

Geography of Housing Markets in Spatio-temporal Perspective: The Case of Residential Land in Hiwassee City, Ethiopia

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1. Introduction

The present study seeks to examine the geography of housing market dynamics in temporal and spatial dimensions in the rapidly urbanizing city-Hawassa-Ethiopia. Urban Rent Theory and Classical Models of Urban Land Use were employed to understand the epistemological and ontological milieu. The study employed a mixed research approach. It was revealed that residential land values in the formal market remained skyrocketing to the extent of inducing income-based spatial exclusions over the years, including the peri-urban, as these locations became home to a mosaic of visible and invisible actors, including the government.

2. Objectives

Accordingly, the present study seeks to understand how housing market attributes (supply and prices) vary spatially with distance from the city center in a constraining land market policy? Does the study area exhibit significant variation in the value of land/housing in formal and informal settlements? How does urban spatial planning activities of the city and housing market nexus be explained? and what kind of housing policy implications could be derived from this nexus?

3. Research Methods

The study employed a mixed research approach. Tender-based and GPS-based housing/land market data were employed for understanding spatio-temporal patterns of residential markets in the sampled city-Hawassa. Besides, the study employed semi-structured interviews (n=305), key-informant interviews (n=12) focus group discussion (2 FGDs), and document review. Global Positioning System (GPS) based housing market data was collected partly aiming to capture the nature of formal and informal markets in the study area, and for validation purpose. Accordingly, 120 land/housing market plots were surveyed randomly, mainly guided by brokers of the city. In fact, these random points were sampled by considering the trends of tender-based residential plots market in the 17 rounds between 2013 and 2023. Policy documents were analyzed using qualitative interpretation and descriptive statistics, whereas, longitudinal tender-based and GPS-based housing market data were pre-processed and visualized to understand the spatial dimensions of the market in the study area. For doing so, average winning prices of tender-based longitudinal data were disaggregated, and thus; kebeles holding these markets were identified with unique identification as shown in Figure 1.

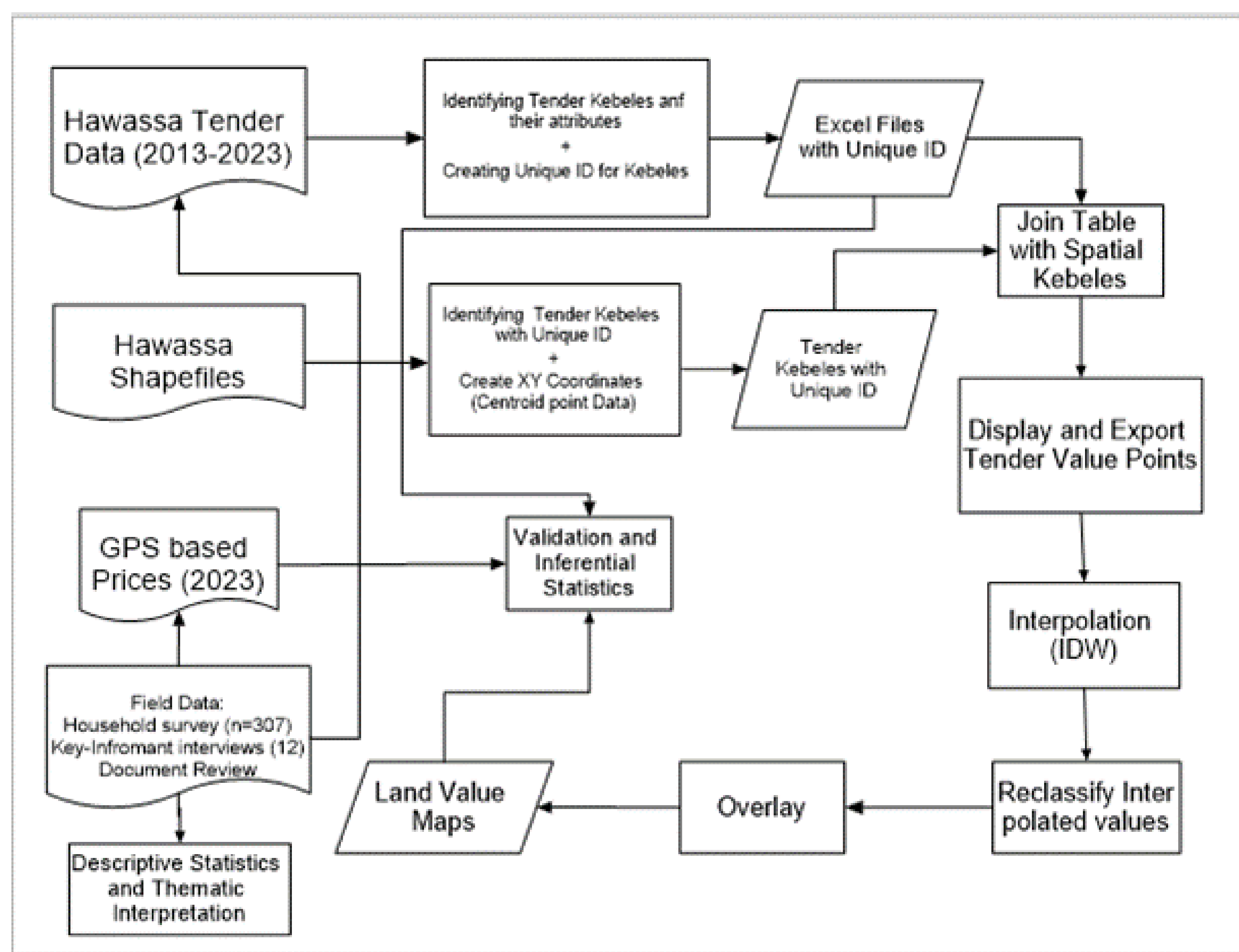


Figure 1. Research Process Source: Authors (2023)

4. Results

4.1. Housing Supply Options in the City

Table 1. Estimated housing stock in Hawassa city

Housing Category	Housing Options	Number of Housing units	Total housing units
Formal housing	Built by the government	4,525	45,000
	Condominiums	3,538	
	Resettlement houses/public rental	977	
	Kebele rental houses	2008	
Private development	Individuals	33,246	40,000
	Cooperatives	626	
	Real-estate	80	
Informal housing	Informal housing units		40,000
Total housing stock			85,000

Source: Hawassa City Structural Plan Policy Document (2020)

4.2. Patterns of housing Prices

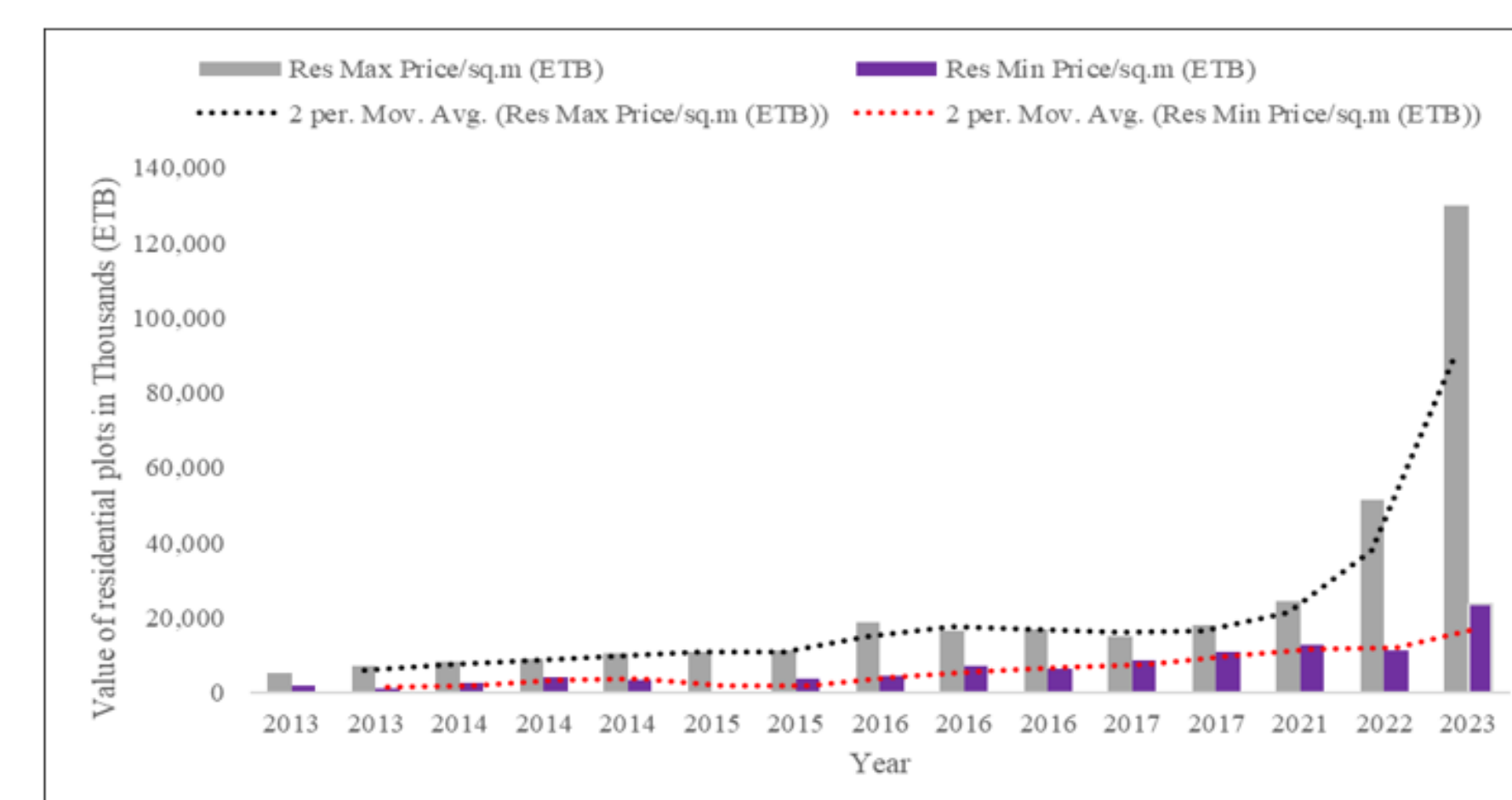


Figure 2 Trends of residential land value based on tender data (2013-2023)
Source: Hawassa City Administration Tender Department (2023)

4.3. Peri-urban Transition in the city

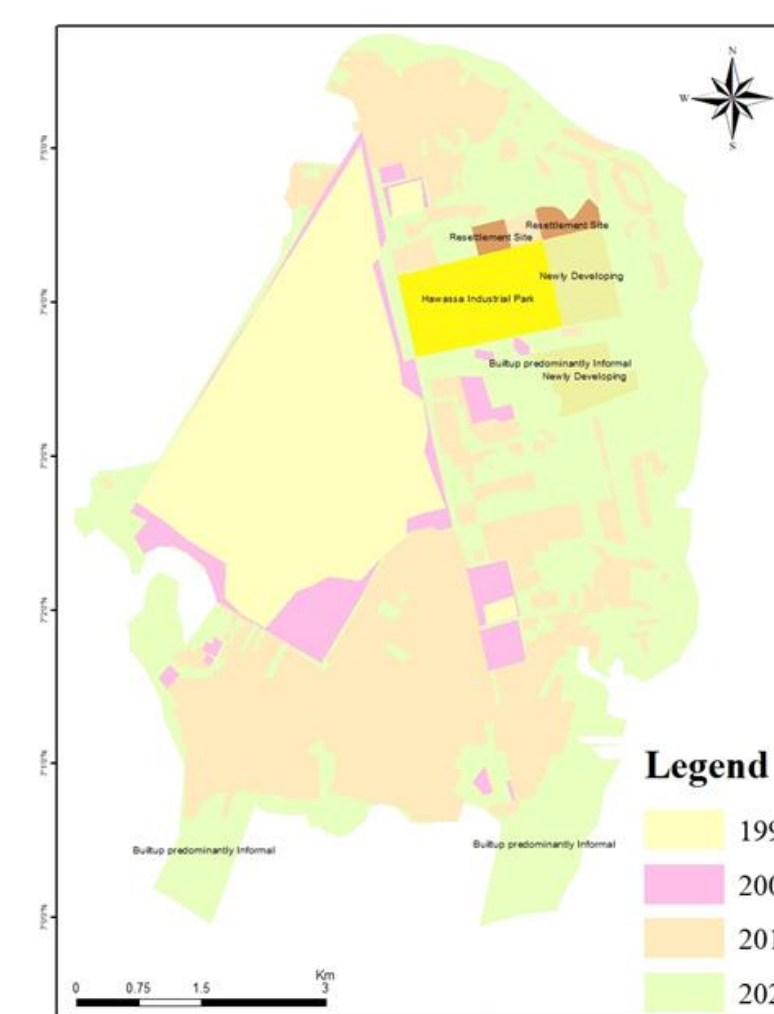


Figure 4 Peri-urban transition and emerging land uses in Hawassa (1996-2023)
Source: VHR satellite Images (1996, 2003, 2014, 2023)

Table 2. Growth of Hawassa City over the years

Year	Area in Km ²	Percentage	Cumulative growth (Km ²)	Difference (Km ²)	Rate of Change (percent)
1996	10.57	17.06	10.57		
2003	13.17	21.25	23.74	2.6	22
2014	15.68	25.31	39.42	2.51	21
2023	22.54	36	61.96	6.86	57

Source: VHR satellite Images (1996, 2003, 2014, 2023)

4.4. Spatial configurations of housing Markets

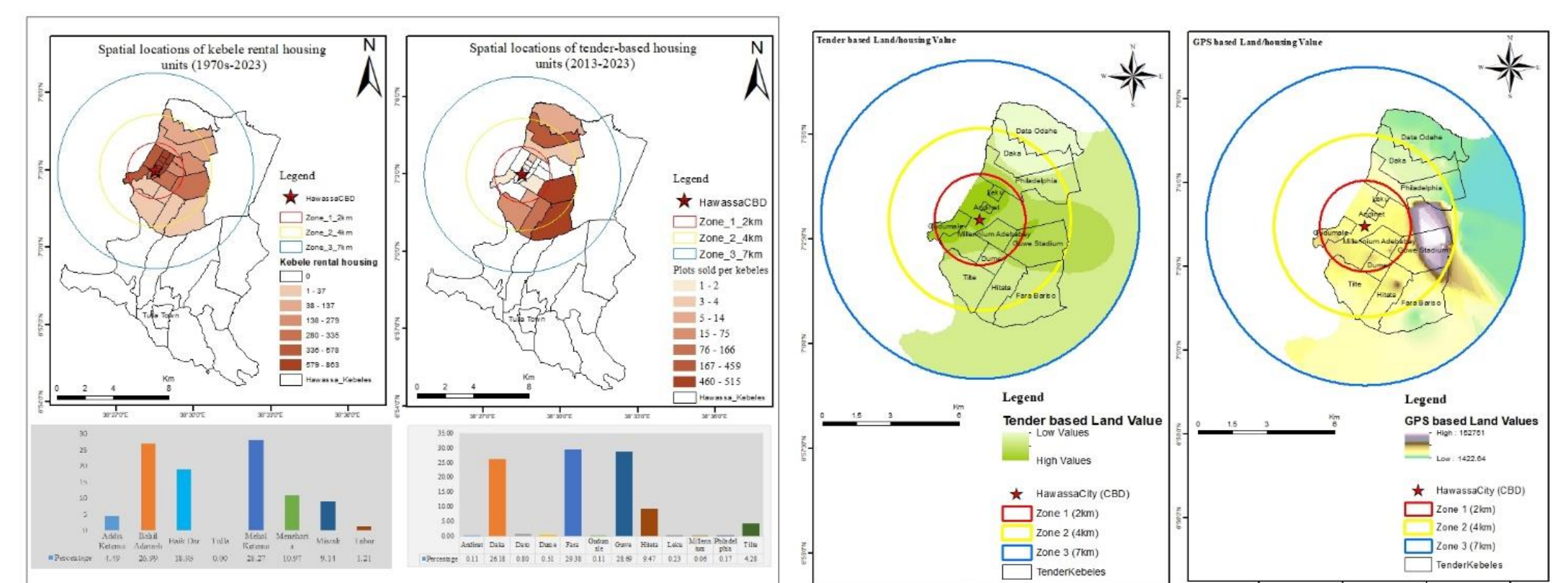


Figure 3 Spatial locations of housing markets

Figure 4. Value of residential plots in spatial dimension

Conclusions

- The city witnessed rapid peri-urban transition given its socio-economic and industrial transformation;
- Neoliberalism necessitates the intrusion of visible and invisible actors to the land and housing markets over the years
- The government's housing policy shift in the post-19190s period largely impacted the land and housing markets in the city
- The study reveals social and spatial exclusions of the low-income residents given the ongoing gentrification of the peri-urban as well as the growing demand from the government over the peri-urban too.
- The findings support the major propositions of Urban rent Theory Nevertheless; the GPS-based spatial data employed in the present study has limitations of covering as many spatial locations as possible, and this limitation could be addressed by other similar studies.

Bibliography

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