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Urban land policy and its administration in Addis Ababa: a perception study

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The Ethiopian government has established a land administration system to implement land policy principles outlined in the Constitution, the Urban Land Development and Management Policy and Strategy (ULDMPS), and the Urban Land Lease Holding Proclamation No. 721/2011. This study assesses the implementation of urban land policy in Addis Ababa through the lens of global land administration principles, focusing on the perceptions of land administration experts. A mixed-methods approach was used, gathering primary data from 318 experts at federal, city, and sub-city levels working in land development and management offices across Addis Ababa. This was supplemented by 30 in-depth interviews. Preliminary interviews identified six key themes affecting policy implementation: alignment between policy goals and administrative practices, distribution of policy benefits, operational performance of the Land Development and Management (LDM) Office, urban land supply for affordable housing and redevelopment, persistence of informal properties, and protection of public land from illegal occupation. Reliability analysis showed moderate to good consistency among expert responses, with intra-class correlation coefficients ranging from 0.562 to 0.857. The findings reveal significant gaps between policy intentions and implementation outcomes, emphasizing the need for improvement in Ethiopia's urban land administration system. The study highlights areas where current practices fall short and offers evidence-based insights to support informed decision-making by city officials. The paper recommends institutional reforms, improved transparency, increased citizen participation, and technology-driven solutions to strengthen land administration processes and rebuild public trust in Addis Ababa's land governance system.

KEYWORDS

constitution, proclamation, urban land policy, urban land administration, land administration systems, land management

1 Introduction

Land is a multifaceted resource central to economic, social, political, and cultural activities underpinning housing, infrastructure, and agriculture (Agunbiade, 2012; Burns, 2007; United Nations, 1992; Williamson et al., 2010; World Bank, 1987). Recognized as one of the four fundamental factors of production—alongside labor, capital, and organization—land is indispensable, as no productive or non-productive activity can occur without it (Ratcliff, 1949). Access to land is critical for human survival, providing shelter and livelihoods, with

Simpson (1976, cited in, Subedi, 2016) emphasizing its role in human existence and the importance of its distribution and use. Consequently, land policies are essential to ensure land availability and equitable access in society.

Urban land policy and governance remain critical issues in many developing countries, particularly in rapidly urbanizing regions such as East Africa. As cities expand, the need for efficient land administration, equitable land distribution, and sustainable urban development has intensified. Scholars argue that weak institutional frameworks, corruption, and informal land transactions are key challenges undermining effective land governance in many developing nations (Durand-Lasserve, 2004). Comparative studies in Kenya, Uganda, and Rwanda reveal that while policy frameworks have been established to regulate urban land, gaps in implementation, limited public participation, and inadequate enforcement mechanisms continue to hinder progress (Adam, 2014; Nkurunziza, 2007). These challenges closely mirror the policy-practice gaps observed in Addis Ababa, highlighting the need for integrated, technology-driven, and transparent land administration systems.

Land policy serves as a foundational framework for land management and administration, encompassing socio-economic and legal principles that govern land allocation and its benefits (UNECE, 1996). According to Törhönen (2004), it outlines strategies for the social, economic, and environmental utilization of land and natural resources, reflecting governmental intentions on ownership, use, value, and development. While not legally binding, it is operationalized through legislation and regulations (EU Force TASK, 2004). Deininger (2003) identifies three key objectives of land policy: promoting economic efficiency, ensuring social equity, and fostering environmental sustainability. Additionally, urban land policies should aim for efficient, equitable, and environmentally sustainable land markets, though priorities may vary by local context (Deininger, 2003).

In Kenya, land governance reforms have been guided by the National Land Policy of 2009, which aimed to address historical land injustices, formalize land tenure, and enhance land-use planning (Kenya, 2009). However, studies indicate that land speculation, elite capture, and weak enforcement continue to undermine policy objectives (Boone, 2014). Similarly, in Uganda, the Land Act of 1998 introduced mechanisms for customary tenure recognition and formal land registration, yet urban areas still struggle with high levels of informality and land disputes due to unclear tenure documentation and competing land claims (Nkurunziza, 2007). Meanwhile, Rwanda has been recognized for its successful land tenure regularization program, which, through systematic land registration and digital land information systems, has reduced disputes and strengthened property rights (Ali et al., 2014). This demonstrates that technology-driven land governance approaches can enhance transparency, efficiency, and tenure security, offering lessons for Ethiopia's urban land administration system.

Land administration, as defined by Samsudin (2014), is the process and procedure, of the management of the rights of land according to the ownership, value, use, and development activities on each land parcel, and a system of working towards effective and efficient land management. It provides the infrastructure for implementing land policies and strategies that support sustainable development (Enemark, 2005), and is central to land management activities, encompassing land policies, land information systems, and institutional arrangement (Enemark et al., 2014). An effective land administration system promotes tenure security, wealth creation, regulated land use, and sustainable development (Kalantari, 2008). Additionally, it supports good governance, facilitates business activities, and enhancing the quality of life (Steudler, 2004). As a result, each land administration organization should conduct a regular assessment of its task to ensure whether it achieved its national objectives (Ali, 2013).

These experiences suggest that comprehensive land governance reforms—including institutional strengthening, digital land management systems, and participatory planning approaches—are essential for ensuring efficient and equitable urban land policies in Addis Ababa. Lessons from neighboring countries indicate that political will, technological innovation, and community engagement are critical factors in bridging policy-practice gaps and restoring public trust in land administration. The case of Rwanda, in particular, highlights the potential benefits of systematic land registration and digital databases in mitigating informality, corruption, and administrative inefficiencies. Integrating these insights into Ethiopia's urban land administration strategies could enhance policy effectiveness, strengthen tenure security, and foster inclusive urban development.

In Ethiopia, particularly in the capital city of Addis Ababa, urban land policy, and the administration and regulation of urban land have become significant topics of discussion and analysis. The country lacks a clear blueprint National land policy, but key principles are outlined in the 1995 Constitution and various land proclamations. Urban land is managed at the federal level by the Ministry of Urban Development and Infrastructure (MUDI), and at the local level by regional and city land development and management (LDM) offices. Urban land administration is guided by the Constitution, the Urban Land Development and Management Policy and Strategy (ULDMPS), and the Urban Land Lease Holding Proclamation No. 721/2011 (Figure 1).

Many countries shape their land policies through diverse land administration systems that reflect their economic, social, cultural, and political contexts. Similarly, Ethiopia has established a land administration system to implement the principles outlined in the Constitution, the ULDMPS, and the Urban Land Lease Holding Proclamation No. 721/2011. As the supreme law, the Constitution sets the foundation for land policy, recognizing land as a common resource with ownership vested in the state, while granting individuals, communities and nations rights to use and benefit from land under established laws and regulations. The Ministry of Urban Development and Infrastructure (MUDI), part of the Federal Government, oversees urban land policy implementation, ensuring alignment with constitutional provisions. It monitors, evaluates, and amends the ULDMPS as needed, enacts laws, initiates programs, and supports capacity building for urban land development (MOUDH, 2016). MUDI also ensures land policies align with broader national goals, such as poverty reduction, economic growth, and environmental sustainability.

The ULDMPS was introduced in 2013 and refined in 2016 to accelerate economic growth, eradicate structural poverty, and transform the country into a middle-income nation (MOUDH, 2016). Regional states, city administrations, and municipalities implement the urban land policy at the sub-national level, with regional governments enacting laws, initiating programs, and providing capacity-building support (*Ibid*). Addis Ababa and Dire Dawa city administrations prioritize policy implementation in their urban centers, aligning laws and programs with local contexts and supporting land development units (MOUDH, 2016). Furthermore, regional city administrations also ensure effective ULDMPS

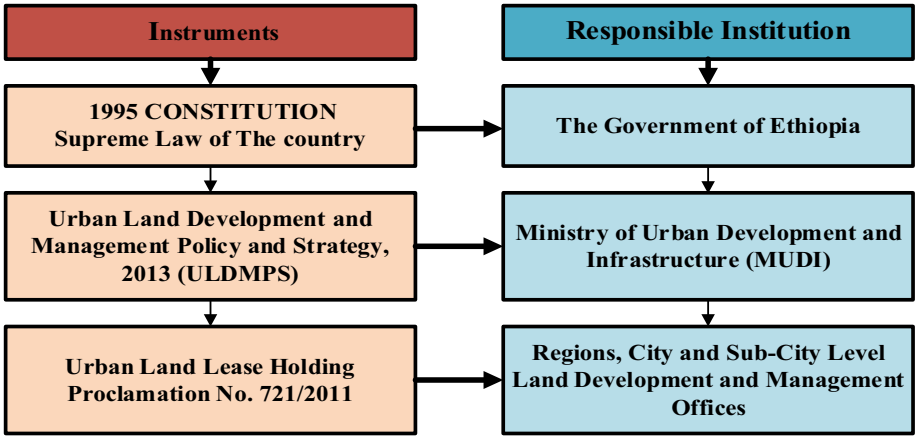

FIGURE 1
Instruments and responsible institution of land administration.

implementation, aligning laws and programs with local contexts to address emerging urban challenges.

The Urban Land Lease Holding Proclamation No. 721/2011 establishes the legal framework for urban land administration and management (Figure 1). It assigns regional states, city administrations, and municipalities the responsibility for land administration, including issuing regulations and directives, allocating land, managing lease agreements, and overseeing urban planning (FDRE, 2011). These entities also engage with communities, resolve land-related disputes, ensure transparency, and inform citizens about lease procedures, rights, and responsibilities. Therefore, effective policy implementation relies on collaboration between the national government, which sets the framework, and regional entities, which adapt policies to local needs.

In Addis Ababa, the capital city of Ethiopia, implementing land policy has been a challenging and complex task despite its critical role in the city's overall development. This paper aims to assess the implementation of urban land policy in Addis Ababa through the lens of a global land administration perspective (Enemark, 2005) drawing on insights from land administration experts. The study evaluates the existing urban land policy, with a particular focus on land administration as a key tool for translating policy into practice, and examines its multiple dimensions in the context of Addis Ababa's urban governance.

Existing research on urban land policy in Ethiopia, and Addis Ababa specifically, has primarily concentrated on legal frameworks and the technical and administrative challenges faced by land development and management (LDM) offices. However, the perceptions of land administration experts, who play a direct role in implementing urban land policy (ULP), remain underexplored. Capturing these expert perspectives is essential for understanding how effectively urban land policy is applied, how governance processes are managed, and how operational realities align with policy objectives and public expectations. This study seeks to fill this gap by incorporating the views of experts actively involved in land administration processes.

The study systematically analyzes expert perceptions across six key themes: (a) the implementation of ULP objectives within Addis Ababa's LDM Office, (b) the benefits of ULP for society, investors, and government, (c) the operational performance of the LDM Office, (d) the supply of urban land for affordable housing and redevelopment under the urban land lease proclamation, (e) the persistence of informal property, and (f) the capacity of the LDM Office to protect public land from unlawful occupation. These themes, identified through preliminary expert interviews, provide a structured framework for evaluating Addis Ababa's urban land governance. By integrating expert insights, the study offers a practice-oriented assessment of urban land policy implementation and highlights critical operational challenges and opportunities for policy reform.

This study addresses this gap by systematically analyzing expert perceptions across six key themes: (a) the implementation of ULP objectives within Addis Ababa's LDM Office, (b) the benefits of ULP for society, investors, and government, (c) the operational performance of the LDM Office, (d) the supply of urban land for affordable housing and redevelopment under the urban land lease proclamation, (e) the persistence of informal property, and (f) the capacity of the LDM Office to protect public land from unlawful occupation, which was identified through preliminary interviews with experts. By integrating these expert insights, the study offers a practice-oriented evaluation of Addis Ababa's urban land governance and highlights operational challenges and opportunities for policy reform.

2 Research methods

This study employs a mixed-methods research approach, which integrates both quantitative and qualitative data collection and analysis techniques. The rationale for adopting this approach stems from the complex and multi-dimensional nature of urban land policy implementation and land administration processes.(Adiaba, 2014). Urban land administration involves not only technical and administrative procedures but also socio-political dynamics, where expert knowledge and public perceptions play equally important roles. A mixed-methods approach is particularly well-suited to capture these complementary dimensions, allowing for both statistical generalization and in-depth contextual understanding (Ting, 2002). The integration of quantitative and qualitative data allows for triangulation, improving the validity and reliability of the findings

(Creswell, 2011). Areas where the survey results align with interview insights reinforce key conclusions, while discrepancies between the two sources help identify areas for further investigation. This mixed-method design ensures that the study captures both broad patterns across administrative levels and detailed institutional dynamics, thereby providing a holistic assessment of Addis Ababa's urban land policy and its administration.

The quantitative component focuses on survey data collected from land administration experts at the federal, city, and sub-city levels. Purposive sampling was used to select respondents. In particular, those individuals with five or more years of experience and those who actively participated in land administration offices at federal, city, and sub-city level, were purposively selected. This allows the study to quantify expert perceptions regarding the six key themes such as the implementation of ULP objectives, benefits of ULP, the practices of the city LDM office, urban land supply for affordable housing and redevelopment, informal property, as well as the city LDM office's capacity to safeguard its land from unlawful occupants. A total of 318 experts were selected to participate in the quantitative survey, representing various administrative tiers involved in urban land administration. This included 28 land experts from the Federal-level Land Development and Management (LDM) Office, responsible for overarching policy and regulatory frameworks, 35 land experts from the City-level LDM Office, which oversees city-wide policy implementation and coordination, and 255 land experts from Sub-city LDM offices, responsible for frontline land allocation, registration, and enforcement at the neighborhood level (Table 1).

The qualitative component on the other hand consists of 30 one-to-one interviews with selected land administration experts who possess deep knowledge and direct experience in urban land policy implementation and administration from the same federal, city and sub-city levels. These interviews were purposefully designed to explore expert insights on the six critical themes identified through preliminary consultations. The qualitative insights also enrich the interpretation of the quantitative survey data, providing context and depth to statistical findings.

Secondary data were also collected from a review of empirical research works in the literature. Moreover, the researcher consulted documents on and related to urban land policy. These include the FDRE Constitution, the ULDMPS, and the Urban Land Lease Holding Proclamation No. 721/2011.

2.1 Measurement instrument and rating scale

A 5-point Likert scale was used to measure opinions. The response options were 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided (Not Sure), 4 = Agree, and 5 = Strongly Agree. This rating system allowed experts to evaluate their agreement or disagreement with various statements related to the six themes. The use of a 5-point scale ensured sufficient variability in responses while maintaining ease of interpretation. The survey responses were analyzed using descriptive statistics, including mean scores, median, mode, standard deviations, and standard error, under the assumption that land administration experts possess deep knowledge of both the intended objectives and practical limitations of urban land policy and land administration in Addis Ababa.

To assess the consistency and reliability of expert opinions, the study employed the Intra-Class Correlation Coefficient (ICC) as a measure of inter-rater agreement. Given the large sample size and the use of a 5-point Likert scale, the ICC was chosen as the most appropriate statistical tool for evaluating the degree of agreement among experts (Graham et al., 2012). ICC scores generally range from 0 to 1, where 1 indicates perfect agreement and 0 indicates no agreement. However, for the purpose of this paper, the researcher selected the following intra-class correlation range, which was adapted from Koo and Li (2016) suggestions. That is:

- values less than 0.5 are indicative of poor reliability,
- values between 0.5 and 0.75 indicate moderate reliability,
- values between 0.75 and 0.9 indicate good reliability, and
- values greater than 0.90 indicate excellent reliability (Koo and Li, 2016).

The use of the Intra-Class Correlation Coefficient (ICC) is particularly important for this research due to its ability to address the study's unique complexities. First, the research involves multiple raters from diverse administrative levels, including federal, city, and sub-city offices, each offering perspectives shaped by their institutional positions. ICC helps measure the level of agreement among these experts, revealing whether there is a shared understanding of key land governance challenges across the administrative hierarchy or significant perceptual differences between tiers. Second, the study focuses on complex and subjective topics, such as urban land policy implementation, which is influenced by legal, administrative, political, and socio-economic factors. Since assessing perceptions of the six themes indicated above relies on subjective judgment, ICC provides a statistical measure of consensus or divergence among experts, offering clarity on the degree of shared understanding. Finally, ICC serves as a validation tool, enhancing the credibility and reliability of the findings. Strong agreement among experts would reinforce the validity of identified challenges and proposed reforms, while weaker agreement would highlight areas of fragmented perspectives, signaling the need for deeper institutional coordination and targeted interventions.

TABLE 1 Potential organizations and respondents for data collection.

No.	Respondents category	Survey	Interview	Percentage
1	Federal level Land Administration Experts	28	10/28	8.81%
2	City level Land Administration Experts	35	10/35	11.01%
3	Sub-city level Land Administration Experts	255	10/255	80.19%
	Total	318	30	100.00%

Source: Own Survey Data (2020 and 2021).

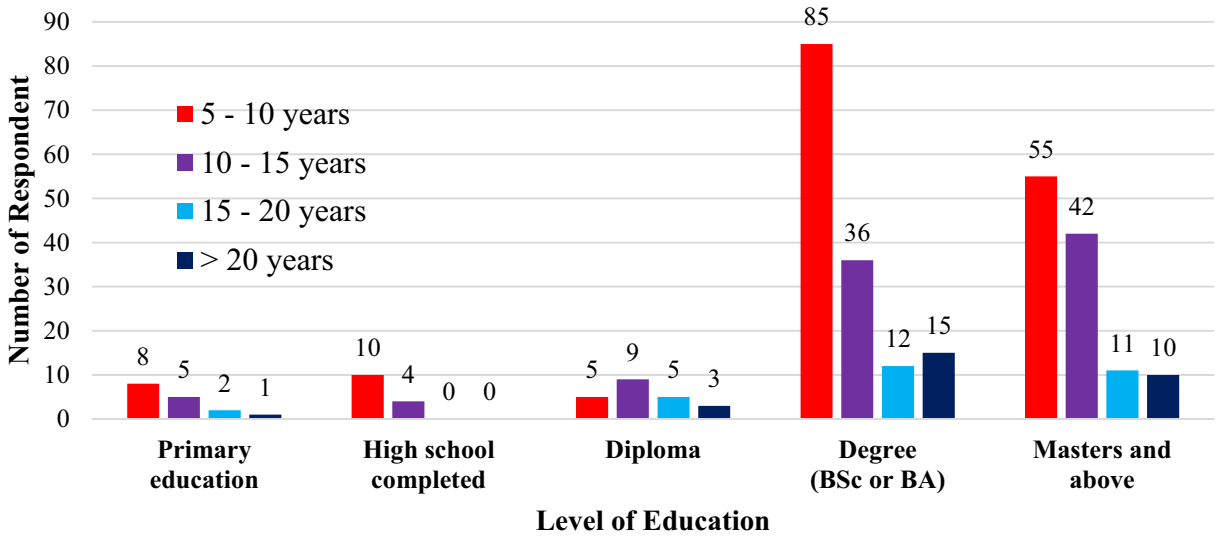

FIGURE 2
Education status of the respondent and work experience in the organization.

3 Results and discussion

3.1 Educational and work experience of respondents

Respondents' educational backgrounds may indicate how well-informed the respondents are, as well as their capacity to comprehend the questionnaire and give truthful responses. Figure 2 gives a cross-tabulation of respondents' level of education and their years of work experience. It revealed that all the respondents (318) were educated, at least up to the primary education level. The majority of the respondents' (266 respondents, or 83.65%) had achieved university-level education, while 22 respondents, or 6.92% of the respondents, had attained diploma level education. Further, 14 respondents, representing 4.4% of the respondents, had completed secondary education, and finally, 16 respondents, representing 5.03%, had attained primary education.

The results therefore suggest that the majority of respondents had a basic education and therefore are able to understand land issues. The figure also shows that the majority of respondents (259) had between 5 and 15 years of work experience, while 30 respondents had between 15 and 20 years of work experience. Further findings show that 29 respondents had land administration-related work experience of more than 20 years. In general those with higher education level (degree and above) have relatively higher level of work experience.

3.2 Land administration assessment themes and Cronbach's alpha reliability test

The views and perception of experts were sought on six different themes. The exploration of the perception on the themes allows a deeper understanding of the challenges and opportunities faced by the city in managing its land resources. The themes were:

(a) *The implementation of the objectives of the urban land policy (ULP) in the city of Addis Ababa LDM Office;*
(b) *The benefits of ULP for society, investors, and the government;*
(c) *The practice of LDM office of Addis Ababa*
(d) *The (implementation of the urban land lease proclamation) supply of urban land for affordable housing to individuals and Redevelopment;*
(e) *The existence of informal property; and*
(f) *The capacity of LDM office of Addis Ababa to protect its land from unlawful occupiers.*

In order to gather the most accurate responses from the respondents, we determined that the best method of questioning was to obtain their level of agreement or disagreement, depending on the nature of the question. This was achieved through the use of a Likert scale, ranging from 1 to 5.[1] This approach allowed us to effectively gather valuable insights and feedback from the participants. After thorough testing, the data collected in the questionnaire were deemed reliable and consistent. We evaluated the results using Cronbach's alpha, which came to an average value of 0.75 (Table 2). This surpassed the standard value of 0.5, indicating that the 49 items included in the survey questionnaire are reliable and can be used for further analysis.

3.3 The perception and opinion of experts

3.3.1 The implementations of urban land policy objectives

The objectives of land policy in any country are shaped by a combination of public aspirations and government efforts to

1 When working with ordinal data, it is recommended to use the median or mode as the measure of central tendency (Jamieson, 2004). This is because the calculations required to determine the mean are not suitable for ordinal data, where the values often represent verbal statements. As noted in methodological and statistical texts, it is best practice to use the median in these situations.

TABLE 2 Cronbach's Alpha reliability—or internal consistency—of a set of scale items.

No.	Questions	Cronbach's Alpha
1	The implementation of the objectives of the ULP in Addis Ababa	0.819
2	Benefits of the ULP for society, investors, and the government	0.856
3	The practice of land development and management office of Addis Ababa	0.857
4	The (implementation of the urban land lease proclamation) supply of urban land for affordable housing to individuals and redevelopment	0.642
5	The existence of informal property	0.754
6	The capacity of LDM office of Addis Ababa to protect land from illegal occupiers	0.562
	Total	4.49
	Average	0.75

Source: Computed from Survey Data (2020 and 2021).

improve land tenure, usage, value, and development (Molen, 2002). In Ethiopia, the urban land policy is guided by six principal objectives: ensuring proper allocation of land for public spaces; creating a sustainable land development and management system; enhancing accessibility, transparency, fairness, and accountability in urban land markets and delivery systems; supporting land and property inventory and registration initiatives to prevent asset depreciation and illegality; safeguarding property rights and increasing property security to facilitate development and growth; and enabling urban centers to leverage modern technologies and techniques to implement a land information system that aligns with the nation's development dynamics and demands (MOUDH, 2016). These objectives reflect a comprehensive approach to addressing both public needs and institutional priorities in urban land governance.

Land experts at federal MUDI, city and sub-city level were asked to rate whether these ULP objectives were well implemented at different levels of LDM offices. The results are shown in Table 3. For each of the objectives, the ratings by the respondents ranged from 1 (Strongly Disagree which refers to not implemented) to 5 (Strongly Agree which refers to well implemented).

From Table 3, one can observe little variability in the data, which can be inferred from the relatively small nature of the standard deviations compared to the mean ratings. This can also be seen from the mode and median values which are generally the same. The small standard deviation relative to the mean in all ratings suggests that data points are quite close to the mean. There is little variability between the sample mean and population means, which can be inferred from the relatively close to zero nature of the standard errors associated with all the means ratings. This suggests that the sample chosen is likely to be an accurate reflection of the population.

Table 3 also revealed two categories of rating responses. First, the implementation of five of the objectives had a median rating score of 2. These objectives were the proper allocation of the right proportions of land for public space (with std. dev. = 1.230, mean = 2.51, mode = 2), the creation of a land development and management system that guarantees a sustained supply of land (with std. dev. = 1.224, mean = 2.67, mode = 2), increasing accessibility, transparency, fairness, developmental nature, and accountability in urban land markets and land delivery systems (with std. dev. = 1.232, mean = 2.66, mode = 2), facilitating the development and growth process by safeguarding people's property rights and increasing the property security of residents (with std. dev. = 1.270, mean = 2.86, mode = 2) and supporting the city's land and property inventory and registration initiatives and preventing asset depreciation and illegality (with std. dev. = 1.331, mean = 2.89, mode = 4). The rating indicates that experts believe that these sub-components of the objectives were weakly implemented. On the other hand, the experts' median score of 3 suggested uncertainty with regard to the implementation of modern technologies and techniques for creating a land information system in urban areas. The mean score is 3.24, with a standard deviation of 1.223, and a mode of 3. It remains unclear whether the land development and management offices at different levels have integrated these sub-components of the ULP objectives.

Across this rating, the Intra-class correlation coefficient (ICC) was 0.819. ICC estimates and their 99% confidence intervals were calculated using SPSS statistical package version 27, using consistency definition, and 2-way Random effect model. This was evidence of good agreement among the respondents that most of the objectives of ULDMP were not well implemented as indicated in the policy document.

The qualitative result also coincided with the quantitative findings. In Addis Ababa, the implementation of Ethiopia's ULP has been challenging due to the ineffective land administration. According to the federal level experts, the lack of a well-functioning system that can efficiently manage land-related issues such as land acquisition, registration, accurate and up-to-date land records, land-use planning processes, and allocation hampered the implementation of land policy objectives. The results are similar to the findings of Tekle (2012).

The coexistence of overlapping and conflicting land tenure systems leads to confusion, disputes, and uncertainty over land ownership, hampering the implementation of urban land policy (ULP) objectives aimed at securing land tenure for residents and investors. Tigabu (2014) corroborates this, noting that such systems hinder the smooth implementation of land policy objectives, and create barriers to efficient land administration and management. Additionally, institutional capacity and resource shortages in Addis Ababa further threaten effective land administration, while corruption and lack of transparency exacerbate challenges, as highlighted by a federal expert who noted that bribery and favoritism distort land distribution and erode public trust. Effective ULP implementation requires collaboration among government agencies, local authorities, communities, and the private sector, but its absence leads to inconsistent approaches, conflicting interests, and delays. Limited

TABLE 3 Perceptions of respondents about the implementation of the objectives of ULP.

	Objectives	$\bar{x}$	M_d	M_o	SD	SE	ICC
1	Ensuring proper allocation of the right proportions of land for public space	2.51	2.00	2	1.230	0.069	0.819
2	Creating a land development and management system that guarantees a sustained supply of land	2.67	2.00	2	1.224	0.069	
3	Increasing accessibility, transparency, fairness, developmental nature, and accountability in urban land markets and land delivery systems	2.66	2.00	2	1.232	0.069	
4	Supporting the city's land and property inventory and registration initiatives and preventing asset depreciation and illegality	2.89	2.00	4	1.331	0.075	
5	Facilitating the development and growth process by safeguarding people's property rights and increasing the property security of residents	2.86	2.00	2	1.270	0.071	
6	Enabling the urban centers to take advantage of modern technologies and techniques to implement a land information system	3.24	3.00	3	1.223	0.069	

Source: Computed from Survey Data (2020 and 2021).

public awareness of land rights and procedures also fuels corruption. Most critically, as emphasized by a sub-city expert, the lack of political will to enforce land policies effectively hinders progress and results in inconsistent implementation.

3.3.2 The benefits of urban land policy

Table 4 presents experts' ratings on the proposed benefits of urban land policy for society, investors, and the government. The results show that mean values are close to the median for most questions, with modes also aligning closely. The small standard deviations relative to the means indicate data points are clustered around the mean. As Field (2009) explains, the standard error measures how well a sample represents the population, with smaller values suggesting greater accuracy. In Table 4, the near-zero standard errors indicate minimal variability between sample and population means, implying the sample is likely an accurate reflection of the population.

The table categorizes responses into "Strongly Disagree," "Disagree," and "Strongly Agree." A median score of 5 ("Strongly Agree") reflects respondents' agreement that the policy fails to provide land for urban dwellers, forcing them to access land informally through squatting or informal settlements (SD = 0.955, mean = 4.52, mode = 5). Conversely, a median score of 2 indicates disagreement with two key statements: that the policy aimed to develop low-cost land supply to encourage industrial development (SD = 1.150, mean = 2.47, mode = 2) and that it was prepared in consultation with citizens and stakeholders (SD = 1.092, mean = 1.99, mode = 1). The results suggest widespread disagreement among respondents regarding the policy's ability to provide affordable land for industrial development, highlighting a lack of support for investors. Additionally, the median rating of 2 for stakeholder consultation indicates a consensus that the policy was not developed collaboratively. This underscores the need for greater engagement and inclusivity in the policy development process to address these shortcomings.

The survey results also revealed a consensus among respondents indicating a strong disagreement regarding the perceived benefits of the urban land policy. Experts asserted that the policy fails to deliver on several fronts, including enabling low and middle-income individuals to become homeowners, assisting investors in building community-beneficial social services, to get land for free, and prioritizing a people-centered approach. Additionally, the policy falls short in expediting infrastructure provision through fair compensation, ensuring public benefits through infrastructure and industrial development, facilitating land allocation for manufacturing investments at fair prices, and playing a vital role in providing up-to-date information on land prices and supply of serviced land.

The ICC values for all responses were found to be 0.856, indicating good reliability or agreement among respondents.

City land experts attribute informal land access to high demand driven by rapid urban expansion, population growth, bureaucratic hurdles, limited formal land supply, and affordability issues, pushing individuals toward informal settlements or unauthorized occupation. Federal-level experts highlight additional challenges, such as complex land administration procedures, poor stakeholder coordination, limited land availability, high prices, and costly infrastructure development, further hindering affordable land provision. Moreover, developing essential infrastructure such as water, electricity, and transportation adds to the overall cost, making affordable options even more difficult to offer. While participatory methods like public consultations, workshops, and surveys are crucial for inclusive policy development (Helbig et al., 2015), Ethiopia's urban land policy (ULP) lacked proper stakeholder engagement. One of the federal-level land officials pointed out that the policy did not include the voices and concerns of private sector, NGOs, and citizens. Even though the issue was a topic of discussion in two workshops, only government officials and public servants were invited in policy formulation. This finding is consistent with the findings of Siraje (2016) and Teferi (2009).

The government has designed low-cost land supply mechanisms to foster urban industrial development (MOUDH, 2016). By offering affordable land and rental buildings, these policies aim to ease financial constraints on investors, enabling greater allocation of funds for equipment and operations. Intended to drive sustainable growth and job creation, these initiatives could enhance the city's economic

TABLE 4 Perceptions of respondents about the proposed benefit of ULP.

No.	The Urban Land Development and Management Policy and Strategy	$\bar{x}$	M_d	M_o	SD	SE	ICC
1	Forced the urban dwellers to access land through informal ways	4.52	5.00	5	0.955	0.054	0.856
2	Has helped to develop low-cost land supply	2.47	2.00	2	1.150	0.064	
3	Were prepared in consultation with citizens and other stakeholders	1.80	2.00	1	0.902	0.051	
4	Helped investors to get land for free	1.22	1.00	1	0.633	0.036	
5	Is more or less a people-centered system	1.63	1.00	1	1.060	0.059	
6	Has enabled to pay of fair compensation to property owners	1.37	1.00	1	0.557	0.031	
7	Ensured the public benefit	1.71	1.00	1	0.939	0.053	
8	Has allowed land offices to prepare land at a fair price for investors	2.04	1.00	1	1.481	0.083	
9	Are well implemented by the Addis Ababa city LDM office	1.41	1.00	1	0.739	0.041	
10	Enabled urban dwellers to become homeowners	1.44	1.00	1	1.066	0.060	
11	Plays a vital role as it provides up-to-date information about the land market	1.30	1.00	1	0.711	0.040	

Source: Computed from Survey Data (2020 and 2021).

prospects. However, implementation has been inadequate, limiting their impact and hindering industrial development, as noted by a city-level land expert. Evaluating a policy's people-centered approach requires examining its provisions for equitable land and housing access. A senior federal land expert asserts that achieving such equity is unfeasible under Addis Ababa's current land administration system. A people-centered system should accord top priority to ensuring that all individuals, irrespective of their socioeconomic status, have access to just and affordable opportunities to acquire land and housing. Regrettably, as observed by key respondent, the task of achieving this objective in the case of Addis Ababa is a formidable one.

Article 12 (1–6) of Proclamation No. 1161/2019 outlines compensation provisions. Sub-article 2 mandates that compensation for property must cover full replacement costs, while sub-article 3 ensures housing compensation meets at least the current construction cost, considering regional standards. Sub-article 4 states that compensation for land improvements must reflect the value of capital and labor invested. However, federal land experts argue that implementation has resulted in unjust expropriation and compensation below market value, leading to mass evictions, particularly in Addis Ababa. These practices undermine fairness and human rights, exacerbating the land ownership crisis. Consistent with this study, Ambaye (2013) found that despite constitutional guarantees of communal land ownership, equitable access, enjoyment, and fair compensation in the event of expropriation remain unfulfilled.

Urban land development should prioritize public benefit by addressing social, economic, and environmental needs, including affordable housing, infrastructure, and job creation (Steudler, 2004). However, experts argue that Ethiopia's policies, particularly in Addis Ababa, have failed to ensure these benefits amid rapid urban expansion and informal settlements. While the ULDMPS mandates fair land pricing for investors (MOUDH, 2016), serviced land is often unavailable at reasonable rates. A sub-city land expert criticizes Addis Ababa's pricing mechanism as unfair and opaque, noting that inflated costs deter investment and hinder development.

Effective land policy implementation is essential for achieving intended community benefits. Addis Ababa is experiencing rapid expansion and population growth. With the aim of effectively managing this growth, the ULDMPS was implemented. However, as indicated by both city and sub-city level LDM office experts, challenges such as capacity and resources constraints, governance issues, coordination among stakeholders, corruption, land grabbing, and political interference from the ruling party have hindered its execution. Access to affordable housing and the opportunity to own a home is vital for urban stability and economic empowerment, yet homeownership remains elusive due to inadequate policies, land tenure insecurity, institutional limitations, lack of affordable financing, and neglect of low-income housing. Moreover, Adiaba (2014) emphasizes the need for accurate land market data for informed decision-making. However, Ethiopia's ULDMPS struggles to keep pace with market dynamics, leading to inefficient land allocation and development.

3.3.3 The performance of the Addis Ababa Land Development and Management Office

The preceding discussion highlighted that the anticipated benefits of ULP to society, investors, and government, as outlined in the policy, have not been effectively implemented. Building on this outcome, the present section reports on experts' opinion about the performance of the Addis Ababa Land Development and Management Office (AALDM). There are 10 important areas over which the performance of the AALDM can be evaluated. These are:

- The extent to which practices are transparent, accountable, efficient,free of rent-seeking, and honest land allocation and marketing systems to accelerate the development and growth of the city
- The extent to which practices benefit the city administration, citizens, and investors through the provision urban land using leasehold system
- Reliance on a modern land information system for property valuation, taxation, and land rents and provision of legal documents as proof of ownership for undocumented landholdings
- The extent to which practices are supplying a planned serviced land for individual, for housing developers and for social services

TABLE 5 Expression of experts' about Addis Ababa LDM office practices.

No.	The Addis Ababa City Administration, Land Development and Management Office	$\bar{x}$	M_d	M_o	SD	SE	ICC
1	rely on a modern land information system for property valuation, taxation, and land rents and provide legal documents as proof of ownership for undocumented landholdings	2.68	3.00	2	0.752	0.042	0.857
2	improved the health, the physical appearance of city, and strengthened land provision efforts at low cost through the re-development processes	1.53	1.00	1	0.565	0.032	
3	are transparent, accountable, efficient free of rent-seeking practices, and honest land allocation and marketing systems to accelerate the development and growth of the city	2.03	2.00	2	0.617	0.035	
4	benefit the city administration, citizens, and investors through the provision of urban land using leasehold system	2.05	2.00	2	0.683	0.038	
5	are supplying a planned serviced land for individual, for housing developers and for social services in Addis Ababa guided by the principles that ensure sustainable land use management	1.81	2.00	2	0.759	0.043	
6	has created a sustainable financial supply system to facilitate urban growth and development through continued urban land provision to finance infrastructure development	1.71	2.00	1	0.794	0.045	
7	to expand investment, conducts special and regular land auctions and allocation of land at reasonable prices for investment projects	1.74	2.00	2	0.687	0.039	
8	created up-to-date and an appropriate way of registering land ownership to protect citizens' right to use land and own property	2.26	2.00	2	1.068	0.060	
9	use a modern urban address system	2.13	2.00	2	1.155	0.065	
10	fair in development and operation	1.92	2.00	2	0.842	0.047	

Source: Computed from Survey Data (2020 and 2021).

in Addis Ababa guided by the principles that ensure sustainable land use management

- The establishment of a sustainable financial supply system to facilitate urban growth and development through continued urban land provision to finance infrastructure development
- The extent to which practices improve the health, the physical appearance of cities, and strengthen land provision efforts at low cost through the re-development processes
- The expansion of investment, conducting special and regular land auctions and allocation of land at reasonable prices for investment projects
- The establishment of up-to-date and an appropriate way of registering land ownership to protect citizens' right to use land and own property
- The use of a modern urban address system; and
- The extent to which practices are fair in development and operation

Rating results on the above by experts from MUDI, Addis Ababa City as well as Addis Ababa Sub-city levels land experts are presented as follows.

The median and mean rating values are consistently close, as shown by their convergence in Table 5. The modal scores, which are similar across most items, further support the median ratings. The small standard deviation relative to the mean indicates that data points are clustered around the mean, which approximates the median. Additionally, the low standard errors suggest minimal difference between the sample and population means, reinforcing the sample's representativeness of the broader population of land experts. Results indicate that experts rated most aspects of LDM office practices with a median score of 2, except for the use of modern land information systems (median = 3) and improvements in the urban health and the physical appearance of the city aesthetics (median = 1). Moreover, In Table 5, a median rating of 1 (std. dev. = 0.565, mean = 1.53, mode = 1) suggests that experts strongly disagree that office practices effectively enhance urban health, aesthetics, and affordable land provision through redevelopment. Conversely, a median rating of 3 (std. dev. = 0.752, mean = 2.68, mode = 2) reflects uncertainty regarding the reliance on modern land information systems for property valuation, taxation, and land rents and provide legal documents as proof of ownership. All other practices received a median rating of 2, indicating general disagreement with the city administration's proposed practices.

The ICC values for all responses was found out to be 0.857, which is good reliability or agreement among respondents.

The interview discussion revealed several factors influencing these results. AALDM Office experts emphasized the need for a modern land information system, highlighting its role in securing property rights and ensuring fair, efficient processes. Such systems provide a comprehensive platform for managing land ownership, use, value, and development (Dale and McLaughlin, 2002). They facilitate land registration, property valuation, dispute resolution, and urban planning (Williamson et al. 2010), while enhancing transparency, reducing corruption, and attracting investment in the real estate sector (Effenberg, 2001). However, despite ongoing efforts by the

office, significant challenges persist. A sub-city land expert identified key obstacles, including financial constraints, limited technical expertise, weak institutional frameworks, slow development processes, and reliance on imported software and hardware.

Regarding health and infrastructure, the AALDM office should prioritize public health by ensuring infrastructure provision for sanitation, waste management, and clean water in new areas. This requires implementing urban planning design of the city. To this end, one respondent expressed the view that in highly productive urban centers, 30% of land is typically allocated for roads and infrastructure, another 30% for public services and open spaces, and the remaining 40% for residential, commercial, and industrial development. However, Addis Ababa was not able to replicate this model due to ineffective land policy implementation leading to a negative impact on productivity.

The land lease policy prioritizes public interests and urban development, allowing urban land to be leased at an initial benchmark price to cover recurring costs (Proclamation No. 721/2011). It aims to support public and self-help housing, as well as manufacturing industries, ensuring affordable urban land for low-income residents and investors. However, experts highlight discrepancies between policy intentions and implementation. A federal land administration expert noted limited transparency, accountability, and access to land lease information, leading to inefficiencies and delays. Moreover, preferential investor selection, often favoring political affiliates, has resulted in underutilized parcels, exacerbating corruption in the land market.

At the city level, as indicated by city level land expert, two major challenges hinder land provision for developers and social services within a sustainable framework. First, institutional inefficiencies within the LDM office undermine effective land and lease administration. Second, urban land development costs—including compensation, infrastructure, and administrative expenses—place a significant financial strain on the city. A sub-city land expert further identified funding constraints, low revenue generation, poor coordination, and socio-environmental factors as key obstacles to establishing a financially viable urban expansion system in Addis Ababa.

Addis Ababa's growing economy and increasing investor interest have heightened demand for land for investment projects. However, the AALDM office's irregular land auctions and allocations have led to scarcity and inequitable distribution of land. City-level respondents noted intense competition among investors due to infrequent auctions, driving up land prices and restricting small business participation, thereby hindering economic growth. Additionally, a lack of transparency in land allocation has fostered favoritism and corruption, creating financial burdens for investors and limiting job creation as well as economic stimulation. Furthermore, the absence of modern technological solutions and trained personnel further hampers the office's ability to maintain and update land ownership records efficiently. Although Addis Ababa has a modern address system with street names and house numbers, its practical application remains minimal. Instead, organizations and service providers rely on sub-city, woreda, and neighborhood names for navigation. Respondents highlighted key deficiencies, including inconsistency, lack of integration and maintenance, limited application, and minimal public participation, aligning with Gessesse's (2021) findings.

The AALDM office plays a crucial role in city land development; however, as noted by city level land expert, there are valid concerns regarding the fairness and transparency of its decision-making processes. Issues such as lack of transparency, accountability, unfair distribution of land, and limited public participation have been identified as areas in need of improvement. Respondents from the city level have highlighted a concerning pattern where decisions are made covertly, devoid of adequate consultation with affected parties. This opacity fosters distrust and erodes the office's credibility. Accountability mechanisms are often lacking, leaving individuals and communities impacted by decisions without recourse for addressing grievances. Reports have surfaced of preferential treatment for influential individuals or groups in land acquisition, leaving marginalized communities bereft of essential resources. Additionally, the decision-making process frequently sidelines the voices of those directly impacted by land development projects, further marginalizing vulnerable communities and perpetuating an unjust cycle of inequality that deepens the chasm between the privileged and the marginalized.

3.3.4 Supply of land for affordable housing and redevelopment

Table 6 shows that there are two categories of ratings related to supply of land and housing: a median score of 5 for "strongly agree" and median score of 4 for "agree." Experts strongly agree on the following sub-components of land supply constraints for affordable housing and re-development. These are:

- Prevalence of unauthorized land occupation in expansion areas;
- Limitations in re-developing deteriorated urban areas; and
- An increasing gap between the demand and supply of land for residential purposes.

On the other hand with a median score of 4, respondents agree on the following subcomponents:

- Failure of the land agencies to increase the supply of land through formal channels.
- Rent-seeking behavior in individuals and organizations.
- Failure to deliver planned and serviced land in expansion areas.
- The inability to relocate those affected by proposed infrastructure projects.
- The absence of urban land information banks
- Lack of specific re-development organizational units at different levels.
- Lack of a comprehensive, transparent and accountable system.

Across this rating, the calculation of the Intra-class correlation coefficient (ICC) resulted in the reliability of Intra correlation coefficient = 0.642, which is moderate reliability or agreement among respondents.

Furthermore, the interview findings align with quantitative data, highlighting that unlawful land occupation reduces available land for affordable housing, disrupts allocations for low-income communities, and hinders urban redevelopment. This practice strains resources and increases costs for both the government and developers. Despite a comprehensive urban renewal strategy—including slum upgrades, redevelopment, and the implementation of urban renewal projects—implementation faces major challenges. A city-level official noted funding shortages, poor planning, and lack of coordination among government agencies. Additionally, limited community participation further complicates redevelopment. Rapid population growth has

TABLE 6 Expression of experts' about supply of land for affordable housing and redevelopment.

No.	Problems of the supply of land for affordable housing and redevelopment	$\bar{x}$	M_d	M_o	SD	SE	ICC
1	Illegal land occupation in expansion areas	4.54	5.00	5	0.667	0.037	0.642
2	Limitations in re-developing deteriorated urban areas	4.76	5.00	5	0.732	0.041	
3	The increasing gap between the demand and supply of land for residential purposes	4.74	5.00	5	0.703	0.039	
4	Failure of the land agencies to increase the supply of land through formal channels	3.62	4.00	5	1.411	0.079	
5	Rent-seeking behavior in individuals and organizations	3.56	4.00	5	1.459	0.082	
6	Failure to deliver planned and serviced land in expansion areas	3.60	4.00	5	1.425	0.080	
7	The inability to relocate those affected by proposed infrastructure projects	4.03	4.00	4	0.949	0.053	
8	The absence of urban land information banks	4.03	4.00	4	0.544	0.030	
9	Lack of specific re-development organizational units at different levels	4.24	4.00	4	0.888	0.050	
10	Lack of a comprehensive, transparent and accountable system	4.31	4.00	4	0.694	0.039	

Source: Computed from Survey Data (2020 and 2021).

intensified residential land demand, leading to housing shortages and slow redevelopment. High land acquisition costs, inefficient administration, and inadequate planning further hinder sustainable urban development.

Rent-seeking involves obtaining economic benefits through non-productive means, such as corruption, bribery, and nepotism, particularly in accessing land for affordable housing and redevelopment projects (Ackerman et al., 1995). A city level land expert suggested that this behavior leads to resource misallocation, with land often diverted from affordable housing to those exploiting the system. Practices like land hoarding and speculation exacerbate the issue, inflating land prices and delaying development initiatives. Despite efforts by city administrations to allocate serviced land for affordable housing, challenges persist due to inadequate infrastructure planning and development in expansion areas. As highlighted by a sub-city level land expert, allocating land to entities lacking development capacity further results in underutilization and project delays. The city, facing a burgeoning population, requires infrastructure development to cater to residents' needs. Yet, a key obstacle to supplying land for affordable housing and redevelopment was the difficulty in relocating individuals impacted by proposed infrastructure projects. This failure perpetuated resource inequity, favoring those able to stay in project areas while displacing lower-income groups who struggled to find affordable housing elsewhere.

The absence of dedicated organizational units for overseeing redevelopment has contributed to inefficient land allocation for affordable housing and redevelopment projects. A city-level land expert noted that the lack of a centralized body for planning and implementation has led to poor coordination, overlapping responsibilities, conflicting decisions, and project delays. This has weakened land administration and resulted in inequitable housing distribution, hindering urban development. Transparency and accountability are essential in land allocation, yet Addis Ababa's system remains opaque. A federal land expert highlighted the lack of public access to information and clear accountability measures, fostering corruption and undermining public trust, further complicating housing challenges.

3.3.5 Informal property

The prevalence of informal property in Ethiopia is a result of the inefficiency of formal land delivery (Abagissa, 2019). Ethiopia's high incidence of informal property can be attributed to economic, political, and legal factors (Melesse, 2007). The delay in the implementation of legal housing, the provision of legal land, and increase in housing rental price are all economic issues (*Ibid.*). On the other hand, political and legal issues include the lack of government initiatives to manage and arrange public spaces, weak enforcement of codes to regulate and control illegal home construction, the lack of all-inclusive legal responses to the persistent emergence of the squatting phenomenon, and the lack of regulation on the practice of land speculators.

Experts at all levels were surveyed to rate the factors that contribute to the prevalence of informal property in Addis Ababa. The results are presented in Table 7. The result showed that the median rating given by all participants was 4, indicating a general consensus that the factors listed contribute to the prevalence of informal property in Addis Ababa. It is clear from the results that the respondents strongly believe that these factors are responsible for the issue at hand.

The intra-class correlation coefficient (ICC), of respondents' agreement or reliability was moderate (intra correlation coefficient = 0.754). Hence, there is evidence of moderate agreement among respondents that the above indicated factors are the most important factors which contribute in the pervasiveness of informal property in the capital city.

The interview results were also consistent with the quantitative findings indicating that corruption, inadequate legislation, excessive and inefficient bureaucracies, inappropriate Laws, and high cost of legal transactions can explain the proliferation of informal property.

Land administration systems in cities are prone to corrupt practices, including bribery, nepotism, and misuse of power. A city-level expert highlighted that corrupt officials often exploit their authority to allocate land illegally or convert public land into informal settlements. This corruption is fueled by a lack of transparency, accountability, weak governance, and inadequate legal frameworks,

TABLE 7 Expression of experts about the existence of informal property.

No.	Reasons for the existence of informal property	$\bar{x}$	M_d	M_o	SD	SE	ICC
1	The existence of corruption	4.16	4.00	5	1.002	0.056	0.754
2	Inadequate legislation	3.71	4.00	4	1.152	0.065	
3	Excessive bureaucracies	3.75	4.00	4	1.105	0.062	
4	Inefficient bureaucracies	3.62	4.00	4	1.252	0.070	
5	Inappropriate law	3.50	4.00	4	1.106	0.062	
6	The high cost of the legal transaction	3.83	4.00	4	1.079	0.060	

Source: Computed from Survey Data (2020 and 2021).

creating an environment conducive to illegal land conversions. The current legal framework fails to address evolving urban dynamics, with outdated or impractical regulations on land tenure, zoning, and property rights enforcement, contributing to the growth of informal settlements. As noted by a study participant, "In Addis Ababa, limited and unaffordable formal housing options, coupled with rising property prices, force residents to seek alternatives in informal settlements due to the complexities of the formal housing market."

Securing formal housing and property rights in Addis Ababa involves complex, inefficient bureaucratic processes, including obtaining title deeds, construction permits, and occupancy certificates. These processes, requiring multiple office visits and years to complete, often frustrate residents, driving them toward informal settlements despite the lack of legal security. The system is costly, time-consuming, and confusing, with excessive paperwork, long queues, and waiting periods, disproportionately benefiting those exploiting bribes and loopholes. A city-level land expert noted that prohibitive fees, taxes, and "contributions" for property registration or land development make formal housing unattainable for most residents. In a city where over 80% live in slums and poverty is widespread, these additional costs render buying or building formal housing inaccessible.

Ambiguous or poorly enforced laws create conditions conducive to the growth of informal settlements, as individuals occupy land without legal ownership, leading to informal property development. A sub-city-level respondent noted, "When planning regulations fail to address the needs of a growing population, people are forced to seek housing outside the formal system, resulting in informal settlements lacking basic infrastructure and services." Inconsistent legislation and policies further exacerbate the issue, as highlighted by a city-level participant: "Confusing laws make it difficult for residents to navigate the legal framework, increasing the likelihood of informal property arrangements." Additionally, cumbersome bureaucratic processes, lengthy procedures, and extensive documentation requirements raise the costs and complexity of legal transactions. Multiple government agencies involved in property registration and the need for numerous documents, such as title deeds and tax clearances, cause unnecessary delays and administrative burdens, pushing individuals toward informal property channels (Deininger and Feder, 2009).

3.3.6 Land protection from unlawful occupiers

Addis Ababa, the capital city of Ethiopia, is facing significant challenges in protecting its own land from illegal occupiers. Situated at the heart of the nation, the city symbolizes Ethiopia's rich history, vibrant culture, and economic aspirations. However, amidst its urban sprawl and growing population, Addis Ababa grapples with the formidable task of defending its land from unlawful seizure and occupation. The status of Addis Ababa's LDM office has contributed to this ongoing issue.

Table 8 shows experts' opinion on why the LDM office of Addis Ababa City is unable to protect its land from unlawful occupiers. The mean values in the table are consistently fairly close to the median values for all rated subcomponents. The modes also tend to coincide with the median, except in few cases. The small standard deviation relative to the mean in all ratings suggests that data points are quite close to the mean. The standard errors associated with all the means ratings are also relatively close to zero (ranging from 0.039 to 0.078), and this also suggests that there is little variability between the sample mean and population mean and, therefore, the sample chosen is likely to be an accurate reflection of the population (Manu, 2012).

Table 8 reveals two categories of rating responses. With median rating scores of 5, the findings show that experts 'strongly agree" that the following three factors hindered the city's land development and management office from protecting its own land. These factors are:

- Lack of Updated Land Records and Maps; (with std. dev. = 0.69, mean = 4.46, mode = 5)
- Political Interference and Lack of Accountability; (with std. dev. = 0.738, mean = 4.55, mode = 5), and
- The rampant corruption in the city LDM office; (with std. dev. = 0.735, mean = 4.49, mode = 5).

With a median score of 4, experts also agree that weak enforcement of land laws and regulations, rapid urbanization and population growth outpacing the city's capacity, and the maladministration of land, hindered the city land development and management office from protecting its own land. The ICC value of 0.562 indicates that there is a moderate level of reliability or agreement among respondents. Moreover, the interview results indicated that the city is facing significant challenges in protecting its urban land from illegal occupiers and effectively administering its land resources. Respondents also agreed on the issues identified as important obstacles in protecting the city's land. Maintaining accurate and up-to-date information on land ownership, boundaries, and land use is crucial for efficient land administration. Deficiencies in this area opened doors to illegal land occupation, intensifying issues like land tenure disputes, encroachments, and unauthorized development. A research participant at the sub-city level emphasized that resource constraints, administrative inefficiencies, and limited modern technological integration have contributed to the neglect of updating and verifying land records.

TABLE 8 Why the city LDM office is unable to protect its land from unlawful land occupiers.

No.	Why Addis Ababa cannot protect its own land from illegal occupiers and administer its land properly	$\bar{x}$	M_d	M_o	SD	SE	ICC
1	Lack of updated land records and maps	4.46	5.00	5	0.690	0.039	0.562
2	Political interference and lack of accountability	4.55	5.00	5	0.738	0.041	
3	Rampant corruption situation of the city	4.49	5.00	5	0.735	0.041	
4	Weak enforcement of land laws and regulations	4.02	4.00	4	0.961	0.054	
5	Rapid urbanization and population growth outpacing the city's capacity	3.48	4.00	2	1.321	0.074	
6	The maladministration of land	3.69	4.00	5	1.389	0.078	

Source: Computed from Survey Data (2020 and 2021).

This neglect has resulted in outdated and unreliable information, posing a significant challenge for the city in safeguarding its urban land from unlawful occupiers and effectively managing its land resources.

Political interference and a lack of accountability significantly challenge Addis Ababa's urban land administration. Prioritizing political interests over proper land management enables illegal land occupation and biased allocations based on personal connections rather than merit or legal requirements. This undermines the integrity of urban land policies and hinders efforts to protect land resources, as decisions often favor influential individuals or groups over the city's broader interests. A city-level official noted that such practices entangle land allocation in corruption and personal gain. Furthermore, a lack of transparency and accountability fosters a culture of impunity, allowing individuals to exploit their positions without consequences. Corruption, including bribery, fraud, and nepotism, permeates land administration, enabling unlawful land occupation and mismanagement. A federal-level expert highlighted that corruption affects governance across public and private sectors, affecting areas from land administration to construction permits, property ownership, obstructing urban planning, fair resource access, economic growth, protecting it land resource, and above all public trust in government.

Finally, the overall mismanagement of land in the city significantly undermined its ability to safeguard against unlawful land occupiers. Inefficient practices, a lack of coordination among administrative bodies, and inadequate resource allocation all contributed to urban land mismanagement. A sub-city level a land expert noted, "The city's rapid urbanization and population growth have outpaced its capacity to devise and enforce effective urban planning strategies. Consequently, land allocation, zoning regulations, and infrastructure development have become disorganized and inefficient." This situation fosters unauthorized settlements, encroachments, and illegal land conversions, exacerbating the issue. Corruption and mismanagement within Addis Ababa's land administration system have also significantly hindered the city's ability to protect its land. Inefficient land registration processes, lack of transparency, and bribery have fostered an environment conducive to illegal land transactions and fraudulent activities. Consequently, land-related conflicts stemming from these transactions and land grabs have resulted in social unrest, displacement, and loss of livelihoods.

4 Conclusion and policy implication

This paper was set to examine the urban land policy implementation in Addis Ababa by examining the role of land administration within a global land administration perspective. Utilizing a mixed-methods research approach, the study specifically considered land administration as a tool in implementing urban land policy. Expert opinions were gathered on six key themes: ULP objectives, benefits of ULP, the practices of the AALDM office, urban land supply for affordable housing and redevelopment, informal property, as well as the AALDM office's capacity to safeguard its land from unlawful occupants.

Findings indicate significant shortcomings in achieving ULP objectives, particularly in land allocation, sustained land supply, transparency, accountability, and property security. Experts expressed skepticism regarding the policy's ability to ensure equitable land distribution, support industrial development, ensure fair pricing and promote urban growth. Key challenges include ineffective land administration, overlapping tenure systems, corruption, and weak stakeholder coordination, which collectively undermine public trust. The study also highlights affordability constraints, bureaucratic inefficiencies, and the adverse impacts of historical land ownership shifts, expropriation, and inadequate compensation.

The Addis Ababa Land Development and Management (AALDM) office faces major obstacles in modernizing land administration, adopting transparent decision-making processes, and ensuring fair land allocation. Experts reported discrepancies in land management, particularly in urban aesthetics, transparency, accountability, and efficiency. Key obstacles include inadequate land supply planning, financial constraints, irregular land auctions, outdated land registration systems, and a lack of equitable development procedures. Weak adoption of modern land information systems and concerns over decision-making fairness further undermine effective governance.

Significant obstacles—such as unlawful land occupation, inefficient formal land supply channels, and rent-seeking behaviors—impede affordable housing development and urban renewal. Limited relocation mechanisms, weak institutional structures, and lack of transparency exacerbate these challenges, making equitable land distribution difficult. Additionally, the persistence of informal property is driven by corruption, weak legal frameworks, inefficient bureaucracy, and high transaction costs, exacerbating tenure insecurity and limiting access to formal housing. Weak enforcement and legal ambiguities further drive informal

land practices, undermining property security and sustainable urban development. Moreover, the office faces challenges in safeguarding land due to outdated records, political interference, corruption, weak law enforcement, rapid urbanization, and poor land management. Addressing these systemic issues is crucial for effective urban land governance.

This study underscores the vital role of efficient land administration in implementing urban land policies. Without transparent and accountable governance, even well-designed policies risk failure. Strengthening institutional capacity, ensuring stakeholder participation, and addressing corruption are essential for sustainable urban land management.

Future research should focus on enhancing urban land policy implementation, with land administration as a key tool. Key areas include improving transparency and accountability in land administration, strengthening institutional capacity for sustainable land management, and resolving overlapping land tenure systems. Research should also explore the drivers of corruption and bureaucratic inefficiencies, while raising public awareness of land rights and procedures. Greater political commitment and stakeholder participation in policy formulation are essential. Additionally, studies should improve land supply mechanisms for affordable housing, promote modern technological solutions for land management, and examine the socio-economic impacts of land policies and informal property on urban development. Comparative studies across cities and regions, along with evaluations of policy interventions, can provide insights into contextual factors and address root causes of urban land challenges. These efforts can advance sustainable urban development in Ethiopia.

By prioritizing these areas, policymakers and researchers can contribute to more effective land policy implementation and sustainable urban development.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

Author contributions

AA: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Writing – original draft, Writing – review & editing. TG-E: Data curation, Investigation, Methodology, Supervision, Validation, Writing – review & editing. BW: Data curation, Investigation, Methodology, Supervision, Validation, Writing – review & editing.

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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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