

Exploring the effects of urban expansion and forced eviction on the livelihood security of the peri-urban farmers in Addis Ababa, Ethiopia

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Abstract

The primary purpose and objectives of this study were to explore the qualitative impact of urban expansion and forced evictions on the sustainable livelihood security of the per-urban households in Addis Ababa. The study employed an exploratory research design and qualitative methodology to solicit the perceptions of 15 cross-sectionally selected per-urban household participants from Lemmi Kura sub city in Addis Ababa. The study's key findings were that a massive urban expansion program is taking place both by the government and private real estate developers that has displaced hundred and thousands of per-urban farmers in Addis Ababa, and there has been a high prevalence of forced evictions. The major consequences of significant forced eviction have been the socio-economic and psychological impact of the urban expansion programme. The affected households have lost their farming land, affecting their livelihood security. The study recommends that the Ethiopian government ensure that the urban expansion programme is inclusive and that there is adequate involvement and participation of the potentially affected residents in the decision-making processes, as well as ensuring the legal protection of the affected residents and strengthening community resilience. The affected residents need to be adequately compensated for the loss of livelihoods.

Key word: Urban expansion, forced eviction, livelihood security, peri urban farmers

1. Introduction

Addis Ababa, Ethiopia's capital and the country's political, economic, and cultural heart, is undergoing a significant transformation as it experiences rapid urban expansion (Kebede & Singh, 2021). As the city sprawls and development projects continue to reshape its urban landscape, the repercussions of this growth extend beyond the city's limits and encroach upon peri-urban areas. Peri-urban households residing in the transitional zones between urban and rural spaces often find themselves caught in the crossfire of urban expansion (Wegedie, K.T., 2018). The consequences of this growth, coupled with the recurring issue of forced eviction, profoundly impact the livelihood security of these households. Urban expansion, a natural consequence of the city's population growth and economic aspirations, is inextricably linked to changes in land use and urban infrastructure development. The desire for improved infrastructure, housing, and amenities for a burgeoning urban population is a noble goal. However, how this expansion occurs and its implications for peri-urban households warrant a closer examination (Victor et al., 2020). Simultaneously, forced evictions have become a recurring phenomenon, with many residents being displaced from their homes and lands, often with little warning or compensation. Forced evictions can be attributed to various factors, including infrastructure development projects, urban renewal initiatives, and land speculation.

The consequences of these evictions extend far beyond the immediate displacement; they impact the livelihoods of those affected (Victor Onyebueke et al., 2020; Kebede & Singh, 2021). This article embarks on a journey to explore the intricate relationship between urban expansion, forced eviction, and the livelihood security of peri-urban households in Addis Ababa. By investigating the causes, consequences, and potential solutions to these issues, the study aimed to provide a comprehensive understanding of this multifaceted challenge in Ethiopia.

2. Literature Review

This section reviews the literature on forced evictions or displacements brought on by urbanisation, sustainable livelihoods, and the effects of urban expansion on the security of sustainable livelihoods for Addis Ababa's per-urban households.

2.1. Urban-induced displacement or forced evictions

Forced evictions are a recurrent issue in Addis Ababa and many other growing cities worldwide. Residents in peri-urban areas are particularly vulnerable to these evictions due to the perceived need for their land for urban development projects or other interests. Forced evictions can disrupt the social fabric of communities, displace individuals from their homes, and have severe repercussions on their livelihoods (Victor Onyebueke et al., 2020). Similar studies were conducted on urban expansion in the major cities of Ethiopia, namely, Bahir Dar, Sebeta Hawas, Sululta, Wolayita Sodo, Assosa, Dessie, Kombolcha, and Addis Ababa. The study conducted by Kassahun Tassie Wegedie (2018) in Bahir Dar city in the Amhara region of Ethiopia concluded that urbanisation-induced development has displaced farmers from their farm landholding systems. Farmers in peri-urban areas are losing enormous farmland due to urban expansion. The study conducted in Sebeta Hawas and Sululta sub cities of the Sheger city of the Oromia region concluded that nearly one-fifth of the sample households from 400 samples lost their entire farmland due to urban expansion induced land acquisition, and more than one-fourth of the sample households lost nearly two hectares of their farmland (Kebede & Singh, 2021).

Peri urban farmers have been displaced due to urban expansion, as evidenced by a recent study conducted in Tigray, Northern Ethiopia. The study, conducted by Weldearegay and colleagues in 2021, found that periurban smallholder farmers who were forced to relocate due to urban expansion experienced a poverty rate 5% higher than non-displaced households. It's worth noting that poverty rates are generally higher among displaced households in these circumstances. By recognizing this, we can work towards finding solutions to help these individuals and families overcome the challenges they face (Weldearegay S.K. et al., 2021; Mubarak et al., 2017). Beka Girma (2016) concluded in his study conducted in Sululta City, Oromia region, that urbanisation has displaced farmers from their farmland and livelihoods. Similarly, the expansion of the town of Wolaita Sodo was not participatory; it marginalised and negatively affected the livelihood of the displaced farming community (Paulos Lukas, 2017). The study conducted in Assosa (Tadele Tesfaye, 2020) indicated that because of urban expansion to peripheral farming communities in Assosa City, there is infrastructural improvement, socio-economic growth, rapid population growth, and socio-economic problems related to urban expansion in the studied area. However, the study failed to measure the significance of improvements in the livelihood of the farming community.

Contrary to the study conducted in Assosa City (Tadele Tesfaye, 2020), Ahlam Yimam (2017) has come to the conclusion that urban expansion into peripheral farming communities decreased income earned from agricultural production (crops and livestock) and increased displacement of the farming community. In Gonder City, urban expansion-induced displacement has negatively affected the marginalised farming communities and forced them to lose their land, livestock, and other land assets. The study also found that the expansion of urban areas has far-reaching consequences on the social life of affected communities. For instance, family disturbance, neighbour conflict, and unemployment induced seasonal migration, which were mentioned among the social problems that evicted households encountered (Yeshiwas Tigabu, 2018). Another study conducted in the Amhara region (Mohammed et al., 2020) concluded that peri-urban farmers' evictions from their indigenous land for land redevelopment are a continuous process that negatively affects the livelihood of farming communities. Although the displaced farming communities secured access to certain services due to urban expansion, it brought effects like loss of agricultural land and other assets, including grazing land, resulting in a change in their livelihoods and unfair compensation (Gadisa Worku, 2020).

Contrarily, in Atsi Womborta of the Tigray region of Ethiopia, the urban expansion has increased the housing rooms, job opportunities and enhancing the quality of life of the peri-urban communities (Hluf et al., 2022). Similar findings came from the study conducted in Sebeta, a city in the Oromia region, namely that urbanisation improved access to better social services and infrastructures. Landholders displaced due to urbanisation were compensated (Mideksa Esthete, 2017). The above-cited articles on urbanisation-induced displacement in Ethiopia reflect the peri-urban communities' agricultural land loss. However, most studies overlooked how much the displaced households lost or gained assets in the sustainable livelihood security framework, such as social, economic, human, natural, and physical capital.

2.2. Sustainable livelihood

A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a living; a livelihood is sustainable and can cope with and recover from stress and shocks and maintain or enhance its capabilities and assets (Mohammad et al., 2019). Research on the sustainable livelihoods of rural households is of great significance in solving rural poverty and promoting the transfer of rural land management rights, which are necessary for better livelihoods and sustainable development. Household livelihood security is defined as adequate and sustainable access to income and resources to meet basic needs (including adequate access to food, potable water, health facilities, educational opportunities, housing, time for community participation and social integration. Robert Chambers and Gordon Conway (1992) suggest that sustainable livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living: a livelihood is sustainable and can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term.

As Lasse Krantz (2001) quoted in his article, Livelihood Resources — the primary material and social, tangible, and intangible assets people use to construct their livelihoods — are conceptualised as different types of 'capital'. The assets that are generally recognised within sustainable livelihoods theory are summarised as follows:

- Natural (Environmental) Capital: Natural resources (land, water, wildlife, biodiversity, environmental resources).
- Physical Capital: It includes basic infrastructure (water, sanitation, energy, transport, communications), housing, and production means and equipment.
- Human Capital: Health, knowledge, skills, information, ability to labour.
- Social Capital: Social resources (relationships of trust, membership of groups, networks, access to broader institutions).
- Financial Capital: financial resources available (regular remittances or pensions, savings, supplies of credit).

2.3. Sustainable livelihood security

Livelihood security in peri-urban areas hinges on the ability of households to maintain a sustainable living through diverse income sources (Akter & Rahman, 2012). Urban expansion and forced eviction have a profound impact on this security. These households often rely on agriculture, informal employment, and small-scale businesses. The loss of land and housing due to urban expansion and forced eviction can disrupt these income streams and threaten their overall security (Mishra, 2021). According to Akter and Rahman (2012), livelihood security is a composite measure of a household's economic security, food security, health security, educational security, and empowerment security. Aidoo, Etuah and Fialor (2021) state that a household's livelihood security influences household livelihood diversity positively. Increasing the ability to meet basic needs improves the financial capital of households needed to build household socio-economic profiles, livelihood strategies, and social networks to reduce their susceptibility to the risk of small-scale mining (Supratim et al., 2022).

Empowering agrarian households to participate in community decisions, providing for their educational, health and food production needs, and facilitating economic status improve their livelihood security and build their capacity to identify, exploit livelihood possibilities and construct diverse livelihood portfolios (Mishra, 2021). Household Livelihood Vulnerability (HLV) Index, Household Livelihood Security (HLS) Index and Household Livelihood Diversity (HLD) Index were computed based on primary data from the field. Livelihood insecurity remains a prime concern for low-household-income countries. To provide a secure livelihood to the rural poor, the government of Ethiopia introduced a self-employment-type poverty alleviation programme similar to the National Rural Livelihood Mission (NRLM) in India. For example, in Odisha (India), a livelihood security index (LSI) was constructed to capture the livelihood security of the respondents, taking habitat security, health security, food security, and economic security into account. Further, the propensity score matching (PSM) method has estimated the programme's impact. The study finds a positive and significant effect of participation in the programme on livelihood security (Mishra, 2021).

2.4. Urban expansion's impact on sustainable livelihood security

Addis Ababa's urban expansion is a multifaceted process driven by factors such as population growth, urbanisation, and the pursuit of economic development. The city's boundaries have extended further into periurban areas as new housing projects, industrial zones, and infrastructure developments reshape the landscape (Mohammed et al., 2020). These expansions significantly affect peri-urban households regarding land access, housing, and livelihood security. The rapid conversion of peri-urban agricultural land into urban infrastructure often results in the loss of livelihoods for those dependent on agriculture. Furthermore, the rising cost of housing and living in newly developed urban areas can lead to displacement for peri-urban residents who can no longer afford to reside in their communities (Onyebueke et al., 2020). Urban expansion has both direct and indirect consequences, and peri-urban households are often on the receiving end of these changes—Ethiopian urban settings are experiencing an unprecedented rate of urbanisation through expansion. Horizontal urban expansion adversely impacts the livelihood of the peri-urban agricultural community in Hawassa, Ethiopia. Practical rules and regulations should exist; in-kind compensation, pre-training and post-coaching on marketable skills are recommended (Firew, 2010). The land-use land-cover change can be inferred as the impacts of peri-urbanisation leading to the degradation of agricultural land, deforestation, deterioration of wetlands and wild habitat destruction (Goswami et al., 2020).

The study that investigated the impact of urban expansion on the peripheral community livelihood in Holeta town of Oromia region in Ethiopia revealed that there is infrastructural improvement, socio-economic growth, rapid population growth and also socio-economic problems related to urban expansion in the studied area (Moisa & G. D. O, 2021). There is excellent spatial and temporal land use and land cover modification for building up land uses. The livelihood condition of the per-urban communities changed to a non-agricultural form. However, there are policy and strategy gaps in confiscating and compensating for the affected communities in-ground implementation (Onyebueke et al., 2020). The dislocation program implemented is not rehabilitative and negatively affects the livelihood of the dislocated farming community. Furthermore, the study revealed that children lose the right to family inheritance in town administration. Landholders' expropriation should be recompensed for equal socio-economic benefits from urbanisation, and further skill-oriented training for new livelihood strategies and also accessing credit and rehabilitating strategies were recommended for affected community livelihood (Asmera, 2018).

3. Methodology

This research employed an explorative research design and qualitative research approach to uncover the complexities of the impact of urban expansion and forced evictions on peri-urban household livelihood security in Lemmi Kura sub-city of Addis Ababa. To delve into the lived experiences and perceptions of peri-urban households, the researcher conducted in-depth interviews with a cross-sectional sample of 15 per-urban household members or representatives in Woreda 2, Woreda 6, and Woreda 14 of Lemmi Kura sub-city in Addis Ababa. The qualitative method allowed the study to explore the emotional, social, and economic impacts of urban expansion and forced evictions on individuals and communities.

Qualitative data were subjected to descriptive and thematic analysis, categorising responses into common themes related to livelihood security, coping strategies, and the emotional toll of forced eviction.

3.1. Themes generated from the analysis of qualitative data

3.1.1. Theme 1: Extent of Urban Expansion

The qualitative data analysis reveals a significant increase in urban expansion over the past decade. New housing developments, industrial zones, and infrastructure projects have encroached further into peri-urban areas, leading to changes in land use and the displacement of residents. These findings align with the study conducted by Kassahun Tassie Wegedie (2018) in Bahir Dar city of the Amhara region in Ethiopia, which concluded that urbanisation-induced development has displaced farmers from their farm landholding system. Farmers in the peri-urban areas are losing enormous farmland due to urban expansion. All the 15 participants in the interviews raised concerns about the fact that Urban Expansion has been achieved at the households' expense. The participants of the interview mentioned that the agricultural land lost between 1997-2018 ranges between two to 15 hectares of land per household of the evicted communities. Such loss of farm land compensation was either nil or Ethiopian Birr 1.22 (or USD 0.0214) per square meter, according to the participants of the interview. There are a large number of farmers still who did not receive eve this meager amount of compensation.

The Urban Expansion and development trajectory embarked on household forces, evictions and displacement of residents in the peri-urban areas of Addis Ababa. The research findings shed light on the multifaceted consequences of urban expansion and forced eviction on the livelihood security of peri-urban households in Addis Ababa. Some of the key results from our study include:

- Loss of generational and livelihood asset, which is ancestral land;
- Absence of fair compensation for the expropriated land;
- Absence of consultations of the evicted peri urban farmers;
- Absence of alternative livelihood activities for the displaced farmers;
- Heavy competition with the experienced youth already available in wage labour market for the available daily wage employment opportunities;
- Lack of skills for a better and sustainable jobs;
- Lack of entrepreneur skills to engage in business activities; and
- Lack of access to credit for a startup of business.

Urban expansion has both direct and indirect consequences, and peri-urban households are often on the receiving end of these changes—Ethiopian urban settings are experiencing an unprecedented rate of urbanisation through expansion. Horizontal urban expansion adversely impacts the livelihood of the peri-urban agricultural community in Hawassa, Ethiopia. The livelihood of such communities has been on the verge of risk attributed mainly to the lack of urban good governance and lack of effective rules and regulations on land expropriation from and compensation to farmers while the difference in wealth, power, educational background, family size burdens, livelihood strategies and diversity before and after expropriation were determining factors (Shankarappa et al., 2022).

3.1.2. Theme 2: Prevalence of Forced Evictions

The findings of this study, which were informed by the 15 interviews, indicate that forced evictions are a recurring issue in Addis Ababa. A considerable percentage of peri-urban households have experienced forced eviction or have been under the threat of eviction between 1997-2018. The reasons behind these evictions range from urban development projects to land speculation. Simultaneously, forced evictions have become a recurring phenomenon, with many residents being displaced from their homes and lands, often with little warning or compensation. The results align with the study conducted in the Amhara region (Mohammed et al., 2020), which firmly concludes that the eviction of peri-urban farmers from their native land for land redevelopment is an ongoing and harmful process that negatively impacts the livelihoods of farming communities. Although the displaced farming communities secured access to certain services due to urban expansion, it brought effects like loss of agricultural land and other assets, including grazing land, resulting in a change in their livelihoods and unfair compensation (Gadisa Worku, 2020). Despite the intensification of agricultural land area, there has been a decrease in agricultural livelihoods and subsequent reduction in income

contribution from natural resource-based livelihoods. According to the participants of the interview, they lost their agricultural land means loss of their entire livelihood, ancestral land and asset, and food and health security. According to them, they used to feed the other Addis Ababa dwellers with production of cereals such as teff and wheat and other crops during the peri era of eviction, where as currently they are begging or looking a helping hand from the government. For instance, a farmer who was a well-known and the richest in their community before the eviction is now begging the leftovers of from local restaurants. According to the key informants, although the recent government tries to support them by providing a direct support of nearly ETB 2000 per month (which is eqivalent of USD 35), this amount is not enough to feed their entire family for 30 days.

3.1.3. Theme 3: Consequences on Livelihood Security

According to this study's findings, these trends' impact on livelihood security is profound. The 15 participants interviewed concurred with the literature that many peri-urban households are losing their primary source of income as their agricultural land is converted into urban areas. The rising cost of living and housing in newly developed areas often pushes them further into poverty. The urban expansion and forced eviction have a profound impact on this livelihood security. These households often rely on agriculture, informal employment, and small-scale businesses. The displaced households' income has drastically and abruptly declined due to the loss of agricultural land to urban expansion, and fully or immensely stopping farming activities due to expropriated farmland. They lost their lifelong farming experience. They also do not have skills for new available construction jobs. Such jobs are also saturated by the other long years experienced semi-skilled workers. Businesses are also require experience and financial literacy, which the displaced peri urban farmers lack. Such economic activities are also occupied by experienced long years' urban settlers, which challenged the displaced farmers to become competitive in the market. The loss of land and housing due to urban expansion and forced eviction disrupted these income streams and threaten their overall security (Mishra, 2021). According to Akter and Rahman (2012), livelihood security is a composite measure of a household's economic security, food security, health security, educational security, and empowerment security. Aidoo, Etuah and Fialor (2021) state that a household's livelihood security influences household livelihood diversity positively. Increasing the ability to meet basic needs improves the households' financial capital needed to build household socio-economic profiles, livelihood strategies, and social networks and reduces their susceptibility to the risk of small-scale mining.

3.1.4. Theme 4: Social and Psychological Impacts

The 15 qualitative interviews provided insight into the emotional toll of forced evictions. The participants interviewed expressed feelings of insecurity, loss, and displacement in harmony with the previous studies. Most of the studies revealed that communities are disrupted, social networks are strained, and the psychological well-being of those affected is compromised. Robert Chambers and Gordon Conway (1992) suggest that sustainable livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living: a livelihood is sustainable and can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term. Urban expansion-induced displacement has negatively affected the marginalised farming communities and forced them to lose their land, production of livestock and other land assets. For instance, in the town of Sululta in the Oromia region, urbanisation has positive and negative consequences on human life. The farming communities in Sululta town are victims of the negative impacts of urbanisation, such as displacement, joblessness, food insecurity, and homelessness. They lost their original way of life, particularly agricultural practices. Local farmers are displaced from their original habitat. As a result, they lost their social, cultural, and economic livelihoods (Beka Girma, 2016). Conversion of farmland has negatively affected the overall livelihood assets of peri-urban dwellers in Addis Ababa (Duguma et al. Megento, 2022). In the sub-urban of Addis Ababa, fully displaced people, due to the urban expansion into suburbs, still need to establish a comparable means of income earnings, and they are pursuing a depleting consumption style (Leulsegged et al., 2011).

4. Discussion

The research findings underscore the urgent need to address the challenges of forced evictions faced by peri-urban households in Addis Ababa for urban expansion. Urban expansion is inevitable as the city grows, but the approach to expansion and its consequences can be managed more effectively (Shambel et al., 2020).

After 2018, the current Prosperity Party government in Ethiopia has tried to remold the pervious EPRDF's government policy of peri-urban farmers land tenure by:

- Providing land certification;
- Introduction of urban agriculture development and promotion support;
- Providing housing for a limited and selected displaced farmers,
- Support through a direct monthly cash transfer for a very limited disabled, and old-aged displaced households, and
- Provide skill training and job opportunities for the youth of the displaced families.

However, such positive government initiatives addressed rearly the already worsen livelihood problems of the displaced peri urban farmers. There is a need for an inclusive approach to urban planning where key stakeholders such as residents and the communities at large are consulted on urban expansion issues. The inclusive urban planning trajectory should consider the impact of such activities on the livelihoods of the periurban residents in Ethiopia. The provision of alternative livelihood opportunities and land use arrangements benefits both urban development and those affected (Shambel et al., 2020).

There is a need to strengthen the legal protection of peri-urban households and ensure that they get adequate and fair compensation for the loss of their livelihoods. The Ethiopian government needs to provide adequate housing and life long sustainable and secured assets such as providing shops and residential houses that generate income for the displaced farmers through either renting or running businesses by themselves. This is a crucial step in safeguarding the livelihood security of peri-urban households. Effective legal frameworks, rules and regulations, in-kind compensation such shopping malls and residential buildings, pre-training and post-coaching on marketable skills should ensure that the displaced residents can sustain themselves once again (Firew, 2010).

Encouraging community-based resilience strategies can help peri-urban households cope with the uncertainties caused by urban expansion. Support for diversified livelihoods and social cohesion can mitigate the negative impacts of displacement and forced evictions. This study also found that the expansion of urban places has far-reaching consequences on the social life of affected communities. For instance, family disturbance, neighbour conflicts, unemployment, and induced seasonal migration were mentioned as the most prevalent social problems that the evicted households encounter (Yeshiwas Tigabu, 2018). Greater land use and urban development project transparency can help prevent unfair or illegal forced evictions. Public accountability mechanisms need to be established to ensure responsible urban expansion initiatives.

5. Conclusion

In conclusion, the impact of urban expansion and forced evictions on the livelihood security of peri-urban households in Addis Ababa is a pressing concern. As the city continues to grow and evolve, policies and strategies must be implemented to protect the interests and well-being of those living in the peri-urban areas of Addis Ababa. By addressing the consequences of these changes, the processes can work towards a more equitable and sustainable urban development model that ensures livelihood security for all residents. This study has explored the complex interplay of urban expansion, forced evictions, and livelihood security. The study's findings can bring insights that will catalyse further research and, more importantly, serve as a basis for informed policy decisions to address the challenges faced by peri-urban households in the dynamic city of Addis Ababa in Ethiopia.

References

Duguma ErasuTufa and Tebarek LikaMegento (2022). The effects of farmland conversion on livelihood assets in peri-urban areas of Addis Ababa Metropolitan city, the case of Akaki Kaliti sub-city, Central Ethiopia. Land Use Policy, Volume 119.

Firew, B. (2010). The Impact of Horizontal Urban Expansion on Sub-Urban Agricultural Community Livelihood: The Case of Tabor Sub-City, Hawassa City, Addis Ababa University. https://doi.org/10.5539/jas.v5n1p54.

Leulsegged Kasa, Gete Zeleke , Dawit Alemu , Fitsum Hagos and Andreas Heinimann, (2011).Impact of Urbanisation of Addis Abeba City on Peri-urban Environment and Livelihoods, ResearchGate, https://www.researchgate.net/publication/267802706. Addis Ababa.

Mishra, A. & D. B. (2021). Livelihood security among rural poor: Evaluating the impact of Rural Livelihood Mission in Odisha, India. Cogent Economics and Finance, 9(1). https://doi.org/10.1080/23322039.2021.1978705.

Mohammad ARIF, D. Srinivasa RAO, & Krishnendu GUPTA (2019). Peri-urban livelihood dynamics: a case study from Eastern India. Forum geographic. Geographical studies and environment protection research. Volume XVIII | Issue 1.

Mohammed, I., Kosa, A., & Juhar, N. (2020). Economic linkage between urban development and livelihood of peri-urban farming communities in Ethiopia (policies and practices). Agricultural and Food Economics, 8(1). https://doi.org/10.1186/s40100-020-00164-2.

Moisa, M. B. and G. D. O. (2021). Analysis of urban expansion and land use/land cover changes using geospatial techniques: a case of Addis Ababa City, Ethiopia. Applied Geomatics, 13(4). https://doi.org/10.1007/s12518-021-00397-w.

Onyebueke, V., Walker, J., Lipietz, B., Ujah, O., & Ibezim-Ohaeri, V. (2020). Urbanisation-induced displacements in peri-urban areas: Clashes between customary tenure and statutory practices in Ugbo-Okonkwo Community in Enugu, Nigeria. Land Use Policy, 99. https://doi.org/10.1016/j.landusepol.2020.104884.

Shambel Tufa Telila (2020). The Impact of Rapid Growth of Urbanization and Urbanism in Eastern Ethiopia. Journal La Sociale. Vol. 1 No. 3 (2020). https://doi.org/10.37899/journal-la-sociale.v1i3.136.

Shambel Tufa Telila (2020). The Impact of Rapid Growth of Urbanization and Urbanism in Eastern Ethiopia. Journal La Sociale. Vol. 1 No. 3 (2020). https://doi.org/10.37899/journal-la-sociale.v1i3.136.

Shankarappa Sridhara & Pradeep Gopakkali & Konapura Nagaraja Manoj & Kiran Kumar R. Patil & Venkatesh Paramesh & Prakash Kumar Jha & P. V. Vara Prasad, (2022). "Identification of Sustainable Development Priorities for Agriculture through Sustainable Livelihood Security Indicators for Karnataka, India," Sustainability, MDPI, vol. 14(3), pages 1-23, February.Handle: RePEc:gam:jsusta:v:14:y:2022:i:3:p:1831-:d:742815.

Supratim Guha, Dillip Kumar Barik, Venkata Ravibabu Mandla (2022). Sustainable Livelihood Security Index A Case Study in Chirrakunta Rurban Cluster. Book Geospatial Modeling for Environmental Management 1st Edition First Published2022 ImprintCRC Press, eBook ISBN 9781003147107.

Weldegebriel, A., Assefa, E., Janusz, K., Tekalign, M., & van Rompaey, A. (2021). Spatial Analysis of Intra-Urban Land Use Dynamics in Sub-Saharan Africa: The Case of Addis Ababa (Ethiopia). Urban Science, 5(3). https://doi.org/10.3390/urbansci5030057.