

An Assessment of Urban Decay in Rural Towns: a Case of Building Dilapidation in Thohoyandou Town, South Africa

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1 ABSTRACT

Urban decay is a global dilemma that can severely weaken the image, livability, and productivity of most cities due to its negative impacts on the built environment. Building dilapidation is one form of urban decay which can pose a risk to public health, safety or well-being. The impact of urban decay cannot be overemphasized particularly in South Africa's historically disadvantaged rural towns such as Thohoyandou. The aim of this study was to assess the status of building dilapidation in Thohoyandou Central Business District (CBD) in Limpopo province of South Africa. The objectives of the study were to map building dilapidation in Thohoyandou CBD; to investigate the causes of building dilapidation in Thohoyandou CBD and to suggest recommendations towards addressing persisting building dilapidation. This study adopted a qualitative research approach through conducting 20 key informant interviews and field observations. The study revealed that building dilapidation in Thohoyandou CBD is caused by factors such as lack of municipal by-laws to deal with derelict buildings, irregular planning procedures in the construction of buildings; lack of building maintenance, illegal occupation of buildings; negligence of buildings by property owners, incapacity of the municipality to render services to overpopulated buildings as well as lack of enforcing building occupant capacity by-laws. These findings highlight the complexity of the issue and the need for a holistic approach to address urban decay. Based on the research findings, the study puts forth several recommendations to mitigate building dilapidation in rural towns like Thohoyandou. The study suggested recommendations which include formulating municipal by-laws to deal with derelict buildings, stricter enforcement of regular planning procedures in construction projects; establishing a dedicated CBD building maintenance plan, conducting Thohoyandou CBD building audits, and regulation of building occupants' capacities. Collaboration among stakeholders, including the municipality, property owners, and the community, is essential for the successful implementation of these strategies. The study contributes to the existing knowledge on urban decay and revitalization. The research findings have significant implications for policy and decision-making in Thohoyandou CBD and other similar contexts, aiming to promote sustainable urban development and improve the overall quality of life.

Keywords: central business district, building dilapidation, urban decay, rural towns, spatial planning

2 INTRODUCTION

Urban decay and building dilapidation pose significant challenges to the sustainable development and revitalization of cities and towns worldwide (Ndlebe, 2017). In the context of developing countries, rural towns often face unique circumstances and complexities in combating urban decay (Phillips, 2017). Thohoyandou CBD, a rural town in South Africa, exemplifies these challenges, where the deterioration of buildings has become a pressing issue, negatively impacting the town's overall aesthetics, economy, and residents' quality of life.

This research aimed to investigate the causes and implications of building dilapidation in Thohoyandou CBD and to propose strategies for addressing this issue. By examining this specific case, the study contributed to the broader understanding of urban decay and provides valuable insights for similar rural contexts facing similar challenges.

According to Saranya and Mewa (2017), building dilapidation refers to the progressive deterioration and decay of structures, resulting from neglect, inadequate maintenance, or other contributing factors. In Thohoyandou CBD, the phenomenon of building dilapidation has been escalating, with a growing number of abandoned or rundown buildings becoming a common sight (Thulamela Municipality IDP, 2019). The consequences are multi-fold, including reduced property values, increased crime rates, decreased economic activities, and a decline in community morale (Phillips, 2017).

While the literature on urban decay and building dilapidation predominantly focuses on urban centers in developed countries, there is a dearth of research examining this issue in rural towns, especially in the context of developing countries. Thohoyandou CBD provided an ideal case study due to its unique characteristics, including a predominantly rural setting, limited resources, and a history of inadequate urban planning and management.

This study adopted a qualitative research approach, utilizing a case study research design to explore the causes and implications of building dilapidation in Thohoyandou CBD. By employing key informant interviews, field observations, and secondary sources, the research sought to uncover the underlying factors contributing to building dilapidation and understand their interconnectedness. Thematic content analysis was employed to analyze the collected data, identify recurring patterns and themes, and draw meaningful conclusions.

The findings of this study offered valuable insights into the complexities of building dilapidation in rural towns like Thohoyandou and inform the development of strategies and interventions to mitigate urban decay. Ultimately, the research aimed to contribute to the existing knowledge base on urban revitalization efforts in developing countries and promote sustainable urban development for the betterment of Thohoyandou CBD and similar contexts.

3 LITERATURE REVIEW

3.1 Introduction

Urban decay is a significant issue that affects cities worldwide, leading to numerous social, economic, and environmental challenges (Saranya and Mewa, 2017). Understanding the causes and consequences of urban decay is crucial for policymakers, urban planners, and researchers to develop effective strategies for revitalization and sustainable urban development (Phillips, 2017). This literature review aims to explore the various dimensions of urban decay, analyze its underlying causes, and highlight the importance of comprehensive interventions.

Urban decay encompasses a range of interconnected problems, including physical deterioration, social disintegration, economic decline, and inadequate infrastructure (Mireku, 2021). Dilapidated buildings, high crime rates, unemployment, poverty, and spatial inequalities are common manifestations of urban decay (Aubakari, 2021). According to Martinez (2021), the consequences of urban decay are far-reaching, affecting the quality of life for residents, hindering economic growth, and exacerbating social inequalities.

This literature review serves as a critical component of a broader thesis focusing on urban decay and its remediation. By examining existing research, theories, and practical interventions, the review aims to provide a comprehensive understanding of urban decay, its causes, and potential solutions. The review draws upon a range of scholarly works, including academic articles, books, and policy reports, to ensure a comprehensive analysis of the topic. By synthesizing the existing literature, this review seeks to identify common themes, knowledge gaps, and emerging trends in the field of urban decay. It also aims to highlight the significance of urban planning, policy interventions, and community engagement in addressing urban decay and promoting sustainable urban development. The findings of this literature review will contribute to the broader thesis by providing a solid theoretical foundation and informing the subsequent empirical research and analysis.

Overall, this literature review will play a vital role in understanding the complexities of urban decay and formulating effective strategies for its mitigation. By examining the existing body of knowledge, it will provide insights into the causes and consequences of urban decay and offer recommendations for policymakers, urban planners, and community stakeholders to foster vibrant and sustainable cities.

3.2 Urban Decay: Definition and Causes

Urban decay refers to the progressive deterioration of urban areas, characterized by physical, social, and economic decline (Martinez, 2021). It encompasses a wide range of manifestations that collectively contribute to the degradation of cities and communities. Physical decay is often visible through dilapidated buildings, crumbling infrastructure, and abandoned spaces (Suite, 2023). Social disintegration involves the breakdown of social networks, increased crime rates, poverty, and social inequalities (Lombardo, 2017).

Economic decline manifests as unemployment, decreased investment, and a shrinking tax base (Ndlebe, 2017).

Urban decay is the result of a complex interplay of various factors, including economic, social, and planning-related aspects (Philip, 2017). Economic factors play a significant role in the deterioration of urban areas. The decline of traditional industries, such as manufacturing, can lead to high unemployment rates and poverty, creating a cycle of disinvestment and decline (Letlape, 2019). Global economic forces, such as deindustrialization and globalization, have also contributed to the decay of certain cities and neighborhoods (Suite, 2023).

According to Glaeser and Gyourko (2005), social issues, including crime, social inequality, and social dislocation, are intertwined with urban decay. High crime rates, often associated with urban decay, create an atmosphere of fear and insecurity, discouraging investment and economic activity (Attwood, 2013). Social inequalities, such as unequal access to quality education, healthcare, and housing, further perpetuate urban decay (Davis, 2018). Social dislocation, caused by factors such as migration, racial segregation, and gentrification, can disrupt social cohesion and exacerbate urban decay (Fahey, 2017).

Inadequate urban planning and governance contribute significantly to urban decay. Poor land-use planning, zoning regulations, and lack of comprehensive urban development strategies can result in mismatched land uses, uncontrolled sprawl, and neglect of certain neighborhoods (Kandžija et al., 2017). Insufficient investment in infrastructure maintenance and renewal leads to the physical deterioration of buildings and public spaces (Lewis, 2013). Additionally, inadequate community participation and lack of accountability in decision-making processes can hinder the revitalization of decaying areas (Nassaji, 2015).

The impacts of urban decay are detrimental to both communities and cities as a whole. Decaying neighborhoods often experience a decline in property values, making it difficult for residents to sell their homes and move elsewhere (Onuoha, 2014). This exacerbates residential segregation and hinders social mobility. Urban decay can also lead to decreased tax revenues for local governments, limiting their capacity to provide essential services and invest in infrastructure (Vera, 2015).

Furthermore, the negative impacts of urban decay extend beyond economic and social realms. Deteriorating physical environments contribute to poor health outcomes, as decaying buildings may contain health hazards such as lead, asbestos, or mold (Zack, 2015). The lack of green spaces and the degradation of the natural environment further exacerbate health disparities in decaying neighborhoods (Kweon et al., 2017). Urban decay also perpetuates a negative cycle, as it discourages private investment and perpetuates a sense of hopelessness and disengagement among residents (Bess, 2008).

In conclusion, urban decay is a multifaceted phenomenon with profound impacts on communities and cities. Its manifestations encompass physical, social, and economic decline. Economic factors, social issues, and inadequate urban planning all contribute to the emergence and persistence of urban decay. The negative impacts of urban decay include reduced property values, diminished tax revenues, health hazards, and social disintegration. Understanding the causes and impacts of urban decay is essential for formulating effective strategies for revitalization and sustainable urban development.

3.3 Importance of Addressing Urban Decay

Addressing urban decay is of utmost importance for achieving sustainable urban development and ensuring the well-being of communities (Bess, 2008). Neglecting urban decay can have severe consequences that extend beyond the physical deterioration of neighborhoods (Awumbila, Owusu, and Teye, 2014). By understanding the significance of addressing urban decay, policymakers, urban planners, and community stakeholders can work towards implementing comprehensive strategies to revitalize declining areas (Branas et al., 2011).

One of the potential consequences of neglecting urban decay is the increase in crime rates. Decaying neighborhoods often experience higher levels of criminal activities due to the lack of social control, disinvestment, and limited economic opportunities (Crentsil and George, 2018). The presence of vacant and abandoned properties creates a breeding ground for criminal behavior and contributes to a sense of insecurity among residents (Galeser, 2011).

Environmental degradation is another consequence of urban decay. Neglected areas are more likely to suffer from poor environmental management, including inadequate waste disposal, pollution, and the loss of green

spaces (Harrison, 2002). This not only negatively impacts the quality of life for residents but also contributes to health hazards and the degradation of ecosystems (Phillips, 2017).

Furthermore, neglecting urban decay can result in declining property values, exacerbating economic inequalities and hindering economic growth. Deteriorating neighborhoods face challenges in attracting investments and businesses, leading to a downward spiral of disinvestment and limited job opportunities (Taipale, 2011). The decline in property values also affects homeowners and can lead to financial instability and limited mobility for residents (Ndlebe, 2017).

To effectively address urban decay, comprehensive strategies are required. Piecemeal approaches are often insufficient and fail to tackle the root causes of decay (Okrent, 2009). Comprehensive strategies should encompass physical, social, economic, and environmental dimensions of urban development (Onuoha, 2014). This may involve targeted investments in infrastructure, affordable housing, and community facilities, as well as promoting community engagement and participation in decision-making processes (Parab et al., 2020).

In summary, addressing urban decay is crucial for sustainable urban development. Neglecting urban decay can have detrimental consequences, including increased crime rates, environmental degradation, and declining property values. It is imperative to adopt comprehensive strategies that address the underlying causes of urban decay and foster revitalization. By doing so, cities can promote social equity, environmental sustainability, and economic growth, ensuring vibrant and inclusive communities for the future.

3.4 Approaches to Urban Decay Remediation

Urban decay remediation requires a multifaceted approach that encompasses urban renewal programs, community development initiatives, and effective land use management frameworks (Smith and Sarah, 2008). This section explores these approaches and their role in addressing urban decay.

3.4.1 Urban Renewal Programs

Urban renewal, a concept rooted in the post-World War II era, aims to revitalize deteriorating urban areas through comprehensive redevelopment strategies (Squires and Kubrin, 2005). These programs emerged in response to the challenges of blight, substandard housing, and social dislocation (Bess, 2008). Urban renewal initiatives have been implemented worldwide, such as the regeneration efforts in London's Docklands and the revitalization of New York City's Times Square (Vera, 2015). However, the effectiveness of urban renewal strategies has been a topic of debate. While they can rejuvenate declining areas and attract investment, they often face criticism for causing displacement, eroding local cultures, and neglecting social inclusivity (Zach, 2015).

3.4.2 Community Development Initiatives

Community-based approaches play a vital role in addressing urban decay by empowering residents and fostering social cohesion. Such initiatives involve active participation from community members, grassroots organizations, and local authorities (Wilkerson et al., 2014). Successful examples of community-led efforts can be found worldwide, including the establishment of community land trusts in the United States and the creation of self-help housing projects in Brazil (Squires and Kubrin, 2005). These initiatives not only address physical decay but also promote social capital and empowerment. However, challenges exist, including limited resources, unequal power dynamics, and the need for sustained community engagement (Parab et al., 2020).

3.4.3 Land Use Management Frameworks

Land use management systems (LUMS) are essential tools for regulating land use and preventing frictional blight. LUMS encompass various mechanisms, such as land use policies, framework plans, and land use schemes, which guide decision-making processes and promote harmonious land development (Okrent, 2009). The Thulamela district in South Africa provides an example of a comprehensive LUMS. In this district, the Land Use Management System (LUMS) plays a crucial role in managing land use and development, aligning with the Integrated Development Plan's policy and strategic-based decisions (Mavhunga et al., 2019). Such frameworks help mitigate conflicts between incompatible land uses, ensuring sustainable urban development and avoiding the detrimental effects of urban decay (Onouha, 2014).

3.4.4 Spatial Planning and Land Use Management Act (SPLUMA)

The Spatial Planning and Land Use Management Act (SPLUMA) serves as a comprehensive framework for spatial planning and land use management in South Africa. It requires the preparation of Spatial Development Frameworks (SDFs), which lay out a clear vision for long-term development goals (Vera, 2015). SPLUMA addresses the causes of urban decay by providing regulations for spatial planning, land use schemes, and urban management. It aims to promote spatial sustainability and efficiency. For instance, SPLUMA emphasizes sustainable land use, limits urban sprawl, and encourages the redevelopment of existing structures (Taipale, 2011). By adopting SPLUMA and adhering to its goals, municipalities can effectively tackle urban decay and promote sustainable urban development (Nassaji, 2015).

In conclusion, addressing urban decay requires a comprehensive approach that includes urban renewal programs, community development initiatives, effective land use management frameworks, and adherence to relevant legislation such as SPLUMA. Urban renewal programs can rejuvenate deteriorating areas, but they must consider social inclusivity and avoid displacement. Community development initiatives empower residents and promote social capital, although challenges of resource constraints and power dynamics exist.

3.5 Integrated Development Planning

Integrated Development Planning (IDP) is a crucial concept in addressing urban decay as it provides a comprehensive framework for coordinating various planning processes and promoting sustainable development (Zach, 2015). The municipality of Thulamela's IDP plays a significant role in addressing urban decay within its jurisdiction.

IDP refers to a strategic planning process that integrates various sectors and stakeholders to guide the development of a municipality or district (Vera, 2015). It serves as a primary instrument for informing planning, management, and decision-making processes (Smith and Sarah, 2008). The IDP recognizes the interconnectedness of social, economic, and environmental factors, aiming to create inclusive and sustainable communities (Bess, 2008).

The municipality of Thulamela's IDP is crucial in addressing urban decay within its region. It provides a framework for aligning national and provincial legislation with local planning requirements (Kandžija et al., 2017). The IDP identifies the plans and planning requirements that are binding on the municipality and outlines the principles and procedures for consultation and coordination with local municipalities (Republic of South Africa, 2000). By integrating various planning processes, the IDP ensures a holistic approach to urban development and helps overcome the challenges associated with urban decay (Branas et al., 2011).

The Thulamela municipality's IDP encompasses both rural and urban issues, addressing the declining built form and physical environment in the region. Urban decay often results in a lack of coherence and functionality in cities, hindering their overall development (Crentsil and George, 2018). The integration of various activities, guided by the IDP, enables the municipality to address urban decay by promoting effective land use, infrastructure development, and social inclusion (Thulamela Local Municipality, 2018).

The IDP's strategic planning approach ensures that all decisions related to planning, management, and development are informed by a shared vision and goals (Republic of South Africa, 2000). It enables the municipality to prioritize interventions and allocate resources effectively, taking into account the specific challenges associated with urban decay (Awumbila Owusu, and Teye, 2014). By integrating spatial development frameworks, land use management systems, and community-driven initiatives, the IDP contributes to a coordinated and comprehensive response to urban decay (Craig and Dougla, 2005).

In summary, integrated development planning plays a vital role in addressing urban decay by providing a holistic and coordinated approach to urban development. The municipality of Thulamela's IDP serves as a strategic planning instrument, aligning national and provincial legislation with local planning requirements. Through the integration of various planning processes, the IDP enables the municipality to address urban decay challenges and promote sustainable and inclusive development in both rural and urban areas.

3.6 Conclusion

This literature review has examined the concept of urban decay, its causes, impacts, and the approaches to remediation. The review highlighted the significance of addressing urban decay for sustainable urban development and emphasized the need for comprehensive strategies.

Urban renewal programs have been identified as a key approach to revitalizing deteriorating urban areas. However, it is crucial to consider their effectiveness and limitations, as well as the importance of community development initiatives. Community-based approaches play a vital role in empowering local communities and fostering sustainable change. Additionally, the review explored the role of land use management frameworks, such as the LUMS in the Thulamela district, and the Spatial Planning and Land Use Management Act (SPLUMA) in guiding land use and development. These frameworks provide regulatory mechanisms to prevent frictional blight and promote harmonious land use.

Moreover, the municipality of Thulamela's integrated development plan (IDP) emerged as a significant tool for addressing urban decay by integrating various planning processes and promoting sustainable development. To combat urban decay effectively, future research should focus on evaluating the outcomes of urban renewal programs, analyzing the long-term impacts of community development initiatives, and exploring innovative approaches within land use management frameworks. Additionally, interventions should prioritize the implementation of comprehensive strategies that integrate multiple approaches, including urban renewal, community development, land use management, and integrated development planning.

4 RESEARCH METHODOLOGY

4.1 Introduction

This section provides an overview of the research methodology, highlighting its significance in addressing the research objectives. The research design, approach, and key components are briefly discussed, setting the stage for the subsequent sections. The chosen qualitative research approach is justified based on its ability to capture human expressions, experiences, and observations. The case study research approach is explained as suitable for conducting a thorough and in-depth study of urban decay. The section also establishes the context for the research methodology and its importance in generating genuine and authentic results.

4.2 Research Approach

A qualitative research approach was chosen to capture the nuances and insights of the human mind in relation to urban decay. Qualitative research allows for open and transparent expression of opinions, experiences, and observations. It enables a deeper understanding of how individuals make sense of their urban environment (Neumen, 2013). By adopting a case study research approach, the study aims to conduct a comprehensive and in-depth examination of urban decay, narrowing down complex issues into manageable and investigable problems. This approach is particularly suitable for qualitative research and facilitates the application of theories or models to real-world phenomena (McLeod, 2014). It also addresses the need for researchers to gain insights into urban collapse and its implications.

4.3 Study Population

The study population consists of key stakeholders involved in the building dilapidation of Thohoyandou CBD. This includes municipal officials, property owners, and tenants within the CBD. Selecting the right participants is crucial for the accuracy and relevance of the study. Understanding the characteristics and preferences of the target audience helps in obtaining precise and meaningful research outcomes (Murphy, 2016)

4.4 Sampling Procedure

The sampling procedure for this study involved the selection of a sample group to be studied instead of attempting to study the entire population (Creswell, 2013). Non-probability sampling methods were adopted due to the qualitative nature of the research. Purposive sampling was used to select municipal officials involved in spatial planning issues within Thohoyandou CBD, while convenience sampling was employed to identify property owners and tenants within the CBD. The choice of sampling techniques aimed to gather information from relevant individuals who had knowledge and experience related to the research topic. By using a combination of purposive and convenience sampling, the study ensured the inclusion of key stakeholders who could provide valuable insights into the building dilapidation in Thohoyandou CBD (Reddy, 2017).

4.5 Data Collection

The data collection process for this study involved both primary and secondary data sources. Primary data collection methods included key informant interviews and field observations. Key informant interviews were conducted with 13 municipal officials, 2 property owners, 4 tenants, and 1 informal trader within the Thohoyandou CBD. These interviews provided valuable insights into the perspectives and experiences of key stakeholders involved in the building dilapidation issue. Field observations were carried out to map dilapidated buildings within the CBD using an observation checklist and capture photographs of the buildings.

Secondary data collection involved gathering information from various sources such as local government documents including the Thulamela Vision 2030 document, the Thulamela Integrated Development Plan (IDP) 2021/2022, and the Thulamela Spatial Development Framework (SDF). Additionally, previous studies such as journal articles and papers were reviewed to gain a better understanding of the research problem and explore existing knowledge on urban decay and revitalization efforts.

The collected data, both primary and secondary, served as the basis for the analysis and interpretation of the research findings. Thematic content analysis was applied as the method of data analysis, which involved identifying patterns and common themes in the interview data (Braun and Clarke, 2006). This analysis approach allowed for a comprehensive exploration of the data and facilitated the achievement of the research objectives.

4.6 Qualitative Data Analysis

Qualitative data analysis plays a crucial role in uncovering patterns, themes, and meanings within the collected data, providing valuable insights into the research topic. In this study, thematic content analysis was chosen as the method for data analysis (Creswell, 2013). Thematic content analysis is a systematic approach that involves identifying, organizing, and interpreting patterns or themes in qualitative data (Braun & Clarke, 2006).

Thematic content analysis was selected due to its suitability for analyzing rich textual data and its ability to uncover common themes and patterns across the interviews and observations (Reddy, 2017). By using this method, the research team aimed to identify recurring ideas, concepts, and perspectives related to building dilapidation in Thohoyandou CBD.

The process of analyzing the raw data involved several steps. First, the transcripts and field notes were read and re-read to gain a comprehensive understanding of the data (Shareia, 2016). Then, meaningful units of information were coded, assigning labels to segments of data that captured important concepts or themes. These codes were then grouped together to form broader categories or themes. Through an iterative process, the research team refined and revised the themes until a coherent and comprehensive set of themes emerged (Robson and McCartan, 2016).

Rigor and reliability were maintained throughout the analysis process by employing strategies such as intercoder agreement, member checking, and peer debriefing (McMillan and Schumacher, 2014). Intercoder agreement involved multiple researchers independently coding a subset of the data to ensure consistency and agreement in the coding process (Hadi and Closs, 2016). Member checking allowed participants to review and validate the interpreted findings, ensuring their perspectives were accurately represented ((Theofanidis and Fountouki, 2018). Peer debriefing involved seeking feedback from other researchers to enhance the credibility and trustworthiness of the analysis.

By employing thematic content analysis and maintaining rigor in the analysis process, this study aimed to provide a robust and comprehensive understanding of the causes and recommendations for building dilapidation in Thohoyandou CBD.

4.7 Ethical Considerations

The study adhered to a set of ethical considerations to ensure the rights and well-being of the participants. Approval was obtained from the university's research and innovation policy committee, ensuring that the study met ethical standards. Voluntary participation was emphasized, allowing participants to choose whether or not to take part in the study without coercion. Informed consent was obtained from participants, ensuring they were fully informed about the purpose, procedures, and potential risks involved. Anonymity

and confidentiality were maintained to protect participants' identities and ensure their responses remained confidential. Potential for harm was minimized by conducting the study in a sensitive manner and providing support resources if needed. Finally, results communication involved sharing findings with participants and the wider research community, ensuring transparency and accountability.

The ethical considerations followed in this study align with established guidelines and principles for conducting ethical research (Polit and Beck, 2017). By upholding these ethical standards, the study aimed to protect the rights and well-being of the participants and ensure the integrity and trustworthiness of the research process.

4.8 Conclusion

This research methodology section has discussed the key elements of the study's research design, data collection methods, and data analysis techniques. The emphasis has been placed on the adherence to ethical considerations, including voluntary participation, informed consent, anonymity, confidentiality, and potential for harm. Rigorous data collection and analysis methods, such as key informant interviews, field observations, and thematic content analysis, were employed to ensure the reliability and validity of the study's findings. The relevance of the research methodology in achieving the research objectives has been highlighted, as it provides a robust framework for understanding and addressing the issues related to urban decay. By following ethical guidelines and employing rigorous research methods, this study aims to contribute valuable insights and recommendations for addressing urban decay effectively.

5 RESULTS AND DISCUSSION

5.1 Introduction

This section aims to present and interpret the findings of the study. This chapter begins by summarizing the research questions or hypotheses addressed and providing a concise overview of the collected or analyzed data. The presentation of results focuses on the key findings, organized in a logical manner from the most important or significant to the least. The discussion of findings involves interpreting and analyzing the results in relation to the research questions or hypotheses. Throughout the discussion, reference is made to existing literature to compare and contrast the current study's findings with previous research. Emphasis is placed on identifying patterns, trends, and relationships observed in the data, while offering explanations or potential reasons for the observed results.

5.2 Research objective 1: Which buildings have dilapidated in Thohoyandou CBD?

Name of dilapidated building	Privately owned/ Owned by the municipality
Noorani complex	Privately owned
Gole complex	Privately owned
Thohoyandou inter-modal taxi rank	Owned by municipality
Matidza complex	Privately owned
NTK Thohoyandou	Privately owned
Post office	Owned by Municipality
Jjays Bottle store	Privately owned
Mutsindo mall	Owned by municipality
Luvhengo Complex	Privately owned

Table 1 Dilapidated buildings in Thohoyandou CBD.

The study found that there are dilapidated buildings around Thohoyandou CBD. Some of these buildings include Noorani complex, Matidza complex, Mutsindo mall, Gole complex, NTK, Post Office, Luvhengo complex and are presented in table 4.1. above. Observation of the Noorani complex showed that the ceiling was decaying, the wall were peeling off and there were some electrical cables hanging on the balcony steels which are rusting. Findings of the study suggested that this was a result of a lack of maintenance in this building. The findings show that the building is dilapidating and may be contributing to urban decay in Thohoyandou CBD. Observation of the Thohoyandou intermodal taxi rank showed a razor wire abandoned on the stairs of the structure to show that the place is not in use. Further observation of the NTK and Thohoyandou Post office building showed that the buildings were in very poor condition, most windows of the buildings were broken and their roofing was rusting and striping off along with the interior wall of the buildings.

5.3 Research question 2: What are the causes of building dilapidation in Thohoyandou CBD?

Through interviews with key informants, the study identified various factors contributing to building dilapidation, including the lack of bylaws, irregular planning procedures, inadequate building maintenance, illegal occupation of buildings, neglect by property owners, the municipality's incapacity to render services, non-regulation of building capacities, and overcrowding. This following highlights the key findings:

Lack of Bylaws: One significant cause of building dilapidation in Thohoyandou CBD is the absence of bylaws to deal with derelict buildings. According to Key Informant A, "The absence of bylaws to deal with derelict buildings is a major challenge. We lack regulatory instruments to enforce compliance and ensure building maintenance." Bylaws serve as crucial regulatory instruments for creating inclusive, accessible, and safe cities (Ndlebe, 2017). According to Van dijk (2007), they enforce compliance and have the potential to bring positive change to the city's safety profile over time. However, the lack of effective bylaws hinders the municipality's ability to control human and corporate behavior, contributing to the deterioration of buildings (Luyt, 2008).

Irregular Planning Procedures: The irregular planning procedures in the construction of buildings, such as the intermodal taxi rank, have also played a role in building dilapidation. Key Informant B stated that, "Poor planning and budgeting, coupled with inadequate monitoring, have led to structural issues and improper provision of housing." Poor planning and budgeting, coupled with inadequate monitoring by local municipalities, lead to structural issues and improper provision of housing (Boraine, 2010). These factors negatively impact the condition of buildings, resulting in urban blight and aesthetic degradation (Wakely, 2014).

Lack of Building Maintenance: The lack of building maintenance exacerbates the problem of dilapidation. Key Informant C emphasized the following, "Building owners often display ignorance and a delayed response to maintenance issues." Building owners often display ignorance and a delayed response to maintenance issues, leading to the worsening of problems such as sanitation, electricity, and water (Ndlebe, 2017). Additionally, the absence of bylaws regulating derelict buildings allows mismanagement by landlords, affecting both revenue and the overall city aesthetics (Andile, 2018).

Illegal Occupation of Buildings: The illegal occupation of buildings, particularly by foreign business owners seeking better living standards, contributes to overcrowding and strain on municipal services. Key Informant D pointed out the following, "The illegal occupation of buildings by foreign business owners seeking better living standards has led to overcrowding and strain on municipal services." The influx of people increases the demand for services, including water, electricity, and solid waste disposal, which the municipality struggles to provide (Chen et al, 2014). According to Graham (2020), this influx further leads to the deterioration of buildings in the CBD.

Neglect by Property Owners: A significant issue in Thohoyandou CBD is the neglect of buildings by absentee property owners who prioritize rent collection over property maintenance. Key Informant E highlighted the following, "Absentee property owners prioritize rent collection over property maintenance." As absentee owners often reside elsewhere, they disregard the condition of the buildings, leading to decay and a decline in the aesthetic appeal of the CBD (Mantzaris, 2014).. According to Murimoga and Musingafi (2014), the lack of control over tenants and a disregard for building upkeep contributes to neighbourhood decline and blight.

Municipal Incapacity to Render Services: The municipality's inability to effectively deliver services, such as water, electricity, and sanitation, exacerbates building dilapidation. Key Informant F stated the following, "The municipality's inability to effectively deliver services exacerbates building dilapidation." Overcrowding caused by illegal occupants puts pressure on these utilities, leading to inadequate service provision (Andole, 2016). Poor leadership, governance, and financial mismanagement further contribute to the ineffective delivery of services (Routhe, 2018).

Non-regulation of Building Capacities: Thohoyandou CBD faces the challenge of large buildings with limited maintenance and insufficient space. According to Key Informant G, "The lack of regulation regarding building capacities affects the cleanliness, health, and overall functionality of the CBD." Overcrowding, especially due to the presence of illegal traders, obstructs proper infrastructure development and service provision (Phillips, 2017). The lack of regulation regarding building capacities affects the cleanliness, health, and overall functionality of the CBD (Graham, 2020).

Overcrowding: The rapid population growth in Thohoyandou CBD, driven by people seeking access to services, intensifies the pressure on buildings. Key Informant H explained the following, "Rapid population growth in Thohoyandou CBD intensifies the pressure on buildings." Small offices in rental buildings accommodate more people than the municipality's targeted capacity for service provision. Overpopulation leads to inadequate maintenance, strain on utilities, and ultimately, the dilapidation of buildings.

The causes of building dilapidation in Thohoyandou CBD are multi-faceted and interconnected. The absence of bylaws, irregular planning procedures, inadequate building maintenance, illegal occupation, neglect by property owners, municipal incapacity, non-regulation of building capacities, and overcrowding all contribute to the deteriorating state of the buildings. Addressing these issues requires a holistic approach, including the implementation of effective bylaws, improved planning processes, increased maintenance efforts, and better service provision. It is imperative for stakeholders, including the municipality, property owners, and the community, to work collaboratively towards revitalizing the CBD and ensuring its long-term sustainability.

5.4 Research question 3: Which recommendations can be suggested to address building dilapidation in rural towns such as Thohoyandou?

This section focuses on several key strategies to address the challenges related to derelict buildings and urban decay. These strategies include formulating bylaws, enforcing planning procedures, establishing a dedicated CBD building maintenance plan, evicting illegal occupants, conducting building audits, and regulating building capacities.

One crucial strategy identified is the formulation of bylaws to deal with derelict buildings. The responsible person or persons who violate these bylaws would be held liable for damages and costs incurred by the local authority to address the issue (Bess, 2008). By developing and enforcing these bylaws, Thulamela municipality can ensure accountability and promote the proper maintenance of buildings (Thulamela Municipality, 2023). To ensure compliance with the bylaws, authorized officials would be appointed by the municipal manager or relevant authority. These officials would have the right to enter any building or property at any time to assess compliance and issue notices as necessary. This approach aims to prevent hindrances to the authorized officials' authority and enable effective enforcement of the bylaws (Thulamela Municipality, 2023).

Another strategy involves stricter enforcement of planning procedures in the construction of buildings. Clients would be required to prepare baseline risk assessments for construction projects, and the municipality would enforce planning procedures based on these assessments (Phillip, 2017). This would ensure that health and safety specifications are incorporated into the design phase and that contractors comply with regulations. The goal is to enhance the longevity and sustainability of buildings while prioritizing safety (Karrin, 2011).

Establishing a dedicated CBD building maintenance plan is also crucial for overcoming building depreciation (Taipeli, 2011). This plan would focus on energy-efficient and adaptable buildings that have long-term value and longevity. By implementing technical systems and services that are easily replaceable and maximizing passive methods, buildings can become more sustainable (Lambardo, 2017). Additionally, water collection, purification, and energy generation should be integrated into building designs. Retrofitting public buildings can serve as examples of sustainable practices (Karrin, 2011).

The eviction of illegal occupants from buildings is another key strategy to address urban decay. The municipality would take action against illegal land occupiers with the property owner's permission (Zack, 2015). This includes submitting charges of trespassing, issuing eviction notices, and demolishing unfinished or unoccupied structures (Vera, 2015). Agreements with significant landowners would also be pursued to enable swift response to land invasions (Thulamela Municipality, 2023).

Conducting building audits in the Thohoyandou CBD is essential to ensure that buildings are used in accordance with their intended purpose. Many buildings in the area are occupied by businesses that may not align with their original designation (Bess, 2008). Conducting audits and comparing the information in land use applications with actual usage can help identify discrepancies and enforce appropriate zoning regulations (Thulamela Municipality, 2023). Lastly, the regulation of building capacities is crucial for efficient and effective building regulation (Vera, 2015). Thulamela municipality can implement a building regulatory capacity assessment strategy to gather essential information, identify gaps, and establish a baseline for

improvement (Andole, 2016). This assessment can aid in streamlining product certification, design, construction, and approval processes, ultimately enhancing the market's efficiency (Thulamela Municipality, 2023).

In summary, the strategies presented above offer a comprehensive approach to addressing derelict buildings and urban decay. By formulating bylaws, enforcing planning procedures, establishing maintenance plans, evicting illegal occupants, conducting building audits, and regulating building capacities, Thulamela municipality can promote accountability, sustainability, and revitalization in urban areas. These strategies emphasize the importance of compliance, safety, adaptability, and efficient building management to achieve long-term improvements in urban environments (Thulamela Municipality, 2023; Karrin, 2011).

6 CONCLUSION

This research shed light on the challenges posed by building dilapidation in Thohoyandou CBD, a rural town in South Africa. The study explored the causes and implications of this issue and proposed strategies for addressing urban decay in similar contexts. Through a qualitative research approach and a case study design, the research uncovered the underlying factors contributing to building dilapidation and highlighted their interconnectedness.

The findings of this study have significant implications for urban revitalization efforts in developing countries, particularly in rural towns facing similar challenges. By understanding the causes of building dilapidation and its consequences, policymakers, urban planners, and community stakeholders can devise targeted interventions to reverse the decay and promote sustainable development. Moreover, this research contributed to the existing knowledge base on urban decay by providing insights from a rural perspective, which has been largely overlooked in previous literature. The study emphasized the need for tailored strategies that address the unique circumstances of rural towns, such as Thohoyandou CBD, including limited resources and inadequate urban planning and management.

By implementing the proposed strategies, such as community engagement, capacity building, and strategic partnerships, Thohoyandou CBD can reclaim its vibrancy and become a model for sustainable urban development in rural areas. Additionally, the lessons learned from this study can be applied to similar contexts worldwide, fostering inclusive and resilient communities.

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