

Relationship between land tenure and land use in unplanned settlements in Lusaka, Zambia

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ABSTRACT

How do land tenure and land use relate to informal settlements? Many studies have examined the effects of land regularisation on communities. Land regularisation is considered a highly effective solution for improving the residential environment in informal settlements and has been implemented in numerous developing countries. However, few studies have explored how land regularisation impacts land use in informal settlements. In this study, we investigated how residents secure land tenure and use their land in unplanned settlements in Lusaka, the capital city of Zambia, focusing on people's practices in detail. We focussed on two unplanned settlements in Lusaka: Chaisa Ward, an improvement area where land regularisation has occurred, and Chazanga Ward, a customary area where land is not being regularised. As the investigation method, we conducted interviews with community management organisations and 31 dwelling owners and an observational survey about land use in selected target sites in Chaisa and Chazanga in 2009, 2011, and 2014. The study findings showed that in informal settlements, where land tenure is secured by authorities within the community, communal regulation supported by community-based social bonds is an important element of land use management. However, official recognition of land rights through land regularisation could undermine communal relationships and communal land use regulations, resulting in a disorganised and congested living environment. Therefore, we point out that official intervention in land tenure should be institutionalised in a manner that fully understands and takes advantage of the relationships between land tenure and land use, as well as between land and people, which are well-balanced within the local context. This study demonstrated that communal regulation plays a key role in managing land use in informal settlements but its positive impact could be easily undermined by land regularisation. Thus, an important learning from this study is that land in informal settlements should be regularised in a way that fully understands and takes advantage of communal regulation of land use to ensure a desirable living environment.

1. Introduction

In African cities undergoing rapid urbanisation, 20–90 percent of the population has settled in informal settlements developed without legal land tenure or development permits (UN-Habitat, 2020). This type of informal development is the driving force behind dramatic urbanisation in Africa. In developing countries, where housing supply is critically insufficient to accommodate the rapidly growing urban population, the emergence of informal settlements is considered inevitable (Payne, 1977), especially for housing the poor (Steyn, 2003; Turner, 1969). Turner argued that housing solutions must be designed by inhabitants, who know their own needs and preferences better than anybody else,

rather than the government. While 'community participation' in informal settlement upgrading has been lauded as a global best practice (The Cities Alliance, 2014), it is not limited to temporary programmes and projects. The daily land use practices of people living in informal settlements are important to consider when thinking about the living environment. However, land regularisation is considered among the most effective approaches for improving the residential environment in informal settlements (De Soto, 2000) and has been implemented in many informal settlements around the world. How does regularisation affect people's daily land use practices?

This study aims to investigate how land regularisation can affect the relationship between the land and its residents by providing a detailed

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picture of the land tenure and land use practices of residents in the unplanned settlements of Lusaka, the capital city of Zambia. Furthermore, we provide suggestions on how land should be owned and used in a manner that fosters sustainable improvement of the residential environment.

2. Theoretical background

In his book *The Mystery of Capital*, Hernando de Soto argues that the absence of formal property rights and secure property titles in many developing countries hinders economic development. The book advocates for property formalisation, which involves granting legal titles to people who have informally occupied and developed land. De Soto posits that property rights formalisation allows individuals to use their assets as collateral, enabling them to access credit, make investments, and participate in the formal economy. This, in turn, promotes economic development.

Since 2000, a multitude of researchers have analysed de Soto's arguments (Benjaminsen et al., 2009; Magigi & Majani, 2006; Toulmin, 2009). The impact of land regularisation on the poor has been examined in terms of access to credit (Field & Torero, 2004; Galiani & Schargrodsy, 2010), investment in housing and residential environments (Field, 2005; Galiani & Schargrodsy, 2010; Payne et al., 2008), household size (Galiani & Schargrodsy, 2010), and real estate transactions (Fawaz, 2009; Payne et al., 2008). Durand-Lasserve et al. (2007) and Payne et al. (2009) extensively reviewed these studies and argued that although it is too early to conclude, land titling has generally failed to achieve the benefits claimed by its proponents. That is, titling has not significantly reduced poverty or increased access to formal credit or service networks, and may instead have negative effects. Furthermore, although titling has generally succeeded in increasing tenure security, a variety of alternative forms of tenure, including those in many informal settlements, also provide high levels of security.

Durand-Lasserve and Selod (2007) point out that land regularisation as a process by which informal tenure is integrated into a system recognised by public authorities is not limited to titling, and that the effect of such diverse approaches should also be evaluated. They argue that tenure should be understood as a social relation, as shown in the following excerpts.

'Land tenure designates the rights individuals and communities have, with regard to land, namely the right to occupy, use, develop, inherit, and transfer land. Land tenure should thus primarily be viewed as a *social relation* involving a complex set of rules that governs land use and land ownership. While some users may have access to the entire 'bundle of rights' with full use and transfer rights, other users may be limited in their use of land resources (Fischer, 1995). The exact nature and content of these rights, the extent to which people have confidence that they will be honoured, and their various degrees of recognition by public authorities and the concerned communities, have a direct impact on how land is used.' (Durand-Lasserve & Selod, 2007, p. 4).

Given the nature of tenure as a social relation, the diversity of tenure situations in informal settlements requires a diversity of land regularisation procedures (Durand-Lasserve & Selod, 2007). In other words, it is argued that transferring land regularisation experiences – regardless of the local context – may prove inappropriate and may harm the existing informal land tenure and, conversely, the context often determines the type of regularisation that can be undertaken (Durand-Lasserve & Selod, 2007).

The tenure practice in informal settlements is influenced by long-standing *in situ* social relations and is certainly neither common nor constant (Wigle, 2010). The process by which people access residential land in informal settlements is not chaotic or anarchic; rather, it is structured and regulated by some form of social ordering, where institutions are developed and utilised, drawing on various normative orders including state law, rules of market exchange, and customary practices (Nkurunziza, 2007). Furthermore, where different sources of

law and different ownership patterns coexist, a continuum in land tenure rights can be observed (Olapade & Aluko, 2021; Payne, 2002). There is a diversity of tenure situations, ranging from the most informal types of possession and use to full ownership (Durand-Lasserve & Selod, 2007; Marx & Rubin, 2008; Opoko et al., 2020), and both interact with each other and are complementary (Bouwmeester & Hartmann, 2021).

Understanding these local practices is crucial in informal settlement upgrading, which is seen as one of the more effective ways of tackling urban poverty (Minnery et al., 2013). While the upgrading implemented through community participation is widely considered global best practice, aimed at significantly improving the lives of urban poor, its execution often fails due to urban standards inappropriate to the social realities of low-income households (Almansí, 2009). Successful outcomes are possible only because of informal continuities, particularly the sustained and consolidated power and influence of the local community following upgrade (Patel, 2013). Through this, impoverished urban communities can contribute themselves to the process of improving their living conditions and consequently enhance their quality of life (Wekesa et al., 2011).

Following Durand-Lasserve and Selod's (2007) argument that land tenure is designated in social relations and these relations affect land use, this paper identifies the relationship between land tenure and land use in unplanned settlements in Lusaka, Zambia's capital, while focusing on the impacts of land regularisation. Ono and Kidokoro (2021) found that land-related systems are closely connected to the development patterns in informal settlements. Umar et al. (2023) observed an increase in immovable land investments resulting from a land rights formalisation initiative. These studies are among the few to examine the relationship between land tenure and land use in informal settlements as a product of people's practices rather than as an institution or as a concept, but the mechanisms by which land tenure and land use interact have not yet been fully examined. Following these research approaches, this study identifies the location and nature of the authority that secures land tenure, and the framework within which that binding force operates, to capture the essence of land tenure. We also demonstrate how that framework determines how people use their land, and how land regularisation impacts the system. The remainder of the study is organised as follows. Section 3 presents the contextual grounding. Section 4 lays out the research methods and data collection steps. Section 5 elaborates on the study results. Section 6 presents the discussion of the results. Section 7 concludes the study.

3. Study context

3.1. Unplanned settlements in Lusaka

Unplanned settlements in Zambia are areas occupied without rights or legal titles under government regulations (Mate, 1997). Unplanned settlements formed by residents' self-help developments (Rakodi, 1986) are characterised by vernacular landscapes of single-story houses, offering residential lots and rental housing at low prices to meet the housing needs of low-income people. In Zambia, an unplanned settlement is variously referred to as a slum, a squatter, an informal settlement, a compound, or a peri-urban area – the term used in geography and planning literature to describe transition zones (Aguilar et al., 2003; Varkey & Manasi, 2019); in the Global South, it is commonly associated with informal urban expansion and haphazard development processes (Mbiba & Huchzermeyer, 2002; Aguilar, 2008; Follmann, 2022). This study uses the term 'unplanned settlement', following the report 'The Status of Unplanned Settlements in Lusaka' by Yasini (2007) of the Lusaka City Council Research Unit, who summarised the legal status, location, administration, and history of 20 unplanned settlements in Lusaka.

Unplanned settlements in Lusaka first emerged during the colonial period, and by 1944, 19 percent of adult men (N = 632) in Lusaka were living in unplanned settlements. In 1963, one year before the declaration

of independence, 21 percent of Africans lived in unplanned settlements (Tait, 1997). The 1938 Non-Statutory Development Plan and the 1952 Statutory Development Plan, both formulated during the colonial period, planned for a very small proportion of the African population so that Europeans could reside in a privileged environment. Unsurprisingly, housing projects implemented according to these plans did not sufficiently meet the housing demands of native Africans. Consequently, Africans barely had any other choice but to develop housing on their own on the farms of European immigrants dispersed on the outskirts of Lusaka (Payne et al., 2009).

With the declaration of independence in 1964, the Zambian government implemented socialist government policies, and land was nationalised after the enactment of the Land (Conversion of Titles) Act of 1975. This law prohibited the purchase and sale of land, except for the development of historical buildings and infrastructure. As land was no longer saleable and held no monetary value, the land market in Zambia came to a standstill. Furthermore, the President's consent was required when determining the asking price for land, and land dealing without such consent was illegal. Because of this law, which aimed to prevent land speculation, vacant and unused land could not be held as collateral, prolonging land deals in general. These factors diminished residential development and real property holdings in the private sector, which eventually led to a scarcity of housing supply in Zambia (UN-Habitat, 2005). Thus, until the land market was revived following the enactment of the Lands Act No.29 of 1995, most private-sector residential development occurred in unplanned settlements.

In response to the expansion of unplanned settlements, the Zambian government declared in the Second National Development Plan (1972–1976) that houses in unplanned settlements should be considered social and economic resources and hence needed to be improved upon rather than demolished. However, because it was impossible to improve the residential environment of unplanned settlements under the Town and Country Planning Act No. 32 of 1961, originally designed for planned settlements, the government enacted the Housing (Statutory and Improvement Areas) Act No. 30 of 1974, which empowered the Minister of Local Government and Housing to declare any unplanned areas as improvement areas. The following year, based on this law, land regularisation and upgrading projects, including the provision of basic infrastructure and services such as water supply, roads, and schools for unplanned settlements designated as improvement areas, were undertaken with the support of the World Bank and other international development agencies.

During this period, Zambia was one of the few African countries to attempt to upgrade its unplanned settlements. The background that led to the enactment of the Housing (Statutory and Improvement Areas) Act No.30 of 1974 or the implementation of the upgrading project is as follows. First, the headquarters of the African National Congress, the party opposing the leading political party in Zambia, was located in the unplanned settlements in Lusaka. Therefore, leaders of the government and the leading political party hoped to gain the support of residents in the area by improving the living conditions of unplanned settlements through an upgradation project. Second, unplanned settlements were under the jurisdiction of the state government before 1970. However, unplanned settlements in urban areas came under the jurisdiction of Lusaka City with an extension of the urban area in 1970. This enabled the intervention of Lusaka City into the affairs of unplanned settlements, and halted evictions enforced by the state government. Third, the World Bank became interested in a large-scale upgradation project supported by the international development paradigm, and prepared funding to launch this project. Lusaka City was selected as part of a pilot scheme to assess the upgradation project assisted by the World Bank.

Approximately 70 percent of the population of Lusaka lives in unplanned settlements. According to Lusaka City officials in charge of the unplanned settlements, of the approximately 37 unplanned settlements, only a few have been declared as improvement areas. When unplanned settlements become improvement areas, the Housing (Statutory and

Improvement Areas) Act is applied exclusively under the jurisdiction of the Lusaka City through the Residential and Social Work Department. Under the authority of this Act, Lusaka City registers all dwellings in the improvement area and issues occupancy licences to residents who occupy pieces of land and own them. Being granted an occupancy licence means that its holder enjoys rights to the land and any dwelling erected on it, as may be prescribed. Thus, the use or occupation of land or dwellings in improvement areas without permission was prohibited. Although Lusaka City imposes ground rent on registered dwelling owners to generate funds for the development of the improvement area, the number of dwelling owners who pay such rent is limited. According to interviews with an official from the Residential and Social Work Department, which is in charge of Chaisa, only approximately 40 percent of registered dwelling owners pay ground rent in Chaisa ward.

3.2. Chaisa and Chazanga

The study was conducted in two unplanned settlements: Chaisa and Chazanga Wards (Fig. 1).

3.2.1. Chaisa: an unplanned settlement declared as an improvement area

Chaisa is located approximately 4 km north of the Central Business District (CBD) and comprises 1.0 km² of land where an estimated 29,980 people live (Yasini, 2007). It was formed on two farms owned by European immigrants; around 1960, African workers were allowed to build dwellings with sun-dried bricks on their farms. Farm owners returned to their home countries after the Declaration of Independence in 1964. Despite the absence of owners, residential development on farms has progressed because the abundant supply of land and water has attracted many occupants. Since the land was declared an improvement area following the Housing (Statutory and Improvement Areas) Act in 1979, the city has held the head lease of the land, a lease directly held by the freeholder, and went on issuing occupancy licences. During 2000–2003, with the support of the Swedish International Development Cooperation Agency, the Land Tenure Initiative was implemented by Lusaka City, led by resident leaders to inform and encourage residents to acquire occupancy licences (Lusaka City Council, 2003). After the settlements were authorised, land acquisition occurred among middle-income groups seeking places of residence or opportunities to manage rental housing.

3.2.2. Chazanga: an unplanned settlement on customary land

Chazanga is located approximately 7 km north of the CBD in Lusaka, and an estimated 17,755 people live on the 0.5 km² of land (Yasini, 2007). Chazanga was originally a village for people who spoke Lenje, who had traditional dwellings scattered throughout vast rural parts of the Central Province adjacent to Lusaka Province. However, the increase in the number of immigrants after the 1970s led to the construction of urban settlements. The management of the settlements was transferred from Chibombo District in Central Province to Lusaka City in Lusaka Province in 2005, and development, including water supply, was initiated by Lusaka City. Chazanga settlement has not yet been granted legal status by the government, but has been recognised by the Lusaka City Council, which is the first step in a series that will result in the legalisation of settlement by the Ministry of Local Government and Housing, as stipulated under the Statutory and Improvement Areas Act (Yasini, 2007). At the same time, since Chazanga is located in a customary area under the jurisdiction of the Chief Mungule, the village headmen/-women register land under the jurisdiction of the Chief Mungule. Thus, one must be registered and acquire land with approval of the village headmen/women in order to live in the settlement. Since residents and developments are to a certain extent left to the chief's management, any development by Lusaka City is undertaken in consultation with the chief through the village head.

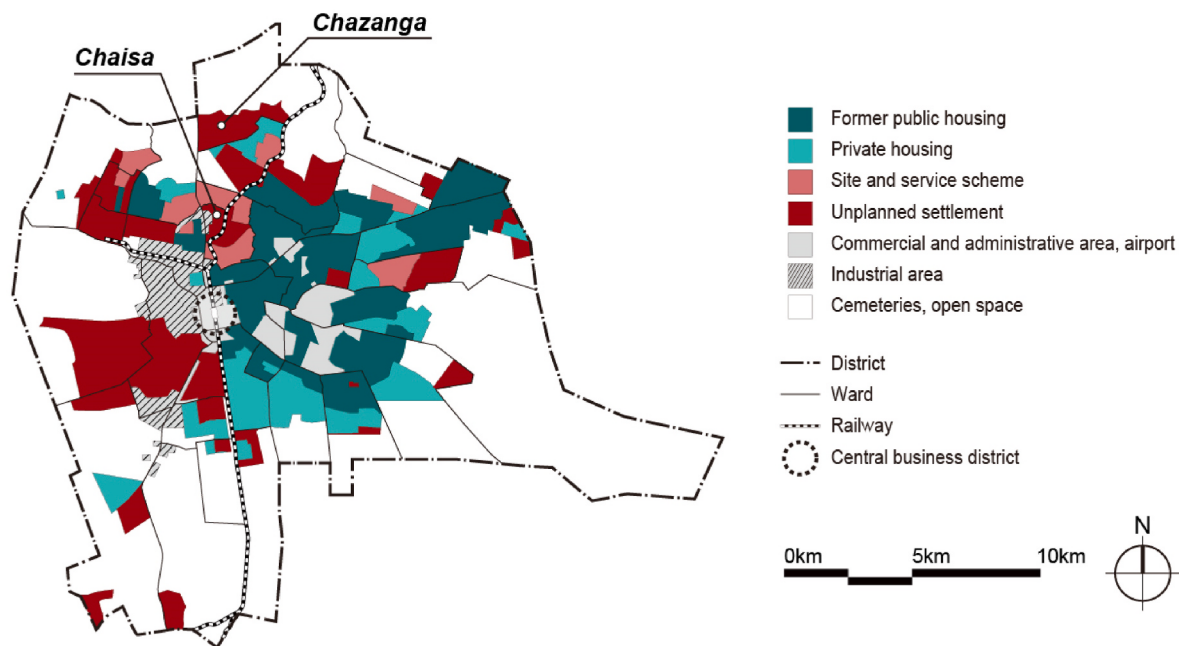


Fig. 1. Map of Lusaka city – locations of Chaisa and Chazanga wards.

3.3. Governance in unplanned settlements

The residents of unplanned settlements are leniently organised by various community management organisations. The following are typical community management organisations.

3.3.1. Ward Development Committee

The Ward Development Committee, a subordinate organisation to Lusaka City Council, operates in unplanned settlements. The Committee is organised by a representative member of the community democratically elected from each zone. These representatives must not be partisan or work for political motives. Furthermore, they are volunteers and are prohibited from working for remuneration. The Committee regularly holds meetings to discuss regional developments or problems concerning residents and reports to the city. In addition, when support projects such as those aimed at housing and environmental improvement are underway, the Ward Development Committee serves as the implementation body, along with any co-operating partners, such as the World Bank and Lusaka City Council. In short, the Ward Development Committee acts as a link between the city administration and residents, and works as a point of contact in the ward as an assisting agency.

3.3.2. Party organisation

Every political party has a nationwide network to organise its members politically. The influence of political parties on unplanned settlements is particularly strong. During Zambia's socialist era following the declaration of independence, such party organisations were involved in development endeavours in the settlements. In addition to engaging in political activities, they allocated land to residents and provided water and bus services to gain the support of residents. The influence of party organisations significantly diminished after the United National Independence Party, which had governed through a one-party system, lost the 1991 elections. With the introduction of the multiparty system, as well as the establishment of the Ward Development Committees, political parties representing their members among the residents are still active in the settlements.

3.3.3. Traditional chiefs and village headmen/women

Land in Zambia is roughly divided into two categories: state-owned

land in urban areas and customary land in rural areas. Customary land is under the jurisdiction of the traditional chiefs and village headmen/women, who are responsible for the economic and social development of each region and its residents. These leaders register land and dwellings, as well as allocate land according to the customs of each tribe. Typically, such leaders do not exist in urban areas. However, in the northern suburbs of Lusaka, where Chazanga is located, customary land under the control of the Chief Mungule is still quite vast, and even though the chiefdom has undergone significant urbanisation, the chief and village headmen/women still have some influence on the development and maintenance of order in the community.

4. Research methods

To investigate how land regularisation affects land tenure and use, this paper focusses on two unplanned settlements in Lusaka: Chaisa Ward, an improvement area where land regularisation has occurred, and Chazanga Ward, a customary area where land is not being regularised. These two settlements were selected as they are among the 37 unplanned settlements in Lusaka, the former being one of the earliest settlements to be regularised in the 1970s and where the Land Tenure Initiative was implemented in the 2000s, thus many people are considered to have occupancy licences. The latter is one of the few settlements where land regularisation has not yet occurred and thus people have not been allowed to acquire occupancy licences from Lusaka City.

Fieldwork was conducted in Chaisa and Chazanga, with the target sites selected as well-defined areas surrounded by streets, each with a typical residential environment. Both target sites were also chosen because they have community leaders who are trusted by the neighbours and familiar with the history of settlement formation, making it easy to conduct the survey. The target site in Chaisa has 51 plots and approximately 100 households, while the target site in Chazanga has 35 plots and approximately 60 households.

Our research was based on a qualitative analysis of interviews and observation. To enhance credibility of the results, the study was conducted in three phases using numerous data collection methods.

In the first phase, interviews were conducted with community leaders to map the current plot boundaries of each unit, while

confirming them on site, and to map the history of plot boundary determination due to division and consolidation in 2011. In Chaisa, we were assisted by the chairperson of the Ward Development Committee who lives in the target site, and while he was able to identify all current plot boundaries within the site, he was not familiar with the evolution of the plot boundaries from the time the settlement was formed in the 1960s to the present. However, in Chazanga, we were assisted by a patriarch who resides at the target site, and since he was one of the first settlers at the site, he was largely able to identify not only the current property boundaries but also the process of site division since the 1960s. Combined with the results of interviews conducted in the second phase with dwelling owners, regarding the process of land acquisition, a map showing the site boundaries from the 1960s to the 2010s was completed. In this phase, interviews with various community management organisations were also conducted to understand the governance structure in Chaisa and Chazanga.

In the second phase, semi-structured interviews were conducted with households that owned dwellings at each site to collect information on how the land was acquired. In Chaisa, these interviews were conducted in January 2011, and in Chazanga in November 2011. After visiting all plots at the target sites in Chaisa and Chazanga with community leaders to interview dwelling owners, we found that 24 of the 51 plots in Chaisa and 19 of the 35 plots in Chazanga were inhabited by owners. As a result of repeated visits at different dates and times when owners were away from home, interviews were conducted with 13 of the 24 owners in Chaisa and 18 of the 19 owners in Chazanga. In the interviews with owners, while recording the interview with their consent, we asked questions about how and when they acquired the land, attitudes toward

ownership of the land, whether there were any problems with the land and how they were resolved, and the status and intentions of renting the house. We also asked the owner to show us the boundaries of the plot at the time that the land was acquired and at the present time on site. If the owner did not live on the plot, tenants living on the plot were asked about the owner's place of residence, the number of tenants living on the plot, and whether there were any problems over the land, and the current plot boundaries were verified.

With regard to land use, we conducted observational surveys of the sites, documented human retention and movement behaviours, and prepared drawings in the third phase in June 2014. Using a copy of the Google Earth satellite image, we looked around the target site and first completed a building layout map, visually checking and recording the shape of the buildings. Next, we plotted the physical environment in the outdoor space, including boundary fences and trees. Then, people's activities in the outdoor space were observed, and the paths that people used on a daily basis and the number of people staying there during weekdays were recorded on the map.

The data collected from the interviews and observations were analysed qualitatively. This process led to data synthesis in the form of figures, maps, tables, and descriptions to meet the research objectives.

5. Results

5.1. Land tenure practice: who secures land tenure?

In this section, we explore the location and nature of the authority that secures land tenure in unplanned settlements in response to

Table 1
Procedures for land acquisition.

Plot No.	Location and year of acquisition	Method of acquisition	Type of contract	Registration		Contract witness					None	Unknown
				Lusaka City Council	Village headman/ woman	Police officer	Ward Development Committee	Party organisation	Patriarch	Relatives		
Chaisa												
1	1960s	Occupation	None					X				
2	1960s	Occupation	None					X				
3	1960	Occupation	None									X
4	1964	Purchase	None								X	
5	1970	Purchase	Unknown									X
6	1970	Purchase	Writing									X
7	1971	Purchase	Unknown									X
8	1972	Purchase	Oral					X				
9	1974	Purchase	Writing	X ^a								
10	1982	Purchase	Writing	X				X				
11	1987	Purchase	Writing	X								
12	1991	Purchase	Writing	X				X				
13	1997	Purchase	Unknown									X
Chazanga												
14	1978	Purchase	Writing				X ^b					
15	1980	Purchase	Unknown									X
16	1981	Purchase	Writing					X				
17	1982	Purchase	Writing									X
18	1989	Purchase	Writing						X			
19	1991	Purchase	Oral							X		
20	1993	Purchase	Writing						X			
21	1996	Purchase	Writing						X			
22	1997	Purchase	Writing		X			X				
23	1998	Purchase	Writing						X			
24	2002	Purchase	Writing						X			
25	2002	Purchase	Writing							X		
26	2002	Purchase	Writing			X				X		
27	2002	Purchase	Writing					X	X			
28	2003	Purchase	Writing						X			
29	2004	Purchase	Writing					X				
30	2005	Purchase	Writing		X				X			
31	2006	Purchase	Writing			X						

^a Acquired exclusive rights after regularisation in Chaisa.

^b The registration certificate, necessary for employment at the kindergarten, was issued by the Ward Development Committee in 2010 Source: Interviews with dwelling owners.

emerging trends. Table 1 summarises the results of the interviews conducted with dwelling owners in Chaisa and Chazanga concerning the year and method of land acquisition, type of contract, place of registration, and the presence of witnesses to validate the contracts.

5.1.1. Registration and contract witnesses for securing land tenure

In unplanned settlements, land transactions are active, including for land around dwellings. Although land acquisition through occupation and donation has occurred in the past, land has been generally acquired through purchase in recent times. The first step in a land deal in unplanned settlements involves obtaining the agreement of neighbours who share boundaries with the property and determining the land price through purchase–seller negotiation. The purchaser then pays the property price to the seller, and the right of land ownership is transferred from the seller to the purchaser. At this stage, a contract for sale is exchanged, typically in writing, although verbal agreements were more common in the past. Both parties save a copy of the contract that states the formal names of the seller and purchaser, their national registration card numbers, transaction price of the land, and property boundaries. The contract often includes the signature of a third-party witness, such as a person of authority in the community, neighbours, or relatives, to secure land tenure. In addition, information regarding the dwelling owner is recorded in a ledger held by community leaders, and a registration certificate of landownership is issued to the dwelling owner. The title of this certificate is changed when landownership is transferred from the previous owner to the new owner, and the registration certificate of landownership and land registration is issued to the new owner.

5.1.2. Chaisa: land tenure previously secured by authority within the community but now outside the community

Those who acquired land in the 1960s, when Chaisa emerged, occupied the land upon receiving approval from the party organisation. Since the 1970s, when development projects have become active, land acquisition through purchases has become prevalent. Except for a few cases involving contracts based on oral agreements, most land dealings were completed via written contracts. The party organisation served as the witness for sales contracts executed from 1960 to 1979. However, since 1979, when Chaisa was declared an improvement area, a branch office of the Residential and Social Work Department within Chaisa has been accepting applications for occupancy licences and transfer of occupancy licences. Therefore, dwelling owners have begun registering land to receive occupancy licences. However, awareness of the land registration system for receiving an occupancy licence is low in Chaisa, and even those who are aware are not inclined to take advantage of it, especially because of the high cost of land registration. Consequently, only 43 percent of all dwelling owners in Chaisa currently hold an occupancy licence. Moreover, the influence of the party organisation on land remains; even after 1979, the party organisation has served as a witness to contracts concerning land dealings.

In summary, the land tenure was secured by party organisations in the community in Chaisa. However, since regularisation began, legal rights have been provided by Lusaka City Council. This implies that the authority to secure land tenure shifted from within to outside the community.

5.1.3. Chazanga: land tenure secured by various authorities within the community

In Chazanga, which is a customary area, a village headman allocates and registers land under the jurisdiction of the traditional chief. However, in the area of investigation, village headmen/women were involved in land allocation only until the 1960s. Since 1970, when urban-style housing land development emerged, former villagers who were land occupants allocated land in lots without involving the village headmen/women. Although most dwelling owners have acquired land through purchases since the 1980s, few have registered their land with village headmen/women (Table 2). In addition to the urban-style

Table 2

Built density.

	Chaisa	Chazanga
Average lot area (m ²)	293	337
Average building (floor) area (m ²)	127	60
Building-to-land ratio (%)	44.3	18.8

Source: Field surveys conducted by the author

development driven mainly by land acquisition by people from outside the village who were unfamiliar with the customary land registration system in the area, the high land registration fees demanded by village headmen/women led them to avoid using the customary registration system. This diminishing influence of traditional chiefs and village headmen/women over the land could have contributed to the decline of the customary registration system.

With the decline in the customary registration system, various authorities within the community, such as the Ward Development Committee, party organisations, and patriarchs, have served as witnesses to sales contracts and issued pseudo-registration certificates. For example, the Ward Development Committee issued registration certificates in 2010, but the fees associated with these registration certificates are only approximately 10 percent of the fee charged by village headmen/women. This measure was implemented to make it easier for everyone in the community to participate in the practice. Although the Ward Development Committee has not officially been authorised to issue registration certificates, it is considered by residents as an authority within the community because the committee is a subordinate organisation of Lusaka City Council, thereby giving social legitimacy to the rights of dwelling owners.

The patriarch of the community also issues registration certificates. He has successively held positions in the party organisation, the customary organisation as a village headman, and the Ward Development Committee. Neighbourhood residents seek his counselling on various matters and rely on his wisdom daily. Naturally, people request him to serve as a witness in sales contracts and issue registration certificates.

There are no clear, commonly held guidelines in the community regarding the qualifications required of a witness for a sales contract. Therefore, people freely choose their witnesses without having to apply specific criteria. In general, the main considerations in choosing a witness are who would be the best person to secure landownership or issue a registration certificate at the lowest price. Consequently, some dwelling owners appoint both the party organisation and the patriarch as dual witnesses or even a police officer as a witness.

As described above, in Chazanga, the involvement of village headmen/women in the land, which was a customary practice that used to be valued significantly, is disappearing. Instead of village headmen/women, land tenure is secured by various authorities within the community who are involved in issuing pseudo-registration certificates, indicating a unique, new style of community-based land management.

5.2. Land use practice: how plots of land are formed, maintained, and used

5.2.1. Formation of property boundaries

Fig. 2 depicts the chronology of transitions in the property boundaries between plots from 1960 to 2011 in the areas under investigation in this study. In Chaisa, little land partitioning has occurred since the first lot subdivisions were completed, as evidenced by the fact that the property boundaries of plots No.1–3, which were first acquired by occupation with the approval of the party organisation in the 1960s, did not change until the 2010s. Interviews with Development Committee members demonstrated that the current overall perimeter and property boundaries were established by the subdivision of land by occupation in the 1950s and 1960s, and have remained more or less intact since then.

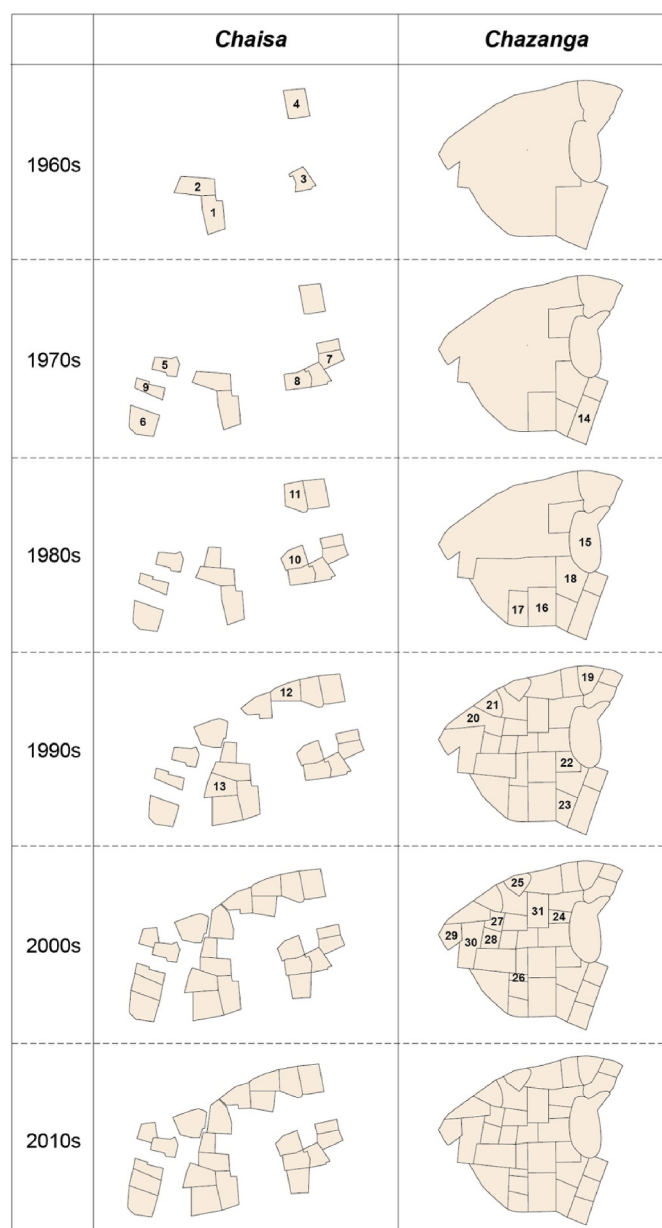


Fig. 2. Transition of property boundaries. Note: The numbers in the figure indicate the plot no. in Table 2. Source: Field surveys and interviews with community leaders and dwelling owners.

However, in Chazanga, the last three villagers who were allocated land by a village headman, began selling lots of their land to immigrants from outside Chazanga, which led to residential development. The sale of land in lots began gradually in the 1970s and peaked in the 1990s. This type of land dealing continued after 2000; however, at that time, property boundaries became increasingly more established, closer to what they are today, and the amount of land sold in lots decreased. A trend of land subdivision could resume in the future in both study areas. However, currently, it seems that this trend has settled into its final stage.

5.2.2. Built density

The building-to-land ratio is 44.3 percent in Chaisa and 18.8 percent in Chazanga (Table 2), indicating that unlike in informal settlements, where high density due to congestion with buildings is frequently a problem, low-density living conditions are maintained in both areas. However, it is important to take into account that the building-to-land

ratio in Chaisa is more than twice as high as that in Chazanga due to the size of the houses. Buildings are typically extended to earn profits from rent. There is a concern that further expansion of houses will lead to an undesirably crowded living environment.

5.2.3. Rental business

The percentage of absentee landlords is not very high: 39.2 percent in Chaisa and 34.3 percent in Chazanga (Table 3). The low percentage indicates that unplanned settlements tend to be the primary places of residence for owners. However, the percentage of dwelling owners who rent their residences is 66.7 percent in Chaisa and 57.2 percent in Chazanga, indicating that rental businesses are active in both areas and are a major source of income for dwelling owners.

5.2.4. Erection of property boundary walls

People typically trespass without heeding property boundaries. Thus, at first glance, the community appears to have no property boundaries. However, tacit agreements on property boundaries, such as those marked by plants, exist among neighbours (Fig. 3). These property boundaries are not formally acknowledged by the law or administration. Rather, 'social' boundaries are protected by unspoken agreements based on trust within the community. Dwelling owners in Chaisa and Chazanga do have a concept of land ownership, and some owners who do not care how their neighbours see them, such as newcomers with no social ties and relatively wealthy people, even build a 'physical boundary' of a wall or fence to prevent others from trespassing (Fig. 4).

The physical environment is depicted in Fig. 5, and the activities of people outside the space and paths are presented in Fig. 6.

The installation of walls or fences is increasingly prevalent in Chaisa, and along with the high density of living spaces, outside spaces that allow people to move freely to and from are becoming limited. Because of this type of exclusive use of land by dwelling owners, paths that residents use daily are constructed on narrow, limited spaces on property boundaries. In contrast, physical boundaries, such as walls or fences between properties, are rarely seen in Chazanga, with a few exceptions of dwelling owners who separate their land from their neighbours with a hedge. Furthermore, dwelling owners in Chazanga tacitly accept neighbours passing through their property. Therefore, neighbours move around freely, even crossing property boundaries, and the paths are in all directions. Trees are planted around the plots and residents are allowed to pass across the property boundaries in the plot (Plot No.15 in Fig. 2), where the property boundaries remain from before the plots were developed as residential areas. This shows that village-like boundaries and relationships between people and the land remain to some extent in Chazanga.

5.2.5. Use of open space

Residents from both Chaisa and Chazanga take advantage of the open spaces outside their properties (Fig. 6). Women and children cook, do laundry and clean, and enjoy each other's company. Men are not often seen during the weekdays, as most are working in the markets and shopping areas in Chaisa or in the city centre, but they can be found in outdoor spaces making products to sell at the markets or growing crops, and elderly men can be seen relaxing in chairs. The living spaces of

Table 3
Resident attributes of each lot.

	Chaisa	Chazanga
Dwelling owner only	11 (21.6)	11 (31.4)
Both dwelling owner and tenants	13 (25.5)	8 (22.9)
Tenants only	21 (41.2)	12 (34.3)
No resident ^a	0 (00.0)	4 (11.4)
No data	6 (11.8)	0 (00.0)
Total	51 (100.0)	35 (100.0)

^a Kindergarten, under construction, vacant lots, etc.

Source: Field surveys conducted by the author



Fig. 3. A tree as a mark of property boundary between neighbouring houses. Note: Plants typically mark property boundaries. Source: Photograph by the author.

residents are not confined to the house but extend outside in both areas. This type of outside space, which runs across streets, is embedded in people's lives and serves as an everyday meeting place for diverse groups of people (Figs. 3 and 7). Although open spaces at path intersections serve as everyday meeting places in Chazanga, they are disappearing in Chaisa, where the physical boundaries around properties limit street formation.

5.3. Development regulation: how development practices of dwelling owners are regulated

5.3.1. Chaisa: there is no authority to regulate development

The occurrence and control of residential development in Chaisa, which is designated as an improvement area, is examined, with a particular focus on how each stakeholder's involvement, including Lusaka City Council, is incorporated.

First, the system for development control in improvement areas is summarised. Development of planned settlements is regulated by the Town and Country Planning Act No.29 of 1995 under the jurisdiction of the City Planning Department. However, no specific guidelines regarding development control in improvement areas are available in the Housing (Statutory and Improvement Areas) Act No.13 of 1994. The City Planning Department is not authorised to intervene in affairs of improvement areas because they are under the jurisdiction of the Lusaka City Council, Residential and Social Work Department. Without a strong legal foundation to support the system for development control, the staff of the Residential and Social Work Department and City Planning Department respond to development control issues that arise in

improvement areas on the ground. According to interviews conducted with the Residential and Social Work Department, even though the sale of land in lots or the construction of new dwellings in clear spaces is prohibited, the extension or reconstruction of existing dwellings is allowed upon receiving permission from the city. In Chaisa, the staff of the City Planning Department visit potential extension sites every week with the stationed staff of the Residential and Social Work Department and make judgements about the approval of permission while considering the surrounding environment. These staff sometimes serve as mediators when land- or housing-related conflicts among residents that cannot be resolved within the community.

Hereon, issues concerning development control with reference to the realities observed in the case studies are identified.

Dwelling owner A divided a small area of land that she owned into lots and sold it to purchaser B from outside Chaisa, who then used the entire space to build his dwelling (Fig. 8). The new construction resulted in the loss of well-used paths, and some of the neighbours lost access to the communal water point.

Owner A acquired the land in 1960 and was one of the first people in Chaisa to own land. She had kept the land and lived there for a long time but recently resorted to selling it in lots because she needed a significant amount of money. She was aware that the sale of land in lots was ethically wrong and would probably create problems for her neighbours and the community. Possibly because of the guilt she felt as a result of her actions, she moved away to the suburbs as soon as she received the money from the sale to purchaser B, leaving only her grandchildren in her old house.

Before selling her land in lots, A visited the neighbour with whom she shared a boundary and the leader of the Ward Development Committee to report her intention. Both the neighbour and leader were concerned about congestion resulting from the division of land into small pieces, so they attempted to convince her to reconsider her plan. However, A did not change her mind. Therefore, the neighbour discussed the issue with A in the presence of the Residential and Social Work Department staff, reaffirmed the property boundary, and installed a hedge to prevent new buyers of the land from encroaching on his property when they built their dwellings. Finally, the land was sold in lots and purchaser B built his dwelling using the entire space.

Surprisingly, neither the Residential and Social Work Department nor the City Planning Department was informed about this development regarding B's dwellings. Owner A did not inform them, because she had no interest in the development of B's dwellings. Furthermore, B, who came from outside Chaisa, was unaware of rules concerning development requirements. Finally, residents in the neighbourhood did not want to destroy their relationships with A and B and therefore did not inform Lusaka City Council officials. According to the Residential and Social Work Department, sale of land in lots and the construction of new dwellings, as observed in this case, are prohibited. Furthermore, they stated that this type of development, which blocks residents' access to the communal water point is unacceptable. Unfortunately, new dwellings had already been constructed. If the department had known



Fig. 4. Physical boundaries. Note: Some owners build physical boundaries to prevent others from entering their land without permission: hedge (left), wire fence (middle), and wall (right) Source: Photograph by the author.



Fig. 5. Physical environment. Source: Field surveys and interviews with dwelling owners.

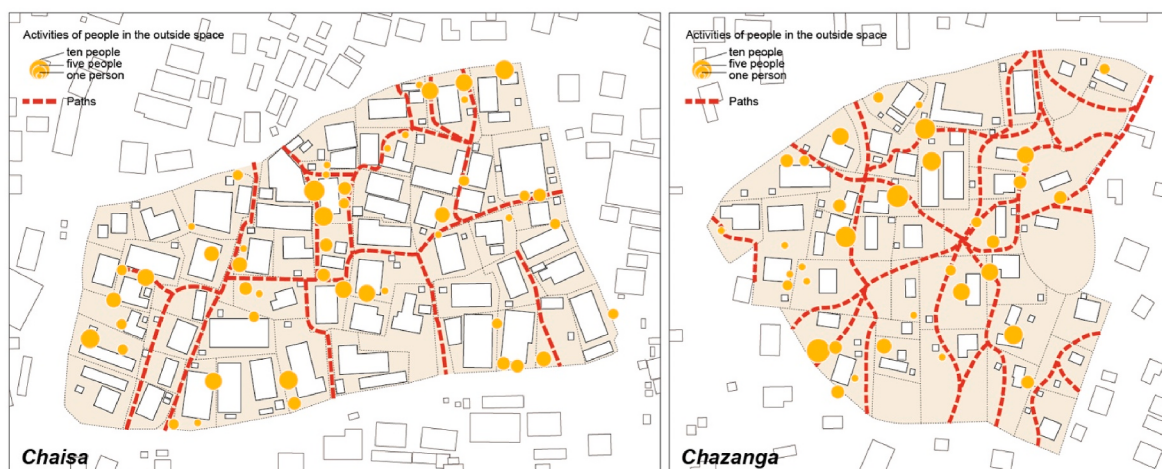


Fig. 6. Activities of people in the outside space and paths †Children and women chat while standing, relaxing, playing, doing/drying laundry, eating meals, or washing dishes during the day on weekdays. Most men work away. Source: Field surveys conducted by the author.



Fig. 7. An open space as an everyday meeting space. Source: Photograph by the author.

beforehand that this type of development was being contemplated, it would have issued a warning against the plan to the City Planning Department. However, by the time they became aware, it was too late.

As demonstrated in this case, despite the City Council's involvement, the development occurred on the ground with virtually no control. City officials cannot keep track of all development cases in Chaisa, and it is challenging to control developments without a legal foundation to support the system. Finally, how to disseminate and enforce the

fundamental rules concerning development is another important issue to be addressed.

5.3.2. Chazanga: development-related issues are managed and coordinated within the community

In Chazanga, however, no development regulations are imposed by the city because the land has not been regularised. Therefore, sale of land in lots or the construction of dwellings are fundamentally left to dwelling owners, but this does not mean that the owners can do whatever they want. This is because various authorities in the community, such as village headmen, the patriarch, the party organisation, or the Ward Development Committee, which secure land tenure and watch development, and residents, including owners, consult with these authorities immediately if they have any problems regarding development. For example, as soon as the patriarch received a complaint about plants extending beyond the property boundary, he immediately went to talk to the people concerned and mediated the situation. In another instance, the patriarch explained to a family newly acquiring land that the path that runs within their property boundary is an important path used by the people and that they should not block it. In yet another case, a dwelling owner consulted the patriarch who said 'A neighbouring owner had built a building across the property boundary without my knowing'. The patriarch gathered both owners and neighbours who knew the situation for fact-finding and discussion and, at the patriarch's discretion, it was settled that the owner who built the building would pay compensation to the owner whose property boundary was violated. Thus, while development regulation by the government is absent in Chazanga, development-related issues are managed and coordinated to some extent, even if their occurrence is not entirely avoided, within the community through mediation by various authorities.

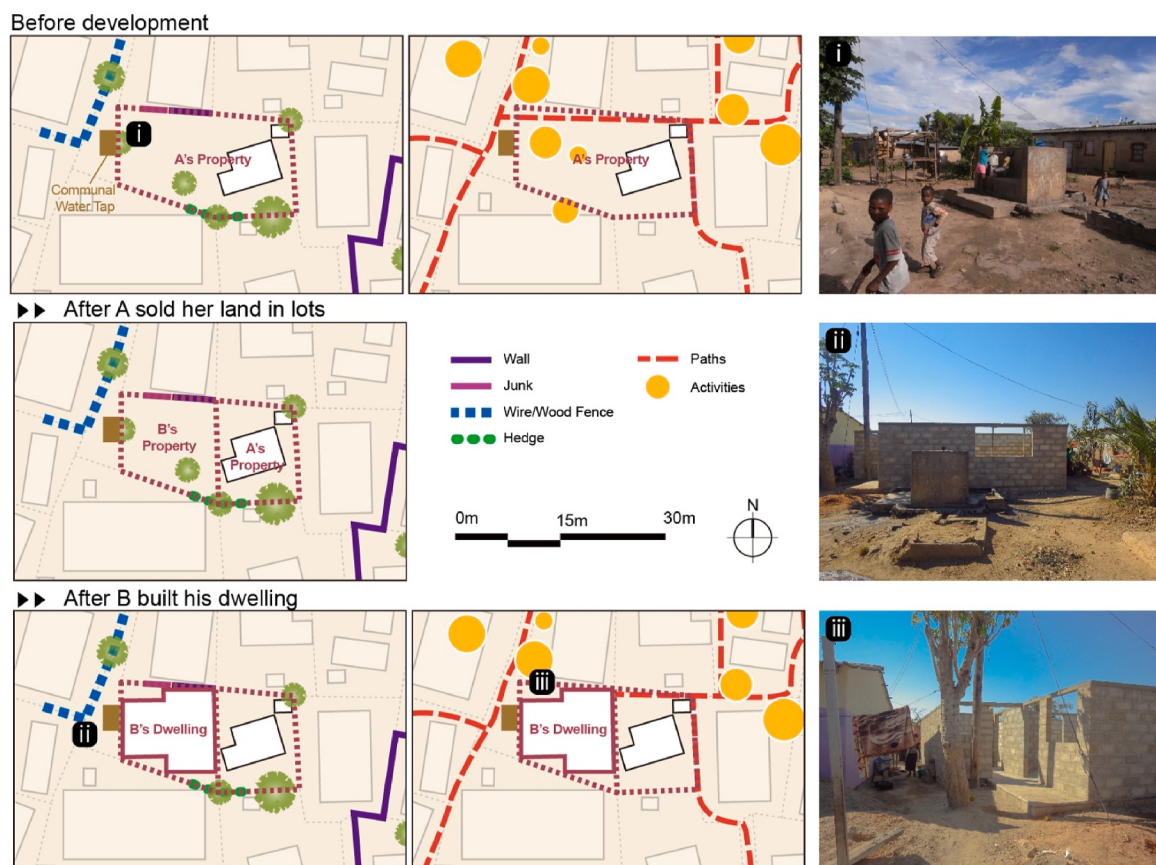


Fig. 8. Development occurring on a site adjacent to the communal water tap in Chaisa (i) Before development, the communal water tap was located in a large open space and served as a place for children and neighbours to interact with each other. (ii) Open space was lost with the construction of the housing. (iii) After the construction of the building, a well-used path was lost, and some neighbours ended up losing access to the communal water tap. Based on field surveys.

6. Discussion

According to interviews with dwelling owners in Chaisa and Chazanga, the owners typically believe in the modern concept of private ownership, meaning ‘as long as any activity is conducted within one’s purchased land, it is fine to do anything’. At the same time, however, they strongly believe in the concept of reciprocity in their neighbourhood relationships. Thus, dwelling owners typically avoid being a nuisance to others for fear of being victimised.

We have seen how both these concepts operate, especially in the erection of property boundary walls by dwelling owners. In unplanned settlements, property boundaries are often drawn using trees as landmarks and land plots are established. The erection of property boundary walls allows individual dwelling owners to protect their plots from encroachment and land-grabbing and ensure safe residence; however, for communities as a whole, especially when they are blocked by walls, this can lead to the deterioration of the residential environment, due to the densification and loss of walking space for neighbours, which is a common problem in informal settlements. The concept of private ownership can motivate the erection of a property boundary for the owner’s benefit. However, the concept of reciprocity can give rise to the idea that ‘if I block the traffic of others by building a physical boundary, they will block my way in some other place or they may not lend a helping hand when I am in trouble’. These principles work behind the scenes to foster a cooperative spirit, encourage a system of mutual surveillance, and enforcement of communal regulations. Such communal regulation is considered an important element of land use management in unplanned settlements. The nature and content of land tenure have a direct impact on how land is used (Durand-Lasserve & Selod, 2007). In unplanned settlements, profit-oriented development practices based on the concept of private ownership have been controlled by communal regulations supported by the concept of reciprocity, thereby balancing the interests of the individual and the community as a whole, creating and maintaining a certain level of orderly residential space.

In Chaisa, where the land is regularised, land tenure is secured by Lusaka City Council, which is an authority outside the community. Therefore, there is no common authority overseeing land use within Chaisa, making community-based control of land management challenging. In addition, dwelling owners in Chaisa are considered to have relatively high incomes due to land regularisation. Consequently, the financial burden of installing physical boundaries is minimal, and the sense of reciprocity is not strong. These factors contribute to a diminished sense of community and increasingly exclusive land use, as evidenced by the erection of concrete property boundary walls, eventually leading to the disappearance of meeting spaces and decreased opportunities for people to bond. Overall, these factors are likely to jeopardise the cooperative use of land and the system of mutual surveillance that previously functioned well in the community. The changes in social relations, which Durand-Lasserve and Selod (2007) describe as involving a complex set of rules governing land use and land tenure, could easily transform land tenure and land use practices (Wigle, 2010). Consequently, as demonstrated in the case study mentioned in Section 5.3.1, in the absence of development control by the city administration, the community no longer has the authority to prevent development actions by individual dwelling owners who are only concerned about their own interests. In summary, the official recognition of land rights for residents in unplanned settlements has resulted in the loss of the community’s capacity to prevent development activities that pursue individual interests, and deterioration of the living environment due to the exclusive use of land without consideration of the surrounding environment. Communal regulation of land use is thought to be weakening as people lose the opportunity to build communal ties due to the loss of space for interaction.

In contrast, in Chazanga, where land regularisation is absent, authorities within the community, such as the Ward Development Committee, party organisations, and the patriarch, secure land tenure. Land

tenure rights with different sources of norms coexist and complement each other (Nkurunziza, 2007; Bouwmeester & Hartmann, 2021; Olapade & Aluko, 2021; Payne, 2002). This seems to prevent the over-establishment of physical boundaries because community-based control of land management has a strong presence. In contrast to Chaisa, where meeting spaces are disappearing, in Chazanga, where the communal use of land is still embraced, people convene at meeting places to strengthen their bonds and sense of community. This seems more conducive to collective use of land and the acceptance of community-based control of land management. However, the cases presented in Section 5.3.2 show that although communal regulations can exercise a certain degree of control over land use, they cannot completely restrain the development practices of dwelling owners.

7. Conclusion

Supporting the position of tenure as a social relation by Durand-Lasserve and Selod (2007), our study clarified the location and nature of the authority that secures land tenure, the framework within which that binding force operates and how this framework determines how people use their land, and further how land regularisation impacts the system. Thus, we specifically clarified the mechanism by which the social relation, involving a complex set of rules, governs land use and land tenure, as argued by Durand-Lasserve and Selod (2007).

In unplanned settlements where land regularisation has not taken place, authorities within the community secure the tenure of the dwelling owners and keep an eye on their land use practices to a certain extent. Communal regulations supported by community-based social bonds function as an important element of land use management in the form of discouraging profit-oriented land use practices by owners and encouraging reciprocal land use practices. Unplanned settlements might not have been planned by the government, but they are certainly not ‘unplanned’ in the sense that local spatial order has been maintained through these communal regulations.

Land regularisation, however, means stepping into these locally rooted relationships among social relation (governance), land tenure, and land use. The breakdown of the relationship among these three factors can lead to the deterioration of the residential environment as communal regulations are undermined and unable to control profit-oriented development practices by owners who ignore the interests of the community as a whole. We point out that official intervention in land tenure should be institutionalised in a manner that fully understands and takes advantage of the relationships between land tenure and land use, as well as between land and people, which are well-balanced within the local context.

However, communal regulation is not a panacea, since it encourages owners to use their land in a reciprocal manner within the community, but cannot completely control individual profit-oriented development practice. With further development pressure or dwelling owners with higher income levels in the near future, communal regulations may cease to function. Furthermore, since communal regulations function due to owners’ concepts of private ownership and reciprocity, they are not necessarily structured to reflect the intentions of the tenants who actually live there. The question is raised as to whether the benefits apply equally to the owner and the tenant in the tradeoff in which the erection of a property boundary wall might result in higher density and road blockage but also ensure the safety and security of the occupants. Therefore, it is essential to discuss and agree between owners and tenants on how the residential environment and living space of the entire area should be developed. From this perspective, existing autogenous communal regulations do not adequately provide such a coordinating function. Therefore, while respecting these locally rooted regulations – ensuring the continuity of informality (Patel, 2013) – the role of public authorities and experts should be considered.

This study demonstrated that communal regulation plays an important role in managing land use in informal settlements, but its

positive contributions could be easily undermined by land regularisation. Thus, an important learning derived from this study is that land in informal settlements should be regularised in a way that fully understands and takes advantage of communal regulation of land use to ensure a desirable living environment. More case studies are required to further examine the potential and conditions under which the communal regulation of land use can function. Moreover, this study basically dealt with data on land use at a particular point of time in the two target sites. However, more precise insights into the impact of land tenure on land use could be obtained by analysing changes in land use over time in the same target areas.

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CRediT authorship contribution statement

Haruka Ono: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Visualization, Writing – original draft, Writing – review & editing. **Mundia Muya:** Project administration, Resources, Supervision, Validation, Writing – review & editing, Writing – original draft.

Declaration of competing interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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