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Strategies for Streamlined Urban Development: A Case Study of Land Use Succession in Upper Hill, Nairobi

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ABSTRACT

This study examines the dynamics of Urban Land Use Succession (ULUS) in Upper Hill, Nairobi, highlighting the impact of neoliberal policies and private sector-led urban redevelopment. It investigates how land tenure, public infrastructure, and planning controls shape urban landscapes, leading to patchwork land use patterns and environmental misalignments. The case of Upper Hill, transitioning from a serene residential area to a bustling commercial hub, is explored to understand the determinants of ULUS and propose strategies for streamlined urban development. Employing Neoliberal Theory and hypothesis testing, the research identifies spatial policy as the primary driver of ULUS. The study suggests innovative approaches, including land assembly and the establishment of an Urban Redevelopment Authority, to harmonize urban development. These strategies aim to bridge the gap between private and public land development, ensuring coherent urban growth. The research contributes to the understanding of urban redevelopment, particularly in Kenyan contexts, by offering a model that integrates public and private interests. This model serves as a blueprint for managing urban transformation in Nairobi and other similar urban settings, promoting sustainable and equitable urban development.



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Highlights:

- The study established that the key determinant of ULUS is spatial policy (planning decisions, land tenure and public investment in infrastructure).
- Despite having a 10% footprint in the area, global capital was found to have no influence on ULUS.
- ULUS was resulting in conflicts such as patchwork land use patterns, overflowing sewers, and mounds of garbage.
- The study developed an alternative model for ULUS to reverse the conflicts comprising strategies such as preparation of ULUS policy, establishment of Urban redevelopment Authority, land assembly and readjustment and use of Public-Private Partnerships, cooperatives, and 'chamas'.

Contribution to the field statement:

This research developed an alternative model to streamline Urban Land Use Succession (ULUS), with strategies such as the development of an integrated policy, a growth management strategy, land assembly, and establishment of an Urban Redevelopment Authority, among others which formed the research's contribution to knowledge.

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1. Introduction

The Urban Land Use Succession (ULUS) phenomenon is anchored in neoliberalism theory which “emphasizes on collaboration and partnership between capital and citizen with little mediation by formal state institutions” (McCarthy & Prudham, 2004). This is based on the belief in open, competitive, and unregulated market as the optimal mechanism for economic development (Brenner & Theodore 2002:2 as cited in (Raco, 2005) It’s also anchored on principles including commodification of everything (Polanyi 1944 & Watts 1994 as cited in (McCarthy & Prudham, 2004) “creation of private property rights defended by the state” (Peck, 2001; Jessop, 2002 as cited in (McCarthy & Prudham, 2004, p. 276) “fiscal administrative cuts, and shifts from binding to voluntary public-private co-operation” (McCarthy & Prudham, 2004). The phenomenon has engendered spatial practices focusing on financing constructing, destroying and reconstructing the built environment (Weber, 2002) The belief in an open, competitive, and unregulated market free from state interference is replicated in Upper Hill where the County Government appeared to be endorsing the free choices of private landowners and investors. This stemmed from the shift in spatial policy from residential to commercial use in 1993, based on the Structural Adjustment Programs (SAPs) of the mid-1980s. The acquisition and redevelopment of property within a seemingly laissez-faire environment has been reinforced by the security of private property rights, as assumed in theory. Although the county government retained the power to approve development permission, individual gratification of the *homoeconomicus* or the ideal self-made man (McCarthy & Prudham, 2004) through free market ideology seemed to dominate. This market was financing, destroying, and reconstructing the built environment with participation by both local and international investors. However, the resultant urban form did not reflect the planning policy for the area in terms of building heights and ground coverage, among others.

Land in Upper Hill was held under both private and public land tenure regimes, which were subject to control by state rules and regulations. The latter was largely regarding planning, development control and infrastructure provision. The assumption of free market therefore implied that land held on private tenure was easily available to the market compared with that held on public tenure. Private land thus appeared to be redeveloped faster than public land, resulting in a patchwork pattern of development and a dichotomy of contradictory states.

Fiscal cuts in public spending were responsible for delays in the provision of requisite infrastructure such as roads, sewers, water and community facilities. Private actors confined themselves to the provision of infrastructure within their property boundaries, leaving the role of provision of strategic infrastructure to a state that was already constrained by fiscal cuts. The piecemeal execution of redevelopment therefore gave rise to disharmony on minimum setbacks and kinks in road alignment. Urban Land Use Succession problem manifested in the impermeability of the commercial area, an incongruous mix of old and new buildings, incoherent streetscape and traffic congestion, among others (Nguah, K'Akumu, & Kimani, 2023). The objectives of the research therefore were to identify the determinants of ULUS; establish the influence of each determinant and respective outcomes; establish the key determinant and suggest strategies for streamlining the phenomenon.

Using hypotheses testing the research established that spatial policy was the key determinant of ULUS (Nguah, K'Akumu, & Kimani, 2023). In this regard, the research used lessons and best practices from the development of New Castle Business Park and Salford Quays (Healey et al 1992 as cited in (Healey, 1995) and Singapore’s, Golden Shoe District, (Government of Singapore, 2016)) among others to formulate streamlining strategies. These strategies have been crystallized by the author into an alternative model for ULUS which formed the research’s contribution to knowledge.

The study’s focus on the determinants of urban land use succession departs from other studies which largely concentrated on its impacts. With most studies focusing on rural and peri-urban environments, the study provides additional literature to the few written on land use succession in urban environments or brownfields by scholars like Bourne and Ng.



2. Urban Land Use Succession

The concept of succession describes the “evolution of natural communities by sequent replacement and invasion and occupancy of one social area by members of another different social group” (Bourne, 1971, p. 1). The social areas were viewed as forming concentric rings around the city core, “with movement originating from the core to the outer ring” (Bourne, 1971, p. 2). As each concentric zone extended outward it replaced another lower density zone (Bourne, 1971) (Kingoriah, 1980).

Land Use succession processes included a probabilistic process of adjustment in the structure of land and building occupancy (Bourne, 1971), a change from simple to complex (Clarke, 1966), or from a young stage to a maturity stage (Frederic and Odum as cited in (Rudel, 2009), and a selective process where a peri-urban fringe was embedded within the built-up area (Barke, 1976). In Upper Hill, the invasion and succession were from a green, serene residential neighborhood to a concrete maze of commercial tower blocks.

There were three categories of Urban Land Use Succession depending on the actors involved, namely the public sector (He & Wu, 2007), Public-Private partnerships (Harding 1992 as cited in (He & Wu, 2007) and the private sector (Turok 1992 as cited in (He & Wu, 2007). While the public sector ULUS focused on social development, the private sector was interested in profit maximization and the Public-Private Partnership blended both extremes.

2.1 Determinants of ULUS

ULUS was determined by both external and internal factors to the property, with the largest proportion of ULUS being caused by external factors (Bourne, 1971). Internal changes included a decline in suitability, depreciation (Bourne, 1971) and fluctuations in relative bid rent potentials of housing (Bang, 2009). External changes included “growth in size or structure, change in land requirements, change in economic viability, technology preferences, alterations of the physical infrastructure (Bourne, 1971), social relations and capital re-switching (Bang, 2009).

2.2 Outcomes of ULUS

ULUS had both negative and positive outcomes, where negative outcomes included rising value of the property, pressure on existing infrastructure, patchwork land use patterns, environmental misfits, and displacement of low-income people among others (Healey et al 1992 as cited in He & Wu, 2007, Bang 2009). Positive outcomes included optimization of land use, improved amenities, road widening and stimulation of the economy (Barnley & Bar 1996 as cited in (Lum, Sim, & Malone-Lee, 2004).

2.3 Governance and Urban Land Use Succession

Governance was the process of coordinating political decision-making (Gaitano & Strom 2003 as cited in (Taşan-Kok, 2010), actors, social groups, and institutions (Melo & Baiachi, 2006 as cited in (Taşan-Kok, 2010) to attain collectively defined goals (Le Gales 1998, 2001 as cited in (Taşan-Kok, 2010). While executing their mandate both state actors and private actors supported or impeded market performance (Cao, 2009). Governance was thus necessary to coordinate these institutions to enhance the positive outcomes while mitigating the negative ones.

2.3.1 Integrated Policy Framework for ULUS

Implementation of ULUS required tools such as an integrated policy framework for the coordination of actors, a strategic framework and strong urban governance institutions. These would help stem conflicts such as the occurrence of pencil-type developments (Ng, 2002) and patchwork land use patterns (Qian, 2010). In Upper Hill, an integrated policy framework for the coordination of actors and a strategic framework appeared nonexistent. The ministry responsible for Lands, Housing and Urban Development, Kenya Urban Roads Authority (KURA), Kenya Power Company (KPC) and the County Government of Nairobi, performed different mandates in the area using different policies and legislations. This disjointed manner of operation left developers on their own.

Best practices used by the study to address the gap included urban regeneration and environmental sustainability, London 2012 Olympic Games and the Lower Lea Valley (Quaglia, 2016) use of strategic vision in Singapore’s Golden Shoe District (Government of Singapore, 2016) land assembly, land readjustment, coordination and phasing of development (Lum, Sim, & Malone-Lee, 2004); (Amirtahmasebi, Orloff, & Wahba, 2016) among others.



2.3.2 Institutional Arrangements

Institutional arrangements help in transmitting information on market conditions, enforce property rights and contracts and direct incentives (North 1990a as cited in (Cao, 2009). According to D'Arcy and Keogh, 1998 as cited in (Cao, 2009), these institutional arrangements include the property market and the governance process relating to the property market.

Kenya had harp-hazard development due to inadequate urbanization policies, planning guidelines and planning for urban areas (Ministry of Lands and Physical Planning, 2017) a situation which persists to date. Upper Hill was planned by the Department of Physical Planning under the Hill Area Zoning and Road Widening Plan of 1992 and the Action Plan of 2010. Currently, the planning and development of Upper Hill is guided by the National Land Use Policy and the Physical and Land Use Planning Act of 2019 (PLUPA). This policy and legislation are supposed to be cascaded into physical development plans and updated standards plus guidelines. It is expected that the County Integrated Development Plan (CIDP) would then draw from the spatial plans when allocating county resources to avoid duplication of effort and wastage of resources. However, the nexus between these institutional arrangements appeared weak in directing incentives for property redevelopment in the area, hence the entry of the private sector to fill the vacuum.

Property-led redevelopment has used Governance regimes including Urban Development Corporations (UDC), (Healey, 1995), Land Development Corporations (LDC), Urban Renewal Authority (URA) (Ng, 2002) Land Assemblage and Redevelopment Authority (LARA), (Qian, 2010) and Urban Redevelopment Authority (URA). Urban development corporations were established by governments to develop new suburban areas and existing ones and help underperforming areas to grow. Examples included the London Thames Gateway Development Corporation, LTGDC (Quaglia, 2016). In Kenya, such corporations in the built environment included the National Housing Corporation (NHC) which focused on the housing sector. In Upper Hill, these corporations seemed absent.

2.3.3 Capacity of Urban Governance Institutions

For urban governance institutions to function they needed capacity in terms of a stable predictable subsidy regime, insulation from political manipulations, and the presence of development experts (Healey, 1995). A strategic framework was also required for the deployment of this capacity (Healey, 1995). Nairobi had the Nairobi Metropolitan Strategy, of 1973, which was poorly implemented due to inadequate financial resources. This has continued to daunt the city to date (County Government of Nairobi, 2014).

2.4 Neoliberal Theory

To explain the situation in Upper Hill, the neoliberal theory was used especially its belief in open, and unregulated markets as the optimal channel for economic development (Brener & Theodore, 2002:2 as cited in Raco, 2005, McCarthy & Prudham, 2004). This market required the commodification of everything (Polanyi, 1944 & Watts, 1994 as cited in McCarthy & Prudham, 2004). The theory furthered the idea of political and ideological antagonism toward state interference on one hand yet on the other, the state is expected to defend private property rights and commodification (Peck, 2001; Jessop, 2002 as cited in McCarthy & Prudham, 2004). It argued for fiscal and administrative cuts (Jessop, 1994 as cited in McCarthy & Prudham, 2004). It brought to the fore "notions of the *homo-economicus*, the ideal, self-made individual" (Barnes, 1987; Barnes, 1988; Barnes and Sheppard, 1992; Bowles and Gintis, 1993 as cited in McCarthy & Prudham, 2004: 276) who must collaborate and partner with capital with no interference by state institutions (McCarthy & Prudham, 2004).

As assumed in theory, Kenya adopted SAPs in the late eighty's, including fiscal cuts in public sector spending. This may have led to a delay in upgrading of infrastructure in Upper Hill.

2.5 Key Independent and Dependent Variables

From the theory, the study isolated the phenomenon of ULUS as the dependent variable, while the determinants of ULUS were seen as the independent variables. The latter included planning decisions, land tenure, public investment in physical infrastructure and global capital.



3. Methodology and Research Strategy

The study used both survey and history strategies embedded within the case study strategy, to allow examination of contemporary events which the researcher could not manipulate. The survey allowed extraction of data from interviews with property owners, and caretakers on the source of development capital, incomes, change of user, building heights, and plot ratio, among others. This data could then be analyzed to develop trends and gauge the intensity of ULUS. History strategy on the other hand allowed the use of key informant interviews to get historical data on when the ULUS started, why it happened and what had been done by authorities to reverse negative consequences. The case study strategy allowed making inferences to other areas of Nairobi and beyond. These approaches yielded both qualitative and quantitative information which the research triangulated to form a comprehensive picture of the area.

3.1 Research Design

A research design comprising study questions, its propositions, a unit of analysis, logic linking data to propositions and criteria for interpreting findings was used to draw inferences concerning causal relations among variables under review (Nachmias & Nachmias 1992 as cited in (Yin, 2003)). The study questions included, what are the determinants of ULUS; the influence and outcomes of each determinant; the key determinant of ULUS; and what strategies can streamline the ULUS phenomenon. These questions guided the development of semi-structured interview schedules which were administered to a random sample of sixty-eight plots. An unstructured interview schedule was also developed to draw insights from key informants. The plot was used as the unit of analysis.

To isolate the key determinant of ULUS, the study used four (4) null hypotheses to test the influence of spatial policy and global capital on ULUS. Spatial policy was a latent variable comprising planning decisions, land tenure and public investment in infrastructure. The null hypotheses included: Ho1: Planning decisions do not have an influence on ULUS; Ho2: Land tenure does not influence ULUS; Ho3: Public investment in infrastructure does not influence ULUS; Ho4: Global capital does not influence ULUS.

T-student test distribution using two variables assuming both equal and unequal variances was used to test hypotheses. If the value of t Stat was greater than the value of t Critical, the null hypothesis (Ho) was rejected meaning the research hypothesis (Ha) was accepted. On the other hand, if the value of t Stat was less than that of t Critical, then the Ho was accepted. and Ha rejected. These tests allowed comparison of the variables and isolation of the variable with the greatest influence on ULUS. This isolation enabled the targeted application of strategies to streamline ULUS as per the study objectives.

3.2 Research Sampling

The researcher developed a base map showing the cadaster of Upper Hill and counted the population of plots to get five hundred and sixteen (516) plots. This became the sampling frame for Upper Hill. Determination of the representative sample was done using the formula:

$$n = \frac{Z^2 pq N}{e^2 (N-1) + Z^2 pq} \text{ as recommended by (Nachmias \& Nachmias, 2000).}$$

$$\text{Therefore, } n = \frac{1.96^2 * 0.95 * (1-0.95) * 516}{0.05^2 (516-1) + 1.96^2 * 0.95 * (1-0.95)} = 67.2 = 68.$$

This sample was selected because it was not possible to administer interviews in all the 516 plots given the limitation of time and cost.

Systematic sampling was used to locate the plots to be observed. This involved using the base map to select a random start and proceeding with the selection of every k^{th} element where k was the ratio of sampling frame size N and desired sample n . The ratio was obtained by substituting N with the population of 516 plots, and n with the sample size of 68 plots to get the interval of approximately $8(k=516/68=7.59=8)$. Every eighth plot was therefore selected by starting from a random start. This method ensured that the sample was representative as it enabled drawing of the sample across the expanse of the area.



3.3 Data Collection Methods

Two types of data collection methods namely primary and secondary research methods were used. To collect secondary data, an internet search using Google Scholar and visits to libraries were undertaken. Through this method, secondary literature on determinants, processes, outcomes and history of ULUS was collated. This enabled easy isolation of the variables for the study. Unstructured interviews, semi-structured interviews, observation and photography were used to collect primary data on land tenure, sources of capital and public investment in infrastructure. Primary data was important in clarifying the influence of the variables on ULUS. This was reinforced by data from key informants including the Ministry of Lands and Physical Planning, Ministry of Housing, Kenya Power Company (KPC), Kenya Urban Roads Authority (KURA), Nairobi County government and Nairobi Water and Sanitation Company (NAWASCO) among others.

3.4 Data Analysis and Presentation Techniques

Data from the literature was grouped into themes as per the variables under study and analysis was undertaken to identify variables, and gaps and draw lessons. Relevant statistical data was presented in charts and line graphs to give clarity and show trends and intensity of the phenomenon. Primary data was also grouped into themes concerning public investment in infrastructure, Land tenure, planning decisions, global capital and analyzed according to the objectives. The results of this analysis were presented using bar charts, pie charts and tables, from which the researcher observed trends, intensity and underlying relationships. Additional data from observation and plates was grouped into themes and used where necessary to support the results of the random survey.

Hypotheses tests were applied to data sets on ground coverage, private land tenure, public land tenure, adequacy of water and sewer, adequacy of transport services. T-student test distribution using two variables assuming both equal and unequal variances was used. If the value of t Statistics was greater than the value of t Critical, the null hypothesis (H_0) was rejected meaning the research hypothesis (H_a) was accepted. On the other hand, if the value of t Statistics was less than that of t Critical, then the H_0 was accepted, and H_a rejected.

4. Results

The study found that a strategic framework for Nairobi was yet to be prepared despite the expiry of the Nairobi Metropolitan strategy of 1973. The County Government prepared the NIUPLAN in 2014. The latter should have been preceded by the County Physical and Land Use Development Plan (CPLUDP) but at that time the Physical and Land Use Planning Act of 2019 had not been enacted. To date, there is no evidence of preparation of this critical plan to anchor the activities of the county in space.

In the absence of CPLUDP, planning of the urban area has been done on a piecemeal basis with the sectoral plans for water, sanitation and roads being used as firefighting tools. Upper Hill was planned in 1992 through the Hill Area Zoning and road widening plan prepared by the Director of Physical Planning (DPP). Its preparation after the introduction of SAPs of 1986 and the attendant fiscal cuts in public spending meant that implementation in terms of road widening was delayed resulting in traffic congestion. A subsequent action plan for road widening was prepared in 2010 that formed the basis for the upgrading and construction of roads by KURA. While upgrading the roads KURA reported facing serious challenges where solutions provided to manage traffic congestion in one area often gave rise to traffic challenges in another. It was not until the links to Ngong Road and Mbagathi were constructed that the traffic gridlock was overcome. Green Park Terminus was undertaken thereafter in 2020 only to be shelved in 2023, owing to resultant traffic challenges. Redevelopment was taking place without a comprehensive plan that would have viewed the area as part of an organic city and not an enclave.

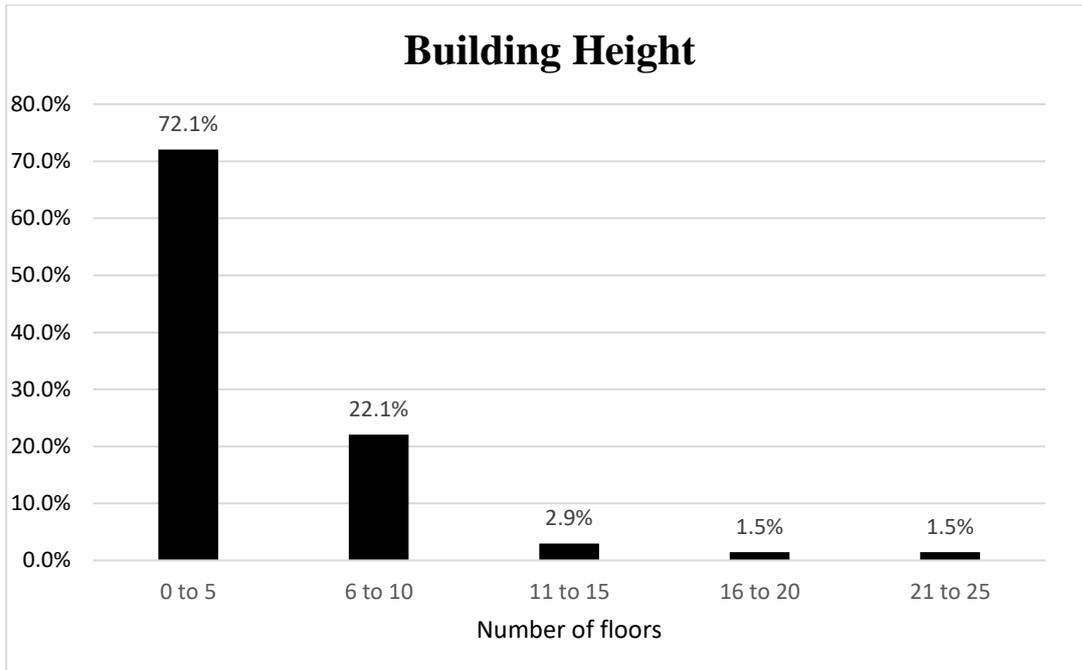


Figure 1. Building Heights. Source: Field Survey.

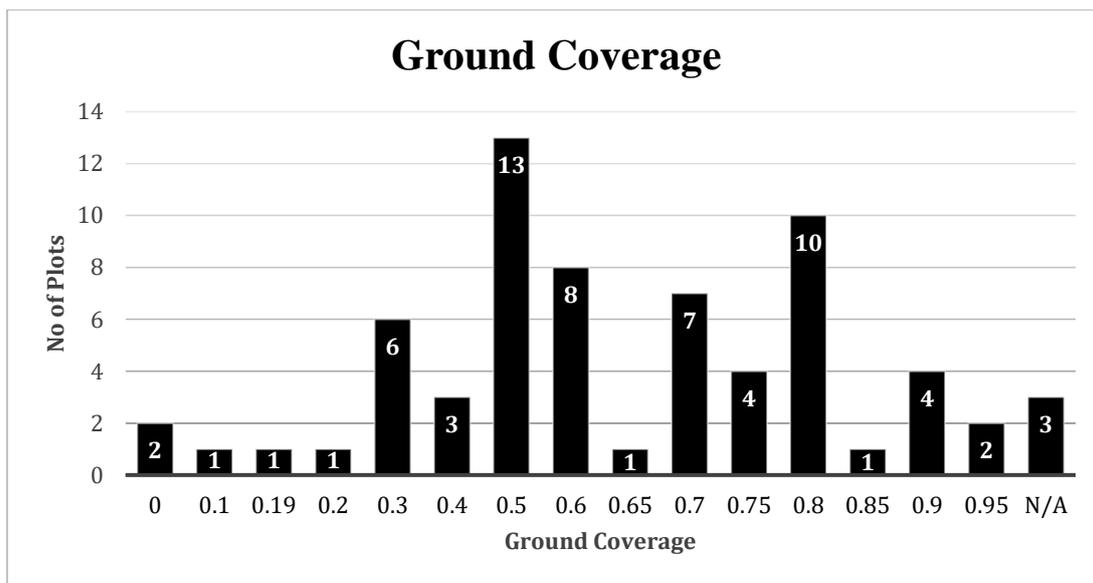


Figure 2. Ground Coverage.

The area has been governed by outdated standards of 2006 with floor levels, set at a maximum of five floors. The study found that in about 28% of sampled plots, buildings had gone beyond five levels while in about 1.5%, buildings had 21-25 floors. as shown in Figure 1. In addition, ground coverage and floor ratio had been set at 60% and 300% respectively. Thirty-two plots had development going beyond 60% ground coverage as shown in Figure 2 and some had overshoot the floor ratio to 700%. These standards were updated in the period 2021/2022 with floor levels being raised to seventy-five across the board. This regularized the existing situation, without commensurate investment in key infrastructure.

The study noted a lack of coordination in the activities of the private investors owing to the lack of a comprehensive plan and strategy for implementation. The County Government of Nairobi, the Ministry in Charge of Housing and Urban Development, KURA, and KPC among others were performing different activities in the area using different policies and legislation. Out of these, only KURA leveraged synergies with the DPP to overcome implementation challenges. The rest of the

actors were uncoordinated, resulting in an attendant waste of public resources. Business sectors and investors were also left to muddle through the redevelopment process on their own.

The study observed that land in Upper Hill was primarily owned by government Ministries, Departments, and Agencies (MDAs) with about 36% occupied by Kenyatta National Hospital and the University of Nairobi. Survey results indicated that about 66% of sampled plots were owned by private persons, 19.4% by the government, and 8% by religious institutions. Out of the 66% of plots owned privately, about 60% were redeveloped indicating that redevelopment was prominent on land owned by private individuals and entities. On the other hand, out of the 19.4% of plots owned by the government, only two plots were redeveloped with prefabricated buildings. Redevelopment under the prevailing land tenure where private properties were being redeveloped faster than public land, was giving rise to an incongruent mix of old and new buildings, a patchwork pattern of redevelopment, and an incoherent urban scape as shown in Figure 3.



Figure 3. Incongruent Mix of Old and New Buildings-Williamson, Prism.



Figure 4. Green-leafy Upper Hill North with insignificant redevelopment.



Figure 5. Upper Hill South with Skyscrapers.

The Northern side of Upper Hill retained its old colonial buildings and remained green and leafy as shown in Figure 3, However, redevelopment in Upper Hill concentrated between Valley Road and Hospital-Elgon Road where there was ease of access to transport services as shown in Figure 5. This was also the area where most of the conflicts were observed including loose telephone wires and cables, poor street alignment, garbage dumps, and overflowing sewers.



Figure 6. Overflowing Sewer along Mbagathi Link.

In Upper Hill, policymakers have also emphasized economic regeneration and city competitiveness neglecting the provision of community facilities and upgrading of utilities like sewer. This has resulted in poor environmental conditions as shown in Figure 6.



Table 1: Results of t-Test: Two-Sample Assuming Unequal Variances.

Variable	t Statistic	t Critical
Ground coverage	9.039209981	1.984467455
Private land tenure	2.991975707	1.977825758
Public Land Tenure	-1.110463342	1.977961264
Adequacy of water and sewer,	5.200453886	1.978098842
Adequacy of transport services	4.16515391	1.977825758
Global Capital	-3.88851	1.983972

The hypotheses test established that the key determinant of ULUS is spatial policy (planning decisions, land tenure, and public investment in infrastructure). Hypothesis tests on ground coverage, private land tenure, adequacy of water and sewer, and adequacy of transport services indicated that the value of t Statistic was greater than the value of t Critical as shown in Table 1. For this reason, the null hypotheses (Hos) were rejected, and the research hypotheses (Has) indicating that ground coverage, private land tenure, adequacy of water and sewer, and adequacy of transport services influenced ULUS, were accepted. In the case of public land tenure, however, the value of t Statistic was less than the value of t Critical. The null hypothesis (Ho) that public Land tenure does not influence ULUS was, therefore, accepted meaning the research hypothesis (Ha) was rejected.

Despite having a 10% footprint in the area, global capital was found to not influence ULUS. The hypothesis test indicated that the value of t Statistic was less than that of t Critical, and therefore null hypothesis Ho: Global capital does not have an influence on ULUS was accepted. This implied that the root cause of the land use conflicts in Upper Hill emanated from spatial policy.

5. Discussions

The study has established that the constituent variables of spatial policy influenced ULUS, hence making it the key determinant of ULUS. This was exhibited in two ways, first by MDAs performing different mandates in the area operating in silos and second by the weak capacity of the county government in plan preparation and implementation. The findings aligned with the literature which indicated that there existed weaknesses in the capacity for the development and implementation of policy among the departments charged with the built environment (Ministry of Lands and Physical Planning, 2017). This has left officers charged with development control with weak policy tools to undertake their tasks, often resorting to negotiations with property developers. These negotiations included allowing for higher densities which resulted in undue pressure on roads and sewers. This finding helps isolate the root cause of the ULUS phenomenon, hence the identification of targeted strategies to plug capacity gaps and improve the coordination of MDAs.

The lack of a comprehensive redevelopment plan and implementation strategy and reliance on piecemeal projects implied that the activities of private developers were uncoordinated. These projects were strewn throughout the plan area bringing about a patchwork pattern of development. This agreed with literature where the lack of a comprehensive redevelopment plan for property-led urban redevelopment driven by private individuals in Hong Kong resulted in uncoordinated, sporadic, and piecemeal or pencil-type developments (Ng, 2002). This finding provides a platform to require the county government to prepare a comprehensive redevelopment plan and implementation strategy to reverse the patchwork pattern of development.

The application of neoliberal policies on existing land tenure where both public and private land existed, has brought about the African socialist state and the neoliberal state. This was manifested in the concentration of redevelopment on private land while public land remained underdeveloped. This further enhanced the patchwork pattern of development giving rise to an incongruent mix of old and new buildings and incoherent uneven urban scape. This agreed with critiques of neoliberal policies



indicating that they often result in negative consequences including uneven spatial development and a poorly regulated landscape (Brenner et al 2010 as cited in (Peck, 2013). This helped to build a case for the development of strategies to bridge the two contradictory states to engender an even pattern of development.

The study found that redevelopment was concentrated in areas with ample transport services implying that public investment in infrastructure had a positive influence on ULUS. This further enhanced the patchwork pattern of development in Upper Hill. The transport services were supported by roads provided by the African Socialism State, thus conflicting with the neoliberal belief that collaboration and partnership between capital and citizens must take place without state interference (McCarthy & Prudham, 2004). It also counters the neoliberal belief in fiscal and administrative cuts through the privatization of public services (Harvey, 2003 cited in (McCarthy & Prudham, 2004). Indeed, these beliefs are responsible for the infrastructural gaps and attendant traffic snarl-ups, overflowing sewers, and mounds of garbage. It however agrees with critiques who see neoliberalism, as analogous to a parasite, occupying and drawing energy from the African Socialism state (Peck, 2013). It further agrees with critiques that neoliberalism results in negative consequences including uneven spatial development, a landscape of policy failures, and stuttering forms of misregulation (Brenner et al 2010 as cited in (Peck, 2013). This finding points to the need for a policy shift, towards state provision of strategic infrastructure, thereby providing the impetus for redevelopment by private investors.

The study established that global capital had no influence on ULUS, and this agreed with the findings that its use was insignificant compared to local capital. This was surprising because, under neoliberalism, it was expected there would be a free flow of global capital for redevelopment (Brenner & Theodore 2002:2 as cited in (Raco, 2005) (McCarthy & Prudham, 2004). This implies that this flow of capital is being obstructed by state controls on land tenure and land use. This finding shifts the focus from global capital to the significant role played by local capital in redevelopment, and the need for strategies and incentives to mobilize and aggregate it. Provision of incentives such as tax benefits on building materials have already been extended to both local and foreign investors in Konza Technopolis and Tatu City and there is no reason ordinary Kenyans cannot partake of the same incentives. In summary, the discussion points to the need for an alternative model of redevelopment addressing all the key findings to reverse negative outcomes as provided in Figure 7. This is expected to make Upper Hill a financial and business hub and a beacon for other Kenyan towns suffering similar challenges.

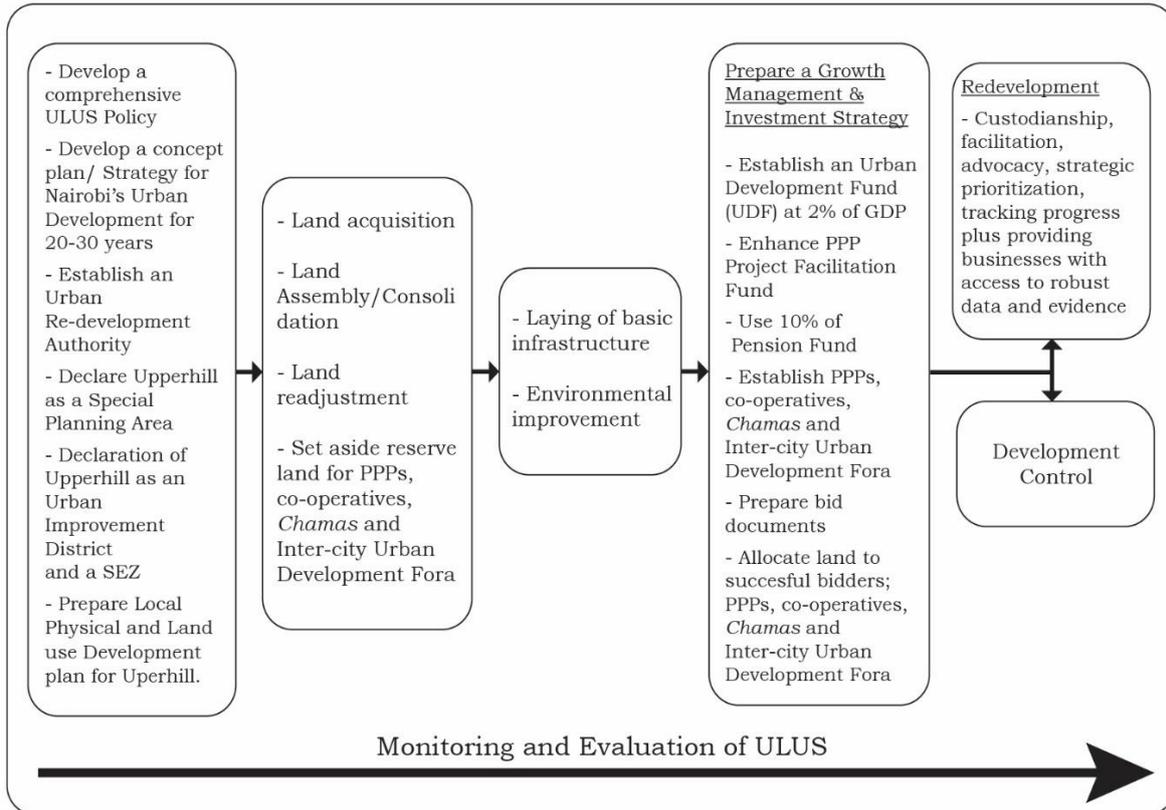


Figure 7. Alternative Model for ULUS.

6. Conclusions

Upper Hill was planned in 1992 when Hill Area Zoning and road widening plans were prepared changing its user from residential to commercial. This coincided with the SAPs of 1986 and the attendant fiscal cuts in public spending which delayed road widening. The absence of a comprehensive plan and strategy for redevelopment into a commercial and failure to update standards resulted in increased population density and pressure on existing infrastructure. A comprehensive plan to guide redevelopment is therefore critical and is recommended.

The redevelopment was concentrated where transport services were available, specifically along, the hospital, Ngong, and Valley roads, resulting in a patchwork pattern of development. The development of roads and provision of transport services in deficit areas like Upper Hill North will make them attractive for redevelopment. Since this investment may require, heavy capital outlay, financing must shift back to the state. In addition, a strategy for the phasing of development is recommended to ensure full development of one phase before moving to the next.

The application of free market, and neoliberal policies on the prevailing land tenure system has brought about the African socialist state and the neoliberal state resulting from the unequal pace of development between private land and public land. The attendant patchwork land use pattern and incongruent mix of old and new buildings imply that bridging the two states will be necessary. This can be achieved by developing a multipronged growth management and investment strategy including land assembly, land readjustment, and release of public land for comprehensive development through Public Private Partnerships, local landowners, cooperatives, and *chamas*.

Despite its presence in Upper Hill, global capital was found to not influence ULUS while spatial policy was found to be the key determinant of ULUS. A strategy to aggregate and mobilize local capital through the formation of cooperatives, interurban investment fora, and *chamas* is therefore recommended.

Though preparation and implementation of ULUS policy was the mandate of the national government and county government, respectively, coordination of actors was found wanting. Reassigning this role



to an Urban Redevelopment Authority with exceptional powers of intervention and decision-making will thus be critical. This body will coordinate planning, land acquisition, land assembly, and readjustment before inviting Public Private Partnerships, cooperatives, Intercity Urban Development Fora, and 'chamas' to undertake the redevelopment. It will also prioritize projects, and provide project facilitation and robust data to investors.

Development of a concept plan for Nairobi to guide long-term land use and transportation development for the next 30-50 years is also recommended to not only provide the vision and direction of growth but also anchor Upper Hill within the context of the whole county.

All the strategies have been used to develop a model for the redevelopment of Upper Hill which can be replicated in other areas around Nairobi's CBD such as Kilimani, and Kileleshwa which are also experiencing pressure from the CBD. The model can also be applied to urban areas such as Nakuru and Mombasa which have distinct urban cores and zones of transition, and which are facing similar challenges as Upper Hill. This model can reimagine the zones of transition by unlocking their socio-economic potential for the benefit of businesses, urban dwellers, and the city at large. The model forms the study's contribution to academia.

Further studies on capacity gaps in the County Government of Nairobi and the role of cooperatives in aggregating local capital for redevelopment are recommended to support the implementation of the strategies to streamline ULUS. It is expected that understanding the capacity gaps of the city would engender plugging those gaps by equipping officers with best practices in policy analysis and implementation. In addition, studies on the role of cooperatives would provide an understanding of their magnitude and aggregation capabilities for urban redevelopment to secure a stake for the Kenyan people.

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Conflicts of Interest

The author(s) declare(s) no conflicts of interest.

Data availability statement

Due to the nature of this research, participants of this study did not agree for their data to be shared publicly, so supporting data is not available.

Institutional Review Board Statement

Not applicable.

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References

- Amirtahmasebi, R., Orloff, M., Wahba, S., & Altman, A. (2016, June). Singapore: Urban redevelopment of the Singapore City Waterfront. In J. Puentes-Rivera & F. Giannotti (Eds.), *Regenerating urban land: A practitioner's guide to leveraging private investment* (pp. 345–384). World Bank Publications. https://doi.org/10.1596/978-1-4648-0473-1_ch10
- Bang, S. (2009). Property-Based Redevelopment and Regeneration: The case of Seoul South Korea. *Geoforum*, 40(5), 906-917. <https://doi.org/10.1016/j.geoforum.2009.06.009>
- Barke, M. (1976). Land use Succession: A factor in Fringe Belt Modification. *Institute of British Geographers*, 8(4), 303-306.
- Bourne, L. S. (1971). Physical Adjustment Processes and Land use Succession: A Conceptual Review and Central City Example. *Economic Geography*, 47(1), 1-15. <https://doi.org/10.2307/143220>
- Albert Cao, J. (2009). Developmental state, property-led growth and property investment risks in China. *Journal of Property Investment & Finance*, 27(2), 162–179. <https://doi.org/10.1108/14635780910937854>
- Clarke, W. C. (1966). From Extensive to Intensive Shifting Cultivation: A Succession from New Guinea. *Ethnology*, 5(4), 347-359. <https://doi.org/10.2307/3772716>
- County Government of Nairobi. (2014). *The Project on Integrated Urban Development Master Plan of the City of Nairobi in the Republic of Kenya*. Nairobi: Nippon Koei Co Ltd. JICA.
- Government of Singapore. (2016). *Urban Redevelopment Authority*. Retrieved August 20th, 2023, from Singapore Infopedia: https://eresources.nlb.gov.sg/infopedia/articles/SIP_1569_2009-09-18.html
- He, S., & Wu, F. (2007). Socio-spatial Impacts of Property-led Redevelopment on Chinas Urban Neighbourhoods. *Cities*, 24(3), 194-208. <https://doi.org/10.1016/j.cities.2006.12.001>
- Healey, P. (1995, August). The Institutional Challenge for Sustainable Urban Regeneration. *Cities*, 12(4), 221-230. [https://doi.org/10.1016/0264-2751\(95\)00043-L](https://doi.org/10.1016/0264-2751(95)00043-L)
- Kingoriah, G. K. (1980). Policy impacts on urban land use patterns in Nairobi Kenya: 1899-1979. (Doctoral dissertation). Indiana State University, Terre Haute, Indiana.
- Lum, S., Sim, L., & Malone-Lee, L. (2004, January). Market-led policy measures for urban redevelopment in Singapore. *Land Use Policy*, 21(1), 1-19. [https://doi.org/10.1016/S0264-8377\(03\)00046-2](https://doi.org/10.1016/S0264-8377(03)00046-2)
- McCarthy, J., & Prudham, S. (2004, May). Neoliberal nature and the nature of Neoliberalism. *Geoforum*, 35(3), 275-283. <https://doi.org/10.1016/j.geoforum.2003.07.003>
- Ministry of Lands and Physical Planning. (2017). *Sessional Paper No. 1 of 2017 on National Land Use Policy*. Physical Planning. Nairobi: Department of Physical Planning. Retrieved August 15, 2021, from <https://repository.kippra.or.ke/handle/123456789/489#:~:text=Abstract%2FOverview,national%2C%20county%20and%20community%20levels>.
- Nachmias, C. F., & Nachmias, D. (2000). *Research Methods in the Social Sciences* (6th Edition ed.). New York: Worth Publishers.



- Ng, M. K. (2002). Property-led urban renewal in Hong Kong: Any Place for the Community? *Sustainable Development*, 10(3), 140-146. <https://doi.org/10.1002/sd.189>
- Nguah, E. M., K'Akumu, O. A., & Kimani, M. (2023). Determinants and outcomes of urban land use and use succession - case study of Upper Hill, Nairobi. *Architecture and Planning Journal (APJ)*, 29(1, Article 2). <https://doi.org/10.54729/2789-8547.1193>
- Peck, J. (2013). Explaining (with) Neoliberalism, Territory, politics & Governance. *Territory Politics Governance*, 1(2), 132-157. <https://doi.org/10.1080/21622671.2013.785365>
- Qian, Z. (2010, February). Without zoning: Urban development and land use controls in Houston. *Cities*, 27(1), 31-41. <https://doi.org/10.1016/j.cities.2009.11.006>
- Quaglia, S. (2016, October). Mega events, urban regeneration and environmental sustainability: London 2012 Olympic Games and the Lower Lea Valley. Retrieved from https://www.researchgate.net/publication/325441993_Mega_events_Urban_Regeneration_and_Environmental_Sustainability_London_2012_Olympic_Games_and_the_Lower_Lea_Valley
- Raco, M. (2005). Sustainable development, rolled-out neoliberalism and sustainable communities. *Antipode*, 37(2), 324-347. <https://doi.org/10.1111/j.0066-4812.2005.00495.x>
- Rudel, T. K. (2009). Succession Theory: Reassessing a Neglected Meta-Narrative about Environment and Development. *Human Ecology Review*. Retrieved from <https://www.jstor.org/stable/24707739>
- Taşan-Kok, T. (2010, April). Entrepreneurial Governance Challenges of Large-Acale Property-Led Urban Regeneration Projects. *Royal Dutch Geographical Society*, 101(2), 126-149. <https://doi.org/10.1111/j.1467-9663.2009.00521.x>
- Weber, R. (2002). Extracting Value from the City: Neoliberalism & Urban Redevelopment. *Antipode*, 34(3), 519-540. <https://doi.org/10.1111/1467-8330.00253>
- Yin, R. K. (2003). Case study research: Design and methods (Vol. 5). Thousand Oaks, CA: Sage Publications.



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