EFFECTS OF STAKEHOLDER'S MANAGEMENT IN PUBLIC PRIVATE PARTNERSHIP ON IMPLEMENTATION OF AFFORDABLE HOUSING PROJECTS IN MERU COUNTY, KENYA

ABSTRACT

More than half of the world's population of over six billion people reside in urban areas, placing increasing responsibility on governments to provide fundamental human necessities, including housing. This challenge is particularly pronounced in Kenya, where many County Government PPP affordable housing initiatives have either failed or been stalled. Both National and County Governments have experienced difficulties in executing these projects, reflecting the nascent stage of PPP application in many underprivileged countries. In Meru County, the Affordable Housing Project (AHP) employs PPP, primarily in the form of joint ventures. This approach distinguishes it from other existing projects and generates a knowledge gap regarding the assessment of the impact of public-private partnerships on the implementation of affordable housing initiatives in this region. The aim of this research was to explore the effects of stakeholder's management in public private partnership on implementation of affordable housing projects in Meru County, Kenya. Guided by stakeholder theory, the study employed a descriptive research design, collecting data through a structured questionnaire. A proportionate stratified random sampling method was used to select the study sample from County officials, non-governmental organization managers, development partners' managers, and household heads from selected study areas where the projects have been initiated, notably in the Buri, Maweni, Mjini, and Makandara wards. A total of 395 questionnaires were issued to the sampled respondents from a total target of 31978 who included the stakeholders in affordable housing project estates in Meru County that included county official managers in DoLPH (15), NGO's managers (25), development partners' managers (5) engaged in affordable housing and household heads (350). The collected data was analyzed and results presented in tables and figures, the qualitative information was presented in prose.

Key words: stakeholder, management, affordable housing

Introduction

Background of the Study

Urbanization is a global phenomenon impacting over half of the world's six billion population, with many residing in cities, towns, and various urban centers (World Bank, 2021). This trend is particularly noticeable in developing countries, where the pace of urban growth exceeds that in developed regions. The projection for urban residents in Africa alone is expected to reach 1.3

billion by 2050, a significant increase from the current 0.35 billion (United Nations, 2014). Interestingly, studies have shown that economic growth does not necessarily correlate with urbanization rates.

According to the United Nations Department of Economic and Social Affairs Population Division [UN DESA], the developing world contributed to more than 90% of the urbanization in recent years (2018). This rapid expansion of urban centers places immense pressure on governments to provide essential services such as healthcare, clean water, sanitation, and, critically, housing (UN DESA, 2018).

In terms of housing coverage, disparities can be observed globally. Mainland China boasts a remarkable 100% coverage in regions like Singapore and Hong Kong Special Administrative Region (SAR), followed by Japan at 65% and Portugal at 41%. Other countries exhibit lower coverage rates, such as Turkey and Armenia at 37%, Congo Republic at 65%, South Africa at 36%, Liberia at 30%, and Kenya at a mere 11%. These statistics illustrate the urgent need for intervention in the housing sector, given the burgeoning urban populations.

The issue of housing is not confined to developing nations. It has emerged as one of the most urgent challenges worldwide, with the increasing demand for affordable housing recognized as a significant hurdle to overcome in the 21st century (UN-Habitat, 2020). Whether in the slums of the less developed regions or among the middle-class populations in advanced economies, the struggle to secure affordable housing affects hundreds of millions across the globe (World Bank, 2019).

The global community must grapple with the complexities of urbanization and housing, devising innovative and sustainable solutions. Policymakers, urban planners, and international organizations must collaborate to ensure that the right to adequate housing is realized for all, without leaving anyone behind. Understanding urbanization patterns, economic factors, and social dynamics is key to addressing the housing crisis and fostering sustainable urban development.

Globally, the homeless population is estimated to be around 100 million ((UN-Habitat, 2020). In a week, around 1 million people are born or relocate to cities, fuelling the demand for new and upgraded housing (Osei-Kyei & Chan, 2015). Africa's overall new housing demand is estimated to be over 4 million units per year, with more than 60% of demand coming from metropolitan

areas, and is expected to increase to 5 million units per year (World Bank, 2021). Daily, about 14,000 new houses are required to accommodate the expected urban population growth.

The turn of the century marked a critical juncture in global housing strategy. Until 2000, the Global Strategy for Housing was a driving force, encouraging governments worldwide to redouble their efforts to provide shelter for their most vulnerable populations (United Nations Habitat, 2012). This directive stimulated an unparalleled surge in housing construction, paradoxically rendering low-income housing both unattractive to and financially infeasible for many developers.

The growing recognition of the limitations of the public sector in meeting the escalating demand for housing - driven by population growth and economic challenges - sparked a reevaluation of traditional approaches. Policymakers, urban planners, and economists acknowledged that relying solely on the public sector was insufficient to address the growing housing crisis, particularly among low-income urban residents.

This understanding led to a paradigm shift, advocating for increased cooperation between the public and private sectors. The concept of Public Private Partnerships (PPPs), as articulated by Finlayson (2012), emerged as an attractive solution. These partnerships represent a strategic alignment of interests, mobilizing private sector resources and expertise to complement public sector objectives. This synergy aims to create affordable housing options that are both financially viable for developers and aligned with broader social welfare goals. For instance, in political systems influence, the World Bank curtailed funding support for public-private partnership (PPP) efforts in Nigeria due to low utilization by government entities and agencies (Alteneiji et al., 2019). Due to the inactivity of the PPP Project Implementation Unit (PIU), it was resolved to restructure and cut its budget from $300 million to $25 million to cover technical assistance and capacity building (Matyushkina et al., 2016). According to the World Bank (2021), Nigeria was chosen as the first country for a PPP pilot project, but the funds provided for the project remained unused for three years. Kenya's government must therefore foster a common, cohesive approach to adopting policies that improve and resolve housing and other vulnerable sector challenges. Partners and stakeholders must be committed to constructing affordable housing programs in Meru County.

In line with Vision 2030, Kenya is actively cultivating an environment that facilitates affordable housing as an integral part of its urban development strategy. Housing, as highlighted by recent

studies (Chileshe et al., 2020), is intimately linked to urbanization, a trend prominently evident in Kenya, where 53.2% of the population resides in urban areas, growing at an annual rate of 4.15% since 2015.

The demand for new housing in Kenya continues to outpace supply, particularly in Meru County. According to projections from the 2019 census, the population in this region is anticipated to rise to 2.2 million by 2030 and further to 2.6 million by 2050 (Kenya National Bureau of Statistics [KNBS], 2019). This population growth, coupled with encroachments on existing housing, is exacerbating the housing deficit. Current estimates indicate a demand-supply imbalance of around 200,000 housing units annually (Githinji, 2018; Centre for Affordable Housing Finance Africa [CAHF], 2019).

Specific to Meru County, the population stands at 1,545,714, with a density of 221 individuals per square kilometer (KNBS, 2019). The housing shortage in this region is critical, numbering 380,000 units, a figure projected to escalate to 650,000 by 2035 (Murithi, 2018). In response, the County Government of Meru's Department of Land, Planning, Housing, and Urban Renewal has announced plans to utilize Public Private Partnerships (PPPs) to construct around 32,000 new residences in the County Housing Estates at Machaka in Buuri Constituency (County Government of Meru, 2023).

The establishment of PPPs is being supported at the legal and policy levels through the PPP policy statement and the PPP Act 2013, creating a favorable atmosphere for high-density urban housing development. This collaborative approach is seen as a vital mechanism to increase housing supply, thereby alleviating the existing shortages and accommodating the sustained growth in demand.

Public Private Partnership

Developed economies such as the Netherlands, the United Kingdom, and Ireland have the vast experience with public partnerships in housing (Alteneiji et al., 2019). In most cases, PPPs in housing are public-private partnerships in which the government provides suitable land and tax incentives and the private sector finances and builds housing units on these lands in exchange for the right to sell a portion of the projects on the open market and the remainder to low-income households at an agreed price (Ellen et al., 2020). Joint venture programs have been attempted in emerging nations such as Malaysia, India, and Iran, but the government has always determined the design parameters for the low-income sector (Taiwo, 2015).

Egypt, Tunisia, South Africa (Mohammed et al., 2014), and Nigeria have all benefited from public-private partnerships (Ayodele & Ayosike, 2015 cited in Ojwang, 2015). In comparison to industrialized countries, the majority of African countries that adopt the PPP model for housing provision are still in the early phases of development (Sani, Sani, & Ahmed, 2018), with an insufficient institutional structure (Kavishe et al., 2018).

Housing that is affordable is defined as housing that meets the needs of low-income families who cannot afford market-rate housing. The public-private partnership model is critical for delivering affordable housing (Ibem, Ayo-Vaughan, Oluwunmi, & Alagbe, 2019). In the study of Ibem et. al., (2019) 250 responders from federal, state, and municipal ministries were surveyed. According to his findings, 63% of respondents believe the government should create an enabling environment for private sector participation and 65% believe the public and private sectors should collaborate on housing supply. Others, such as (Nyein & Hadikusumo, 2021; Olanrele, 2018), are geared for experts with considerable experience delivering PPP housing (Fatile, 2015).

Kenya's housing crisis began in the 1980s, when the government abandoned the majority of its World Bank-financed housing projects (Ojwang, 2015). Private developers and contractors have dominated housing development in Kenya since then, with the government facilitating the process. The National Government has reenergized efforts, which have percolated down to the County level. Although the PPP model originated in infrastructure, it has expanded into urban development (Chileshe et al., 2020).

Affordable Housing

Affordable housing is quite often referred to as non-market housing provided to individuals unable to afford competitive prices (Muhammad & Johar, 2018). Home is expensive, and low-income individuals may struggle to secure acceptable housing through conventional market mechanisms (Bao et al., 2018). This implies a mismatch between housing demand and supply, which has resulted in a housing shortage in the country (Muhammad & Johar, 2019).

Ahmed & Bin Sipan, (2020) conducted a study on housing options in Nigeria at various income levels. The study revealed that none of the places evaluated satisfied the needs of low- to moderate-income families. It is imperative to conduct a comprehensive examination of the framework for Housing Public Private Partnership (PPP) Schemes. Such an in-depth study should not only analyze the existing structures and practices but also explore potential areas of

innovation and improvement. Furthermore, an integrated and equitable housing policy must be considered as part of this examination. As with previous research, the study discovered that a lack of financial resources, bureaucratic delays, and high land and building material costs all impede house provision in Nigeria.

The Universal Declaration of Human Rights recognizes the right to a reasonable standard of living, which includes adequate housing (Ellen, Dragan, & Glied, 2020). According to the Kenyan constitution GoK (2010), "everyone has a right to accessible and adequate housing, as well as to reasonable sanitation standards." Despite statements and regulations, a sizable portion of Kenya's population, particularly in urban regions, lives in informal settlements with inadequate sanitation, electricity, water supply, and access roads (Githinji, 2018).

The current demand-supply imbalance is approximately 200,000 residential units per year (Kenya National Bureau of Statistics [KNBS], 2019). In response, the second medium-term plan for the period 2013-2017, contains two key objectives related to the provision of affordable housing. First, through PPPs and other measures, facilitate the building of 200,000 housing units annually (Government of Kenya [GoK], 2013).

Second, construct affordable and quality houses for low-income Kenyans (GoK, 2019).

According to the Centre for Affordable Housing Finance Africa [CAHF], (2019), the problem of unaffordable housing disproportionately impacts low- and middle-income households due to demand exceeding supply. Chileshe et al., (2020) identified the following factors as significant contributors to low and moderate-income households. Housing affordability challenge such as high returns on investment, and potential future returns on investment. Second, the cost of housing units is cost prohibitive for low-income families due to building materials being expensive.

According to Bao et al., (2018), housing affordability indices frequently assume that low-income households are unable to fund other living expenses adequately when housing costs reach 30% of family gross income. The genuineness of this figure is questioned (Matyushkina et al., 2016). As described by, the '30/40' guideline has enabled the emergence of a substantial corpus of empirical research addressing housing for low-income populations (Githinji, 2018).

The KNBS (2013) basic report includes measures of household wellbeing such as median monthly household income, expenditure, and savings, which is critical given the effect on home

affordability. Monthly income, expenditure, and savings in Kenyan cities are approximately Ksh. 13,000, 9,700, and 3,000 (Kenya National Bureau of Statistics [KNBS], 2019).

Meru County

Meru County Integrated Development Plan 2018 – 2022. It was developed in accordance with the 2012 County Government Act, which established the plan's objectives and requirements. Affordable housing, infrastructure, and urban services were recognized as priorities in the plan. The County Department of Planning, Land and Housing then established a program aimed at valuing people as a resource and fostering an environment favorable to economic progress. It aimed to improve living standards and establish Meru as a regional commercial hub (Meru integrated development plan 2018 – 2022)).

Meru County's government has been actively implementing strategies to enhance housing opportunities for low- and moderate-income individuals. Notable among these strategies is the Kenya Informal Settlements Improvement Programme (KISIP), under which housing in informal settlements such as Makandara, Maweni, and Mujini has been upgraded. Additionally, private and international collaborations have led to developments like Greenwood Mall and the enhancement of the local sewage system, financed in part by JICA (UN-HABITAT, 2020).

The need for such initiatives is underscored by the substantial housing deficit in Meru County. Currently, the county faces a shortage of 380,000 housing units, a number projected to grow to 650,000 by the year 2035. In response to this urgent need, the county has embarked on an ambitious affordable housing policy. This policy was officially inaugurated by President William Ruto on April 22, 2023, reflecting a determined effort to alleviate the housing crisis in Meru County (MCG, 2023).

Statement of the Problem

In many regions, including the County Government, Public Private Partnership (PPP) initiatives aimed at affordable housing have faced substantial challenges and, in some cases, have ceased altogether (Muhammad & Johar, 2019). The implementation of such projects has proven complex and fraught with difficulties for both National and County Governments, as acknowledged by the Government of Kenya [GoK] (2019).

Previous research in this area has tackled various facets of the problem. Ndungu (2017), for example, focused on the factors influencing the implementation of government housing projects within the Kenya police service, with an emphasis on the roles of project team competence,

strategic planning, sufficient funding, and active stakeholder involvement. On another front, Ojwang (2015) delved into the financial ramifications of PPPs on affordable housing in Nairobi, shedding light on the monetary aspects and how they may impede or facilitate housing goals.

Despite these efforts, a more comprehensive understanding of the factors contributing to the success or failure of PPPs in developing nations, including Kenya, remains elusive (Chileshe et al., 2020). Particularly in economically challenged regions, the utilization of PPPs is still a relatively unexplored strategy (UN-Habitat, 2020). In the context of Meru's Affordable Housing Project (AHP), the joint venture model of PPP stands out as a distinct approach, contrasting with traditional mechanisms.

This distinction in Meru's approach opens a significant knowledge gap, as it presents a unique opportunity to analyze the impact of this specific PPP form on the implementation of affordable housing projects. Assessing the effects, both positive and negative, of public-private partnerships in this context could lead to a deeper understanding of how various factors such as governance, financial structuring, risk management, social considerations, and local dynamics interact to shape the outcomes.

The pursuit of this research avenue could provide critical insights for policymakers, developers, and stakeholders, guiding them in the design, implementation, and evaluation of future PPP projects for affordable housing. Furthermore, it may contribute to a broader theoretical framework for the effective use of PPPs in diverse socio-economic settings, potentially enriching the global discourse on sustainable urban development and housing equity."

Research Objective

To determine the effects of stakeholder's management in public private partnership on implementation of affordable housing projects in Meru County, Kenya.

Scope of the Study

The study focused on public private partnership and implementation of affordable housing projects by emphasizing on stakeholder's management, development partner's Commitment, legal framework and political systems. The study was conducted in Meru County and mostly focused on the planned/on-going projects in Buuri constituency and Imenti North constituency (Meru town). The study cover project started and between 2018 to 2023.

Literature Review

Theoretical literature review

Stakeholders theory

The stakeholder theory, introduced into management literature by Stanford Research Institute in 1963, has undergone a significant evolution over the years (Freeman & Cavusgil, 1984). It was brought to prominence by Freeman in his influential work, "Strategic Management: A Stakeholder Approach" (1984), a pioneering text that laid the foundation for future studies in stakeholder management (Amadi et al., 2020).

At its core, stakeholder theory advocates for a management approach that recognizes and actively engages with all stakeholders, with an emphasis on ethics and fairness. According to this theory, the responsibility of management extends beyond achieving financial targets to also include addressing the legitimate concerns and interests of various stakeholders, such as employees, suppliers, customers, the community, and even competitors (Bakhtawar et al., 2018).

Treating stakeholders with fairness, honesty, and charity isn't just an ethical imperative; it is also a strategic tool that fosters collaboration and synergy. Amadi et al. (2018) argue that a fair and transparent approach towards all stakeholders leads to more productive relationships, reducing conflicts and enhancing cooperation. This, in turn, contributes to the overall success of a project, business, or organization.

In the context of construction projects, the stakeholder theory takes on multi-dimensional nuances. Various parties involved in these projects often have differing, sometimes conflicting, goals and interests (Dos et al., 2018). This complexity is further exacerbated by the multiple layers of stakeholders that could be involved. Internal stakeholders might include employees, managers, and owners, while external stakeholders encompass suppliers, governmental bodies, regulators, and others.

Furthermore, the stakeholder theory recognizes the importance of local people and end-users in the implementation of construction projects (Cleland & Ireland, 2007). These stakeholders may not be directly involved in the day-to-day operations but can significantly influence the project's outcome. For example, local community acceptance may determine the smooth execution of a project, while end-users' satisfaction may be the key to the project's long-term success.

In recent years, stakeholder theory has expanded to encompass sustainable development and corporate social responsibility (CSR). Businesses are now encouraged to align their strategies

with the broader societal goals, including environmental protection, social equity, and economic well-being. This alignment ensures that organizations are not merely focused on immediate profit but are cognizant of the long-term implications of their decisions on various stakeholders.

For organizations and projects operating within the dynamic and often unpredictable construction environment, the application of stakeholder theory is not just theoretical but deeply practical. It provides a roadmap for navigating the intricate web of relationships and interests, enabling project leaders to identify potential challenges, build strong alliances, negotiate conflicting interests, and foster a collaborative environment.

In conclusion, stakeholder theory offers a holistic and ethical framework for management, considering the interconnected interests of various stakeholders. By prioritizing fairness, transparency, and collaboration, it encourages a more inclusive and sustainable approach to management. Whether applied to construction projects or broader organizational strategy, stakeholder theory's emphasis on mutual respect and cooperation makes it a valuable guide in today's complex business landscape.

Empirical Literature

Stakeholder's Management in PPP and the implementation of affordable Housing

Globally, the quest for affordable housing remains a formidable challenge, and various nations have employed different strategies to address this critical issue. One common thread found in successful initiatives is the significant commitment to building and managing a network of contacts and stakeholders (Ewurum et al., 2019).

Stakeholder management, which encompasses the strategy for handling expectations and engagement of those affected by PPP (Public-Private Partnership) deliverables, plays a vital role during both the planning and implementation phases of housing projects. This approach recognizes that housing is not merely about construction but involves a complex web of relationships among diverse stakeholders, each with unique expectations and interests.

Canada, for instance, has embedded elements of sustainable housing within its policy framework, promoting increased private ownership and reduction of homelessness. This success is partly attributed to enhanced communication between housing regulators and specific stakeholders, integrating demographic and socioeconomic forecasts into the long-term housing planning (International Institute for Sustainable Development, 2016).

Recent studies further emphasize the importance of stakeholder management in the successful execution of housing projects. Strategies like stakeholder identification, engagement, and conflict management have proven to be crucial in delivering housing projects on time and within budget (Ojobor & Ewurum, 2017). The collective understanding and reconciliation of differing views on project outcomes are essential for achieving success.

In Australia's housing industry, the power of stakeholder management has been leveraged to foster long-term economic recovery. Well-known economists and experts like Chip Case of the Case-Shiller index have recognized housing as an engine that has pulled the economy out of previous recessions (Ogunleye, 2019). South Africa has followed a similar path, formalizing stakeholder engagements through the Record of Understanding between the Government and Housing Stakeholders (Kwofie et al., 2019). Emphasizing stakeholder identification and conflict resolution, highly skilled management teams meticulously guide the projects.

However, not all nations have embraced this approach. In many emerging economies, the housing sector has been hesitant to utilize stakeholder participation fully (Kwofie et al., 2019). This lack of stakeholder engagement, especially in developing countries with vast housing needs, has sometimes contributed to program failure. The gaps in planning, collaboration, and alignment with stakeholders' needs can lead to missed opportunities and inefficient resource allocation.

Recognizing this challenge, housing authorities worldwide are increasingly focusing on Stakeholder Management methodologies, aligning policies and institutions with diverse interests. In regions like Meru County, an effective stakeholder management strategy for delivering affordable PPP housing complexes has become a critical need. The role of stakeholders extends beyond governments and private companies. Community groups, NGOs, financial institutions, and even individual citizens have voices that must be heard and considered in the planning and execution of affordable housing projects.

Understanding the complex dynamics of stakeholders in the housing sector requires not only robust methodologies but also a commitment to transparent communication, mutual trust, collaboration, and shared vision. The goal of this study, thus, was to deepen our understanding of how public-private partnerships, when aligned with comprehensive stakeholder management strategies, can enhance the delivery of affordable housing. This understanding helps to inform

policy-making, foster collaboration, and ultimately contribute to addressing one of the most pressing challenges of our time: providing affordable and quality housing to all.

Conceptual Framework

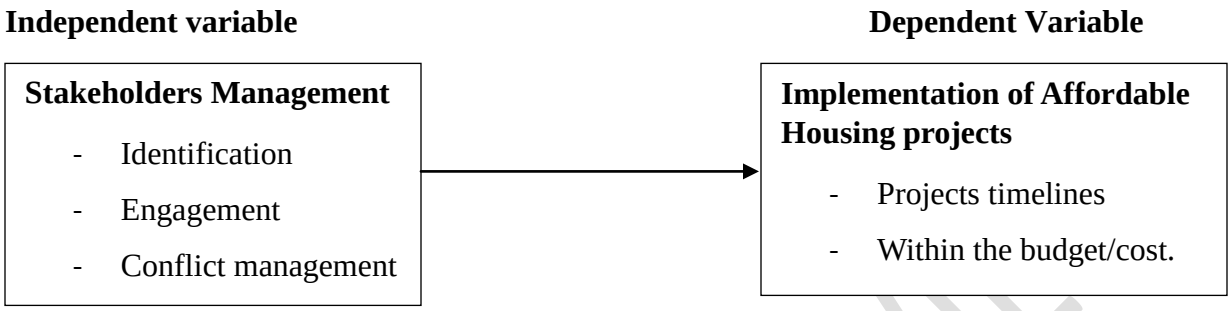

Figure 1: conceptual framework

Methodology

The research employed a descriptive research design, fitting for the exploratory nature of the study that required the use of diverse inquiries to gather essential information. The suitability of this design lies in its ability to facilitate a flexible approach to data collection without influencing or altering the participants, aligning with the methodological perspective outlined by Creswell (2017). According to Kothari (2019), descriptive research design entails fact-finding inquiries and surveys, with the primary goal of explaining the current condition of affairs utilizing both quantitative and qualitative data without manipulation. The research methodology made it easier for the researcher to examine the existing state of public private partnership practices and affordable housing project implementation in Meru County, Kenya.

Target population

The target population for this study was 31,978 respondents. This group includes development partners, non-governmental organizations involved in low housing development, and county government officials engaged in the development of low-cost housing in Meru County. According to the Kenya National Bureau of Statistics (KNBS), Meru County consists of estates with an estimated total of 15,933 households. Additionally, each estate is surrounded by encroaching slum areas, housing approximately 16,000 households. The combination of these figures leads to an estimated relevant population of 31,933 households. It's essential to

acknowledge a slight discrepancy in the figures, which might be a typographical error or represent additional considerations in defining the population. As Kothari (2019) defines, population in research refers to the entire group of people or items that the investigator aims to explore. In this context, the population encompasses various stakeholders, reflecting diverse perspectives and roles in the housing ecosystem in Meru County. These respondents provide a comprehensive view of the factors affecting the implementation of affordable housing in the region, encompassing not only governmental and institutional insights but also the lived experiences and needs of residents within the community.

Sampling Procedures and Techniques

The study utilized a proportionate stratified random sampling method to select the study sample. This approach ensured that the sample was representative of the various categories within the target population, namely the county officials, non-governmental organizations, development partners, and households who have purchased or are in the process of purchasing their home through some form of home financing.

Research Instruments

Data was obtained from selected participants through the administration of questionnaires. Utilizing questionnaires for this research was advantageous, as they enabled the gathering of substantial information in a concise timeframe. Additionally, they allowed the investigator to systematically collect data that was readily analyzed. As expressed by Kothari (2019), a questionnaire serves as a tool to collect information, facilitating the assessment of specific viewpoints. The inquiries were arranged in accordance with subcategories originating from the research goals, including multiple-choice queries for effortless answering. In the majority of the questions, a Likert scale was employed, enabling participants to articulate their views on a graded scale concerning various elements pertinent to the research aims.

Results and Discussion

Response Rate

A survey was conducted in Meru County's affordable housing project estates, involving stakeholders such as county officials from DoLPH (15 individuals), managers from NGOs (25 individuals), development partners (5 individuals) working in affordable housing, and household heads (350 individuals). In total, 395 questionnaires were distributed to these participants. Out of

the 395 questionnaires, 77 were incomplete and had missing data hence were excluded in the study. Hence, the study achieved a response rate of 80.5% as shown in table. According to Heo, Kim and Faith (2015) a cluster randomized study should have a response rate ≥ 80%. This is in order for the sample to be fully representative of the population. In a study conducted in Starehe in Nairobi County for affordable housing, had a 97% response rate, but the sample size was 100 respondents (Masinde, 2019). This study sample was large enough to generalize the findings and the response rate was representative of the study population attributes. Moreover, Story and Tait (2019) study on academic studies response rate recommends a response rate of more than 60% to be credible enough for the study.

Reliability Test

To ensure the reliability of the research instruments, the study employed Cronbach's Alpha (α), a widely accepted measure of internal consistency, generated through the use of SPSS. Ten questionnaires were subject to a pretest by distributing them to a sample of respondents, who were subsequently excluded from the final study. These ten questionnaires were then systematically coded and entered into SPSS version 26.0, a statistical software package tailored for social science research, for further analysis and validation.

Socio-demographic Characteristics of Stakeholders in Affordable Housing

The Table 1 describes the socio-demographic characteristics in form of house registration under respondents' name, any formal writing agreement, relationship with the registered owner, level of education, occupation and perception on whether PPP improved affordable housing projects.

Table 1: Respondents Socio-demographic characteristics

Socio-demographic characteristics	n	%
House Registered under your name		
Yes	191	67.8
No	92	32.2
Formal Writing		
Yes	4	4.9
No	88	95.6
Relationship with the Owner		
Relative	193	68.1

Not a relative	90	39.9
Level of Education		
Primary Certificate	53	16.7
Secondary Certificate	103	32.4
College Diploma	110	34.6
University Graduate	45	14.2
Occupation		
Self-employed	169	53.1
Not employed	53	16.7
Formal employment	80	25.2
Informal employment	16	5.0
PPP improves affordable housing projects		
Yes	114	35.8
No	200	63.0
Not sure	4	1.2

The current residents of the government houses mainly consist of 191 individuals (67.8%) who were officially registered in the land records as legal owners. However, a significant number of 92 individuals (32.2%) occupy these houses without their names being on the official records. Further investigation revealed that 88 of these occupants (95.6%) had no formal documentation, with only 4 individuals (4.4%) having a formal agreement in place. These occupants are a mix of relatives and non-relatives, with the majority being relatives, accounting for 193 individuals (68.1%), while non-relatives make up 90 individuals (31.9%). For non-relatives, the houses are primarily used for rental purposes, and some of them directly pay the monthly rent to the estate managers, while a few registered owners handle the payments on their behalf. Regarding the educational background of the respondents, the study found that the majority, 110 individuals (34.6%), had completed college certificate-level education, followed by 103 individuals (32.4%) with secondary level education, 53 individuals (16.7%) with primary education, and 45 individuals (14.2%) with university education. This suggests that the participants had some level

of knowledge and understanding of public-private partnerships and affordable housing projects and their roles as stakeholders.

In terms of employment status, 169 respondents (53.1%) were self-employed, primarily representing household heads. Formal employment was reported by 80 individuals (25.2%), while 53 individuals (16.7%) were not currently engaged in any form of employment or business. Additionally, 16 individuals (5.0%) were in informal employment, which included casual laborers without formal contracts or pension plans. This indicates that a significant portion of the respondents were either formally employed or engaged in their own businesses.

Regardless of their occupational status, a common observation among the majority of respondents was that public-private partnerships (PPP) did not improve the affordability of housing projects in Meru, with 200 individuals (63.0%) expressing this sentiment. Many respondents cited the pricing of the houses as a barrier, with the majority finding it unhelpful to their economic situation. However, a sizable number of 114 individuals (35.8%) believed that the houses were affordable compared to commercial housing sector schemes.

Age of the respondents

The descriptive statistics was performed for numerical data that include age, and duration the occupant had stayed in the house.

Table 2: Age of the respondents

Age	
Valid	318
Missing	0
Mean	46.64
Std. Error of Mean	1.321
Median	49.00
Mode	48[a]
Std. Deviation	11.888
Skewness	-.123
Kurtosis	-.283
Range	53
Minimum	22

Maximum	75

a. Multiple modes exist. The smallest value is shown

In this study, the respondents' average age was 46 years, with a standard deviation of 11 years. The majority of participants fell into the age group of 48 to 49 years, which was attributed to the bimodal nature of the dataset. The youngest respondent was 22 years old, while the oldest was 75 years old. This age distribution was considered sufficiently representative for examining the impact of PPP on affordable housing implementation in Meru, where age plays a significant role. To assess the distribution of the data, we used skewness and kurtosis. The skewness value was found to be -.123, indicating a negative skew, meaning the data leaned towards the left and had a longer tail on that side, with a concentration around the mode (48 years), median (49 years), and mean (46 years). Regarding kurtosis, it measured -.283, which indicated that the data was less peaked than the typical ogive curve (which has a kurtosis of 3). In other words, the data had less extreme values and a flatter distribution compared to the curve.

Duration of Stay for the Households Members in current County houses

This sought to find how long the respondents had lived for the current county houses proposed to be demolished for affordable housing projects.

Table 3: Duration of Stay for the Households Members in Current County houses Duration of Occupant stay

Valid	**283**
Missing	0
Mean	32.13
Std. Error of Mean	2.191
Median	30.00
Mode	20
Std. Deviation	16.975
Skewness	-.018
Kurtosis	-1.088
Range	62
Minimum	1
Maximum	63

a. Multiple modes exist. The smallest value is shown

The assessment of occupant duration pertained exclusively to household heads among the participants, resulting in a sample size (n) of 283. On average, respondents had lived in their households for approximately 32 years, with a standard deviation (SD) of 16 years, indicating that the range of occupant tenure among respondents spanned from 16 to 48 years. The standard error of the mean, which was 2.191, suggests variability in the data, but the mean itself was deemed reliable. Notably, the duration of occupancy ranged widely, with some occupants residing for just 1 year, while others had been in their homes for as long as 63 years. The skewness value of -0.018 indicates a negative skew in the data, suggesting that it is skewed to the left, or in other words, it has a left-tailed distribution. This means that the data is concentrated more towards the left side of the mode (20 years), median (30 years), and mean (32 years). In terms of kurtosis, the measure of -1.088 indicates that the data is less peaked compared to the shape of a typical ogive curve since it is less than 3.

Descriptive Analysis of Study Variables

Stakeholders Management and PPP in AHP

The first object of the study sought to establish the effects of stakeholder's management in public private partnership on implementation of affordable housing projects in Meru County, Kenya. The response were presented in Table 4.

Table 4: Effect of Stakeholder Engagement in implementation of AHP

Statements	N	Min	Max	M	SD
Stakeholders Management Effect	318	1	5	3.62	1.157
Commitment of Stakeholders	318	1	5	3.74	1.149
Readiness to participate among stakeholders	318	1	5	3.67	1.162
Stakeholders engaged in planning and implementation	318	1	5	3.60	1.180
Consultation done amongst Stakeholders	318	1	5	3.63	1.078
Capacity building conducted	318	1	5	3.62	1.067

amongst Stakeholders	
Valid N (LISTWISE)	318

Based on the data presented in table 4, it was found that 78.3% of the respondents (n=249) emphasized the significant impact of stakeholder engagement on affordable housing projects. The mean value was 3.62 with a standard deviation of 1.157. Furthermore, a majority of 84.0% (n=267) confirmed active stakeholder involvement and commitment in affordable housing implementation. However, a smaller fraction, 16.0% (n=51), disagreed, indicating dissatisfaction with stakeholder engagement. The mean for this dissenting group was 3.74 with a standard deviation of 1.149, signifying notable concern. Regarding stakeholder readiness, 78.0% of the respondents (n=248) strongly agreed that they had a substantial stake in the projects, as indicated by a mean of 3.67 and a standard deviation of 1.162. Additionally, 73.0% (n=232) stated that stakeholders were optimally involved in the planning and execution of affordable housing projects, supported by a mean score of 3.60 and a standard deviation of 1.180. Consultative meetings were held among stakeholders affected by the projects, with 81.4% (n=259) acknowledging their participation in these meetings, which had a mean score of 3.63 and a standard deviation of 1.078.

The stakeholders demonstrated prior knowledge and understanding of affordable housing project implementation, with 87.1% (n=277) indicating familiarity. This knowledge, reflected in a mean score of 3.62 and a standard deviation of 1.067, was enhanced through capacity-building events and seminars. However, a minor fraction (18.2%, n=58) expressed hesitancy, potentially leading to project delays and hindrances in planning and implementation.

Ordinal Regression Analysis

This was performed since the data was not normally distributed to test the effect of independent variables on the dependent variable. The diagnostic tests performed were

Omnibus test, Goodness of fit, and Pseudo R-Square.

Table 5: Omnibus Test Omnibus Test[a]

Likelihood Ratio Chi-Square	**df**	***p***
134.186	4	.000

Dependent Variable: log_AHP

Model: (Threshold), log_SM, log_DPC, log_LF, log_PS

a. Compares the fitted model against the thresholds-only model.

The p value 0.000 <0.05, this shows that the model is fit for the data since it is statistically significant.

Table 6: Goodness-of-Fit Output

	Chi-Square	df	*p*
Pearson	851.336	866	.000
Deviance	263.511	866	.000

Link function: Logit.

Following the Goodness-of-Fit analysis to determine the model's suitability for the dataset, a statistically significant Pearson test result with 866 degrees of freedom ($\chi^2 = 851.336$, $p < 0.001$) was obtained. As suggested by Pojanapunya and Todd (2018), the comparison of log-likelihood ratio statistics between saturated models for regression coefficients demonstrated that the model effectively aligns with the data.

Table 7: Pseudo R-Square

	R^2
Cox and Snell	.809
Nagelkerke	.815
McFadden	.337

Link function: Logit.

Pseudo R Squared is commonly utilized to elucidate the extent to which the outcome is influenced by explanatory variables, as noted by Hemmert et al. (2018). Table 7, based on Nagelkerke's analysis, indicates that there is a substantial 81.5% impact of PPP on stakeholders' engagement, development partners' commitment, the legal framework, and the capacity of political systems regarding the execution of affordable housing projects. To ensure the success of the affordable housing project, it is imperative to address these interrelated predictor variables collectively. Neglecting any of these predictor variables could result in project delays or ineffective implementation within Meru County.

Table 8: Results of Model fitting examining the influence of PPP on Affordable Housing Projects

Logistic Parameter	B	SE	LL	UL	p
AHP	19.300	2.3304	14.733	23.868	.000
SM	5.735	1.5724	2.653	8.817	.000

Note: Dependent Variable: Affordable Housing Project Implementation (AHP)
Model: Parameters, Stakeholders Management (SM)

The odds ratio suggests that there is a 14.733-fold increase in the likelihood of successfully implementing affordable housing projects for each one-unit rise in stakeholder's management within the Public-Private Partnership (PPP) framework. This finding indicates a positive association between stakeholder's management and the effectiveness of affordable housing projects in Meru County. Furthermore, with every one-unit increase in stakeholder's management, there is a predicted 2.653 increase in the logarithm of the odds of achieving higher levels of effective implementation in affordable housing projects.

Additionally, the odds ratio reveals that for each one-unit increase in development partners' commitment to preventing delays, active participation, detailed work planning, transparency, and timely project completion, there is a 0.004-fold increase in the likelihood of implementing affordable housing projects successfully. Notably, when the odds ratio is less than 1, it signifies a decreasing probability of project implementation as development partners' commitment increases. In this case, the commitment of development partners did not have a significant impact.

Correlation Analysis

The Spearman correlation coefficient (rs) is a widely used nonparametric measure for assessing the association between two ordinal variables (Lewis-Beck et al., 2012). In this study, it was discovered that the implementation of affordable housing projects demonstrated statistically significant relationships with the predictor variables under investigation. Specifically, the implementation of affordable housing projects exhibited a relatively weak correlation (0.430) with stakeholder management, a moderate correlation (0.545) with the commitment of

development partners. The overall correlation analysis revealed a significant influence of public-private partnerships on the implementation of affordable housing, with a correlation coefficient of rs = 0.644, p < 0.001, based on a sample size of n = 318.

Table 9: Spearman Correlation Coefficient Output

Affordable Housing Project Implementation	**Correlation Coefficient**	***p***	**n**
SM	.430**	.000	318

**. Correlation is significant at the 0.01 level (2-tailed).

Summary of the Results

In brief, the data gathered underwent analysis in accordance with the study's predetermined objectives and research inquiries. Within this section, we explore the impacts of stakeholder management on the execution of affordable housing initiatives in Meru County, Kenya. This encompasses a condensed presentation of the findings, aligning them with the discourse and insights established by previous scholars.

Stakeholders' Management effect and PPP in AHP

The aim of this study was to assess the impact of stakeholder management within public-private partnerships on the implementation of affordable housing projects in Meru County.

According to 78.3% of the participants, the results showed that stakeholder management had a significant influence on the success of public-private partnerships in affordable housing projects in Meru County. Respondents concurred that engaging with stakeholders is a crucial factor that contributes significantly to the effective execution of affordable housing initiatives in Meru County.

Conclusion

In Meru County, despite the challenges encountered in affordable housing projects, there is a noteworthy emphasis on stakeholder management within the proposed housing estates. Additionally, there exists a moderate commitment level among developers, which is, however, hindered by the limited utilization of the legal framework, influenced by the prevailing political dynamics in the region.

Comparing this with successful approaches in other developed cities one can observe notable examples. For instances, in Vienna, approximately 25% of housing units are owned and

maintained by the state, while in Singapore, a substantial 82% of the population resides in apartments built by the housing and development board. The Singaporean Government's commitment to supporting a robust legal framework has been instrumental in achieving this. Similarly, in certain U.S cities like Boulder and Austin, there have been relative successes. These cities have created an environment conducive to the involvement of development partners and have factored in the economic capacity of the community.

Considering that PPP initiatives in affordable housing in Meru County are still in their early stages, it is crucial to take into account the perspectives of stakeholders during the planning phase. Malik and Tariq (2021) emphasize the significance of involving stakeholders in the initiation of the regulatory framework and implementing mechanisms for obtaining feedback and making necessary adjustments as needed.

Recommendations

The research affirmed the notable and substantial impact of stakeholder management within public-private partnerships when it comes to affordable housing projects. It underscores the importance of facilitating well- regulated interactions among stakeholders within the specific context of affordable housing. A recent study conducted by Malik and Tariq in 2021 advocates for a multidisciplinary approach, emphasizing the need for corporate governance to be implemented across all stakeholders.

Secondly, it suggests the promotion of an institutionalist -stakeholder approach. This approach would enable development partners to better understand the multifaceted needs involved and encourage collaborative efforts in the implementation process.

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