



Stone Town Built Heritage Identity as a Stimulus to Sustainable Urban Growth within Zanzibar City

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Abstract

Stone Town, located in Unguja Island, Zanzibar, is one of East Africa's oldest towns, showcasing Swahili urbanism and culture influenced by Arab, European, Indian, and African heritage. Its unique architecture reflects a rich cultural diversity shaped by historical trade and economic activities. Despite its appeal to residents and visitors, the rapid urbanization of Zanzibar City poses a threat to Stone Town's historical identity. This study explores the crucial role of Stone Town's heritage in promoting sustainable urban growth and how local perceptions of heritage values influence future development. Through qualitative methods such as interviews and participatory workshops, this research illustrated how conserving Stone Town's heritage can shape Zanzibar's urban future. The findings reveal that Stone Town holds significance beyond its architecture, deeply intertwining with residents' way of life and their desire to see similar patterns in the new parts of the city. This study is part of an ongoing PhD research project focused on proposing comprehensive planning frameworks to integrate heritage conservation into urban policy, ensuring the city's cultural, social, economic, and environmental sustainability.

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Keywords

Swahili Urbanism; Stone Town built heritage identity; Urban growth; Perception on cultural Identity, Zanzibar City

1. Introduction

Stone Town, located on the East African coastline, is one of the region's oldest towns, distinguished by its unique spatial patterns and town development (Battle & Steel, 2001). Historical influences have played a unique role in shaping Zanzibar City, especially Stone Town, influencing its growth patterns and cultural characteristics. The architectural heritage values in Stone Town exemplify the Swahili urbanization, highlighting the cultural identity of its residents (Rashid & Shateh, 2012; Sheriff, 1995). The town's tangible and intangible cultural richness has garnered significant recognition both locally and internationally. Since 2000, it has been designated as a UNESCO World Heritage Site (UNESCO World Heritage Convention, 2000). Yet, with the escalating threats of rapid urbanization, particularly the neglect of cultural values in planning practices, Stone Town risks losing its cultural legacy. The decline of cultural

values is also evident in other heritage towns in Tanzania, like Pangani, which shares similar cultural origins (Chami & Mjema, 2024). The obstacles faced by heritage sites are diverse and differ across regions. Sustaining the status of these sites has proven to be challenging in many parts of the world, owing to a variety of factors such as political decisions, investment pressures, and the impacts of climate change (UNESCO, 2024; UNESCO World Heritage Convention, 2007). However, it remains crucial to prioritize preserving cultural heritage sites, including built heritage, as they are not just historical artefacts but also essential drivers of socioeconomic and spatial development (Tweed & Sutherland, 2007). The significant contributions of conserving the authenticity of heritage sites are evident in various aspects that support human lives (Al-Sakkaf et al., 2020). Since the 1990s, Zanzibar City has undergone significant unplanned urban expansion, particularly in the new city center adjacent to the historic Stone Town and its surrounding areas. The 2022 Population and Housing Census reported that Zanzibar's urban growth rate has reached 48% (Tanzania, 2022). However, over 80% of this growth has occurred informally, as previous studies have indicated (Kukkonen et al., 2018; Scholz, 2006). The primary reason for this rapid growth is the increase in population, which has reached 1.8 million at a density of 768 persons/km², making Zanzibar the most densely populated region in Africa (Tanzania, 2022). Furthermore, the three municipalities that constitute Zanzibar City—Urban, West 'A', and West 'B'—are home to approximately 819,944 residents, with around 13,715 individuals living in Stone Town (Review, 2023; Tanzania, 2022; The United Republic of Tanzania, 2022). Continued population growth has led to increased demand for basic social amenities, stress on the built cultural heritage, and environmental degradation (Ali & Sulaiman, 2006; Myers et al., 2020). The deputy director of Zanzibar City, who oversees urban planning, stated that "..., Stone Town's built heritage exemplifies a sustainable model of urban growth, characterized by its carefully planned patterns and construction techniques. However, in the past two decades, rapid unplanned urbanization has rapidly eroded Stone Town's cultural identity, driven by increasing social and economic demands. For instance, the rising focus on tourism investments has led to modifications of historic buildings to accommodate modern hotel needs, which significantly undermines the authenticity of Stone Town's architectural identity" (Deputy city director, Interview, 11th March, 2024). The lack of synergy between planning regulations and conservation efforts has led to the deterioration of historically significant buildings like the House of Wonders (Also known as Beit el- Jaib) and the People's Palace, once the Sultan of Zanzibar's residence in the 19th century. These structures among others are now in serious disrepair. Scholars have affirmed that declining state of historical buildings, such as the House of Wonders, has raised significant concerns for both residents and visitors (Chami & Lyaya, 2015; Longair et al., 2023). Inefficiencies in spatial planning and conservation practices have worsened violations of heritage regulations, leading to a decline in the authenticity of the built environment. Effective spatial planning in Stone Town could establish important benchmarks for the city's overall growth and promote inclusivity, yet it is often overlooked. In contrast, new developments in the contemporary area of Zanzibar City have occurred in an ad hoc and unstructured manner, primarily driven by population growth as well as political and business demands (HAJI et al., 2006; Myers, 2023). This has led to a fragmentation of the social fabric among residents, particularly following the introduction of gated neighborhoods.

Against this backdrop, the main objective of this study is to highlight the significance spatial values of Stone Town's built identity, which has often been overlooked in planning policies and practices. The study answers two main questions that are: i. What is the pivotal role that the built heritage of Stone Town can play in fostering sustainable Swahili urban growth? and ii. How do the community's perceptions and values of the heritage site impact the city's future growth? The possible answers to the research questions may highlight the community's priorities and define the key concerns that should be considered when creating sustainable development strategies for Zanzibar City, ensuring they are effective, impactful, and inclusive. Although the Revolutionary Government of Zanzibar has developed plans like the 2015 ZanPlan to promote sustainable growth and counter unregulated development, challenges remain (DoURP, 2015). Still, there is room for improvement in prioritizing the promotion of cultural identity to encourage more compact and inclusive sustainable growth patterns. As previous researchers have argued, cultural identity is vital in enhancing the sustainability of city growth (Abdurahiman et al., 2024; Juma & Turner, 2019; Tweed & Sutherland, 2007). Therefore, Zanzibar City's spatial dichotomy, encompassing Stone Town and the other side (Known as Ng'ambo in Swahili language) where the city's expansion and contemporary developments occur, requires a comprehensive understanding of the spatial relationships and influences these parts have on each other (Folkers & Muhammad, 2016). The land use planning in Stone Town has been designed to ensure that residents have convenient access to all essential amenities (DoURP, 2015). Thus, embracing the compact design seen in Stone Town, characterized by a high level of mixed uses, can promote

equitable access to essential services and enhance the city's resilience amidst ongoing urban developments (Juma, 2020). This form of growth is essential for Zanzibar City to achieve sustainable urbanization by enhancing compact urban patterns, ensuring the resilience of built structures, and fostering the protection of cultural identity. Consequently, this research has provided a clear understanding of the connections between planning practices and heritage conservation, emphasizing the need to recognize built cultural identity in the planning process.

1.1. Stone Town as Sustainable Urban Growth Model

Enhancing the protection of Stone Town's built cultural identity against the impacts of rapid urbanization is crucial for the sustainability of Zanzibar City. The limited capacity of the planning department and city management authorities to address the challenges of rapid urbanization has heightened the demand for essential services. If these trends continue, the growing needs could exacerbate social inequality, cultural decay, and environmental degradation in the city. For instance, significant demands, like the tourism industry modernizing old buildings to meet current standards, have slowly eroded the authenticity of Stone Town's historical cultural heritage. Furthermore, like other heritage sites, Stone Town has encountered numerous challenges stemming from inadequate management, environmental degradation, and political influences (Chami & Mjema, 2024; Falk & Hagsten, 2024; UNESCO World Heritage Convention, 2007). An evident illustration of these influences is the escalating impacts of climate change, such as floods and seawater intrusion in various parts of Zanzibar City. Seawater intrusion has emerged as a significant concern in recent years, leading to a severe shortage of clean and safe water. Despite the daily requirement of approximately 125,043,660 liters of water for Zanzibar City alone, the available water from sources amounts to only about 52,297,139 liters, creating a substantial deficit (Tanzania, 2022). Consequently, many residents have resorted to drilling wells to alleviate the impacts of water scarcity. However, as noted by Cobbinah et al. (2015), their actions have resulted in the salinization of many wells due to the spread of seawater intrusion and excessive pumping that minimizes the chances of aquifer recharge. As a result, the salinity issue has extended to affect various parts of the city, including Stone Town. Also, as revealed in the study by Khamis et al. (2022) that increase in sea level rise for 36 years is nearly 1 meter as depicted in Figure 1 which has resulted to salt water intrusions in many part of the island including the Stone Town. These challenges place an increased burden on the government to ensure adequate service provisions.

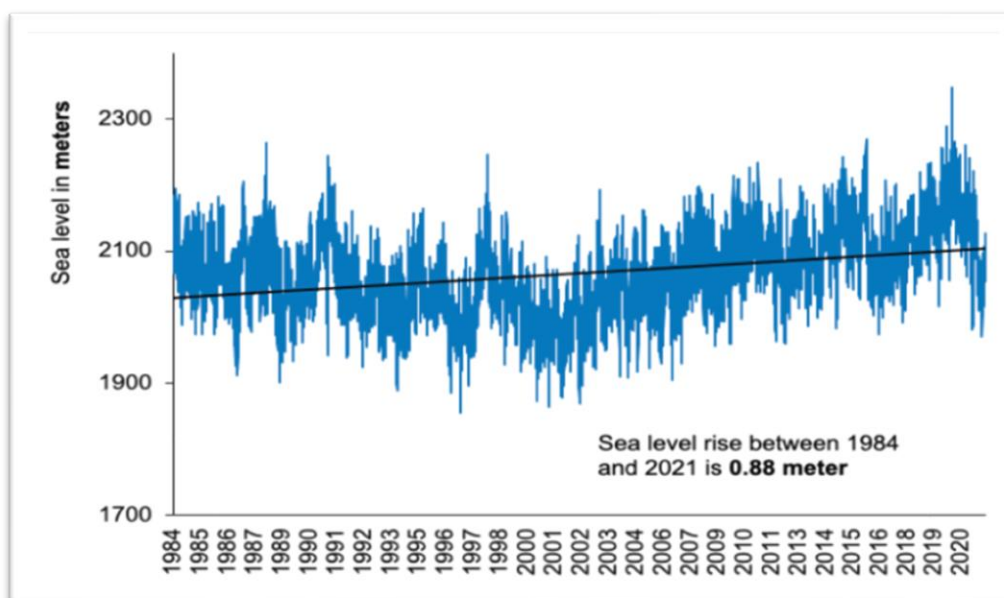


Figure 1: The trend of Sea level rise for the last 36 years (Source: Khamis et al., 2022, reproduced with permission).

This study, therefore, as previously mentioned in the objective, champions the need to value the significant contribution of Stone Town's built heritage identity to various aspects of city growth. Foreexample the Town's historic buildings' architectural designs and spatial layout provide valuable lessons on relying on environmental systems to regulate environmental conditions. Implementing eco-friendly techniques is crucial in addressing tropical climate issues, particularly the impacts of climate change (Lanchester, 1923). Also, it was confirmed that the built environment of Stone Town was purposefully designed to harness natural environmental processes, including temperature regulation

and ventilation within the buildings see (Battle & Steel, 2001). Additionally, building designs adhered to a height hierarchy, with most structures being no more than two stories high, enabling the natural aeration system to function effectively despite the compact growth form (Siravo, 1996). As a result, the design of Stone Town ensured an energy-efficient of the buildings. The energy-efficient characteristic highlights diverse skills and technological advancements from the 19th century, which are pertinent to the city's development, especially considering the contemporary concerns regarding energy availability and increasing energy demand (Sviluppo & Society, 2020). Furthermore, the sewage system introduced in the 19th century served dual purposes as a waste control system and as a mitigation measure to manage flooding within Stone Town (Khamis et al., 2022). Collectively, these studies demonstrate how the knowledge gained from the spatial plan and building designs of Stone Town can aid in the establishment of a robust nature-based system to promote sustainable urban growth.

Recognizing the contribution of local identity is essential in shaping planning visions for sustainable urban growth. Similarly, understanding the communities' perceptions can be equally valuable in shaping Zanzibar City's future development. Sharing local knowledge and techniques can provide a foundation for implementing the plans that have been proposed for future development of Zanzibar. For instance, in the context of island planning practices, Muhammad (2015) emphasizes the importance of formulating spatial plans based on the principles outlined in the National Spatial Development Strategy (NSDS). As depicted in Figure 2 of the Zanzibar NSDS pillars, this strategy prioritizes four fundamental dimensions: people-centric development, investment, growth, and environmental sustainability. Aligning planning practices with this strategy aims to enhance sensitivity to sustainable urban growth by embracing local identity. By pursuing this form of growth, the ownership of the proposed plans can be enhanced, facilitating their implementation. Understanding the local identity is pivotal in contributing to effective urban growth. Therefore, the purpose of this paper is to provide a foundation for an ongoing PhD research project that focuses on the role of planning in conserving the built cultural heritage of Stone Town in the face of rapid urbanization. The study aims to bridge the gap between the planning process and built heritage conservation initiatives by proposing effective planning frameworks. By highlighting these connections in planning frameworks, it is hoped that the implementation of the Zanzibar Urban Policy and the Zanzibar Building Codes will be improved. Additionally, the incorporation of local cultural identity in growth and the enhancement of local capacity to withstand and resist the impact of rapid urbanization and climate change are important goals of this research.

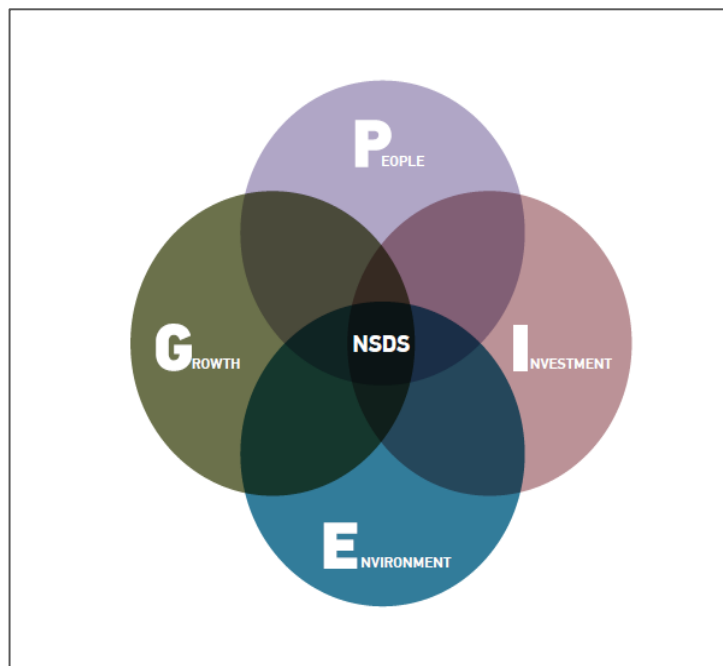


Figure 2: The Zanzibar National Spatial Development Strategy Pillars, Source (DoURP, 2015) reproduced with permission.

2. Materials and Methodology

Stone Town, which represents Swahili culture, is crucial for driving urban growth in Zanzibar City. Recognizing the importance of this historic town, it was necessary to understand the community's perceptions of the values existing to build identity in their lives as residents. As emphasized by Sumartojo and Pink (2018). Understanding the research context is key to gathering genuine data and valuable insights. Therefore, this study utilized expert interviews and a participatory planning approach to explore how Stone Town's built heritage identity could support Zanzibar City's urban development. In this study, the researcher used semi-structured interviews and participatory workshops. The semi-structured interview questions were especially advantageous in the following ways: First, using semi-structured interviews allowed the researcher to gain valuable information from the participants as they focused and provided more information on the issues concerning this research. Hence, it helped to prevent the participants from providing unnecessary information despite their in-depth explanations. Second, the researcher engaged the participants to fully express their perceptions without seeming provocative or linked with political views. Therefore, all the participants comfortably contributed by sharing their knowledge and experiences, knowing that their contributions would be presented anonymously. All the participants filled in the consent form, in which they agreed to the researcher's use of the collected data solely for this research, which was obtained at the beginning of each workshop.

The researcher selected a specific group of residents to participate in participatory planning workshops based on various characteristics such as age (18 and above), gender, knowledge or experience of Stone Town, and political affiliations. The workshops were divided into three sessions, each with 15 participants, totaling 45 individuals. To illustrate, the first 15 participants were residents of Stone Town and the new city center, the next 15 were individuals with rich experience in Stone Town, and the final 15 had strong political affiliations. These participants were selected from the community through the Ward or Shehia leaders (*Shehia* is a Swahili word that refers to the grassroots administration level). The workshops were co-designed with participants from Aalto University's WiT Programme who conducted a study titled "*Stone Town in the Eye of the Beholder*" and conducted in collaboration with Pamoja Youth Initiatives, a local NGO, to build trust and ensure objectivity in learning from the participants. During the participatory planning workshops, the participants were divided into small groups of five and given a simple map of Stone Town (see Figure 3). The facilitators supported each group to identify important places, memories, and aspirations that are closely linked to this old town. This exercise aimed to help the researchers understand their perceptions of the built heritage identity. Through this intensive exercise, the participants also shared their experiences within the groups and concluded by suggesting the best approaches to replicate these values in other areas within the city and the island as a whole. The workshops were documented through video and voice recordings, as well as photography. The diverse group of participants allowed the researcher to capture different perceptions of the built heritage identity and its roles in the urban development of Zanzibar City. Their knowledge and aspirations had a profound influence on highlighting the values of the old town and its potential for future growth. These inputs from the selected sample form the basis of the ongoing research aimed at suggesting planning frameworks to enhancing the conservation of heritage values and identity.

In case of experts Interviews, this research actively engaged various stakeholders, including government experts and non-governmental participants, in the interview sessions. The interviews included urban planners from the Department of Urban and Rural Planning of Zanzibar (DoURP), the Deputy city director responsible for Urban Planning, and conservation officers from the Stone Town Conservation and Development Authority (SCTDA). Additionally, environmental experts from the Zanzibar Environmental Management Authority (ZEMA), an Arts instructor from Nyumba ya Sanaa Zanzibar (Zanzibar house of Art institute), and Development control officers from the Development Control Unit were also part of the process. Involving non-governmental actors, the interview sessions included the Chief of the Africa Unit at UNESCO (Unit: CLT/WHC/AFR), Conservation Engineers from the Stone Town Conservation Society, Architect from Hifadhi Zanzibar, Archaeologists, Artists, and local tourism operators from the Colour of Zanzibar. These diverse participants have made significant contributions to understanding the core values of Stone Town's culturally built identity, providing invaluable insights for Zanzibar City's sustainable urban growth.

In conclusion, the participatory workshops and interviews were aligned with the research questions to that help the researcher understand the importance of continuously protecting the built identity of Stone Town. This involved exploring perceptions of how preserving the city's heritage values could contribute to social, cultural, spatial, and economic sustainability in Zanzibar City. Gaining these insights is crucial for developing effective strategies for

achieving sustainable urbanization. Previous studies have highlighted the importance of embracing the local identity of communities in promoting sustainable urbanization (Tweed & Sutherland, 2007; UNESCO, 2016). Hence, through participatory planning workshops actively encouraged by the Department of Urban and Rural Planning Zanzibar since its establishment in 2009, the researcher has been able to exchange knowledge with the participants.



Figure 3: The group discussion among the participants identifies their most important places and experiences linked to the Stone Town-built heritage identity. (Source Author March 2024).

3. Results

The results from the analysis of the collected data are presented in two main categories. The first category examines the spatial layout and functions of Stone Town that could be replicated in other parts of Zanzibar City to enhance sustainable growth and efficient land use. The second category focuses on the community's perceptions, emphasizing the significant role of cultural identity in urban development. The paper concludes that Zanzibar City's sustainable future is closely tied to its built cultural elements, emphasizing the importance of these two categories.

3.1. The Stone Town Spatial Pattern's Roles to Zanzibar City Growth

Stone Town, initially a small fishing village, has evolved into a bustling urban center, setting a positive example for sustainable urbanization in the newly developing areas on the other side of Zanzibar City. The architectural design of the buildings in Stone Town promotes social and economic development, as well as provides essential services for the residents. In addition, the report by Sviluppo and Society (2020) affirmed that the Stone Town architectural style, urban planning patterns, and layout have given Stone Town a renewed compact character (See Figure 4 for Stone Town planning layout from 1958). This compact growth is crucial for enhancing resilient and sustainable urban settings, making Stone Town one of the most effectively planned town within Zanzibar City. Furthermore, many buildings in Stone Town have unique stories and have adopted several uses. For instance, the old fort, built in 1710 by the Arabs from the remnants of the Portuguese Chapel, is a Grade 1 building with a rich history and versatile characteristics. The fort was expanded in the 19th century, allowing the accommodation of various functions, including serving as a prison and housing the Sultan's Baluchi bodyguards. Additionally, the area outside the fort once housed the main market before the construction of the Darajani markets (Zanzibar Walks, 2018).

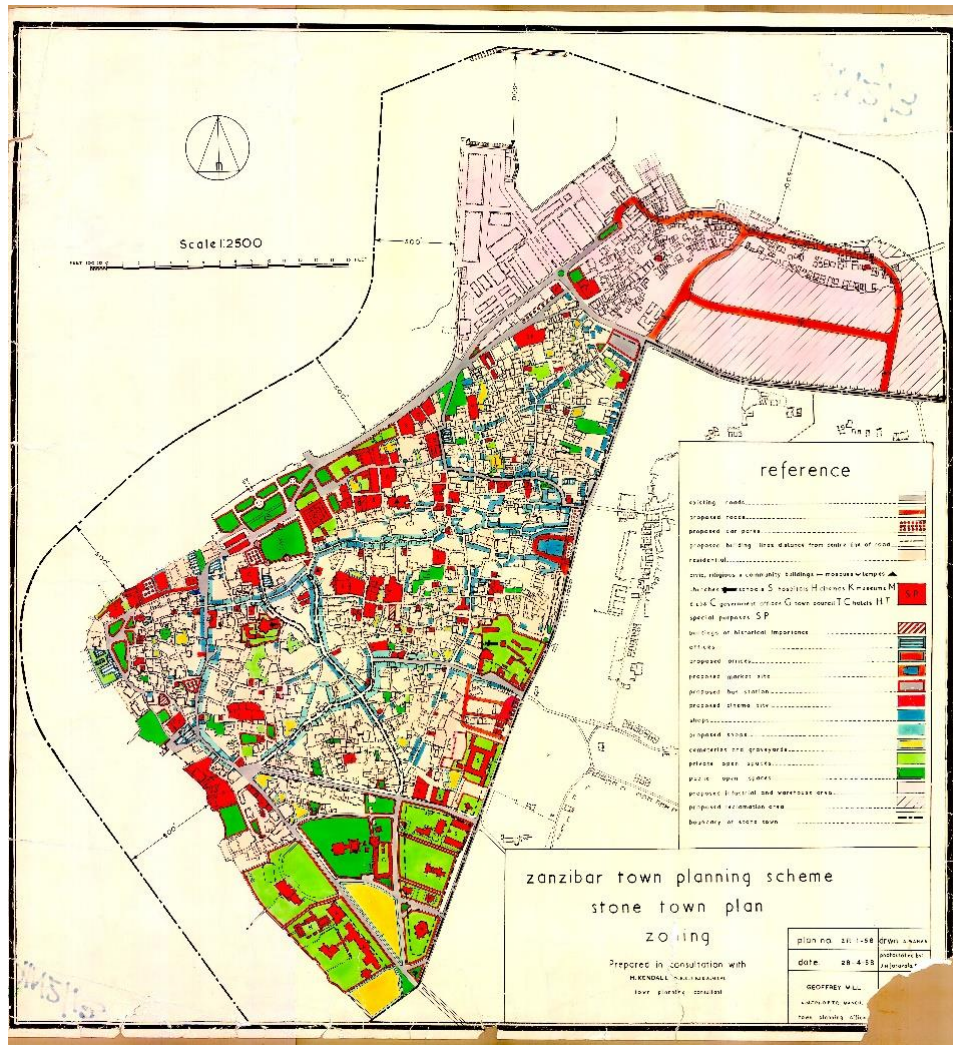


Figure 4: The 1958 Stone Town planning layout was obtained from the National Archive in Zanzibar in 2024.

Stone Town was carefully planned with infrastructure and services to effectively support its residents. For example, the railway line that served from 1905 to 1928 connected Stone Town to the vicinity area (Siravo, 1996). Although this train was later removed, currently the government has been revising the possibility to reintroduce the train services following the extensive city growth caused by the population increase. With this regard, it is apparent that Zanzibar City future development initiatives are intricately linked to past initiatives. Stone Town has a special character, with buildings grouped closely together, connected by open spaces and narrow streets see Figure 5, and beautiful sea views. This layout creates a wonderful experience for both residents and visitors. These buildings serve as tangible evidence of the mixed-use character within Stone Town, accommodating various activities and social needs. The town's narrow streets, influenced by a blend of designs rooted in diverse cultures, such as Oman's, contribute to its unique scenery and promote tranquillity in mobility and accessibility (Oers, 2013). Socialization is facilitated by using baraza in these streets, ("Baraza" is a Swahili word that represents communal gathering places) where communities gather to converse, enjoy coffee, and exchange ideas (Steyn, 2001). The city's structure is adaptable, fostering interaction and inclusivity, which remains a significant achievement today.



Figure 5: The night view of Hamamni Street within Stone Town (Source: Author, March 2024)

3.2. The Perceptions of Communities on the Stone Town Built Cultural Identity

The built heritage of Stone Town is not just about its historic buildings and architectural beauty; it embodies the core values and distinctive identity of the local community. The intangible cultural aspects, such as communal interactions, dining, dancing, and worship, harmoniously blend with the built heritage values. Consequently, this enduring cultural legacy has transformed Stone Town into a place for family connections, education, work, leisure, and sustainable growth in harmony with nature, to name a few. As Taylor and Lennon (2012), remarked that one of our profound needs is a sense of identity and belonging, with their study emphasizing human attachment to the landscape and how we derive our identity from it. Also as commented by Jackson (1994, p. 151), "Most of us, I suspect, without giving much thought to the matter, would say that a sense of place, a sense of being at home in a town or city, grows as we become accustomed to it and learn to know its peculiarities. It is my belief that a sense of place is something that we ourselves create in the course of time. It is the result of habit or custom". The following sections—family life, social and spiritual life, economic activities, urban planning patterns, nature, and contributing to local identity—are based on opinions and insights from residents. These were collected during participatory planning workshops and interviews in this second category.

3.2.1. Stone Town History Intertwined with Family and Homestead

Stone Town has become home to many local families, thriving culturally and economically. Due to the proximity of essential services, a substantial number of people have chosen to reside in this town to take advantage of the opportunities it offers. The presence of local communities, with family as a fundamental social unit, plays a pivotal role in shaping individuals and their involvement in the collective life of the community (Sviluppo & Society, 2020). Families often establish long-term roots in the same home, weaving a rich tapestry of personal and collective history. A profound sense of belonging is deeply ingrained in these multi-generational households, which are revered not only as physical historical spaces but also as guardians of the family's heritage. They foster the evolution and prosperity of their support system. Elders impart wisdom and traditions to younger generations. This support system extends beyond the immediate family to encompass the wider community, where neighbours and friends also contribute to a network of support and solidarity. At its core, the home serves as the foundation of this interconnected system, offering individuals and families the resilience and strength required to navigate life's complexities.

As highlighted in the participatory workshop: "Stone Town holds great significance for me, as it evokes memories of my childhood and family. Growing up in a building where numerous families resided has shaped me into a considerate individual, teaching me the values of kindness and harmonious coexistence with others" (Workshop Participant, 2024). Additionally, the interview with Deputy City Director dealing with Urban Planning revealed: "The old-built heritage

part of Stone Town once served as a thriving hub for robust social connection, with unique architectural designs that induced joy and comfort for residents and visitors. These places were fragranced with unique aromas such as oud and cloves scent. This is where you get this saying: The town with clove scents (Mji wenye Marashi ya karafuu in Swahili language). Therefore, I believe it is important to continue considering these cultural elements in the expanded part of the city, as they hold significant meaning that represents the social and cultural identities of the communities" (Interview 11, 3, 2024). Therefore, this study strongly emphasizes that future urban planning initiatives in Zanzibar City must not only embrace the diverse form of growth but also consider social-cultural values. As Keeton and Provoost (2019) rightly pointed out, no new urban growth should be isolated, indicating the need for linking crucial aspects such as culture to the overall growth, hence representing the cultural identity. Similarly, a 2016 report by UNESCO highlighted that embracing traditional cultural practices, such as vernacular architecture, is essential for maintaining community well-being and achieving sustainable, resilient urban environments (UNESCO, 2016).

3.2.2. Stone Town as Spiritual and Religious Place

Spirituality and religious life are considered sources of relief, support, and gratitude, bringing a certain level of peace to the lives of the people of Zanzibar. Religion is practiced everywhere: at homes, mosques, churches, and madrasas. Religious spaces serve not only as centers of worship but also as places for learning and social encounters (Koskinen & Nimri, 2024). In Stone Town, there are around 51 mosques safeguarded under the Islamic waqf system (Khalfan & Ogura, 2012). These mosques are distributed in nearly every ward in Stone Town (Akasheh & Izady, 1996). The mosques, as essential institutions, have many purposes that are not only limited to prayers but also play a role in encouraging individuals to engage with praying and religious teachings. Apart from the mosques, there are two main churches and two Indian temples in Stone Town (Hitchcock, 2002). As a testament to the cultural differences and fusion of the community, the people of Stone Town have displayed maturity in religious tolerance. Residents have been respecting each other's religious affiliations while interacting with harmony, making the town a conducive living environment for residents and visitors alike.

During the co-design participatory session, it was revealed that the presence of mosques, churches, and other religious foundations has meaningful significance for social growth and urbanism in Zanzibar. "I have prayed in this mosque for many years, finding peace and connection with each visit. The presence of many mosques in Stone Town has made me appreciate it more. I have learned to respect others' faith, as this is a knowledge taught in Islamic teaching, which I acquired during the time I attended madrasa" (Workshop Participant, 2024). Furthermore, an interview with the Conservation Engineer from the Zanzibar Stone Town Heritage Society (ZSTHS) affirmed: "The community in Stone Town has been shaped with a great deal of tolerance for each other's religious affiliations. I believe that the allocation of land uses, architectural design, and social integration has blended perfectly to form a culture that is rare to see elsewhere in the world. Zanzibar is blessed to have this town, and many lessons could be learned and replicated for the future growth of the city" (Interview 25.03.20234). Stone Town's urban layout and architecture have significantly fostered an inclusive, lively, and sustainable Swahili culture and urbanization. These principles can inform the development projects for the new Zanzibar City. As noted by Juma (2020), a shift in the planning strategies in Zanzibar could emphasize the effective integration of cultural aspects that embody the local identity

3.2.3. Stone Town as Centre for Economic Activities

Stone Town continues to provide a wide range of economic opportunities for the locals. Traditional trades such as fishing, arts and crafts, and commerce coexist with modern service jobs. As one of the oldest port towns in the East African Region, Stone Town has a rich history of fostering a favorable environment for economic activities (Kelly, 2017). The concentration of economic activities, particularly those related to tourism, has highlighted the need for a more secure environment to support the thriving sector (Mahmoud, 2019). Although economic activities in Stone Town have led to some challenges, the government aimed to address this by proposing the nodes development strategy outlined in the new city master plan called the ZanPlan (DoURP, 2015). The 2015 proposed nodes development strategy, depicted in the Figure 6, have identified potential space to promote equal distribution of services through spatial expansion and attract more economic investment. However, the realization of this growth vision is still pending. Stone Town remains the central thriving business region of Zanzibar City.

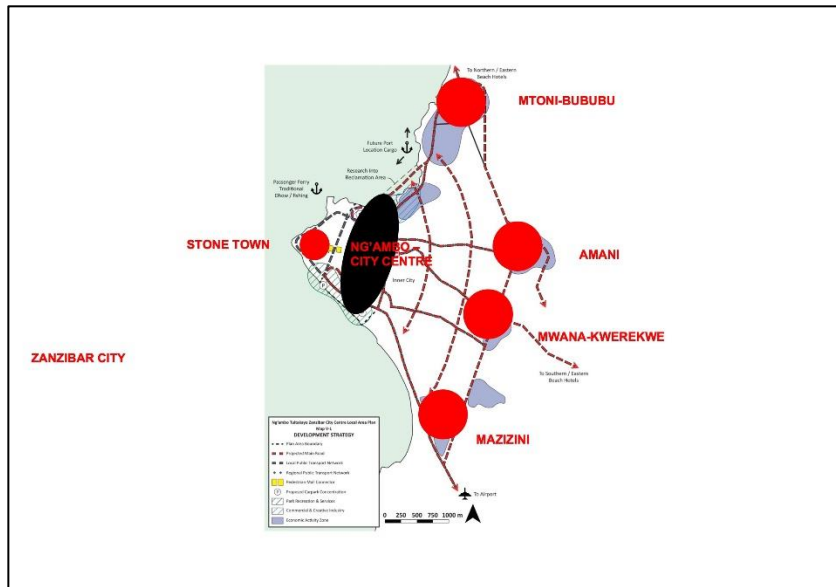


Figure 6: The 2015 proposed nodes development strategy that cater to compact growth as manifested in Stone Town (DoURP, 2015) reproduced with permission.

During the co-design workshop sessions, one of the participants expressed her thoughts about Stone Town, saying, "I believe Stone Town is an important place that supports many people's economic needs. As an artist, I started my crafting activities in 1996 located at the Old Fort. Along with my three partners, we have grown in these activities and have witnessed many changes over time. I am so reluctant to move to a different location because, for now, Stone Town continues to provide a conducive business environment despite some existing challenges" (Workshop Participant, 2024). Moreover, the Director for Conservation at Stone Town Conservation and Development Authority highlighted in an interview that, "The growth patterns, architectural styles, designs, materials, and techniques employed in Stone Town provide crucial aspects to consider for the city's new spatial plan. It is essential to develop actionable planning recommendations for the sustainable conservation of the city's built heritage identity, especially considering the pressure from rapid growth and tourism affecting Stone Town" (Interview 22.03.20234). It is clear that the new city centre in Zanzibar City would benefit from inclusive urban development and ensure equal economic opportunities for all residents. Achieving this form of growth will enhance the improvement of social-cultural wellbeing and result to attain sustainable urbanization.

3.2.4. Stone Town Urban Planning Patterns and Fabrics

Stone Town's urban planning patterns and diverse architectural styles cater to multifaceted functions and support the residents' needs. The town's pattern of spatial growth is not just historically significant but also provides inspiration for the sustainable development of Zanzibar City. According to Al shawabkeh et al. (2023), cultural elements have the potential to stimulate future sustainable growth. In the context of Stone Town, the architectural and planning values are of significant aesthetic importance and hold valuable knowledge for researchers and experts (Juma, 2018). For instance, the narrow alleys of Stone Town are not just pathways of transportation but also the lifelines of social activity (Siravo, 1996). Replicating these growth patterns have the potential to contribute to inclusivity and vibrancy in other parts of the city as well (Folkers & Muhammad, 2016). During the co-design approach, a participant raised: "The slender alleyways of Stone Town hold great significance for the local community, as these spaces provide communal platforms where locals convene to sit on benches, socialize, cook, and enjoy meals together" (Interviews with local tour guide, 17.3.2024). Furthermore, a comment from the Deputy City Director highlighted: "A Stone Town planned and built patterns have succeeded in integrating the functions intended. Within Zanzibar City Stone Town stands as a manifestation of smart urban growth and urbanism" (Interview 11, 3, 2024). As a result, this study asserts that the cultural identity of Stone Town, as evidenced in its architectural design and urban development patterns, serves as the foundation for the sustainable urban growth of Zanzibar City. The urban development initiatives in Zanzibar City could be enhanced by prioritizing diversity and aligning with cultural values. This approach to growth will enhance a sense of inclusion, vibrancy, and lead to resilient urban development.

3.2.5. Appreciation of Stone Town's Natural Beauty

Zanzibar's islands are home to a truly captivating, breathtaking natural environment. The islands feature stunning beaches, lush forests, and significant cultural landmarks, making Zanzibar a unique destination with intricate ecosystems (ZEMA, 2021). The island's exceptional environment is linked to the cultural elements in places like Stone Town. As a notable historical site, Stone Town beautifully embodies the island's rich heritage by seamlessly blending historical values with intangible elements reflected in the residents' way of life. The local community's deep connections to and profound appreciation for Stone Town's natural surroundings are undeniable. Zanzibar's natural heritage not only plays a crucial role in the residents' lives and heritage but also presents a range of economic, recreational, cultural, and educational opportunities (Barrsäter, 2013). This connection is essential for cultural traditions and is the foundation of local identity. As one participant mentioned about Forodhani park located in Stone Town. "Forodhani Park holds a special place in my heart as it used to be a frequent destination for my family and me to bond and create cherished memories. The park's tranquil environment allowed us to partake in various activities such as playing, swimming, snorkeling, and enjoying meals outdoors, leaving behind a lingering sense of joy. In few words I would say Forodhani park symbolizes the potential for community integration" (Workshop Participant, 2024). Another participant said, "The unique building structures and open spaces have always fascinated me to the point that I stayed young in Stone Town. The existence of a public park, such as the Jamhuri Garden, reminds me of my schooling time. I often had discussions related to my studies with my colleagues there. I wish to see such urban characteristics replicated in other places, as they help many people engage, relax, and conduct their activities" (Workshop Participant, 2024). Careful urban planning that includes developed areas and open public spaces is crucial for creating vibrant and resilient city landscapes, especially in addressing the impacts of climate change in Zanzibar City.

3.2.6. The Stone Town Cultural Heritage and Local Identity

The historical buildings in Stone Town serve as a tangible connection to the past, grounding residents in their roots and the defining events that have shaped their present. Therefore, this study argues that conserving heritage involves more than just protecting architectural features; it also requires recognizing the stories these buildings hold. Understanding their cultural significance as living parts of the community is equally important. The rich cultural values underscore the need to establish linkages between the urban growth patterns of the old town and the proposed new city center to ensure sustainable growth and the protection of cultural heritage (Juma, 2018, 2020; Juma & Turner, 2019). The shift in planning focus from the integrated nature seen in Stone Town to the creation of exclusive gated neighbourhoods in the newly planned areas of the city has led to various issues, including the erosion of the cultural identity within Zanzibar City (HAJI et al., 2006). Furthermore, urban planning trends in Zanzibar City have yet to realize the sustainability of cultural and growth patterns due to ongoing pressures and influences from political, elite, and business groups (Myers, 2023). These groups have consistently altered well-conceived plans aimed at transforming the city's haphazard growth, often to the detriment of its original identities. With these prevailing power dynamics and the emphasis on smart growth as a symbol of cultural identity, Zanzibar City is becoming increasingly divided into unequal social groups based on economic disparities. These income discrepancies are visible spatially, raising concerns about potential future social unrest in the city.

According to the Deputy Zanzibar City Director responsible for urban planning, "The patterns of Stone Town symbolize a smart form of growth that is needed in other parts of Zanzibar City. While Stone Town is the oldest in this region, its growth patterns and cultural identity represent the totality of an urban setting where social aspects, economic elements, and ecological sensitivity perfectly coexist" (Interview 11, 3, 2024). The UNESCO Chief for the African Desk expressed, "As the head of the unit responsible for tangible and natural heritage values in the African region, I believe that Stone Town is a crucial site as it reflects the local identities of the Islanders. The architectural designs provide insights into the origins of Swahili culture and the formation of the social fabric. Additionally, Stone Town encompasses more local symbols and identities than many other World Heritage sites. For instance, the prevalence of carved doors in Stone Town, which have also been adopted in other areas of Zanzibar City, serves as unique cultural entities that tell distinct stories about their origins and the individuals who crafted them. Therefore, it is imperative to preserve these elements, and enhancing Stone Town's status as a World Heritage site could contribute to that legacy" (Interview with UNESCO Chief, African Desk, 4th April 2024). Consequently, it becomes evident that the projected sustainable urban growth in Zanzibar is intertwined with cultural values. Emphasizing the presence of cultural identity will not only enrich

the sense of joy and belonging but will also lead to the long-term realization of a functional city in terms of economic and social integration, as evidenced in Stone Town.

4. Discussions

Stone Town's cultural heritage identity is a precious asset that unites the community in Zanzibar City, symbolizing architectural beauty and community integration. It is argued that the built cultural heritages are vital elements that bind the communities (Tweed & Sutherland, 2007). Cultural values, especially those related to the built environment, have been widely recognized to foster community interconnectedness and serve as potent stimuli for socio-economic development. Consequently, the Stone Town townscape features pedestrian streets connecting the seafronts to the bustling bazaar, leading to narrow residential streets with diverse forms of housing. The residential houses in Stone Town reflect their owners' cultural diversity, influenced by African, Arab, Indian, and European traditions. Therefore, Stone Town's built heritage comprises a blend of cultural elements that shape its unique urban architectural environment (Steyn, 2001). As noted by the Conservation Engineer from the Stone Town Heritage Society during an interview, "the architectural styles and construction techniques in Stone Town were specifically designed to suit the tropical climate. These buildings have a natural breathing system through their thick walls, large windows, and doors. Additionally, nearly all structures were designed with courtyards serving multiple purposes. I believe that if these construction methods were adopted in the new areas where the city has rapidly expanded, they could enhance resilience to climate change impacts and address other issues" (Interview with Conservation Engineer, March 28, 2024).

Moreover, the diverse architectural styles and planning patterns seen in Stone Town reflect the necessity for functional, supportive designs that cater to the town's needs. These architectural and planning values hold aesthetic importance and contain valuable knowledge for researchers and experts to draw upon. For instance, the urban planning techniques and vision implemented during those periods have persisted in providing the services sought by many residents. Therefore, the compact and inclusive urban planning patterns make Stone Town a vibrant laboratory for research in planning, architecture, and culture. However, rapid urbanization, evolving demands, and increasing extreme weather events underscore the urgency to reconsider conservation and growth strategies (Khamis et al., 2022). Zanzibar City requires a transformation in planning, emphasizing the amplification of cultural elements and the adoption of sustainable growth principles.

In conclusion, this analysis underscores the importance of learning from the urban planning patterns in Stone Town. These insights could be used to develop new areas within Zanzibar City. The uniqueness of urban patterns and buildings in Stone Town highlights the advanced nature of concentrated urban development. As stated by the Conservation Director of the Stone Town Conservation and Development Authority (STCDA), "The urban planning and building patterns in Stone Town are well-designed and implemented, making it possible to improve the land uses if needed. This level of planning maturity implemented in the 19th century still significantly contributes to the city today, despite the growing challenges. It is therefore important to replicate some of these planning techniques and building fabrics in new places across the city, as their efficiency has proven successful, as seen here in Stone Town" (Interview with STCDA Director, March 28, 2024). As the population increases, there is a growing need for more deliberate urban planning that focuses on the efficient use of land and resources, including cultural values (DoURP, 2015). Zanzibar City, home to an estimated 819,944 individuals across three municipalities, including approximately 13,715 in Stone Town, experiences high population growth due to a birth rate of about 3.7 and immigration, contributing to a total population of around 1.8 million across the Zanzibar islands (Review, 2023; Tanzania, 2022; The United Republic of Tanzania, 2022). Hence, the Zanzibar City Authority could enhance urban environments by integrating cultural elements into planning and construction, similar to what we see in Stone Town. This approach would help in recreating the vibrancy, safety, accessibility, and security of the newly planned areas to the level achieved in Stone Town.

5. Conclusion

The promotion of sustainable urban growth in Zanzibar City needs to heavily rely on cultural identity. Stone Town in Zanzibar City features unique cultural aspects that support social and economic activities, facilitate community connections, and provide access to essential services and amenities. Alem Gebregiorgis et al. (2022) highlighted the importance of urban planning initiatives in addressing challenges such as rapid transformation and the impacts of climate change. Their research suggests that leveraging cultural and traditional practices can contribute to the safety and future

of African cities. Integrating cultural patterns that define the Swahili culture could significantly benefit Zanzibar City in terms of social and economic aspects. Therefore, it is crucial to recognize the ability to stimulate sustainable urban development in Zanzibar City by accommodating cultural identity. Understanding the local communities' perception of Swahili culture can incorporate cultural values into practices that could help Zanzibar City address various social, economic, and environmental challenges (Folkers & Muhammad, 2016; Juma, 2018).

This study analyzed the local community's perceptions to understand their aspirations for cultural values in urban growth within Zanzibar City. The findings reveal that the community's aspiration for cultural identity in Zanzibar City goes beyond the existence of the built heritage structure. For instance, residents of Stone Town, a historical part of the city and UNESCO heritage site, expressed their preference for living in this old town. The sense of belonging, interaction, and access to basic amenities are crucial elements many wish could be replicated in other parts of the city, particularly in newly planned and developed neighbourhoods. Creating a sustainable urban environment in Zanzibar City with a focus on balancing diversity with local cultural identities and values is essential. Striking this balance will represent the local identity and promote economic growth, environmental protection, and inclusive development, aligning with broader country development plans such as Vision 2050 (Zanzibar Planning Commission, 2020) and the National Spatial Development Strategy (Muhammad, 2015). Given the limited land resources in the Zanzibar islands, there is a need for efficient spatial planning and land allocation. With this in mind, I argue that the future urban development in Zanzibar City could be closely linked to the built identity seen in Stone Town. It is evident that many of the planning initiatives proposed by the Department of Urban and Rural Planning have resonated along the same compact growth principles as those in Stone Town. However, enhancing cultural identity integration into urban planning policies is crucial for Zanzibar to achieve sustainable urban growth.

Acknowledgment

The abstract of this paper was presented at the Cities' Identity Through Architecture & Arts (CITAA) Conference—8th Edition, which was held on the 17th - 19th of September 2024.

I would like to express my gratitude to my supervisors, Professor Saija Hollmén and Professor John Fien, for their dedicated supervision and guidance throughout this research. This paper would not have been possible without their exceptional support. Special thanks to the Aalto WiT programme 2023 participants Anna Koskinen and Lidia Nimri for their contribution to designing the workshops. I also want to thank Pamoja Youth Initiatives NGOs for their valuable contribution in conducting workshops that provided genuine insights from the participants. Additionally, I am grateful to the local community members, governments, and private sector experts for their wholehearted engagement and for sharing their knowledge and skills related to the subject of this paper. Their contribution has greatly benefited this study.

Funding declaration.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 101034328.

Ethics Approval

Since this paper is part of the ongoing PhD under the Redi Program involving RMIT University and Aalto University, all the data collected were based on the requirement of ethical approval as approved by the Human Research Ethics boards of RMIT University, satisfying the requirements described in the National Statement on Ethical Conduct in Human Research (NHMRC, 2023). Additionally, the research permit with reference No: 20OL7 LOOLT 244239888087 was obtained from the Second Vice President's Office of Zanzibar to meet the necessary requirements to conduct research in Zanzibar.

Conflict of interest

The authors declare there is no conflict.

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