Applying Livable City Method to Address Urban Poverty in Bafoussam, Cameroon: A Participatory Framework for Inclusive Planning

**Abstract**

Urbanization in Bafoussam has induced significant demographic shifts, presenting both opportunities and challenges. As the city confronts increasing urban poverty, the concept of livability becomes essential for enhancing residents' quality of life. This paper explores how enhancing urban livability can alleviate the negative impacts of poverty and provides insights into effective strategies for fostering inclusive urban development and empowering marginalized communities in Bafoussam. Specifically, the study: (i) evaluates the current level of urban livability and its relationship with residents' aspirations, (ii) Correlate the Future aspirations of the Bafoussam city dwellers with Livable City Method as a working tool for stakeholders in Bafoussam (iii) formulates a participatory urban planning framework that integrates the perspectives and needs of local stakeholders to facilitate collaborative efforts in improving livability in Bafoussam. Utilizing the Livable City Method (LCM), the study identifies potential obstacles to achieving the city's desired livability standards. The analysis included 156 surveys of urban residents and 5 interviews with key informants, including the Mayors of Bafoussam, the Delegate for Urban Development and Housing, and the Transport Delegate. Key findings emerges that access to clean water, electricity, affordable housing, public transport, markets, waste disposal, health services, education, and safety are the primary needs of Bafoussam's residents. By reviewing the city’s development plan, the study proposes series of interventions, each offering multiple benefits, thereby aligning future aspirations with current operational activities. Additionally, the study assesses the resilience of these interventions against future changes. Consequently, city authorities in Cameroon can leverage the advantages of the LCM model to ensure that development initiatives align with residents' aspirations for improved livability in its cities.

Keywords: Planning, Urban Livability, Mitigation, Urban Poverty, Bafoussam City

1. Introduction

Over the years, Africa has increasingly become a focal point in the narrative of urban growth. Projections suggest the continent's population will reached 1.5 billion by 2050 (UN-Habitat, 2014), with urban regions set to host approximately 950 million individuals (OECD, 2020). This demographic shift is profoundly altering the urban landscapes across many Sub-Saharan African cities where urban growth is occurring in an unprecedented manner. As the urban populations rises, there is a corresponding increase in the demand for housing, transportation, energy, and various resources, leading to significant challenges in urban livability and environmental sustainability. While research into urban livability is gaining momentum, it remains largely centered in developed nations (Kyttä et al., 2015), with only a handful of case studies from Africa (Kasim et al., 2020). Sub-Saharan Africa is anticipated to account for more than half of the continent's urban population, with projected annual growth rates around 5.35% (UN DESA, 2019). This rapid urbanization is vital for addressing the needs of urban residents, particularly as the region confronts a range of pressing issues, including escalating inequality, environmental degradation, overcrowding, social exclusion, poverty, increased informal settlement residency, and worsening traffic congestion (Alexandra T. and Sosten S.C., 2019), all of which are aggravated by a lack of a sustainable livable framework.

The notion of urban livability emerged in the 1950s (Kaal, 2011), and has evolved as researchers analyze it from various angles. According to AARP (2020), a livable community is one that offers affordable housing, supportive community features and services, and sufficient mobility options, thereby fostering personal independence and civic engagement among residents. Some scholars look at the notion from a safe and clean environment that includes environmental justice for the urban poor, who are disproportionately affected by environmental challenges (Douglass, 2002), livability as an urban framework that enhances the physical, social, and mental well-being of all its residents (Vancouver, 2003). In terms of city rankings, livability assesses which areas provide favorable or unfavorable living conditions (Economist Intelligence Unit, 2012). Consequently, interpretations of livability can differ significantly across various studies and frameworks. This study focuses on the livability concept especially applying the Livable City Method (LCM within the context of Bafoussam to address the current level livability initiatives that correlate with aspirations of the residents, and, the resilience of the livable initiatives to future changes, and the applicability of the Livability City Method to suit the local context in Bafoussam.

1. Conceptual frame
	1. The concept of livability

Numerous studies have explored the concept of urban livability (Morais et al., 2013; Saitluanga, 2014; Nissi & Sarra, 2018; Fu et al., 2019; Valcárcel‑Aguiar & Murias, 2018), with various dimensions that contribute to overall well-being of residents (Kovacs-Gyori, A. 2019). The notion of livability has undergone significant changes within the field of urban studies (Ghasemi et al., 2018). It remains a nebulous concept, often characterized by ambiguity and a plethora of interpretations, complicating its contextualization and measurement. Currently, there is no definitive or universally accepted definition, and scholars have yet to reach a consensus on the dimensions necessary to adequately encapsulate the idea, largely due to varying academic backgrounds (Hankins and Powers, 2009). Some researchers have sought to refine livability by linking it specifically to urbanization, suggesting that a well-developed infrastructure, along with enhanced access to healthcare, education, recreational facilities, and diverse employment opportunities, contributes to a livable environment (Tennakoon & Kulatunga, 2019). Conversely, others view livability as synonymous with sustainable development (Urbis, 2008). For example, many indicators used to assess livability relate to a cleaner, safer, and greener environment, which aligns with the principles of sustainable development (Portney, 2013). Urban policymakers and advocacy groups assert that livability is a critical measure of urban quality of life. The Clinton Livability Agenda (1999), for instance, describes livability as a best practice aimed at preserving green spaces, promoting sustainable transportation, and implementing intelligent regional growth strategies for a sustainable future (National Research Council, 2002). Additionally, the Australian Bureau of Statistics in 2012 links livability to the overall well-being of urban communities, evaluating how well a society fulfills the needs of its residents (Paul and Sen, 2017).

In contemporary cities, unchecked urban expansion has introduced numerous challenges, including insufficient road infrastructure, inadequate healthcare services, inefficient waste management systems, limited energy resources, and a shortage of social and recreational amenities (Satterthwaite, 2017). To tackle these urban issues, city authorities strive to create livable conditions that enhance residents' quality of life (Onnom et al., 2018; Yassin, 2019). While city planners and policymakers aim to build livable urban environments, many states, localities, and regional planning agencies face considerable obstacles in adopting and executing a livability framework. This often arises from a lack of agreement on how to define, classify, or elaborate on the concept of livability (Young & Hermanson, 2013). Consequently, research on livability has received limited attention due to various challenges impacting the region. Furthermore, case studies are scarce because of few implementation efforts (Kasim et al., 2020). From an urban planning perspective, the core principle for conceptualizing livability in Sub-Saharan Africa is that urban support systems, environmental considerations, economic values, and social sustainability must be interconnected, fostering cities designed to promote sustainable living.

* 1. The Livable City Method (LCM)

The LCM is the handwork of the Birmingham school, developed from a comprehensive review of the sustainability, resilience, livability and city performance in the United Kingdom. Today the LCM serves as a working tool for a good number of stakeholders in the UK including local authorities, urban designers and planners and other urban experts from the private, public and third sectors to assess the need for and the vulnerability of interventions designed to move cities towards improved sustainability and livability (Lombardi, et al., 2012; and Leach, et al., 2017b). The LCM outlines a vision for a future city that aligns with the aspirations of its inhabitants while also examining obstacles that hinder progress toward that vision. This framework consists of nine steps as demonstrated in Figure 1. These steps connect the city's desired future outcomes with its existing operations, evaluating the susceptibility of new initiatives to potential future changes.

The first step in the LCM is for a city to identify what it wants to be like in the future (i.e., its desired future performance). For each element of performance, concomitant ‘intended benefits’ (i.e. the benefits that have been designed to arise from implementing performance improvement measures, which will take the form of ‘interventions’ in the city and its infrastructure systems) should be identified, where possible taking advantage of multiple intended benefits (Rogers, 2018). If more than one intended benefit is identified then the LCM should be followed for each intended benefit. The second step identify the necessary conditions for the future performance to be realized. These include affordable, safe, sustainable and accessible mobility, including active mobility for the purpose of creating an active and inclusive city. The third step determine the current existence of the necessary conditions. This is to find out if each necessary condition currently exists. This requires judgement and synthesis, drawing on expertise, experience and knowledge of the local context of the city’s current performance (Leach, et al., 2017a). The fourth step identifies interventions(s) that bring into existence the necessary conditions. This has to do with potential solutions to problems that can overcome the barriers to and exploit the opportunities for bringing the necessary conditions into being, and thus achieve the desired future performance. Interventions can be anything from physical interventions (and for engineers this often means infrastructure, which is highly interdependent with and interconnected to policies promoting behavior change (Montgomery, et al., 2012). The fifth step engages to identify for each intervention its intended multiple benefits (intervention-benefit pairs). Once designed, the intervention is tested for potential future vulnerabilities, as well as its potential in maximizing the range of additional benefits it might realize, and redesigned and retested as necessary. In Step six, for each intervention-benefit pair, necessary conditions are identified for the intervention to deliver the intended benefit. Step seven determine the performance of the necessary conditions now and in the future. It guides the user in determining whether each necessary condition is present now and if it is likely to be present in the future. Regarding the ‘now’, the user should make their determination in the most appropriate way, such as by reviewing documentation, observation, and deduction. Regarding the ‘future’, there exist a number of ways of determining the presence of necessary conditions (Rogers, 2018). Step eight determine the resilience of the intervention-benefit pair now and in the future. At this point it becomes possible to determine the current and future resilience of the intervention. This requires judgement and synthesis, prioritizing the importance of the necessary conditions and 357 balancing these against the potential vulnerabilities identified (Lombardi, et al., 2012). While Step nine (a) implement the intervention, (b) adapt the intervention (and return to Step 6) or consider using an alternative intervention (and return to Step 5). It is now up to the user to decide whether (and how) to implement the intervention, adapt it to make it more resilient to future change or to deliver additional benefits, or replace it altogether.

**Step 1**

Identify desired future performance and it’s intended multiple benefits (Performance-benefit pair)

**Step 2**

For each performance-benefit pair, identify the necessary conditions for the future performance to be realized

**Step 3**

Determine the current existence of the necessary conditions

**Step 4**

Identify intervention(s) that bring into existence the necessary conditions

**Step 5**

Identify for each intervention its intended multiple benefits (intervention-benefit pairs)

**Step 6**

For each intervention benefit pair, identify the necessary conditions for the intervention to deliver the intended benefit.

**Step 7**

Determine the performance of the necessary conditions now and in the future

**Step 8**

Determine the resilience of the intervention-benefit pair, now and in the future.

**Step 9, Option A**

Implement the intervention

**Step 9, Option B**

Adapt the intervention (return to step 6)

**Step 9, Option C**

Consider using an alternative intervention (return to step 5)

Figure 1. The Livable Cities Method (LCM) (Leach et al., 2019)

It is worth noting that The LCM has been applied in several cities in the United Kingdom with a positive significant successful rate. This study seeks to translate the model to an African city context who’s geographical, socio-economic and cultural landscape is very different from that of the Western world.

1. Materials and Method

The study is conducted in Bafossam city, the commercial hub of the West Region of Cameroon. The study area is located between latitudes 5°26’ and 5°30’ North and longitudes 10°20’ and 10°30’ East. It is bounded to the North West by the Bamboutous and Menoua divisions, to the South West by the Menoua high Plateaux and the Koung-khi divisions, the north-east by the Bamboutous as seen in Figure 2 (PDU Report, 2013).



 Figure 2: Location map of Bafoussam in the West region of Cameroon

 Source: Administrative map of Cameroon 2014: OSM, 2022

The research employed a quantitative methodology, distributing 156 structured survey questionnaires to participants to assess their aspirations related to critical dimensions of urban well-being. Participants were selected randomly and requested to rank their city aspirations from a predetermined list curated by the researcher to streamline the evaluation process. To gather data on current urban interventions, a thorough document review was conducted, focusing on the Council Development Plans to pinpoint initiatives that align with the identified aspirations. Only those interventions that directly addressed the top five aspirations were included in the analysis. Subsequently, the data reflecting residents' aspirations and the corresponding interventions were systematically analyzed utilizing the Life Cycle Management (LCM) model, allowing for a comprehensive understanding of the alignment between community desires and urban development efforts

1. Results and Discussions
	1. City Resident’s aspirations on livable Indicators in Bafoussam

Figure 3 shows data on residents' aspirations for livability in Bafoussam. A total of 156 residents were sample and the results reveals a clear prioritization of essential urban services and infrastructure, with healthcare services receiving the highest recognition at 128 responses. This suggests that residents are acutely aware of the importance of accessible healthcare in contributing to their overall quality of life. Following closely are housing quality at 126 responses and good transport facilities with 125 rating, this demonstrate a strong demand for safe living conditions and efficient mobility options. The significant emphasis on portable water provision 120 indicate the necessity of ensuring access to clean water, which is fundamental for public health and well-being. Additionally, the aspiration for access to electricity 123 responses and recreational centers 116 responses reflects a desire for both basic utilities and spaces that foster community engagement and leisure activities. Security and safety, with 109 responses, indicate that residents prioritize a secure living environment as crucial for their daily lives. In contrast, employment had 83 responses and waste management facilities 99 responses though received relatively lower attention, this suggest that while these are important aspects of urban livability, they may not be perceived as immediate concerns compared to the urgent need for healthcare, housing, and basic utilities. Overall, the analysis underscores a critical focus on health, safety, and essential services, reflecting the priorities of Bafoussam residents in their aspirations for a better urban living environment.

Figure 3: City Resident’s aspirations on livable Indicators in Baoussam

4.1.1. Urban Residents Aspirations and their Intended Benefits Associated with Various Interventions in Bafoussam

Table 1 provides a comprehensive overview of city dwellers' aspirations and the intended benefits associated with various urban interventions in Bafoussam, alongside the percentage of respondents supporting each aspiration. The highest aspiration is for affordable housing, with a notable 95.7% of residents acknowledging its benefits, such as reducing slum occupation and fostering social cohesion. Access to potable water gained 91.0%, while electricity provision which aims to extend distribution and install street lights, is also significant, with 81.3% of participants recognizing its importance for both safety and convenience it will bring. The aspirations for public transport and proper waste management, were both support at 76.2% and 69.3%, respectively. Residents acknowledge that an improved public transport system can enhance bus frequencies and reduce traffic congestion, while proper waste management is crucial for urban air quality and public health. Lastly, the aspiration for security and safety was desired by 60.5% of the participants. Overall, the data stressed the critical areas that Bafoussam residents feel need attention to improve their quality of life and foster a more livable urban environment.

Table 1. City dweller’s aspiration and intended benefits pair

|  |  |  |
| --- | --- | --- |
| Aspiration | Intended Benefits | Percentage (%) |
| Access to Potable Water | -Improve public health by providing clean water.-Increasing supply to meet demand.-Enhancing economic activities such as car washing, cleaning services and so.  | 91,0 |
| Affordable Housing | -Reduce occupation of city slumps.-Developing social cohesion amongst residents. | 95.7 |
| Public Transport System | -Increase bus frequencies.-Reduce traffic congestion. | 76.2 |
| Electricity provision  | -Extend distribution to all quarters-Install street lights | 81,3 |
| Proper Waste Management | -Improve urban air quality-Enhance public health | 69,3 |
| Security and Safety | -Providing safe environments-Attract investors to the city- Boost economic activities | 60,5 |

Source: Fieldwork, 2025

4.1.2. Current Interventions of Livable Indicators in the City

Table 2 outlines the current interventions aimed at enhancing livability indicators in Bafoussam city, with various projects and their stakeholders. Key initiatives include drinking water project that extends a distribution network by 95 kilometers and enhances storage capacity by 17,000 cubic meters, managed by CAMWATER which have solved water shortage in Bafoussam. The Ministry of Urban Development and Housing (MINHDU) is overseeing a social housing development project that aims to provide 10,000 affordable homes. Additionally, the city is developing Bus Rapid Transit (BRT) lanes and implementing an urban waste management project, both under the auspices of the Bafoussam City Council. An electrification project, which includes the construction of a new 225 kV transmission line, is being conducted by ENEO. Lastly, a national initiative has led to the installation of 220 surveillance cameras in strategic locations to bolster security. Each of these interventions is designed to improve essential services and infrastructure throughout the city, addressing critical needs for residents.

Table 2: Current interventions of some livable indicators in Baoussam city

|  |  |  |  |
| --- | --- | --- | --- |
| Intervention  | Locality | Stakeholders | Source |
| Drinking water project. Extended distribution network 95km, Enhanced storage reservoirs by 17,000 cubic meters | Citywide | CAMWATER\* | (ADB, 2017) |
| Social housing development. Affordable housing project of 10,000 homes | Citywide | MINHDU\* | Bafoussam City Development Plan |
| Construction of Bus Rapid Transit (BRT) lanes | Citywide | Bafoussam City Council |  [Bafoussam Urban Mobility](https://projects.worldbank.org/en/projects-operations/project-detail/P167795)  |
| Urban Waste Management Project | Citywide | Baoussam City Council | Bafoussam City Development Plan |
| Electrification project. construction of a new 225 kV transmission line | Citywide | ENEO | Cameroon government and Exim-bank India |
| Installation of 220 surveillance cameras at strategic locations  | Citywide | National Initiative | Bafoussam City Development Plan |
|  |  |  |  |

Source: Ministry of Urban Development and Housing, Cameroon Water Corporation, 2025

4.2. Incorporating Future Aspirations of Residents and LCMs for Bafoussam City

Table 3 presents the key livability indicators for Bafoussam City. The future aspiration for each indicator is defined (step 1) as well as the necessary conditions that must exist for the indicator to function well in (step 2). The nest step of the Livability Condition Model (LCM), determined whether the necessary conditions currently exist and if their implementation would yield the intended benefits (step 3). Only interventions that align with the aspirations of the city’s residents were considered (step 4).

Table 3: City’s aspiration, necessary condition, current existence, and interventions that bring into existence the necessary conditions

|  |  |  |  |
| --- | --- | --- | --- |
| Future Aspiration (Step one) | Necessary Condition(Step 2) | Current Existence(Step 3) | Interventions(Step 4) |
| Access to Potable Water | -Availability of reservoirs for storage-Available public taps in each quarter | -Frequent water rationing-Inadequate supply.  | 17,000 cubic meters/day additional drinking water project |
| Affordable Housing | -Construct affordable housing -Prioritizing low income earners (taxi drivers, hawkers, local traders, farmers) | Current accommodations mostly occupied by middle income earners | Additional construction of 10,000 social housing |
| Public Transport | -Construct more streets and pedestrian malls-Create an efficient and more public transport system | Poorly managed and of low performance | The construction of BRT lane and pedestrian malls will improve the bus frequency and pedestrian pathways |
| Proper Waste Management | -Construct waste dump sites in each quarter-Distribute trash cans not more than 500m away from residents-Ensure daily waste collection | -No precise dump sitesTrash cans incorrectly position.-Irregular waste collection  | Recruitment of additional waste collection companies |
| Construction And Supply Of Electricity  | -Extension of electricity poles- Improve the electricity supply-Reduce voltage drops | -Frequent electricity shortage-Partial supply of light in quarters | Construction of 225 kV new transmission line from Bekoko and Bafoussam |
| Security and Safety | Improved security surveillance within the city by installing CCTV cameras at strategic locations, as well as recruiting and training anti-security agents within the neighborhoods. | Available but low coverage of strategic locations in the city | Installation of CCTV cameras along major streets |

Source: Fieldwork, 2025

Generally, the results from table 3 indicates a widespread deficiencies in the livable indicators outlined as the most desired by the residents. Each aspiration is linked to specific necessary conditions that are currently unmet, this signals a dare need for targeted interventions and urgent strategic development initiatives such as infrastructure improvements and enhanced public services to elevate the city's livability and align it with the aspirations of its urban residents. This can go a long way to foster a safer, more sustainable, and inclusive urban environment of Bafoussam city.

4.3. Resilience of city’s interventions

As presented on table 4, LCM in step 5 examines the advantages provided by various urban interventions. Step 6 identifies the specific conditions necessary for these interventions to achieve their intended benefits, focusing on factors that enable community members to effectively utilize these solutions. The subsequent steps, 7 and 8, assess the resilience of these interventions. Resilience, in this context, refers to an intervention's capacity to maintain functionality and continue delivering benefits amidst various changes, ultimately aiming to create solutions that endure future uncertainties. To analyze resilience, the Designing Resilient Cities Method (DRCM) as described by Lombardi et al. (2012), was integrated into the LCM framework. At this stage, four extreme scenarios becomes useful: fortress world, market forces, policy reform, and new sustainability paradigm as described by Electris et al., (2009), to evaluate the resilience of the interventions. The "fortress world" scenario depicts a society divided into two distinct groups: the affluent, who possess wealth and resources, and the underprivileged, who face significant barriers to accessing essential services. The "market forces" scenario emphasizes how economic dynamics of supply and demand shape the production and distribution of goods and services. "Policy reform" involves the government implementing laws and regulations to foster sustainable practices, while the "new sustainability paradigm" represents a grassroots movement where individuals and communities actively pursue sustainable living.

Table 4. City’s interventions, intended benefits, and necessary conditions

|  |  |  |  |
| --- | --- | --- | --- |
| No | Intervention (step 5) | Intended benefit (s)(step 5) | Necessary condition (step 6) |
| 1  | 17,000m3/day additional drinking water project. | -Increase water supply | Provide public taps to all quarters |
| 2 | Affordable housing project: Construction of social housing  | Reduce the number of people living in city slumps | Assign accommodation to city dwellers with low income |
| 3 | Construction of Bus Rapid Transit (BRT) corridors and feeder lines in the city | Increase the fast traffic flow of buses within the city | Buses connect areas of the city people want to travel to and from.  |
| 4 | Urban waste management project  | Improve cleanliness and good quality air | Provide dump sites not more than 1km away from users. |
| 5 | Electricity provision  | Extent electricity to all neighborhoods, increasing the reliability and efficiency of the power network | Construction of a new 225 kV transmission line between Bekoko and Bafoussam |
| 6  | Installation of surveillance cameras in the city. | Improve street surveillance thereby reducing insecurity. | Constant monitoring of the videos collected and maintenance of the cameras. |

Source: Fieldwork, 2025

4.4. Synthesis of intervention resilience and actions taken

Considering the resilience or vulnerabilities obtained above, they are then synthesized (step 8) and decisions are now made regarding whether to implement the intervention, or adapt some adjustments first before taking action, or pick up an alternative intervention (step 9).

Table 5 outlines various interventions aimed at improving urban infrastructure and services, pointing out their resilience and the corresponding actions taken. The additional drinking water supply, with a planned capacity of 17,000 m³/day, is timing to the urgent demand for water in the city. However, this intervention's effectiveness hinges on expanding supply capabilities and establishing water storage solutions beforehand. Similarly, the construction of social housing raises concerns about potential policy manipulations that could divert its benefits away from low-income residents, indicating a need for careful oversight in implementation.

On the other hand, the development of BRT corridors and feeder lines demonstrates a proactive approach to enhancing public transportation by allowing for expansion and increased competition among service providers, which is vital for breaking existing monopolies. The urban waste management initiative aims to foster competition among service providers, signaling a shift toward a more efficient waste management system. Lastly, the installation of surveillance cameras is a reactive measure intended to address crime, emphasizing the necessity for heightened security in vulnerable areas. Collectively, these interventions illustrate a dual strategy of enhancing service provision while addressing potential pitfalls, thereby promoting resilience in urban planning.

Table 5: Synthesis of intervention resilience and actions taken

|  |  |  |
| --- | --- | --- |
| Intervention | Synthesis of its Resilience*(Step 8)* | Action Taken*(Step 9)* |
| **Implement** | **Adapt** | **Alternative** |
| 17,000m3/Day Additional Drinking Water Supply | Demand remains extremely high, necessitating an expansion of supply and the establishment of water storage facilities before implementation | **✅** |  |  |
| Construction of Social Housing | Regulatory changes by city authorities could shift the intended purpose of these accommodations away from benefiting low-income residents. |  | **✅** |  |
| Construction of BRT Corridors and Feeder Lines | Potential exists to extend the overall length of BRT lanes and issue a tender to diversify city transportation bus service providers, breaking any existing monopolies | **✅** |  |  |
| Urban Waste Management Project | Aim to dissolve monopolies in service provision and foster increased competition among new service providers. | **✅** |  |  |
| Installation of Surveillance Cameras in the City | An increase in surveillance cameras on high-crime streets is necessary to deter criminal activities |  | **✅** |  |

Source: Fieldwork, 2025

The overall results indicate that the BRT corridor and urban waste management interventions are ready for full implementation, meanwhile, the water project, housing, and security projects require some adjustments before they can be implemented. Also, the results indicated that none of these interventions requires alternative interventions.

4.5. Participatory urban planning framework for improving livability in Bafoussam City

The table 6 outlines a comprehensive participatory planning stages aimed at enhancing urban development in Bafoussam by actively involving various stakeholders throughout the process. The initial stage focuses on stakeholder identification and mapping, which is crucial for understanding the community's demographic landscape and aligning interests. By conducting surveys and creating a stakeholder map, the framework establishes a foundation for inclusive engagement that recognizes the diverse roles of community members, local organizations, and government agencies. This foundational work paves the way for fostering a sense of ownership through community engagement and awareness efforts, such as public workshops and multimedia outreach, which educate residents about urban planning and facilitate their active participation.

Subsequent stages like needs assessment and collaborative planning are very important for collective visioning and design in urban initiatives. Through participatory workshops and vision boards, stakeholders can articulate their aspirations, enabling planners to create urban plans that resonate with community needs. The focus shifts to developing actionable implementation strategies that prioritize transparency and responsibility allocation of resources. Finally, establishing feedback loops and continuous engagement ensures that the dialogue with stakeholders persists beyond initial consultations, allowing for ongoing refinement of urban plans in response to evolving community needs and fostering a collaborative spirit in Bafoussam's urban development journey. If stakeholders in Bafoussam can implement this participatory frame, the needs and aspiration of the residents can easily be identified and scale for implementation. This can go a long way to improve their livability conditions.

Table 6: Participatory Urban Planning for Engaging Stakeholders in the Development of Bafoussam city

|  |  |  |
| --- | --- | --- |
| Participatory Stages | Objective | Action |
| Stakeholder Identification and Mapping | Identify all relevant stakeholders, including community members, local organizations, government agencies, and private sector representatives | -Conduct surveys and focus groups to understand community demographics and interests.-Create a stakeholder map highlighting roles, influences, and relationships among different group |
| Community Engagement And Awareness | Foster a sense of ownership and participation among residents in urban planning processes | -Organize public workshops and forums to educate residents about urban planning processes.-Use multimedia platforms (social media, community radio) to disseminate information and gather feedback |
| Needs Assessment And Visioning | Collect and prioritize the needs and visions of local stakeholders for Bafoussam’s development | -Facilitate participatory workshops to discuss current challenges and aspirations.-Implement a “Vision Board” activity where stakeholders can visualize and express their ideal urban environment |
| Collaborative Planning and Design | Develop urban plans that reflect the collective inputs of stakeholders | -Form collaborative design teams comprising community members, urban planners, and local officials to draft planning proposals.-Utilize design charrettes (intensive planning sessions) to enable real-time input and feedback on urban designs |
| Implementation Strategy Development | Create actionable plans for implementing urban initiatives while ensuring stakeholder involvement | -Develop a phased implementation roadmap that includes short-term, medium-term, and long-term goals.-Allocate responsibilities to various stakeholders, ensuring transparency in the execution of projects |
| Monitoring/Evaluation Framework | Establish a system for assessing the effectiveness of implemented plans and making adjustments as necessary | -Set up regular community meetings to review progress and gather feedback on ongoing initiatives.-Use indicators co-developed with stakeholders to measure success and facilitate adaptive management |
| Feedback Loops and Continuous Engagement | Maintain ongoing communication and engagement with stakeholders to ensure their needs are continually addressed | -Establish a digital platform for stakeholders to voice concerns, suggest improvements, and stay informed about urban planning developments.-Organize periodic community reviews to refine and update urban plans based on evolving needs and feedback |

Source: Fieldwork, 2025

5. Discussion of Findings

The application of the Livable City Method (LCM) in Bafoussam has yielded significant insights into the top aspirations of city dwellers, with access to potable water, affordable housing, public transport, waste management, and security emerging as critical priorities. This aligns with the findings of Rogers (2018), who emphasizes the LCM's role as a decision-making tool that enables urban authorities to identify and address potential barriers to achieving sustainable urban aspirations. The identification of these aspirations reflects a broader consensus in the literature, where access to clean water is often ranked as the top necessity in urban settings, particularly in developing regions (UN-Habitat, 2020). The planned intervention of adding 17,000m³/day of potable water in Bafoussam is a crucial step towards enhancing public health and well-being, echoing the sentiments of Karam et al. (2021), who argue that water security is foundational to urban livability. The aspiration for affordable housing resonates with the challenges presented in Bafoussam, where a significant housing deficit persists. With a reported estimating annual deficit of 50,000 units, the construction of 10,000 social affordable homes for low-income households is a strategic move to alleviate overcrowding in informal settlements (Centre for Affordable Housing in Africa, 2014). This situation is indicative of the broader patterns in Sub-Saharan Africa, where over 47% of urban populations live in informal settlements (NIS, 2012), highlighting the urgent need for targeted housing policies. Moreover, the alignment of affordable housing initiatives with community needs is supported by authors like Mohan et al. (2020), who assert that effective housing solutions enhance social cohesion and stability within urban environments.

Public transport, waste management, and security are also critical aspirations, with interventions such as the construction of Bus Rapid Transit (BRT) lanes and the installation of CCTV cameras reflecting attempts to address these needs. However, the study underscores vulnerabilities, such as inadequate enforcement mechanisms for transport regulations and the potential ineffectiveness of surveillance systems without community involvement. This aligns with previous research that emphasizes the importance of community engagement in enhancing urban safety and efficacy of interventions (Alexander, 2019). Moreover, the introduction of competitive waste management services illustrates a proactive approach to improving urban cleanliness, yet, as Satterthwaite (2017) points out, such initiatives must be sustained through ongoing investment and public support. Overall, the findings highlight the interconnectedness of urban aspirations and the necessity for holistic and adaptable strategies that consider the unique contexts of cities like Bafoussam.

**Conclusion**

The study employs a design thinking approach to enhance decision-making among stakeholders regarding urban interventions in Bafoussam, ultimately contributing to more effective policy development and implementation. The application of the Livable City Method (LCM) revealed that existing interventions in Bafoussam are insufficient in meeting the aspirations of residents, particularly in critical areas such as access to potable water, affordable housing, public transport, waste management, and security. Furthermore, the resilience of these interventions is significantly undermined by the monopolistic practices of service providers in urban waste management and intra-city transport services. This lack of competition not only stifles innovation but also results in subpar performance and inadequate service delivery, which is a prevalent issue in many African cities. In contrast, cities in the United Kingdom, where the LCM was originally developed and tested, often benefit from competitive markets that foster quality improvements and responsiveness to community needs. Therefore, addressing these barriers through collaborative governance, fostering competition, and engaging communities in the planning process is essential for enhancing urban livability in Bafoussam and similar contexts across Sub-Saharan Africa. By prioritizing these strategies, city authorities can better align interventions with residents’ aspirations, ultimately leading to more sustainable and resilient urban environments.

Disclaimer (Artificial intelligence)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

**References**

AARP (2020). The Geography of Livability: Insights from AARP’s Livability Index.

Alexandra, T., and Sosten, C., (2019). Pathways for Sustainable and Inclusive Cities in Southern and Eastern Africa through Urban Green Infrastructure? Sustainability 11(10):2729; DOI: 10.3390/su11102729

Douglass, M (2002). From global intercity competition to cooperation for livable cities and economic resilience in Pacific Asia Environment and Urbanization 14 1 pp 53-68

Economist Intelligence Unit EIU, (2012). The Economist Intelligence Unit’s Quality-of-Life Index, The World in 2OO5 2007: <http://www.economist.com/media/>

Fu, Bo; Yu, Danlin; and Zhang, Yaojun, (2019). “The Livable Urban Landscape: GIS and Remote Sensing Extracted Land Use Assessment for Urban Livability in Changchun Proper, China” Department of Earth and Environmental Studies Faculty Scholarship and Creative Works. 587.

 <https://digitalcommons.montclair.edu/earth-environ-studies-facpubs/587>

Ghasemi, K., M. Hamzenejad, and A. Meshkini, (2018). The spatial analysis of the livability of 22 districts of Tehran Metropolis using multi-criteria decision making approaches. Sustainable cities and society: p. 382-404.

Hankins KB, Powers EM (2009). The disappearance of the state from livable urban spaces. Antipode 41(5):845–866

Kaal, (2011). A conceptual history of livability. Dutch scientists, politicians, policy makers and citizens and the quest for a livable city, vol. 15(5): pp 532-547

Kasim O F.,Wahab B., and Olawale E O., (2020). Assessing Urban Liveability in Africa: Challenges and Interventions, <https://doi.10.1007/978-3-319-71059-4_70-1>

Kovacs-Gyori, A. (2019). GIS-based Livability Assessment: A Practical Tool, a Promising Solution. In Proceedings of the 5th International Conference on Geographical Information Systems Theory, Applications and Management - GISTAM; ISBN 978- 989-758-371-1; ISSN 2184-500X, SciTePress, pages 289-296. DOI: 10.5220/0007753702890296

Kyttä, M., Broberg, A., Haybatollahi, M., and Schmidt-Thomé, K., (2015). Urban happiness: context- sensitive study of the social sustainability of urban settings. Environ. Plan. B : Plan. Des. 47, 34–57. [https ://doi.org/10](https://doi.org/10). 1177/0265813515600121.

Leach J.M., Rogers DF., Ortegon-Sanchez A., Tyler N., (2019). The Liveable Cities Method: Establishing the 2 Case for Transformative Change. Proceedings of the Institution of Civil Engineers – Engineering Sustainability

 <https://www.icevirtuallibrary.com/doi/abs/10.1680/jensu.18.00028>

Leach, J. M., Lee, S. E., & Christopher, B. T. (2017a). Dataset of the livability performance of the City of Birmingham, UK, as measured by its citizen wellbeing, resource security, resource efficiency and carbon emissions. Data in Brief, 15, 691-695.

Leach, J. M., Lee, S. E., Hunt, D. V., & Rogers, C. D. (2017b). Improving city-scale measures of livable sustainability: a study of urban measurement and assessment through application to the city of Birmingham, UK. Cities, 71, 80-87.

Lombardi DR, Leach JM, Rogers CDF et al. (2012). Designing Resilient Cities: A Guide to Good Practice (EP103). IHS BRE Press, Bracknell, UK.

Morais, P., Miguéis, V.L., Camanho, A.S., (2013). Quality of life experienced by human capital: An assessment of European cities. Soc. Indic. Res. 2013, 110, 187–206

Mercer (2011). Quality of Living Survey Highlights—Defining ‘Quality of Living’ 2011. Available online: [http://www.mercer.com/articles/quality-of-living-definition- 1436405](http://www.mercer.com/articles/quality-of-living-definition-%091436405)

Montgomery, M., Broyd, T., Cornell, S., Pearce, O., Pocock, D., & Young, K. (2012). An innovative approach for improving infrastructure resilience. Proceedings of the Institution of Civil Engineers - Civil Engineering, 165(6), 27-32.

National Research Council, NRC (2002). Community and Quality of Life: Data Needs for Informed Decision Making. Washington, DC: The National Academies Press.

Nissi, E., & Sarra, A. (2018). A measure of well-being across the Italian urban areas: An integrated DEA-entropy approach. Social Indicators Research, 136, 1183–1209, <https://doi.org/10.1007/s11205-7>

OECD (2020). Africa’s Urbanization Dynamics 2020: Africapolis, Mapping a New Urban Geography, West African Studies, OECD Publishing, Parris, https://read.oecd- ilibrary.org/development/africa-s- urbanisation-dynamics-2020\_b6bccb81-en#page

Onnom, W., et al., (2018). Development of a liveable city index (LCI) using multi criteria geospatial modelling for medium class cities in developing countries. Sustainability 10 (2). <https://doi.org/10.3390/su10020520>

Paul, A., Sen, J., (2017). Livability assessment within a metropolis based on the Impact of Integrated Urban Geographic Factors (IUGFs) on clustering urban centers of Kolkata. Cities 142–150. <https://doi.org/10.1016/j.cities.2017.11.015>

PDU Report (2013). Plan de Développement Urbain de Bafoussam, 2013, 325p

Portney, K. (2013). Taking Sustainable Cities Seriously: Economic Development, the Environment, and Quality of Life in American Cities. Cambridge: MIT Press

Rogers, C. D. (2018). Engineering future liveable, resilient, sustainable cities using foresight. Proceedings of the Institution of Civil Engineers - Civil Engineering, 171(6), 3-9.

Saitluanga, B.L., (2014). Spacial pattern of urban livability in Himalayan region: A case of Aizawl City, India. Soc.Indic. Res. 2014, 117, 541–559.

Satterthwaite D., (2017). The impact of urban development on risk in sub-Saharan Africa's cities with a focus on small and intermediate urban centres, International Journal of Disaster Risk Reduction, [www.elsevier.com/locate/ijdr](http://www.elsevier.com/locate/ijdr) , IIED, pp 16-23

Tennakoon, T.M.M.P. and Kulatunga, U., 2019. Understanding liveability: Related concepts and definitions Proceedings of the 8th World Construction Symposium, Colombo, pp. 578-587. doi.org/10.31705/WCS.2019.57.

UN-Habitat, (2014). Transforming Our World: The 2030 Agenda for Sustainable Development. UN, New York, USA.

UNDESA, (2018). United Nations, Department of Economic and Social Affairs, Population Division, World Urbanization Prospects: The 2018 Revision, Online Edition. Retrieved from <https://population.un.org/wup/Publications/>.

Urbis T (2008). Enhancing Victoria’s Liveability. Victorian Competition and Efficiency Commission, Melbourne

Valcárcel, A.B., Murias, P., (2018). Evaluation and management of urban liveability: A goal programming based composite indicator. Soc. Indic.

Vancouver, (2003). The World Urban Forum 2006, the livable city.

Yassin, H.H., (2019). Livable city: An approach to pedestrianization through tactical urbanism. Alexandria Eng. J. 58 (1), 251–259. <https://doi.org/10.1016/j.aej.2019.02.005>

Young, M., (2013). Overcoming the crisis in curriculum theory: a knowledge-based approach. Journal of Curriculum Studies, [e-journal] 45(2), pp. 101–118.

 <http://dx.doi.org/10.1080/00220272.2013.764505> .