paper explores how landholders perceive land tenure security in Bahir Dar City, Ethiopia. The paper is tailored to the following sections: background information, literature review, and methodology as pre-field and fieldwork. Then, results, discussion and conclusions as post-field work are among sections of this paper.

1.1 General Understanding of Tenure Security

Tenure security is not an object someone can provide to or take from the other. "Security of land tenure derives from the fact that a known set of rules underwrites the right of access to and use of the land and property; and that this right is justifiable" (UN-Habitat, 2004, p. 31). Payne and Quan (2008, p.24) define land tenure security as:

The degree of confidence that land users will not be arbitrarily deprived of the rights they enjoy over land and the economic benefits that flow from it; the certainty that an individual's rights to land will be recognised by others and protected in cases of specific challenges; more specifically, the right of all individuals and groups to effective government protection against forced evictions.

In the same perspective, Williams (2011) elaborates on the concept of security of tenure as it involves legal protection against forced evictions, harassment and other threats to residents and users of property, whether or not they own it. Therefore, land tenure is concerned with individuals and groups of people, their rights, protection, and level of confidence landholders and users perceive on their properties in front of any threat.

1.2 Benefiting Through Tenure Security in Land

Development organisations at a global level, such as the World Bank and Food and Agriculture Organisation (F.A.O.), a regional level: U.S.A.I.D., UKAid and Department for International Development (D.I.F.D.) and others who are working in eradicating poverty, combating food insecurity and improving livelihoods of humankind are of the view that achieving tenure security in land and other property will help to achieve the objectives mentioned above (Abdulai et al., 2021; and Holdena & Ghebru, 2016). For example, it is acknowledged that achieving tenure security can lead to rural transformation by motivating investment in agriculture which increases manifold agricultural produce (Ghebru & Lambrecht, 2017). In England, tenure security ascribes to the welfarisation of English people through social housing for the poor (Fitzpatrick & Watts, 2017). The message here is that not only developing countries need tenure security. Tenure security is required all over the globe for different purposes and benefits.

Moreover, Palmer *et al.* (2009) underlined the benefits of land tenure security, such as increased land-based investment by landowners, food security and sustainable use of natural resources, improved livelihoods for the urban poor, efficient inland markets; and improved health and quality of life. On the other hand, Payne *et al.* (2012) argue that people living in fear of eviction are less likely to realise their full potential as workers or as citizens and are unlikely

to invest in improving their land, homes and their neighbourhoods. This shows that land tenure security by landholders is crucial for development. Generally, a secure perception of land held gives the owner peace of mind, allowing the landholder to think out of the box for innovation and creativity and invest much effort (cost and time) for sustainable land exploitation.

1.3 Perceived Land Tenure Security Among Other Types of Land Tenure Security

As previously highlighted, land can be associated with various tenure security forms that landholders can use either individually or collectively (Norwegian Refugee Council (N.R.C.) & International Federation for Red Cross (I.F.R.C.), 2013; and Ghebru, 2015). Typically, land tenure security can be guaranteed by having legal documents (titles/certificates of ownership) delivered by a competent authority (*de jure* or legal land tenure security). This protects landholders from arbitrary evictions. Another type of tenure security may be provided by society or political institutions that accept and recognise the land ownership without legal documents provision; *de facto* (Customary) land tenure security (D.U.M.O.N.T., 1993; van Gelder, 2009). In Africa, this form (*de facto*) is primarily found in many rural and peri-urban lands where land is inherited from one generation to another or land allocated by traditional leaders. The landholder has confidence in this holding because the society and existing leadership recognise it. Lastly, there is a perceived land tenure, which is how people feel regarding the likelihood of eviction, the attempt at spatial disintegration, and the eruption of land disputes (Ghebru and Lambrecht, 2015). Generally, perceived land tenure security pays less consideration to the legal titles or support from existing social and political systems but instead combines the two (de Souza, 2001; Ma et al., 2015).

This means that many landholders may own land with *de jure* or *de facto* land tenure security. However, they may still feel or perceive their land tenure security inadequately in case the government wants the land, with *de jure*, where classical cadastre is still in use, land-related conflicts that may be avoided such as double allocation of plots, delay in legal documents provision; and disputes related to boundaries of a neighbouring plot. Furthermore, ambiguous policies, regulations, and land commissions with overlapping authorities that sometimes contradict challenge land tenure security in most developing countries (Mwaikambo & Hagai, 2013); Adam et al., 2020). For *de facto*, conflicts related to ethnicity, regionalism, and unstable political systems can seriously affect the land tenure security of this type, given that one group may deny or deliberately challenge the validity of land ownership for one group to the detriment of another group. This has happened in countries like Burundi² and Rwanda,³ where land was taken from one ethnic group by the government to another after a civil war, and inversely, be re-taken after decades in a subsequent civil war (European Network for Central Africa [E.N.C.A.], 2017). This situation has pushed many people who can afford to register their land in Burundi and Rwanda⁴ to undertake a massive land registration. However, this is

² The civil war happened in 1972, Hutus were killed and others fled to neighbouring countries; their land was taken by the government and be given to Tutsi community members. After signing the Arusha Peace Agreement, refugees returned back and retook their land either by agreement facilitated by National Commission of Land and Other Assets (CNTB) or through judicial courts.

³ The civil war of 1959 took the lives of many Tutsi and others pushed to flee the country. Their land was taken by the government of that time led by Hutu. After genocide against the Tutsi of 1994, the Tutsi re-took their land + Hutus land in what was called “Kubohoza” in local language.

⁴ The Rwandan Constitution of 2003, the National Land Policy of 2004 and the Organic Land Law of 2005; all these legal frameworks supported legal land ownership to respond to land related conflicts that were intensifying. Then, Land Tenure Regularisation (LTR) programme to register and administer land ownership in Rwanda was initiated from 2009. It is reported 10.4 million of parcels have been recorded, 7.6 million titles collected by land owners (Schaefer, 2017).

not the end, given that the land sector is still facing some social, economic, political and environmental challenges related to land tenure security to landholders (Ali et al., 2019; Chigbu et al., 2019; and E.N.C.A., 2017). The perception of having inadequate land tenure security can negatively impact the proper exploitation of the land leading to fertile land indirectly becoming marginal land.

1.4 Perceived Land Tenure Security in Global South and Global North

The literature shows that perceived land tenure security has played a significant role in motivating farmers to invest much for increasing production. In China, it is revealed that "households that consider land certificates as important for protecting land rights invest significantly more in irrigation canals construction and maintenance" (Ma et al., 2013, p.301). In Thailand and Vietnam, landholders with insecure land tenure always plant perennial crops to convince people that it is their land (Neef et al., 2000). These crops can take time on the same piece of land that should be used for other seasonal crops. Then, they can even apply for legal land holding through registration (Wannasai & Shrestha, 2008). On the other hand, those who feel secure on their lands typically grow seasonal crops that are primarily economic and fast cash remunerable. What can be underlined is that perceived land tenure security has its own contribution to land development and livelihood improvement.

In Buenos Aires, Argentina and Bandung, Indonesia, van Gelder (2009); Reerink & van Gelder (2010), respectively, have analysed the relationship between legal tenure security and perceived tenure security towards housing improvement. The findings showed that with enhanced perceived tenure security, individual urban dwellers improved their houses by mobilising financial and technical resources that are locally available. Other projects were postponed through prioritising housing services while housing-related projects were undertaken. Similarly, Nakamura (2016) used another approach to find out the link between perceived tenure security and housing improvement in slums. The results showed that the perceived tenure security is the basis of improving informally developed settlements rather than *de facto* and *de jure* tenure security.

Meanwhile, *de jure* and *de facto* land tenure security are criticised for being expensive in processes and implementation. Also, they are attributed to modernisation that ignores the local reality and traditional values. However, in their analysis, Nakamura and Gelders do not see *de jure* and *de facto* as solution providers but problem creators by welcoming derivative land-related challenges.

Moreover, Chigbu et al. (2017) disclose perceiving land tenure insecurity as evident in developing countries for urban lands. However, many private and public projects take place on these lands despite the uncertainty of future ownership. Chigbu et al. propose that developing countries need tenure security responsive to land management. Ghebru & Fikirte (2019) showed that perceived land tenure security has no gender bias. In African countries, men and women feel insecure in land held even though they have some titles and are supported by the authorities. Many assumptions on this state of affairs can be formulated, such as the fraud that can arise in legal documents — if the cadastre system is still paper-based as it is observed in many developing countries — delays of land-related cases in courts, and the prevalence of corruption injustice and other land-related offices such as nepotism and favouritism. Besides, fraudulent and fake documents can be produced and validated by competent authorities without the knowledge of the legal owner. All aforementioned can make people lose hope and trust in legal documents and systems. Given that perceived tenure security is directly linked to a socio-

psychological perspective, it is apparent that it has become one of the supporting options for many landholders in developing their lands.

1.5 Perceived Tenure Security and Motivating Factors

Gaining self-confidence on the owned property is something that landholders would have to afford peace of mind and start enjoying the land, and the fruits gathered from it (Payne & Quan, 2008). However, most landholders in developing countries doubt the existing legal and institutional frameworks even though they are presented in significant numbers (Turimubumwe, 2021), especially when land gains value in a particular location. Policies and other related regulations on land may exist but not be adequate to cover crosscutting land and property issues. The same for institutions; they may exist but cannot fulfil their responsibility due to various challenges (Adam et al., 2020).

Location and building type also can affect the perception of tenure security. There is an assumption that location and building types have meaning to landholders when it comes to tenure security. Landholders who hold land in the Central Business District (CBD) and other prime lands where the values of land and property increases are always living in fear of expropriation or pressure of involuntary relocation to the periphery (Jimenez, 1983; Feldman & Geisler, 2012; and Dires, et al., 2021). Furthermore, land use types can be attached to locations where land value and prices are linked to selective use. This implies that land located in CBD or other prime land areas have high prices with multiple uses, which sometimes require capital and specific architectural requirements (El-Barmelgy et al., 2014). Those who do not fulfil the aforementioned elements lose confidence, leading to insecurity even though they have titles and certificates. In an African context, achieving social protection in the neighbourhood where neighbours can talk on your behalf has significance in perceived tenure security. Being recognised as a settler of a specific neighbourhood in terms of decades is something valuable in enhancing tenure security (Darshini, 2010). This relates to settlement durability, which means that, in most cities, CBDs are the oldest areas where land conflicts are rarely observed, given that social linkages determine the issue of ownership. However, due to relocation caused by socio-economic dynamism, it is difficult to find old settlers in CBDs in some cities.

Mwaikambo and Hagai (2013) note that in developing countries where policies and institutions dealing with land exist, they are sometimes unfocused or are overlapping. On the other hand, institutions concerned with land management may exist. Still, they may be challenged by the financial, human and technical capacity to offer services to landholders, including tenure security and property rights (Adam et al., 2020). Moreover, landholders have been blaming legal and institutional frameworks that are not properly working to provide land tenure security. Finally, in some countries, especially in developing countries, policies and institutions may exist, but landholders are not informed about their existence. Experience shows that even local people — dominated by women — do not know the location of land offices, land officers and lawyers who can assist them in the event they face land-related challenges. Lack of awareness of adopted policies and nominated institutions are among the problems that illiterate people face to protect their land and properties (Cotula et al., (2004); Byamugisha, 2016). The authors are of the viewpoint on how the government can create awareness sessions about policies and adopted laws to ensure that local people are informed about legal and institutional frameworks in collaboration with development partners and civil societies.

1.6 Tenure Security in the Context of Ethiopia

The right to ownership of rural and urban land and all-natural resources are exclusively vested in Ethiopia's state and the people (the Federal Democratic Republic of Ethiopia, 1995). It is stated that both federal and regional rural land laws, rural land use rights of peasant farmers, semi-pastoralist and pastoralists shall have no time limit (F.D.R.E., 2005; A.N.R.S., 2017) and are permitted to transfer their holding use rights through donation and inheritance for those who have use rights. In addition to that, Urban Lands Lease Holding Proclamation defines "lease" as a system of land tenure by which the right of use of urban land is acquired under a contract of a definite period (F.D.R.E., 2011). The maximum leasehold period is 99 years to construct residential houses, science and technology centres, research centres, government offices, charitable organisations and religious institutions. In comparison, the minimum duration is 15 years for urban agriculture (F.D.R.E., 2011).

Land rights available to citizens in Ethiopia include the right to alienate, bequeath, and, where the right of use expires, remove his property, transfer his title, or claim compensation for it. However, if these rights, in some cases, are kept in offices due to many grievances, conflicts and claims that are observed in the land sector, they will not be hidden from public view. People seem not to be secure on their lands, especially when it comes to any proposal of land acquisition or expropriation in fear of unfair compensation. Albeit, the law is clear. It is advocated that when the government does expropriation in landholding for public purposes, landholders can claim compensation based on legislation, for instance, F.D.R.E., (2005a). However, some Basis and Amount of Compensation stated in F.D.R.E. Proc. No. 455/2005, sub-article (1) & (2)⁵ are not respected, which became a loophole and exacerbated the situation of landholders perceiving their land tenure security inadequately. All of these articles and others are related to land tenure security for landholders in Ethiopia. However, many landholders are not generally secure because they either do not know these legal texts or know their existence but are missing their implementation.

Moreover, the Constitution of Ethiopia article 40 does not allow the selling of land. In contrast, in the same article, property rights are mandatory and an obligation to all responsible authorities in their areas of jurisdiction. Therefore, it is clear that if you do not have the right to sell a property, your tenure security is insignificant. The meaning and importance of having *de jure* and *de facto* tenure security are presented as a 'white elephant' to the landholders.

2. Methods

2.1 Approach for Data Collection

As mentioned earlier, this research explores how landholders perceive land tenure security in Bahir Dar City. Therefore, the study employs mixed-research methods with an exploratory case study approach to achieve this objective. The experience shows that a mixed-method integrates quantitative and qualitative data within a single project (Creswell, 2009) to strengthen the result of the study. It is also a means of triangulating data from the case so that it may be mutually corroborated, improving the accuracy and credibility of the data; verifying results obtained from both quantitative and qualitative data (Bryman, 2012).

⁵ According to the proclamation (FDRE, 2005a). an urban landholder whose landholding has been expropriated under this Proclamation shall be provided with a plot of urban land, the size of which shall be determined by the urban administration, to be used for the construction of a dwelling house; and; be paid a displacement compensation equivalent to the estimated annual rent of the demolished dwelling house or be allowed to reside, force of charge, for one year in a comparable dwelling house owned by the urban administration.

2.2 Techniques for Data Collection

For that reason, a desk review of existing literature on land tenure security globally and regionally complemented with legal framework as applied in Ethiopia at a federal and regional level were consulted. The content analysis mainly was applied for deducting viable empirical, theoretical and practical evidence. In the field, structured interviews and semi-structured interviews coupled with direct observation were employed as data collection instruments. The structured interview was used to generate information from landholders on their perception of land tenure security in general. Open-ended questions were formulated and addressed to landholders. Segments of inquiries related to reasons of perception insecurity, fear of institutional capacities and legal loopholes on supporting landholders in case of trespass, expropriation or eviction were formulated. Subsequently, a semi-structured interview question was conducted to selected landholders who have building types dominated by mud, G.F.⁶+0 H.C.B.⁷, to know the reasons behind not developing the plots and how they perceive their land tenure security. Generally, questions related to reasons pushing them to lose their landholding rights, the adequacy of legal provisions to protect the rights of the landholders, and the institution's capacity to give sufficient services to the landholders were administered. This method has helped gather more responses from individual landholders and dig deeper into the issue related to the perception of land tenure security in the case study. Finally, direct observation has been employed to confirm the available types of individuals' buildings and land use types in Bahir Dar. From there, categories of building levels and land use types were distinguished.

2.3 Sampling and Data Inquiry

The urban expansion and its impacts on land use in Bahir Dar City are alarmingly increasing. For the purpose of quantitative and qualitative data, this study classified the expansion and land use land cover changes in three districts (CBD, intermediate, and periphery). The unit of analysis for this study is landholders who legally own land.

Therefore, the study used a probability sampling approach with a multi-stage combined with a cluster sampling method to determine a sample size from the city to the neighbourhood level. In the first stage, the city was divided into three districts based on the first clustering criteria: settlements in CBD settled before 1957, a recent settlement established between 1957 – 1994 (within 37 years), and periphery or new settlement from 1994 to 2019 (within 25 years of new settlement) that settled after 1994 (see Fig. 2). The CBD was selected among the three districts to conduct our study because it contains all the needed data for the study. In the second stage, buildings in the CBD, which are residential, commercial and public offices, were selected. This study did not consider other uses like religious, cultural and undeveloped plots. The buildings were selected based on their construction building materials and ground floor levels in the third stage. Thus, buildings built in mud, GF+0 HCB, GF+1-2, GF+3 and above GF+3⁸ and their use types were identified using purposive sampling methods, which is a nonprobability approach. Precisely, 22 landholders from each building type (mud, GF+0 HCB, GF+1-2, GF+>=3) for residential use, 22 commercial building owners from each building type; and 22 service building owners from each building type were samples used for this paper. Therefore, a total of 66 respondents were consulted for the survey by using questionnaires and interviews.

⁶ GF: Ground Floor

⁷ HCB: Hybrid Composite Beam

⁸ Ground Floor + Floor 1, 2,3. known in construction for multi-story houses

Before carrying out the survey, we performed a pilot study in each district. During the pilot study, final modifications were made to some questions. The participants were approached on a door-to-door basis. The next step was to formulate questions for the interview based on the conceptual framework to be addressed to landholders in Bahir Dar city so that the hypothesised independent variables could be measured. Participants were asked various questions to measure how these independent variables are related to their personal opinion about tenure security and the general perception of their land tenure security. The items 'institutional capacity' and 'perception of security' were measured using five-point scales from 'strongly disagree' to 'strongly agree' with the same participants.

2.4 Data Analysis

This paper uses S.P.S.S. software to analyse data collected from the questionnaires, and the results are described quantitatively. Then, the significance of the correlation of variables on tenure perception, a variance of tenure security perception, a stepwise regression of variables, and factor analysis of variables was undertaken to determine the level of tenure security perception of landholders in the case study.

A critical examination of respondents' personal perceptions about land tenure security was done for qualitative information, and the results were underlined. Interviews are analysed through a narrative analysis method using a cyclical terms process. The application of this technique and process for qualitative data analysis is advised by the Academy of Educational Development (2006) and the U.S. General Accounting Office (1992), particularly when there is mixed data.

3. Results

In this section, the results of the statistical analyses are presented. Following the numerical representation of the results of the different analyses, verbal explanations and interpretations of the results are given.

3.1 Descriptive Statistics and Zero order Correlation

One of the purposes of this research was to examine the relationships of security perception with the independent variables treated in the study.

Table 1: Descriptive Statistics and Zero-order Correlation Among the Variables in the Study (n=66)

	Mean	Std. Deviation	Location of parcel	Land-use Type	Building type	Settlement duration	Awareness	Inadequacy	Confidence	Institutional Capacity
	2.18	.822								
Location of parcel										
Land-use type	2.00	.822	-.250*							
Building type	2.27	1.121	-.144	.278*						
Settlement duration	1.34	.606	-.375**	.141	-.385**					
Awareness	3.16	1.067	.061	-.195	.252*	-.002				
Inadequacy	2.77	1.087	.063	-.097	.224	-.109	.297*			
Confidence	3.14	1.407	-.009	-.145	.416**	.479**	.096	.185		
Institutional Capacity	7.12	1.683	.084	-.203	-.342**	.312**	-.042	-.257*	.359**	
Perception of Security	12.97	6.285	.004	-.103	.738**	.517**	-.293*	-.371**	.573**	.477**
** Correlation is significant at the 0.01 level (2-tailed).										
* Correlation is significant at the 0.05 level (2-tailed).										

From the Table 1, the Pearson correlation coefficients indicated that security perception was related significantly with building type ($r = 0.738$, p , alpha, 0.01), settlement duration ($r = 0.517$, p , alpha, 0.01), Awareness of legal provision ($r = -0.293$, p , alpha, 0.05), Inadequacy of legal provision ($r = -0.371$, p , alpha, 0.01), confidence of individual landholders ($r = 0.573$, p , alpha, 0.01), and institutional capacity ($r = 0.477$, p , alpha, 0.01).

The results in Table 1 indicated that the type of buildings individuals have would relate to their security perception. Individuals with mud houses tend to feel less secure about their land tenure than individuals with H.B.C. building types. Their level of security perception increases as the type of building increases its size/ complexity. Similarly, the length of the settlement also increased the level of security, where the longer people lived in that area, the more secure they felt. Confidence of individual landholders was the other worthily considerable variable that significantly and positively correlated with perception of security. The implication here is that when the landholder's confidence becomes high, the more they feel secure on land tenure. In addition, institutional capacity was also an important variable that significantly and positively correlated with the perception of security. In other words, when the institution provides appropriate services in land certification and titling, grievances and disputes arbitration, and

there is adequate human and material capacity to render the aforementioned services to the dwellers, it enhances an increase in tenure security of individuals.

On the other hand, the inadequacy of legal provision significantly and negatively correlated with the perception of security. This means the more people feel that the legal provision is not adequate, the more they perceive insecurity. Similarly, awareness of legal provision correlated negatively with security perception, although the results were significant at a 0.05 confidence level. Moreover, overall, respondents tended to perceive land tenure security negatively. In the interview, the perceived land tenure security for those landholders whose buildings are made in mud and G+0 HCB⁹ openly expressed their worries that they could be evicted or expropriated by the government or be obliged to sell their land.

3.2 The Effects of Independent Variable

Since the significant task of the research was to investigate the effects of the independent variables on the dependent variable, namely perception of security, a multiple regression analysis was employed.

Table 2: The Effects of Independent Variable (i.e. "Confidence", "Location", "Awareness", "Inadequacy", "Land-use Type", "Institutional Capacity", "Building Type", and "Settlement Duration") on Dependent Variable of "Perception of Security" (No. =66)

Model		Unstandardised Coefficients		Standardised Coefficients	T	Sig.	R ²
		B	Std. Error	Beta			
1	(Constant)	21.927	4.119		5.323	.000	.743
	Institutional Capacity	.528	.282	.141	1.872	.066	
	Location	-.202	.588	-.026	-.343	.732	
	Land-use Type	-.315	.598	-.041	-.527	.600	
	Building type	2.772	.501	.486	5.538	.000	
	Settlement duration	1.873	.939	.180	1.994	.050	
	Awareness	-.801	.429	.133	1.866	.067	
	Inadequacy	-1.021	.413	-.171	-2.471	.016	
	Confidence	.840	.365	.188	2.303	.025	

* $F = 22.779$, $df_1 = 8$, $df_2 = 66$, $p = 0.000$

As can be seen in Table 2 the independent variables jointly contributed 74.3% in the variance of security perception ($r^2 = 0.743$, $p = 0.000$). The analysis further indicated that building type (beta= 0.486), Individual Confidence (beta= 0.188), Inadequacy of legal provision (beta= -0.171), settlement duration (beta= 0.180), awareness about legal issues (beta= 0.133), and institutional capacity (beta= 0.141), were the significant predictors of perception of security.

⁹ See footnotes page 90

The remaining variables, namely land use type of a parcel and location of a parcel, failed to significantly predict the residents' security perception about their land tenure in Bahir Dar. In order to sort out the significant predictors and their weighted contribution, further, a stepwise regression analysis was carried out.

3.3 Stepwise Regression Analysis of the Independent Variables

The research extends the analysis by undertaking the regression analysis to identify which item increases the tenure security perception.

Table 3: Stepwise Regression Analysis of the Independent Variables on the Dependent Variable (Security Perception)

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.	R ²	R ² Change
		<u>B</u>	<u>Std. Error</u>	<u>Beta</u>				
1	(Constant)	22.602	1.128		20.040	.000	.564	
	Building type	4.280	.450	.751	9.508	.000		
2	(Constant)	25.252	1.234		20.462	.000	.642	.078
	Building type	3.530	.454	.619	7.780	.000		
	Confidence	1.382	.355	.309	3.888	.000		
3	(Constant)	28.017	1.462		19.169	.000	.687	.045
	Building type	3.369	.430	.591	7.827	.000		
	Confidence	1.248	.338	.279	3.696	.000		
	Inadequacy	-1.297	.415	-.217	-3.122	.003		
4	(Constant)	23.872	2.194		10.879	.000	.713	.026
	Building type	3.136	.426	.550	7.361	.000		
	Confidence	-.917	.352	.205	2.602	.011		
	Inadequacy	-1.320	.401	-.221	-3.294	.002		
	Settlement duration	1.962	.796	.189	2.465	.016		

As indicated in Table 3, four variables were identified as significant contributors to the perception of security. These four variables jointly accounted for 77.3% of the variance of individual security perception, of which 56.4% was contributed by building type, 7.8% by individual confidence, 4.5% inadequacy of legal provision, and 2.6 % by settlement duration. This signifies that the type of building individuals own tends to increase their perception of security. This was also confirmed during interviews where participants with G+3¹⁰ and above have the confidence of not being arbitrarily evicted or expropriated. "It is not easy to evict or expropriate such a building," said one of the participants during the interview. "It can cost the municipality much", the interviewee added. This shows how building types play a significant

¹⁰ Ground floor plus three floors

role in providing perceived tenure security coupled with *de jure* and *de facto* land tenure security.

3.4 Factor Analysis

Factor analysis was run using principal component analysis to determine whether security perception is unidimensional or multidimensional.

Table 4: Factor Analysis of Security Perception Using Principal Component Analysis

Items	Factors
Item 11	.864
Item 9	.821
Item 10	.806
Item 13	.793
Item12	.770

The result in Table 4 indicated that all the items loaded on one factor suggest that perceiving tenure security is a unidimensional variable since each one is straightforward to affects the tenure security independently. The factor contributed 66.923% of the variance in perceived land tenure security. This research also proceeded by exploring other factors that may affect the perception of security or otherwise by applying qualitative inquiry.

3.5 Legal Provision, Institutional Capacity Vis a Vis Land Tenure Security Perception

The inadequacy of legal provisions contributes to the perception of insecurity regarding their land tenure. The results collected show that landholders are worrying about the leasehold practice, which specifies that land for residential land should be leased for 99 years and commercial 70 years, vague legal statements on land such as "public purpose" inland expropriation; cronyism in land allocation and favouritism were also mentioned in the first stance as drawbacks of a legal provision. Inadequacy of legal provisions on urban land security was viewed by 43/66 respondents (68.2%) as among the threats to their land security.

Challenges such as inadequate qualified human resources, equipment and financial resources, a top-down approach in land management were identified by the land officers during interviews. Furthermore, respondents added to the list of challenges: corruption, inadequate development control, and delays in certificate and title delivery. The majority of people consulted, about 84.1%, expressed how these elements affected landholders to be in doubt about land tenure. On the side of land officers, they argue that there is a shortage of technicians and experts in different departments that may help to provide services to clients in due time. In addition, the research found during the interviews with land officers insufficient institutional capacity by those working in land offices is one of the significant problems that make landholders not perceive land tenure as secure. Land officers also identified problems related to transport means that hamper them from assisting landholders on time in case of grievances.

On the other hand, clients blame land officers for not assisting them on time unless you bribe them during interviews.

3.6 Confidence in Tenure Security for Landholders in Bahir Dar City

This study tried to determine the confidence level among landholders in Bahir Dar City on land tenure security. The interview questions were formulated to get reasons behind landholders having low or high confidence. Therefore, results revealed that among 66 respondents, 30 of them (47.6%) expressed their views during interviews had low confidence due to doubt about full land ownership, land value increase, lack of money for building a multi-storey building, and existing institutional and legal frameworks. For the ownership, respondents showed that they are not the owner of land but holders. When it came to land value increase, respondents were of the view that those who have money may go and buy them or the government expropriate them for better development.

Furthermore, the respondents revealed that those with high-rise buildings are more confident in their land, which is not easy to destroy. In the same perspective, existing institutional and legal frameworks were cited as among elements that lower their confidence. Respondents accuse the existing institutional and legal frameworks of not making clear many land issues and not applying the provided ones.

Lastly, a high level of confidence was expressed by 20/66 respondents (31.7%). The main points that make them have this level of confidence are living in planned areas with legal documents, the type of buildings (G+1-G+3; G+4 and above), and land use that is in line with the government plan. The people living in the planned area expressed their confidence by believing in being compensated once the government may expropriate the land or the sale of their property at a high price due to the location. Also, those with modern and high-rise buildings were confident that the expropriation might not be automatic due to their property's legal status and value. Finally, the kind of land use was identified by some respondents as the basis of their confidence, especially those with hotels, businesses and rental housing, disclosing that the government encourages these kinds of developments for employment, service, and shelter provision.

4. Discussion

4.1 Building Type Affects Tenure Security Perception

The study explores the perception of tenure security in Bahir Dar among landholders. The results show that there is still a gap in knowing these variables that affect the perception of perceived tenure security in Bahir Dar. Out of those considered outlined variables, the significance value for "building type" is less than 0.01, indicating that the variable has the most significant contribution to the rest of the others. In addition to this, the significance values for "confidence", "inadequacy", and "settlement duration" are less than 0.05, showing that the effect of these variables also has a much more significant influence than the rest of the variables. Therefore, by focusing and working on those only five variables, the perception of tenure security can be improved significantly.

Although most studies have focused on rural and/or agrarian situations, researchers have a consensus that there is a positive relationship between tenure security and investment (Ma et al., 2013). Those who managed to build their plots with G+1, G+3 and above are confident with their perceived tenure security. Similarly, the result of this study confirmed that building investment could significantly predict the landowners' perception of tenure security about their land tenure in an urban area too.

4.2 Investment and Awareness of Legal Provisions on Tenure Security

The findings revealed that the higher the level of the building investment, the more individuals tend to feel secure about their land tenure. According to the results, individuals perceive such confidence to refer to the high and more complex building investments they have on land. The government cannot easily think of expropriation due to compensation that may be too high. Even any buyer who can think of buying the land and property may reconsider the price that may be asked.

On the other hand, Sarpong (2006) claimed that raising public awareness increases the perception of tenure security. Contrary to Sarpong's idea, the results show that awareness of legal provision correlated negatively with security perception, although the results were significant at a 0.05 confidence level. This means the more landholders are aware of the existing legal provision, the less they perceive insecurity about their land tenure security. Many landholders who know where to go and what to do if their land and properties are taken or trespassed do not worry about their perceived tenure security. One of the problems found in the case study is that landholders are not informed about land-related proclamations and other regulations. Others know that they exist but do not know the content. Others do not know where the courts are located and how private or public lawyers can assist them once their properties are trespassed or totally taken.

The results also completely contradict Julian Barnes's quote, "The more you learn, the less you fear..." (Barnes, 201, p.82; Singirankabo & Ertsen, 2020). It was supposed that landholders who are informed about legal frameworks have positive perceptions of perceived land tenure. However, this paper believes that maybe these people might not practically respect the existing laws and rules; or the laws are not adequate enough to convince the landholders of perceived land tenure security. In the same analysis, the legal provisions are not offering the security of tenure to all. A significant number are not comfortable with the legal provisions. Their responses blame the leasehold so that they can be granted a freehold tenure system.

4.3 Existence of Legal and Institutional Frameworks Versus Perception of Tenure Security

Since the existing laws from the constitution and land-related laws and regulations do not allow land ownership but do recognise the holding of land, Ethiopians are not allowed to sell or buy land but lease land from the government. This affects how people perceive the land tenure security as incomplete, even though respondents do not provide further information on their statement about leasehold as a source of insecurity. However, Gilbert (1994), De Soto (2000), and UN-Habitat (2011) proposed to the government to provide adequate legal and institutional frameworks to harness secure land tenure to promote investment in land-based; this paper proved these assertions wrong. In our case study, legal frameworks and institutions related to land are provided at the federal and regional states level. However, still, several landholders are continuously feeling insecure about land tenure. Landholders in the case study cannot sell their land, and the government is able to expropriate land from landholders with compensation.

Due to the experience of previous unfair compensations and quarrels that emanated from the process, all landholders perceive their tenure security to be in trouble when they think that the government could expropriate their land under the same conditions. During interviews, respondents expressed their worry about the implementation and enforcement of those legal frameworks and blamed land officers for deliberately delaying assisting landholders in case of land-related conflicts.

De Soto (2000) provided the existing empirical data on his five countries case study areas wherein in developing countries, the certificate of title can take more than a year to be given to the acquirer; whereas Transparency International (T.I.) & Food and Agriculture Organisation (2011), Transparency International (2015) point out that land administration has been identified as a corrupted sector. Moreover, institutional capacity has been determined, among other problems that make landholders feel insecure (84.1%). The corruption among land officers, delays in land-related service provision and poor land development and protection control make landholders feel insecure. All these confirm the worries expressed by respondents in this study during interviews. Respondents disclosed that services inland offices might take many days due to postponing your appointments. However, during the interview, landholders were not ready to directly use the word corruption or nepotism for these arrangements to access land-related services.

5. Conclusion and Recommendations

This research paper aims to explore the factors affecting the perceived tenure security of legal landholders in urban areas in Bahir Dar City. The objectives were to test the relationship between the independent variables that affect the perceived tenure security of landholders in Bahir Dar and explore the perceptions of the landholders of Bahir Dar about their land tenure security. In order to successfully attain these two objectives, the study employed both quantitative and qualitative research methods with an exploratory case study approach.

The findings show that perceived land tenure security is related significantly to building type, settlement duration, awareness of legal provision, the inadequacy of legal provision, the confidence of individual landholders and institutional capacity, respectively, with different coefficient correlations. Multi-regression analysis disclosed that these variables contributed significantly with 74.3% on perceived land tenure security by landholders in the case study. However, 'building type' contributed more considerably than others, whereas institutional capacity was last in the contribution of perception security in land tenure.

Finally, this study concludes that the feeling of perceived tenure security of landholders in Bahir Dar is not only affected by 'land-use type of a parcel', 'institutional capacity', and 'location of the parcel', but also by other factors like noise, misbehaviour of neighbours, projected road upgrading, heavy traffic and accidents. It was also noted that having legal documents on land does not ensure landholders have full tenure security. Having developed the plot to the maximum level is the only way to have perceived tenure security in the case study. Those who cannot afford to develop their plots to a maximum level still doubt their tenure security due to threats of expropriation or exorbitant prices from buyers who can push them to relocate to the periphery unwillingly. The paper finds that the challenges that Bahir Dar is experiencing in physical development, socio-economic development, and environment are contributed by some landholders' fear of tenure insecurity. Landholders are not motivated to invest more in the development of the city.

Based on the results and discussion above, the government is recommended to implement and enforce the existing legal frameworks and support technical and financial land-related institutions so that landholders can be assisted on time in case of need. The government is to collaborate with the financial institutions to smoothen the ways of accessing capital for developing the land to a maximum level for urban dwellers holding land in the CBD so that confidence in land tenure there may be increased.

Acknowledgement

The authors of this paper recognise the financial support given to them as PhD students to undertake this paper. Also, the contributions of Bahir Dar residents that provided data during fieldwork are acclaimed for their collaboration. Finally, the authors value the moral and technical support given by Professor Yalew Endaweke Mulu through consultations as an instructor at Bahir Dar University, Institute of Land Administration.

References

- Abdulai, A. I., Derbile, K., & Fuseini, N. M., 2021. Livelihood Diversification Among Indigenous Peri-Urban Women in the Wa Municipality, Ghana. *Ghana Journal of Development Studies*, 18(1), pp. 72-96.
- Abebe, S., 2020. *Land-use planning: a new approach towards solving tenure insecurity in Ethiopia*, Bahir Dar: Researchgate.
- Adam, G. A. et al., 2020. Land Governance Arrangements in Eastern Africa: Description and Comparison. *African Journal on Land Policy and Geospatial Sciences*, 3(2), pp. 53-68.
- Ahiakpor, C. Z. J., 2008. Mystifying the Concept of Capital: Hernando de Soto's Misdiagnosis of the Hindrance to Economic Development in the Third World. *The Independent Review*, v. XIII, n. 1, Summer, pp. 57-79.
- Ali, A., Deininger, K., Mahofa, G. & Nyakulama, R., 2019. Sustaining land registration benefits by addressing the challenges of reversion to informality in Rwanda. *Land Use Policy*, Volume 80, pp. 1-24.
- A.N.R.S. (2017) The Revised Rural Land Administration and Use Determination Proclamation of the Amhara National Regional State Proclamation No.252/2017. Bahir Dar.
- Bambio, Y. & Agha, B., 2018. Land tenure security and investment: Does the strength of land right really matter in rural Burkina Faso? *World Development*, Volume 111, pp. 130-147.
- Barnes, J., 2011. *The Sense of an Ending*. 1st ed. London, UK: Random House.
- Byamugisha, F., 2016. *Securing Land Tenure and Easing Access to Land*, Washington, DC: International Food Policy Research Institute (I.F.P.R.I.), C.G.I.A.R. Research Center.
- Chigbu, U. E., Ntihinyurwa, P. D., de Vries, T. & Ngenzi, I. E., 2019. Why Tenure Responsive Land-Use Planning Matters: Insights for Land Use Consolidation for Food Security in Rwanda. *Int. J. Environ. Res. Public Health*, 16(1353), pp. 1-24.
- Chigbu, U., Alemayehu, Z. & Dachaga, W., 2019. Uncovering land tenure insecurities: tips for tenure responsive land-use planning in Ethiopia. *Development in Practice*, 29(3), pp. 371-383.
- Cotula, L., Toulmin, C. & Hess, C., 2004. *Land Tenure and Administration in Africa: Lessons of experience and emerging issues*, London: International Institute for Environment and Development.
- Darshini, M., 2010. Tenure Security and Urban Social Protection Links: India. *Institute of Development Studies Bulletin*, Blackwell Publishing Ltd, 41(4), pp. 52-62.

- De Soto, H. 2000 *The mystery of capital: Why capital triumphs in the west and fails everywhere else*. New York: Basic Books.
- De Souza, A. M. F., 2001. Perceived security of land tenure in Recife, Brazil. *Habitat International*, 25(1), pp. 175-190.
- Dires, T. et al., 2021. Assessing the Impacts of Expropriation and Compensation on Livelihood of Farmers: The Case of Peri-Urban Debre Markos, Ethiopia. *Land*, 10(614), pp. 1-16.
- Dubé, J., Brunelle, C. & Legros, D., 2016. Location Theories and Business Location Decision: A Micro-Spatial Investigation of a Nonmetropolitan Area in Canada. *Review of Regional Studies*, 46(2), p. 143–170.
- DuMont, G.-F., 1993. La Population Mondiale au XX e siècle (The World Population in the Twentieth Century). *Defense nationale*, 49(1), pp. 19-35.
- DuMont, G.-F., 2010. Prospective: un Monde de 9 milliards d'humains? (Foresight: A World of 9 Billion Humans?). *Population & Avenir*, n° 699, Available at SSRN: <https://ssrn.com/abstract=2377843>. Date accessed: 1 September 2020.
- Ege, S., 2017. Land tenure insecurity in post-certification Amhara, Ethiopia. *Land Use Policy*, 64(1), pp. 56-63.
- El-Barmelgy, M. M., Shalaby, M. A., Nassar, U. A. & Ali, S. M., 2014. Economic Land Use Theory and Land Value in Value Model. *International Journal of Economics and Statistics*, Volume 2, pp. 91-98.
- European Network for Central Africa, 2017. *Land, development and conflicts in the Great Lakes: For a renewed engagement by the E.U. and Switzerland in land governance in Rwanda, Burundi and the D.R.C.*, Brussels Belgium
- F.D.R.E. (1995) A Constitution Proclamation of the Federal Democratic Republic of Ethiopia, Proclamation No.1/1995. Addis Ababa.
- F.D.R.E. (2005a) Expropriation of Land Holdings for Public Purposes and Payment of Compensation, Proclamation No. 455/2005. Addis Ababa.
- F.D.R.E. (2011) Urban Lands Lease Holding Proclamation, Proclamation No.721/2011. Addis Ababa.
- Feldman, S. & Geisler, C., 2012. Land expropriation and displacement in Bangladesh. *The Journal of Peasant Studies*, 39(3-4), pp. 971-993.
- Fitzpatrick, S. & Watts, B., 2017. Competing visions: security of tenure and the welfarisation of English social housing, *Housing Studies*. *Housing Studies*, 32(8), pp. 1021-1038.
- Gebeyu, H. Z., 2013. *Towards Improved Transactions of Land Use Rights in Ethiopia: Paper prepared for presentation at the Annual World Bank Conference on Land and Poverty, April 8-11, 2013*. Washington DC, The World Bank.
- Ghebru, H. & Girmachew, F., 2019. *Perceived Tenure (In)Security in the Era of Rural Transformation Gender-Disaggregated Analysis from Mozambique*. Michigan, Feed the Future Innovation Lab for Food Security Policy.
- Ghebru, H. & Lambrecht, I., 2017. Drivers of perceived land tenure (in)security: Ghana's empirical evidence. *Land Use Policy*, Volume 66, pp. 293-303.
- Ghertner, D. A., 2014. India's urban revolution: geographies of displacement beyond gentrification. *Environment and Planning*, Volume 46, p. 1554 – 1571.
- Gilbert, A. G. (1994) *The Latin American City*. London: Latin American Bureau.
- Greasley, P., 2008. *Quantitative Data Analysis Using S.P.S.S.: An introduction for health & social science*. Open University Press.
- Holdena, T. S. & Ghebru, H., 2016. Land tenure reforms, tenure security and food security in poor agrarian economies: Causal linkages and research gaps. *Global Food Security*, 10(1), pp. 21-28.

- Jimenez, E., 1983. *Tenure Security and Urban Squatting.* " Centre for the Study of International Economic Relations Working Papers, 8305C, London: Department of Economics, University of Western Ontario.
- Ma, X. et al., 2013. Land tenure security and land investments in Northwest China. *China Agricultural Economic Review*, 5(2), pp. 281-307.
- Ma, X., Heerinka, N., Fenga, S. & Shi, X., 2015. Farmland tenure in China: Comparing legal, actual and perceived security. *Land Use Policy*, 42(1), pp. 293-306.
- Montgomery, R., 2008. The Urban Transformation of the Developing World. *Science*, 319(5864), pp. 761-764.
- Moreda, T., 2018. Contesting conventional wisdom on the links between land tenure security and land degradation: Evidence from Ethiopia. *Land use policy*, Volume 77, pp. 75-83.
- Nakamura, S., 2016. Revealing invisible rules in slums: The nexus between perceived tenure security and housing investment. *Habitat International*, 53(1), pp. 151-162.
- Neef, A., Sangkapitux, C. & Kirchmann, K., 2000. *Does land tenure security enhance sustainable land management? Evidence from mountainous regions of Thailand and Vietnam*
- Security of tenure Security in Humanitarian Shelter Operations* 2013, Norwegian Refugee Council & IFRC, Geneva, <https://www.nrc.no/globalassets/pdf/reports/security-of-tenure---in-humanitarian-shelter-operations.pdf>
- Quan, J. and Payne, G., 2008. *Secure land rights for all.* The United Nations Human Settlements Programme, UN-HABITAT
- Payne, G., 2002. Tenure and Shelter in Urban Livelihoods, in Lloyd-Jones, *Urban Livelihoods: A People-centred Approach to Reducing Poverty.* Earthscan Publication Ltd, London pp. 152-164.
- Reerink, G. & van Gelder, J.-L., 2010. Land titling, perceived tenure security, and housing consolidation in the kampongs of Bandung, Indonesia. *Land Use Policy*, 34(1), pp. 78-85.
- Schaefer, L., 2017. *Centre for Public Impact: a BCG Foundation.* Available at: <https://www.centreforpublicimpact.org/case-study/land-reform-rwanda/#:~:text=In%201994%2C%20after%20the%20Rwandan,tenure%20to%20help%20reduce%20poverty>. Viewed 25 November 2020.
- Singirankabo, U. A. & Ertsen, W. M., 2020. Relations between Land Tenure Security and Agricultural Productivity: Exploring the Effect of Land Registration. *Land*, 9(138), pp. 1-18.
- Tsegaye, G., 2017. Factors affecting farmers' land tenure security after implementing rural land registration and certification programs in Hulet Eju Enese district, Amhara region, Ethiopia. *Journal of Geography and Regional Planning*, 10(10), pp. 289-297.
- Turimubumwe, P., 2021. Challenging Institutional Frameworks in Land Administration: Many institutions, but less property rights (Case of Burundi). *African Journal on Land Policy and Geospatial Sciences*, 4(1), pp. 15-32.
- UN-Habitat - G.L.T.N. (2011) *Monitoring Security of Tenure in Cities: People, Land and Policies.* Working Paper, Nairobi
- UN-Habitat, U.N.H.S.P., 2008. *State of the World's Cities 2008/2009: Harmonious Cities,* Nairobi: Gutenberg Press Ltd, Earthscan.
- United Nations, Department of Economic and Social Affairs, Population Division (2019). *World Population Prospects 2019: Highlights (ST/ESA/SER.A/423).*
- Uwayezu, E. & De Vries, T., 2018. Indicators for Measuring Spatial Justice and Land Tenure Security for Poor and Low-Income Urban Dwellers. *Land*, 7(84), pp. 1-34.
- Uwayezu, E. & de Vries, T., 2019. Expropriation of Real Property in Kigali City: Scoping the Patterns of Spatial Justice. *Land*, 8(2), pp. 1-29.

- Van Gelde, J.-L., 2010. What Tenure security? The case for a tripartite view. *Land Use Policy*, Volume 27, p. 449–456.
- Van Gelder, J., 2009. Legal Tenure Security, Perceived Tenure Security and Housing Improvement in Buenos Aires: An Attempt towards Integration. *International Journal of Urban and Regional Research*, 33(1), pp. 126-146.
- Wannasai, N. & Shrestha, P., 2008. Role of land tenure security and farm household characteristics on land-use change in the Prasae Watershed, Thailand. *Land Use Policy*, 25(2), pp. 214-224.
- White Paper, (2009) Land Governance and Security of Tenure in Developing Countries. French Development Cooperation
- Williams, R.C (2011) From Shelter to Housing: Security of Tenure and Integration in Protracted Displacement Settings.