

Framework for the provision of affordable housing: addressing the housing crisis in Namibia

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Abstract: This study aims to address the global issue of homelessness, with over 900 million people lacking homes worldwide, and a specific backlog of 300,000 housing units in Namibia. The study's purpose is to conduct a comprehensive review to identify a suitable framework for affordable housing provision in Namibia while analyzing existing theories used by housing professionals and academics. The design and methodology involved sourcing data through Google Scholar, using search terms related to affordable housing and Namibia. Desktop content analysis was employed for data analysis. The study findings suggest that mass housing, supported by well-defined critical success factors, is the most effective framework for providing affordable housing to low-middle income earners. The challenges associated with implementation can be addressed by ensuring knowledgeable individuals are placed in key housing position institutions to facilitate housing legal framework review. The practical implications of this study are to inform researchers, developers, policymakers, and practitioners of the various modalities for affordable housing schemes. The study argues in favour of utilizing Herbert A Simon's decision-making process, which consists of four stages - intelligence, design, decision, and implementation activities to assess and review the current legal framework of affordable housing policies. The study supports an "up-bottom" approach to restore the dignity of the citizen and foster more equitable society. The value and originality of this research lie in the significant impact of decision-making theory, in conjunction with operations research. Furthermore, this study contributes to the existing literature on affordable housing framework. Future research should delve deeper into the phenomenon and gather original information from those affected by housing crisis, allowing experts to determine critical success factors (CSFs) and criteria.

Keywords: Affordable housing, framework, Namibia, decentralization, Regional and local authorities.

1. Introduction

The issue of unaffordable housing has become a prominent global challenge, leading to the emergence of slums and inadequate living conditions in both developed and developing nations (Adabe, Chan & Darko, 2021) as the world moves to become a global village. Namibia is no exception to this crisis, despite its abundant natural resources. A large portion of the productive population in Namibia lives in poverty, lacking access to affordable housing often resulting in homelessness and the creation of slums. According to UN-Habitat, approximately 900 million people worldwide are without a home, highlighting the magnitude of the housing crisis. To tackle this issue, countries across the globe have come together to collaborate on sustainable development goals (SDGs), with a particular focus on providing affordable housing.

However, Regional Government institutions in Namibia have conducted limited research on the implementation of decentralization policies that facilitate the provision of affordable housing. In addition to the housing crisis, contemporary challenges such as a global shortage of qualified workers capable of addressing housing shortages have emerged. (Yang et al, 2021) To overcome these obstacles, it is crucial to engage relevant stakeholders in a country facing housing issues and identify an appropriate framework. By employing Herbert Simon's decision-making theory, a comprehensive understanding of the problems at hand can be gained, allowing for the design of effective housing programs and schemes. This participatory approach is particularly important in developing countries where low and middle-income earners are disproportionately affected by the housing crisis. Sustainability is a key consideration in addressing the affordability

issue. It involves ensuring that housing programs or projects can sustain themselves after implementation and during ongoing operations. Achieving this requires the active engagement of all stakeholders. Literature on housing and slum creation, it becomes evident that such issues are symptoms of either a housing shortage or the relative unaffordability of proper housing. The efforts made by the government, such as the mass housing initiative, indicate recognition of the importance of addressing affordability concerns. Given this background, this study aims to review existing frameworks, identify a suitable framework, and increase awareness of the context and ongoing trends in the provision of affordable housing. It is hoped that significant progress can be made in addressing the housing crisis and improving the overall living conditions for individuals in Namibia and beyond.

2. Methodology

The study utilizes a secondary research approach, which involves analysing existing literature and sources. This approach is chosen to gather information on the provision of affordable housing and its associated frameworks. The researcher analyses the collected information through desktop content analysis. This involves studying and evaluating the content and findings of various sources related to affordable housing. Information is gathered from a variety of sources to ensure a comprehensive understanding of the subject matter. These sources include Google Scholar, government institution websites, newspapers, and national reports. In Google Scholar, specific search terms are used to retrieve relevant articles. The search terms used are "framework" and "affordable housing," which generated 118 articles. Additionally, the search terms "framework," "affordable housing," and "Namibia" were used, resulting in 778 articles. Set time limitations: To ensure the relevance of the literature review, the search is limited to articles published within five years, from 2018 to 2022. The primary focus of this research is on Namibia and its housing framework. This emphasis is due to the limited research available on housing in Namibia, especially regarding the provision of housing by Regional and Local governments. The study also includes an analysis of other countries with similar housing challenges, such as Indonesia, Malaysia, Nigeria, Somalia, Ghana South Africa. This comparative approach allows for a comprehensive perspective on affordable housing frameworks. The research also explores internationally recognized best practices in affordable housing provision. By examining successful approaches from different countries, the study aims to identify effective frameworks that can be applied in Namibia.

Overall, this methodology comprises conducting secondary research, using desktop content analysis, gathering data from various sources, using specific search terms, setting time limitations, focusing on Namibia, conducting a comparative analysis, and considering best practices. To ensure a thorough examination of articles for the affordable housing framework and provide a comprehensive understanding of the subject matter.

3. Literature Review

I. Importance of a Conceptual Framework in Housing Research

A conceptual framework is essential in researching complex phenomena like housing (Lara, 2020). Housing is a multifaceted concept with varied meanings for individuals and

communities. For a country to make informed decisions, it is significant to understand some concepts around housing study. Herbert A Simon's decision-making theory adopted by the study presents a framework that presents a realistic understanding of the world, where a decision has a significant impact on prices and output (Alijoyo, 2021). Per Jung et al (2020) Simon's theory has four stages in the decision-making process as follows (Jung, Tuan, Tran, Park, & Park, 2020)

a) The intelligence stage is an activity process that involves closely observing and analyzing the problem at hand and then formulating both the problem statement and the conclusion. This is a critical stage of initiation of phenomena and the housing crisis can be analyzed and input must be gathered from all stakeholders such as businesses, the government community, academicians, and non-governmental organizations (NGOs).

b) Design stage- In the second stage, variables and criteria are identified for the decision and their relationship to the problem formulated in the intelligence stage. Hence, in the housing sector, this stage holds great importance as it enables the development or alteration of programs and schemes for affordable housing. It also facilitates the identification of critical success factors and criteria. Moreover, a decision model can be created based on market research to assess the design of potential programs and schemes.

c) Choice stage. The third step involves assessing decision alternatives and providing recommendations on the most favourable option based on merits. In the context of housing, it is essential to thoroughly analyze various frameworks, strategies, and approaches for achieving affordable housing. This analysis should include a comprehensive examination of the strengths and weaknesses of each alternative to identify the most beneficial option. Furthermore, economists and psychologists should actively participate in the decision-making process to ensure that the chosen course of action has a positive impact on people's living standards and does not create challenges for the public.

D) Implementation stage. Is the stage at which careful assessment of the potential consequences of the decision takes place, allowing for the creation of an implementation plan. When it comes to the housing sector whereby implementation plan and communication strategy of the framework will be widely disseminated and promoted within the housing sector. It is crucial to ensure that all stakeholders have a clear understanding of their respective roles in the implementation process. Simon's theory argues that there is no single best or perfect course of action, as complete information about a situation is unattainable, therefore, there is always room for improvement (Alijoyo, 2021). It is significant for programs and housing to be revised after 5 years to be in line with strategic planning. Moreover, the strategic plan should always be crafted with a communication strategy. Communication strategies are everything when it comes to implementing a plan.

No universal definition is agreed upon, for this study housing is defined as a cornerstone of stability and security for individuals and families, serves as the hub for the social, emotional, security, and economic existence, and shall be a haven that offers a state of peace, security, and dignity (www.ohchr.org). Agyeman-Yeboah (2019) stated that Affordable housing is access to sufficient, safe, and reasonably priced housing is essential for

creating a society that is unified and inclusive (Agyeman-Yeboah, 2019). While there is no universally accepted definition, Lara (2020) argues that a conceptual framework is crucial for guiding research and identifying gaps in our understanding (Lara, 2020). By examining existing literature and previous studies, the significance of conducting research can be determined. The literature review serves two purposes: highlighting the importance of addressing housing issues such as slums, shortages, affordability, and their impact on individuals, and identifying potential contributions to expand our understanding of the topic (Lara, 2020).

II. Sustainable Development Goals and Housing

The United Nations defines sustainable development as meeting current demands without compromising the ability of future generations to meet their own needs (www.un.org). Slum settlements globally indicate a lack of affordable and suitable housing (Robert & Okanya, 2022). In response to this issue, member states collaborated on the adoption of the Sustainable Development Goals (SDGs) in 2015 (www.un.org). The SDGs emphasize the provision of affordable housing and align with targets such as poverty eradication, zero hunger, good health, education, gender equality, clean water, and clean energy (www.un.org). Policymakers and academicians adopted the terminology affordable housing during the 1980s specifically to address poverty (Agyeman-Yeboah, 2019). Some researchers indicate that the ability to secure housing is a prerequisite for gaining access to employment, education, healthcare, and social services (www.unhabitat.org). Henceforth, housing is more than just a roof overhead as it presents to people a better life that resulting prosperity (www.unhabitat.org). For the framework of affordable housing to be sustained, Herbert A Simon's decision making process could be the best theory to overcome the phenomena.

III. Critical Success Factors and Challenges in Providing Affordable Housing

Providing appropriate and accessible housing goes beyond simple construction; it requires the development of robust communities (Pero et al., 2021). Unpredictable consumer behavior influenced by social, political, economic, environmental, and technological factors, combined with a lack of common governmental preferences and company strategies, contributes to challenges in the housing sector (Pero et al., 2021). Pero et al. (2021) suggested that a potential solution lies in the mass housing framework, which could be developed in collaboration with community organizations, local developers, and renewable associates to improve the residential sector in places like Mogadishu, Somalia.

The literature also indicates a shift in focus towards sustainable and affordable housing, highlighting the shortcomings and inefficiencies in housing policies and practices (Pero, 2021). These issues may be attributed to high staff turnover and a lack of understanding among key personnel regarding goals and objectives (Pero, 2021). It is important to note that delays in economic growth occur when the construction of new houses, as a crucial investment component, is hindered. Research questions arise regarding how to integrate sustainability into affordable housing design to achieve SDGs and generate investment that increases national income (SDGs, 2021). It is common knowledge that the

construction of a new house is part of the new investment when it comes to the component of national income, which is expressed as follows: $Y = G + C + I + NX$, where Y = national income, G = government spending, C = household consumption, I = investment, and NX = net export. **“A delay in the provision of affordable housing not only delays new investment in the country's gross domestic product, which is an indicator of a healthy economy but also hampers the overall level of productivity”.**

Araji & Shahin (2021) proposed a two-part framework for addressing housing affordability: providing housing through low-cost investment assistance and low-interest rates and ensuring affordability in maintaining the house. They emphasized on the importance of thorough consultation with relevant stakeholders within each country, employing the Herbert Simon decision-making theory, and involving intended beneficiaries, especially in persistently affected low and middle-income communities (Araji & Shahin, 2021). Incorporating market research, academia, and scholars into development strategies is crucial for achieving sustainable goals in the housing sector. However, Adabre et al. (2020) argue that there are insufficient stimuli to accelerate the adoption of residential building construction in achieving UN sustainability goals in housing.

Chan & Adabre (2019) assert that the lack of residential construction that meets key aspects such as land use arrangement, household needs, and sustainable housing hampers progress, largely due to a lack of awareness of critical success factors (CFSs) (Chan & Adabre, 2019). Identifying CFSs is crucial for developing effective housing policies and programs (Oluyeye, et al 2020). Arguably, the missing puzzle in delivering sustainable affordable housing is identifying the critical success criteria and factors that will become benchmarks during the review process and implementation of housing programs and schemes. By recognizing the underlying causes and focusing on success factors, the delivery of sustainable affordable housing can be improved (Chan, 2019). In addition, embedding indicators of financial viability in strategic planning and national development plans is recommended (Adabre & Chan, 2019).

The study done by Oluyeye et al (2020) highlights the insufficient recognition of critical success factors for providing sustainable housing in African countries compared to the rest of the world. Oluyeye et al (2020). This misallocation of priorities hinders the implementation of affordable housing policies and neglects monitoring and assessment as essential principles. A study done by Debrah et al. (2020) through factors analysis and eloquent analysis suggest concepts such as sustainable city planning and management, fully integrated and practicable city design, and safeguarding legacy as factors that should be considered and serve as an index (Debrah et al, 2020). Urbanization in developing countries presents both challenges and opportunities for economic growth and job creation (Akinwade & Hui, 2022), requiring tailored approaches to address housing issues. Stakeholders' participation and public engagement play a crucial role in developing quality homes and ensuring social sustainability (Hamid et al., 2018).

In Malaysia, the middle class, which constitutes a significant portion of the population, faces housing demand issues due to disagreements between government policies, buyer preferences, and property developer behavior (Mustapa & Ali,

2021). A sustainable framework that facilitates collaboration among stakeholders is proposed to achieve affordable housing for all. Adejumo and Rukwaro (2021) find that the inappropriate policy framework is the greatest challenge in housing development in Nigeria. Dania et al (2021) suggest sustainable affordable housing strategies that encompass social, economic, environmental, institutional, and technological components, emphasizing the need for cooperation among the government, shareholders, legislators, and private property investors (Dania et al, 2021).

A study done by Debrah et al (2020) indicates that Ghana has also experienced challenges such as poor forecasting, flooding, and slum formation due to rapid urbanization (Debrah et al., 2020). Ensuring a shared understanding and tangible results through collaborative planning with people promotes collective alignment toward achieving common goals (Bah et al., 2018). Africa's population growth and migration patterns require urban planning based on market research to avoid housing crises (Bah et al., 2018). The COVID-19 pandemic further exacerbated housing issues and transformed them into a socioeconomic crisis as some family lost their breadwinner, became homeless, and never recovered.

Table 1. Comparison of purpose, conceptual/theoretical frameworks, and findings for 8 articles for the period of 5 years, 2018 to 2022 on Malaysia, Indonesia, Somalia, Nigeria, South Africa considering international and African perspectives

Author/Year	Topics/Purpose	Conceptual/Theoretical Framework	Findings
Moghayedi,A.;Awuzie,B.;Omotayo, T.;Le Jeune, K.; Massyn, M.; Ekpo, C.O.; Braune, M.;Byron,P., 2021	A Critical Success Factor Framework for Implementing Sustainable Innovative and Affordable Housing: A Systematic Review and Bibliometric Analysis.Worldwide The research purpose is to identify the critical success factors (CSFs) that enable the seamless integration of innovative technologies and practices throughout the different stages of the Sustainable Affordable Housing (SAH) lifecycle.	The SIAH CSF framework	The research findings revealed four distinct yet interconnected aspects through which Sustainable and Inclusive Affordable Housing (SIAH) can be achieved holistically. These facets include housing design, housing elements, housing production methods, and housing technology.
Abubbaker, A.,2021	A framework for sustainable provision of low-income housing in Abuja, Nigeria. This research aims to examine the current provision of housing for low-income groups in Nigeria, specifically focusing on Abuja, to create a framework for the sustainable provision of low-income housing.	Maslow's (1958) theory	The research findings indicate the development of a framework for providing sustainable low-income housing by integrating preliminary frameworks I, II, and III from chapters 6, 7, and 8. This integrated framework serves as a comprehensive approach to address the long-term housing needs of individuals with low incomes.
Adetooto, J., & Windapo, A.,2022	The use of alternative building technologies as a sustainable affordable housing solution: perspectives from South Africa. The research aims to assess the viewpoints of local experts and end users regarding the factors that drive or hinder the adoption of Alternative Building Technologies (ABTs), specifically focusing on Sandbag Building Technologies (SBTs), to enhance public awareness and understanding of SBTs, to promote sustainable housing in South Africa	philosophical viewpoint using NVivo 11 software	The research findings indicate that the main reasons for adopting Alternative Building Technologies (ABTs) like SBTs are sustainability, affordability, potential for job creation, fire-resistant qualities, and resistance to earthquakes. The study also identified several strategies for promoting the use of SBTs, such as raising awareness, constructing sandbag prototypes in different cities, and providing training on their implementation.

Chan, A.P.C.;Adabre, A.A.,2019	Bridging the gap between sustainable housing and affordable housing: The required critical success criteria (CSC). The research objective is to determine and categorize the diverse critical success factors (CSC) as perceived by affordable housing experts globally.20 countries were used.	fuzzy set theory	Results of factor analysis revealed that critical success criteria (CSC) for affordable housing can be categorized into six components: household satisfaction, stakeholders' satisfaction, house operation cost, time measurement, location affordability cost, and quality-related factors. These findings have practical implications, as they can be used as a framework for evaluating the performance of affordable housing projects. Furthermore, developers, NGOs, and government agencies can utilize these findings to effectively allocate resources for the provision of sustainable affordable housing.
Ezennia, I. S. & Hoskara, S. O., 2019	Exploring the Severity of Factors Influencing Sustainable Affordable Housing Choice: Evidence from Abuja, Nigeria. The research aims to address the existing gap in the literature by identifying the factors that influence the choice of sustainable affordable housing (SAHC) in the specific study area.	Sustainable affordable housing choice	The research findings indicate that housing affordability issues have a significant impact on housing choices in Abuja, Nigeria. As a result, it is important to consider users' perceptions when determining what housing is considered affordable.
Mustapa, N.A.;Ali, S.,2022	A conceptual framework for minimizing middle-income housing mismatch. The research purpose is to create a conceptual framework that addresses the issue of middle-income housing mismatch. This will be achieved by conducting a literature review on the occurrences of housing mismatch and exploring government interventions aimed at overcoming this situation in Malaysia.	Conceptual Framework for Minimizing Middle-Income Housing Preferences.	Research findings indicate that the majority of existing frameworks aim to address the issue of affordable housing by increasing its supply. However, these findings also suggest that government actions, development practices, and buyer preferences have played a role in the occurrence of middle-income housing mismatches.
Pero, C.D.;Bellini,E.O.; Martire, M. &Summa, D.,2021	Sustainable Solutions for Mass-Housing Design in Africa: Energy and Cost Assessment for the Somali Context. The research aims to examine mass housing in Mogadishu Settlement, considering both the economic and social factors associated with it.	Effective Legal Framework	Research findings propose a specific design solution for housing settlements that consider various contextual factors to ensure economic, environmental, and social sustainability. The analysis focuses on meeting identified Key Sustainability Requirements (KSR) and specifically emphasizes climate-responsive design, optimizing shape and construction techniques to meet social needs.
Prabantarikso, M.;Fahmi, I.; Fauzi, M.;Nuryantono, N.,2018	Strategic Collaborative Model of BGAC+ for Sustainable Housing Development in Indonesia. The research aims to propose a stakeholder model that emphasizes collaboration among the government, academia, business, community, and non-governmental organizations.	BGAC+ model of Stakeholder's collaboration for SH	Research findings show that stakeholders have diverse priorities when it comes to incorporating specific factors of sustainable housing criteria into housing development. The government plays a vital role in implementing these priorities effectively.

Sustainable development goals provide a framework for addressing housing issues globally, emphasizing the provision of affordable housing. Table 1 confirms that numerous studies have been conducted in different regions, aiming to seek solutions to the housing crisis. The findings of these studies have proposed various frameworks for affordable housing, strategies, and approaches, including critical factors and alternative building technologies. All that remains is to employ a decision-making policy process to identify the most optimal framework for overcoming the housing crisis.

IV. Literature Review: Affordable Housing in the Namibian Context

The provision of affordable housing is a significant concern for the Republic of Namibia as it seeks to improve the quality of life for its citizens. The backlog of housing in the country, Namibia presents both challenges and opportunities, with the potential to stimulate economic activity and job creation (Bah, 2018). Collaborative efforts between the government and development partners, including financial institutions, are essential for the implementation of a comprehensive framework (Annan-Aggrey et al., 2022). The Namibia framework for affordable housing consists of four programs, namely the Shack Dwellers Federation of Namibia (SDFN), the Namibia Housing Action Group (NHAG), the Decentralized Built Together Programme (DBTP), National Housing Enterprises (NHE), and Housing Subsidies for All Government Employees. All these schemes are implemented through the Regional Council Act (Act 22 of 1992) and the Local Authority Act (Act 23 of 1992) under the decentralization policy of 1997 and the Decentralised Enabling Act of 2000 (www.murd.org). These programs aim to provide basic services, including housing, in settlement areas, villages, towns, and municipalities.

However, several challenges hinder the effective provision of affordable housing in Namibia. Nghifindaka (2019) highlights the difficulties in managing construction processes, including budget approvals, building licenses, schemes, customs clearance certificates, and the rising costs of land and building materials. Such challenges directly impact the timely completion of affordable housing projects. It is proposed that collaboration among various stakeholders involved in delivering affordable housing is necessary to overcome these obstacles (Nghifindaka, 2019). On the other hand, incorporating critical success factors has proven beneficial in addressing critical issues (Rockart, 1982), and having the same understanding can work wonders within the housing sector.

Previous research reveals that former President Hifikepunye Pohamba's attempted to address the housing issue in 2013 through the introduction of the Mass Housing Development Program (MHDP) (Wilhelm, 2018). The program aimed to construct 185,000 houses by the end of Vision 2030, with National Housing Enterprises allocated a proposed budget of 45 billion Namibian dollars. Similar mass housing initiatives have proven successful in other contexts, such as Somalia (Pero et al., 2021). Wilhelm (2018) indicated that the mass housing strategy in Namibia was designed through an "up-bottom" approach, and faced challenges, including staff turnover, lack of knowledge in key positions, and resistance from some local authorities. These challenges led to inflated prices and unoccupied houses, necessitating the program's temporary suspension in certain locations (Wilhelm, 2018).

Inadequate incentives for developers have been identified as a constraint in the provision of affordable housing (Adabre et al., 2020; Mustapa & Ali, 2021). When National Housing Enterprises (NHE) was tasked with providing incentives to developers, the housing units produced were unaffordable for the target beneficiaries. Failure might be attributed to the consideration of buyer preferences adequately and lack of support from local authorities, who lacked suitable locations for housing unit construction. This non-existence of residential construction impacts three empowering aspects: land use, household arrangements, and sustainable housing (Chan & Adabre, 2019). Furthermore, the importance of incorporating critical success factors into the framework of mass housing for affordable housing is emphasized and supported by the study.

Addressing the affordable housing challenge in Namibia is still crucial for fostering wealth creation and economic development (Namibia Trade Directory, 2019). The legal framework recognizes housing as a major development priority and the government's responsibility to provide affordable housing to disadvantaged individuals (Asino & Christensen, 2018). Implementation can be challenging, and the backlog of housing currently stands at 300,000 units, predicted to increase to 311,000 by 2030 (Nghifindaka, 2019). Challenges related to construction management, such as budget approval, building licenses, and increasing costs of land and materials, directly impact affordable housing projects (Nghifindaka, 2019).

Table 2 Comparison of purpose, conceptual/theoretical frameworks, and findings for 6 articles for the period of 5 years, 2018 to 2022 on Namibia perspectives by author.

Author/Year	Topics/Purpose	Conceptual/Theoretical Framework	Findings
Dhliwayo, T.;Musonda, I.;Gumbo, T.,2022	An Integrated Framework for Catalysing Development and Sustainability of Small and Medium-sized Contractors: A Case of Namibia. The research aims to create a comprehensive framework specifically tailored to developing and sustaining Small and Medium Construction Enterprises (SMCs) in Namibia. This is important as there	Integrated framework	The research findings reveal the creation of an integrated framework called IFCDs-SMC (Integrated Framework for Catalyzing Development and Sustainability of Small and Medium Construction Enterprises). This framework encompasses six essential components that contribute to the development and sustainability of SMCs. These components include facilitating a conducive construction business environment, providing training for SMCs, offering accessible and affordable finance options, ensuring consistent work opportunities, promoting collaboration

	is limited existing knowledge on this topic within the Namibian context.		between public and private institutions, fostering an entrepreneurial culture among firm owners, and providing institutional support.
Hungi, K.D.,2020	Understanding barriers to housing delivery in informal settlements in Mariental, Namibia. The objective of this research is to gain a comprehensive understanding of the challenges hindering the delivery of housing in the Takarania informal settlement located in Mariental, Namibia.	Conceptual policy framework Self-help housing	Based on the research findings, it is evident that multiple factors act as barriers to housing delivery in the Takarania informal settlement. One of the primary impediments identified is the issue of land tenure.
Kakwambi, J.N.N.,2021	Evaluating the self-help housing programme in Namibia: the case of build together programme in Okahao town. The objective of this research is to assess the impact of the self-help housing program on the well-being and livelihoods of individuals who have benefited from the Better Township Program (BTP) in Okahao Town, Namibia.	Self Help Housing	Based on the research findings, it is evident that the Build Together Program's self-help housing initiative has a significant impact on the beneficiaries' livelihoods, leading to socioeconomic improvement. This is primarily due to the program providing beneficiaries with land tenure, decent housing equipped with basic amenities, and proximity to important public facilities.
Katoole, S.K.,2018	An investigation of affordable housing provision in the high-density location of Havana in Windhoek, Namibia. The objective of this research is to examine the factors that affect the provision of affordable housing for low-income households residing in the Havana Informal Settlement in Windhoek.	Theory of the Self-help Mode of Low-cost Housing Delivery	The research findings indicate that several social, economic, and governmental factors play a role in influencing the affordability of housing in the Havana Informal Settlement. These factors include rural-urban migration, education levels, income, occupation, inadequate access to water and sanitation, high construction costs, and limited availability of service land. Additionally, the study reveals that the high cost of living has a negative impact on housing affordability, making it difficult for low-income households to afford suitable housing.
Christense, A.,2019	Land governance in Namibia: challenges and opportunities. The objective of this research is to identify the primary challenges and delays encountered during the implementation of projects in the land and housing sector in Namibia.	Flexible Land Tenure System (FLTS)	The research findings indicate that despite the existence of policies, frameworks, and guidelines, none of the three projects and programs investigated, namely the Built Together Program, Communal Land Registration, and Mass Housing Development Program, have successfully achieved their intended outcomes or fully met their targets. The slow progress in implementing these programs can be attributed to inadequate program management overall, as well as weak financial management practices specifically.
Nghifindaka, T.,2019	Understanding the Challenges in Financing Affordable Housing: Multiple Stakeholder Perspectives from Namibia. The research purpose is to gain a comprehensive understanding of the obstacles involved in financing affordable housing, with a specific focus on three primary stakeholders: fund managers, developers, and homeowners.	Housing Economic theory Human motivation theory Efficient Market Hypothesis	The research findings indicate that enhancing the financing process for affordable housing in Namibia requires increased engagement and negotiations among local authorities, fund managers, and land acquirers. By reducing the stringent conditions and establishing an ample serviced land bank, the provision of affordable housing can be improved.

The provision of affordable housing in Namibia is a complex task that requires collaboration between the government, development partners, and financial bodies. Table 3 also confirms that several studies have been conducted in the country of Namibia. The findings of these studies have proposed integrated frameworks, such as enhancing financing and construction options, as well as highlighting the slow progress in implementing them in the housing sector. The confirmation was also made that in certain locations, the housing program is performing well and positively influencing the livelihoods of the people.

Scholars believe that some of the challenges identified during the review may be recognized as just administrative and decision-making issues. The work of Frankenfield & Clarke (2022) highlights that Herbert A Simon received the Nobel Prize in Economic Science in recognition of his significant impact on modern business and administrative research. Hence, Simon's decision-making theory can serve as a valuable tool in tackling administrative challenges and devising affordable solutions (Frankenfield & Clarke, 2022) to address the housing faced by low and middle-income earners in Namibia. Decision-making theory revolutionized organizational thinking by shifting the focus toward the human mind, enabling the administration to identify and resolve long-standing issues (Alijoyo, 2021)

4. Discussion

The Republic of Namibia recognizes the importance of providing affordable housing to enhance the quality of life for its citizens. The country has a comprehensive framework consisting of four programs: the Shack Dwellers Federation of Namibia (SDFN)/ the Namibia Housing Action Group (NHAG), the Decentralized Built Together Programme (DBTP), National Housing Enterprises (NHE), and Housing Subsidies for All Government Employees as shown in the table 1 below.

Table 3 Programme for the Provision of Affordable Shelter in Namibia compiled by author.

Programme for affordable housing	Shack Dwellers Federation (SDF) & Namibia Housing Action Group (NHAG)	Decentralized Build Building Together (DBTP)	National Housing Enterprises (NHE)	Government Subsidy (GRN)
Target beneficiaries (TB)	Up to a basic salary of N\$6000	Up to N\$5400	Everyone who can afford to repay back the loan	Employees below management
Repayment	Minimum N\$300	Minimum N\$600	determine by the loan amount paid out	Ratio GRN: TB 70: 30 and 65:35
Loan amount	<N\$35000	N\$40000-N\$80000	Up to N\$500, 000	Up to N\$792,000
Location	Settlement, Village, Town and Municipality	Settlement, Village, Town and Municipality	Village, Town and Municipality	Village, Town and Municipality

The four-housing programs and schemes in table 3 are implemented across different settlement areas, villages, towns, and municipalities per the Regional Council Act (Act 22 of 1992) and Local Authority Act (Act 23 of 1992) in Namibia. However, the programs and schemes are not clear to all, which is the implementation becomes problematic as it is not in a collaborative manner. All Government employees can benefit from housing subsidies negotiated by trade unions such as the Namibia Public Workers Union (NAPWU) and the Namibia National Teachers Union (NANTU). Still, there is a disparity where some employees are considered too wealthy to qualify for programs like SDFN & NHAG, and DBTP, while at the same time are unable to construct their houses with the assistance of NHE and government subsidies due to unaffordability or their geographical location. Currently, NHE and government subsidies do not reach individuals in settlement areas, although the existing framework was intended to prioritize these areas. This discrepancy may be attributed to challenges such as staff turnover, retirement, and a lack of knowledge in key positions within the Regional Councils. The Regional Councils were established to plan, coordinate, and to facilitate the developmental activities and projects to improve the

livelihood of all in their regions. It is common knowledge that the intention of the establishment of the Regional Council and Local Authority was to provide basic services, including housing, through a decentralization policy. This is just a matter of the decision-making process because the problem of housing does not affect the people at the supervisory and management level at the Regional Councils as well as all the government institutions.

Through observation, some Regional and Local Authorities are doing well in providing affordable housing and fast-tracking their local economic development in regions, despite the challenges. Houses should not be treated as products for someone or institutions to make a huge profit but as new investments for economic growth. Thus, why Mass Housing Development Program (MHDP) was launched by Former President Pohamba to address the housing problems in Namibia. The program aimed to provide accessible housing options for the population aligning with the goals outlined in Vision 2030. The scope of the MHDP was to construct around 185,000 houses by the end of Vision 2030 to eliminate approximately 61% of the housing backlog in the country. Scholars' thought that the program was

significant as it was monitored through an up-bottom approach and reported directly to the head of State. Successful implementation of mass housing framework in other countries has been reported through collaborative partnerships. However, the implementation of mass housing in Namibia faced challenges, houses built under this program became expensive for the targeted beneficiaries, leading to some remaining unoccupied. The program was eventually put on hold as affordable housing was not realized. To optimize the mass housing framework and leverage valuable insights, it is necessary to incorporate the four activities stage of Simon 'theory and actively involve academicians in the process. Namibia can also learn from Singapore. In accordance with Indonesia, Public Expenditure Review (2020) indicate that housing program implemented by the government of Singapore is widely praised for being one of the best in the World. It further presents that its success is attributed to Singapore's long-term planning approach that underlies the program (Indonesia, Public Expenditure Review, 2020). On this basis mass housing framework proposed as the best optimal choice through an up-bottom approach because the level of productivity in a country is evaluated.

Implementing affordable housing initiatives for low and middle-income earners is challenging. Comprehensively addressing sustainability aspects is vital, including environmental, societal, financial, and institutional factors, along with creating cohesive and well-connected communities (Adamec, Janouskova, & Hak, 2021). The presence of staff turnover and reliance on semi-skilled workers in key positions within the framework of providing affordable housing can be considered constraints in delivering quality housing. To ensure access to affordable and decent housing, decision-making theories can provide stability and firmness in reducing destitution and criminal activities. Adopting an alternative interpretation theory suggests that constructing new housing represents an opportunity to create capital infrastructure and contribute to overall investment (Adamec, Janouskova, & Hak, 2021).

The challenges faced in the housing sector in Namibia can be associated with staff turnover as well as the retirement of experienced personnel. Planning tools and approaches were formulated during the inception of Regional and Local Governments. The tools and approaches were revised again through a consultation process whereby a manual was produced with the support of the former Permanent Secretary of the Ministry of Regional Local Government and Housing (MRLGHRD) Hon Sirkka Ausiku (MURD, 2015). Contribution also comes from the personnel from (MRLGHRD), Ohangwena Regional Council, Karas Regional Council, Erongo Regional Council, Otjozondjupa Regional Council, and Zambezi Regional Council (MURD 2015). MRLGHRD is known today as the Ministry of Urban and Rural Development (MURD).

The importance of addressing the affordable housing challenge in Namibia is not only a matter of social welfare but also a catalyst for wealth creation and economic development. Adequate and affordable housing improves overall quality of life, reduces poverty, and contributes to economic growth. It enables low and middle-income earners to allocate resources efficiently and participate more actively in the economy. The construction of affordable housing creates jobs, stimulates demand for goods and services, and promotes investments in infrastructure and

community development. The research confirms that the postponement of affordable housing not only leads to a delay in new investments in the country's gross domestic products which acts as a gauge for a robust economy, but also obstructs the overall productivity levels.

Alternative financing models and incentives, such as public-private partnerships and collaboration with non-profit organizations, should be explored to make housing more affordable for low and middle-income earners. Tax breaks, low-interest loans, and other financial incentives can also encourage private-sector investment in affordable housing projects. An analysis of the affordable housing framework in Namibia by the scholar suggests that staff turnover and the reliance on semi-skilled workers in key positions pose constraints in delivering quality housing. It is important not to overlook the housing issues faced by the majority of the population, as they form the backbone of the country. A sustainable framework for mass housing, guided by market research and including critical success factors, is essential in addressing the housing crisis and improving living standards, social impact, and economic growth. Addressing challenges and capitalizing on opportunities offered by the framework of decision-making to craft the sustainable framework for affordable housing, Namibia can ensure that affordable housing becomes a reality, contributing to a more prosperous and equitable society.

Implementing shared vision and collaborative planning fosters collective alignment and increases the likelihood of achieving common goals by involving the people rather than planning solely for them. In most cases, planning efforts that exclude the active involvement and participation of the people, tend to be ineffective (Bah et al, 2018). The study conducted by Bah et al, (2018) on housing market dynamics in Africa shows that the speed at which people migrated from rural to urban from 2000 to 2015 in Africa has an average that has been identified as the highest rate in the world. Africa's population is expected to reach 2.44 billion by 2050, up from 1.18 billion in 2015, the year the SDGs were adopted (Bah et al. 2018). It is widely recognized that population growth can lead to a housing crisis if urban planning is not based on market research, especially in developing countries. In Namibia, the backlog of housing was recorded at 80,000 in 2015, while it is now at 300,000. The world is dynamic, and change can't be held back. In Namibia, it is crucial for key stakeholders involved in housing facilitation and development to update their knowledge, analyze population statistics, understand consumer behaviors, and predict market challenges to effectively plan and address them. Bah (2018) argued that in Africa, the backlog of housing has been identified as challenging at the same time as an excellent opportunity to expand economic activity and part of job creation (Bah, 2018). This was reaffirmed by the study done in 2014 by the National Council of Applied Economic Research for India, which stated that 19.6 % of GDP is brought by housing services and construction altogether while 6.9% of job creation contribution is from housebuilding (Marfo & Peprah, 2018).

5. Conclusion

The literature on affordable housing highlights the increasing importance of addressing the housing shortage to achieve the Sustainable Development Goals by 2030. Namibia, like many African countries, faces challenges such as poor planning,

flooding, and slums. While the country has a good policy framework on housing, it needs revision to include more people, particularly those in the working group below management. However, implementing affordable housing initiatives for low and middle-income earners is challenging. The adoption of sustainable development goals by member states provides a roadmap while implementation and monitoring are left to individual countries. The lack of affordable housing in Namibia not only impacts the economy but also affects the well-being and productivity of workers. It is recommended that institutions dealing with affordable housing employ psychologists and economists to make quality decisions. However, some challenges hinder the provision of affordable housing such as managing construction processes and inadequate incentives for developers. Some of these challenges are related to the implementation and have been observed as an administrative and decision-making issues. Alternative financing models and incentives can help make housing more affordable. Achieving affordable housing for all in Namibia requires a multi-faceted approach involving collaboration, innovation, and commitment from all stakeholders including identifying critical success factors and criteria to guide the planning and implementation process. Implementing a proposed sustainable mass housing framework based on Herbert Simon's decision-making process is crucial to providing stability and reducing destitution among the communities. Collaboration among stakeholders and further research will help gather original information for sustainable housing programs and schemes. By addressing challenges and capitalizing on opportunities offered through the decision-making process framework. Namibia or any other country can craft a sustainable mass housing framework aimed at ending homelessness. This framework will pave the way for the achievement of affordable housing, significantly contributing to the creation of a more prosperous and equitable society.

References

1. Abubbaker, A. (2021) A framework for sustainable provision of low-income housing in Abuja, Nigeria. *The University of Sheffield*
2. Adabre, M.A. & Chan, A.P.C. (2019). "Critical success factors (CSFs) for sustainable affordable housing", *Building and Environment*, Vol. 156, pp. 203-214.
3. Adabre, M.A., Chan, A.P.C. & Dariko, A. (2021). A Scientometric analysis of the housing affordability literature. *Journal of Housing and the Built Environment* [https:// doi. Org/10.1007/510901=021-09825-0](https://doi.org/10.1007/510901=021-09825-0)
4. Adabre, M. A., Chan, A. P., Darko, A., Osei-Kyei, R., Abidoye, R., & Adjei-Kumi, T. (2020). Critical barriers to sustainability attainment in affordable housing: International construction professionals' perspective. *Journal of Cleaner Production*, 253, 119995.
5. Adamec, J., Janoušková, S., & Hák, T. (2021). How to Measure Sustainable Housing: A Proposal for an Indicator-Based Assessment Tool. *Sustainability*, 13(3), 1152. <https://doi.org/10.3390/su13031152>
6. Adejumo, I. A., & Rukwaro, R.W., (2021). Affordable Housing Policy for the low-income Civil Servants in Job City, Nigeria. ISSN: 2524-1354 (online) *African Habitat Review-Journal*.
7. Adetooto, J., & Windapo, A. (2022) The use of alternative building technologies as a sustainable affordable housing solution: Perspectives from South Africa
8. Akinwade, T., & Hui, E.C.M. (2022). The Interface between socio-economic activities of the urban poor and sustainable affordable housing provision. *SSRN* <https://ssrn.com/abstract=4004007>
9. Alijoyo, A. (2021) Risk Management and Decision Making theory. *IRMAPA*
10. Annan-Aggrey, E., Arku, G., Atwoye, K and Kyeremeh, E (2022). Mobilizing "Communities of Practise" for local Development goals. *SAGE Journal*
11. Araj, S.Z., & Shahin, B.R, (2021). Identification of effective integrated indicator for sustainable affordable housing provision IOP Conf. Ser Earth Environment Sci 856012055
12. Asino, K., & Christensen, Å. (2018). Assessment of housing needs in Namibia. *Retrieved*
13. Bah, E.M., Faye, I & Geh, Z.F., (2018). Housing Market Dynamics in Africa. *Palgrave Macmillan*. ISBN 978-1-344-95120-8 [https:// doi.org/10.1057/978-1-137-59792-2](https://doi.org/10.1057/978-1-137-59792-2)
14. Chan, A.P. & Adabre, M.A. (2019). "Bridging the gap between sustainable housing and affordable housing: the required critical success criteria (CSC)", *Building and Environment*, Vol. 151, pp. 112-125.
15. Christense, A. (2019) Land governance in Namibia: Challenges and Opportunities. Annual world Bank Conference on Land Poverty: *Washington, DC*
16. Debra et al (2020). A factor analysis of the key sustainability content underpinning green cities development in Ghana, <https://doi.org/10.1080/15623599.202.2068786>
17. Dhliwayo, T.; Musonda, I.; Gumbo, T. et al (2022) An integrated framework for catalysing development and sustainability of Small and Medium-Sized Contractors. A case of Namibia. *ResearchGate*
18. Ezennia, I. S. & Hoskara, S. O. (2019) Exploring the severity of factors influencing sustainable affordable housing Choice: Evidence from Abuja , Nigeria. *MDPI*
19. Frankenfield, J & Clarke, C (2022) Who was Herbert A Simon? Bounded Rationality and AI Theorist. *Investopedia*
20. Hamid, S. H. A., Jamaludin, S. Z. H. S., & Mahayuddin, S. A. (2018). Achieving sustainable affordable housing scheme

- from the perspective of multi eco-system. *IOP Conference Series: Materials Science and Engineering*
21. Habitat for Humanity (2021). Housing and the Sustainable Development Goal Transformation impact housing. *Publicinfo@ Habitat org.*
 22. Herbert Simon Decision making theory (2021). *Harappa*
 23. <https://www.un.org/sustainabledevelopment/development-agenda-retired>
 24. <https://www.unhabitat.org>
 25. <https://www.weforum.org/agenda/2022/06/how-to-fix-global-housing-crisis/>
 26. Hungi, K. D., (2020). Understanding Barriers to Housing Delivery in Informal Settlement in Mariental Namibia. *University of Free State*
 27. Indonesia, Public Expenditure Review (2020) Housing PPPs could leverage underutilized urban land to create affordable housing. *World Bank*
 28. Jung, D.; Tuan V T, Tran, D.Q.;, Park, M & Park, S (2020) Conceptual framework of an Intelligent Decision Support systems for a Smart City Disaster Management. *MDPI* <https://doi.org/10.3390/app/0020666>
 29. Kakwambi, J.N.N. (2021) Evaluating the Self – Help Housing Programme in Namibia. The case of Build Together programme in Okahao Town. *University of Free State*
 30. Katoole, S.K. (2018) An investigation of Affordable Housing provision in the high-density location of Havana in Windhoek, Namibia. *University of Namibia*
 31. Lara, V., et al., (2020). Distinction between theoretical framework and Conceptual framework. *Academic Medicine*
 32. Marfo, M. & Peprah, J. (2018). Contemporary challenges and sustainability of microfinance institutions in Ghana. *Journal of Economics and Development Studies*, 6(4). <https://doi.org/10.15640/jeds.v6n4a9>
 33. Moghayedi,A.;Awuzie,B.;Omotayo, T.;Le Jeune, K.; Massyn, M.; Ekpo, C.O.; Braune, M.& Byron,P., (2021) A critical success factors: Framework for implementing sustainable innovative and affordable housing, A systematic review and bibliometric analysis. *MDPI* <https://doi.org/10.3390/buildings11080317>
 34. MURD (2015) Advance Training Manual for Regional Development Committees in Namibia.
 35. Mustapa, N. A., & Ali, S., (2021). A Conceptual Framework for minimizing middle income housing mismatch. *Malaysia Journal of Sustainable Environment Vol .9(1)* 77-98 DOI 10.24191/myse. V9i1.17293
 36. Namibia Trade Directory, (2019).
 37. Nghifindaka, T., (2019). Understanding the challenge in financing affordable housing. Multiple Stakeholders Perspectives from Namibia. Graduate School of Business. *University of Cape Town.*
 38. Oluyeye, I B., & Ogunleye,M B., (2020). Evaluation of the critical factors for sustainable housing delivery analytical hierarchy process approach. *Journal of engineering, design, and Technology. Emerald Publishing Limited* 1726-0531 DOI 10.1108/JEDT 06-2020-0232
 39. Pero, C.D.;Bellini, O. E.; Martire, M. &Summa, D. (2021) Sustainable solution for mass housing design in Africa: Energy and Cost Assessment for Somali Context. *MDPI*
 40. Prabantarikso, M.;Fahmi, I.; Fauzi, M.& Nuryantono, N.(2018) Strategic collaborative model of BGAC+ for Sustainable Housing in Indonesia.IOP Conf. Ser. *Earth Environment Science* 145 012128
 41. Rockart, J.F. (1982). “The changing role of the information systems executive: a critical success factors perspective”, *Sloan Management Review*, Vol. 24(1), pp. 3-13
 42. Roberts, R. E & Okanya, O (2022) Measuring the socio–economic impact of forced evictions and illegal demolition; A comparative study between displaced and existing informal settlements, *The Social Science Journal*, 59(1), 119-138, DOI: 10.1016/j.soscij.2018.12.003
 43. Wilhelm, M., (2018) Analysis of the role of governance on effective programme management. A case of Namibia Mass Housing Development Programme Management. *University of Cape Town University of South Africa.*
 44. www.weforum.org
 45. Yang, C., Jin, X., Yan, J., Zhang, J., Chen, C., Cheng, Y., ... & Deng, G. (2021). An investigation of the intention and reasons of senior high school students in China to choose medical school. *BMC Medical Education*, 21, 1-10. <https://doi.org/10.1186/s12909-021-02677-w>.