

Emerging Trends Shaping Growth of Informal Settlements at Kwa-Bulo, Nyali Sub-County, Mombasa County

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Abstract

Globally, urban dwellers living in informal settlements constructed by the residents' efforts which are often devalued, unrecognized, labelled unlawful and stigmatized as though the settlements are not part of the mega cities. This study explores the vital problem of Kwa-Bulo's informal settlements in Nyali Sub-County, Mombasa County, Kenya against the global backdrop of urbanization and the growing difficulties associated with impoverished residential regions. These informal settlements pose a big problem in Kenya and Africa at large since they need more basic facilities and infrastructure. Cross sectional study design was used as its guiding framework. Qualitative and quantitative data were collected and analyzed. Findings indicates that despite numerous negative stereotypes linked with residents of informal settlements and a multitude of obstacles they encounter, inhabitants of informal settlements make substantial contributions to the economic and urban development of Mombasa County. The study recommends that local and national governments should consider industrialization level when formulating effective strategies for reducing the growth of informal settlements and improving housing conditions in the community.

Key Words: Informal settlement; Urbanization; Tenant at will; Mombasa County

Introduction

In the developing world, the ability of cities to supply their residents with necessary basic amenities, such as housing has surpassed their rapid urban expansion. The population of informal settlements rises in tandem with the rate of rural-urban migration (Niva et al., 2019). Unlike squatter communities, which are located on private or public land, informal settlements are made up of urban poor people who cannot afford to buy a home in an urban area and instead construct shanty dwellings on land they do not own to survive. Akirso (2021) stated that numerous interconnected issues, including poverty and public perception contribute to the growth of informal settlements.

The development of informal settlements, and slums is a worldwide concern that coincides with a surge in metropolitan populations. According

to Onyango et al., (2021), 213 million more people have joined the world's population since 1990, making up 25 % of all urban dwellers who reside in informal settlements worldwide. The number of individuals living in informal settlements is predicted to rise to two billion by 2030 and three billion by 2050, particularly if the patterns continue (Agyabeng et al., 2022a). Population growth, the lack of affordable housing, rural-to-urban migration, economic vulnerability, low-paying jobs, poor governance, displacement due to natural disasters, marginalization and conflict, are some interrelated factors that have propelled the emergence of informal settlements in cities of most developing countries (Alene, 2022).

According to Mahabir et al., (2016a), informal settlements have existed since the beginning of cities, and literature has always acknowledged their existence. In literary works, slum and

informal settlements are frequently used synonymously, nonetheless, some contend that slums and informal settlements are very different. People who live in filthy, inadequate circumstances are typically referred to as being in informal settlements. Informal settlements are neglected areas of cities with horribly poor housing and living conditions. These towns remain physically, socially, politically, and economically isolated from larger metropolitan systems, with few opportunities for access (Peters et al., 2022). The attitude of the city governments regarding informal settlements ranges from disapproval and eviction to cautious acceptance and support for upgrading and legality. It is better to upgrade informal settlements through infrastructure provision and tenure regularization over displacement since it preserves the social and economic networks vital for sustaining a way of life (Nassar & Elsayed, 2018).

Notably, an estimated one billion individuals residing in informal settlements worldwide are mostly found in the African nations. Unable to effectively address the rising population's demands, informal settlements have formed and continue to rise in many nations of Africa. Given that developing nations frequently lack infrastructure and basic amenities, increased urbanization is a major concern for them (Agyabeng et al., 2022b). The growth of informal settlements has serious consequences for the environment and has grown to be a major burden for urban administration. (Joe & Msimang, 2017), looked at Pietermaritzburg, South Africa's Informal Settlements' detrimental effects. According to this study, informal settlements were found to have a multitude of effects. Kukkonen et al., (2018) investigated the reasons for Zanzibar's informal settlements and found out that the leading causes are; urbanization, land-related problems, poverty, and social and cultural elements.

Kenya is dealing with a booming number of informal settlements popping up in its cities. More than 34% of Kenyans are urban dwellers, with more than 71% living in informal settlements. With an average population of around 900,000, Kibera Informal Settlements in Kenya's capital city, Nairobi is one of the biggest

slums in Africa (Páv, 2023). Mombasa the second largest capital city in Kenya is rapidly urbanized, as a result of factors such as natural population increase, migration from rural to urban regions, and city-based economic possibilities. Mombasa's population boom has outpaced its infrastructure development, resulting to a myriad of challenges for the local people and the coastal and marine environment due to water, housing, wastewater, and solid waste management deficiencies.

Mombasa's Kwa-Bulo community serves as an illustration of two separate cities contained within one larger metropolis. Noticeably, the Kwa-Bulo settlement has had several difficulties, including substandard housing, unplanned construction, lack of planning, legal tenure arrangements, and political leaning. The locals requested letters of occupancy from the Mombasa County Government. Subsequently, the County Government of Mombasa commissioned socio-economic and geospatial research to determine how many people live in Kwa-Bulo and how big an average plot is. Using the Social Tenure Domain Model, the Pamoja Trust, UN-Habitat, and the Global Land Tenure Network (GLTN) gathered socio-economic and geographic data from the communities (Kumwenda et al., 2018). After years of uncertainty and dread of eviction, the settlement led to the issue of over 700 certificates of occupancy. This study assessed the emerging trends shaping the growth of informal settlements at Kwa-Bulo area in Nyali sub-County within Mombasa County. Specifically, this study investigated the contributions made by the informal inhabitants of Kwa-Bulo to the growth of urban economy.

Materials and Methods

The Study Area

The study was carried out at Kwa-Bulo, an informal settlement, which is located in Mombasa County, Nyali Constituency, Kazandani ward. The settlement measures 86.84 acres of land with more than 1200 households. Over 1230 houses have been constructed, which are both permanent and semi-permanent and are fully occupied by the residents. The area of Kwa-

Bulo is divided into four clusters/village - EPCO, Kishani, Timboni and Msufini.

Sampling and Data Collection

Structure owners were selected using the snowball sampling approach. By the use of snowball approach, one structure-owner was chosen and other structure-owners were reached through until the needed sample size of structure owners was obtained. The convenient sampling technique was used to select the household heads. Household heads were the tenants or individuals who lead and manage the households as residents. The houses at Kwa-Bulo did not follow any order neither did they have numbers. Thus, giving every house a chance to be chosen. Houses are utilized to pick household leaders because, according to Golzar et al., (2022), houses are ideal channels via which household heads may be easily discovered. Conversely, non-probability sampling using purposive sampling was employed to choose important informants, such as village elders. According to Ames et al., (2019), this approach makes it possible to choose participants based on their niche expertise or significance to the goals of the study. A thorough study and a more nuanced knowledge of the target population resulted from combining different sampling procedures and enhancing the research findings. Nyoro (2019) asserts that the precise sample size is based on the

goals of the research as well as the characteristics of the population being studied.

The current study used a cross-sectional study as its guiding framework. In cross-sectional study, data was collected from a selected population sample, often all at once or over a brief period (Wang et al., 2019). When examining the relationships between variables, this method is quite beneficial. The process involves selecting a significant number of people from a pre-identified population and obtaining data from them. The ability of cross-sectional study to provide an instantaneous snapshot of current happenings within a population is one of its main features. It gives researchers insights into the characteristics, behaviors, and opinions of respondents throughout a given period, allowing them to describe the current situation of a particular group.

The population sample size for this study was calculated using Yamane (1967) formula of sample size calculation. Likewise, the formula takes the error margin (e) into account as a parameter (Adam, 2020). Depending on the desired level of trust in their results, researchers might modify this margin of error. A larger sample size is needed for a lower margin of error, whereas a more significant margin of error permits a smaller sample.

$$n = \frac{N}{1 + N(\square)^2}$$

Where;

n = sample

N = Target population

□ = Sampling error (0.05)

Thus, the sample size was computed as:

$$n = \frac{N}{1 + 936(0.05)^2} = 280$$

In order to address the research objectives, questionnaire, supplemented by focused group discussions (FGDs) and participant observation were used. Questionnaires were used as principled tool for collection of primary data from the field because they offer a fast, efficient

Data Analysis

Qualitative data was analyzed thoroughly to find recurrent themes and patterns. Subsequently, the data was carefully coded to classify and arrange its components. This coding procedure simplified the complicated data to be manageable for analysis. The researcher identified important themes and connections in the data using coding. Three separate and sequential rounds of data analysis took place, each focusing on a different component of informal settlements in the Mombasa environment. The first stage determined how the general public viewed informal settlers to illuminate social attitudes and preconceptions about this group. The next section examined the difficulties that informal dwellers confronted and offered insights into the problems and roadblocks they faced in this living situation. The ultimate phase of the examination endeavored to accentuate the vital inputs made by occupants of the informal sector,

and in-expensiveness of gathering large amount of information from sizeable sample volumes. The interview guide used both structured and semi structured questions to collect detailed information and on poverty and public perception on the growth of informal settlement

acknowledging their function and influence on the wider economy. Furthermore, data cleaning was done to guarantee correctness and consistency before moving on to the qualitative analysis. Quantitative data was collected using Statistical analysis. Statistical Package for Social Sciences software was used. Descriptive and inferential statistics, such as percentages, mean, frequencies, and correlation coefficients, were used to assess the quantitative features of the data. For instance, percentages were used to show the distribution of economic activities, mean values to evaluate income levels, and frequencies to characterize the demographics of the people living in informal settlements. Regression analysis was conducted on the variables to determine their relationships. This quantitative analysis improved the general comprehension and interpretation of the facts of the study.

Findings and Discussion

Table 1. Gender of the respondents

Category	Frequency	Percentage (%)
Male	136	48.6
Female	144	51.4
Total	280	100.0

From the analysis, 51.4% of the total participants were female whereas 48.6% were male. This indicated that most of the respondents were female. The implications of the findings indicated that, women voices are more visible or actively sort in discussion related to community issues due to their roles and responsibilities within the households and community. Unlike men who are faced with barriers to participate in discussions or surveys due to employment obligations, mobility constraints or even cultural norms that prioritize their roles outside the home.

Poverty and public perception have an impact on informal settlement

The study examined the extent of poverty and public perception on the growth of informal settlements that were provided on a 5-point Likert scale to the study respondent (Table 2). Results indicate that majority of the respondents in the study agreed that the level of poverty in informal settlements influence access to basic amenities and services has an impact on the formation and expansion of informal settlement at a mean of 1.78 ± 0.809 . Majority of the respondents agreed that public attitude towards

informal settlements affects the implementation of poverty alleviation programs at 1.85 ± 0.895 . The study also found out that majority of the respondents strongly agreed that lack of resources in informal settlements contribute to the perpetuation of poverty, and how it is perceived by public employment opportunities contribute to the rise of informal settlements at 2.04 ± 0.793 . Further, most of the respondents

agreed that social stereotypes and stigmas are associated with informal settlements impact the well-being and opportunities of residents contribute to the growth of informal settlements at 1.90 ± 0.830 . Moreover, the study respondents agreed regarding the economic disparities within informal settlement affect the overall perception of poverty in the settlement play in the growth of informal settlements at 1.59 ± 0.918 .

Table 2. Description of poverty and public perception on growth of informal settlement, At Kwa Bulo area

Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	n	Mean	Standard deviation
Level of poverty in informal settlements influence access to basic amenities and services	0(0.0%)	13(4.6%)	18(6.4%)	137(48.9%)	112(40.0%)	280	1.78	0.809
Public attitude towards informal settlements affects the implementation of poverty alleviation programs.	19(6.8%)	5(1.8%)	7(2.5%)	147(52.5%)	102(36.4%)	280	1.85	0.895
Lack of resources in informal settlements contribute to the perpetuation of poverty, and how it is perceived by public	2(0.7%)	18(6.4%)	27(9.6%)	59(21.1%)	174(62.1%)	280	2.04	0.793
Social stereotypes and stigmas are associated with informal settlements impact the well-being and opportunities of residents	18(6.4%)	29(10.4%)	94(33.6%)	139(49.6%)	0(0.0%)	280	1.90	0.830
Economic disparities within informal settlement affect the overall perception of poverty in the settlement	14(5.0%)	11(3.9%)	73(26.1%)	177(63.2%)	5(1.8%)	280	1.59	0.918
Overall							1.8236	0.73060

The findings which indicate that majority of the respondents in the study agreed that level of poverty in informal settlements influence access to basic amenities and services has an impact on the formation and expansion of informal settlement at a mean of 1.78 with a standard

deviation of 0.809, majority of the respondents agreed that public attitude towards informal settlements affects the implementation of poverty alleviation programs at mean of 1.85 with a standard deviation of 0.895.

The study also found out that majority of the respondents strongly agreed that lack of resources in informal settlements contribute to the perpetuation of poverty, and how it is perceived by public employment opportunities contribute to the rise of informal settlements with a mean of 2.04 and a standard deviation of 0.793. Further most of the respondents agreed that social stereotypes and stigmas are associated with informal settlements impact the well-being

and opportunities of residents contribute to the growth of informal settlements at a mean of 1.90 with a standard deviation of 0.830. Moreover, the study respondents agreed regarding the Economic disparities within informal settlement affect the overall perception of poverty in the settlement play in the growth of informal settlements at a mean of 1.59 with a standard deviation of 0.918.

Table 3. Qualitative results of poverty and public perception on the growth of Informal Settlements

Attributes of informal settlements (perceptions)	Attributes of informal settlements	Contributions of informal settlements to economic & urban development
Disorderly community	Insufficient or no basic and social amenities	Revenue generation
Destitute	poor housing facilities	Provision of labour
Poor health and sanitation facilities	hazardous environment	Creation of employment

Perceived Attributes of Informal Settlements

It emerged from the data that the public has diverse perceptions of informal settlements and their inhabitants. The perceptions were used as the main yardstick to describe and characterize

how the dwellers lived in their informal neighborhoods. The perceived characteristics were macro-categorized into three main themes: disorderly community, destitution, and poor health facilities (Table 4).

Table 4. Data structure of perceived characteristics of informal settlement

Illustrative codes	Aggregated codes
<ul style="list-style-type: none"> The community is disorderly Kwa-Bulo is unsafe for visitors Residents are violent and criminals 	Disorderly community
<ul style="list-style-type: none"> Poor neighborhood Social exclusion and stigmatization Poverty is prevalent in this area 	Destitution
<ul style="list-style-type: none"> Lack of public hospital Neighboring health facilities are under resourced and in a poor state. The available health facilities are privately owned which are expensive 	Poor health facilities

The study reveals that poverty levels within the community are high, contributing significantly to the expansion of informal housing. Many respondents were engaged in temporary employment and lacked sustainable income, which led them to reside in informal settlements. This finding aligns with the perspectives of Sud, (2006), UN-Habitat, (2008), and Billah, (2011), who argue that poverty fosters the development of slums, breeding hopelessness and crime. They assert that the rapid growth of large cities, particularly in developing nations, has coincided with an upsurge in urban poverty, often concentrated in specific social groups and locations, such as informal settlements.

The results determined perceived attributes of informal settlements as disorderly community, destitution, and poor health facilities. It is important to note that the characteristics of informal settlement that emerged from the data supported findings from previous studies (Zhu 2010; Herrle & Fokdal 2011; UN-Habitat 2014; Brown-Luthango et al. 2017). For example, Table 5. Challenges faced by residents of Kwa-Bulo informal settlements

Illustrative codes	Aggregated codes
<ul style="list-style-type: none"> • Inaccessibility to fresh piped water from county. • Inadequate sanitation facilities • Poor drainage 	Lack of basic and social facilities
<ul style="list-style-type: none"> • Most houses are muddy and semi-permanent • The houses get flooded during heavy rains • Getting houses in good condition is expensive 	Poor housing condition
<ul style="list-style-type: none"> • Lack of public hospital • Neighboring health facilities are under resourced and in a poor state. • The available health facilities are privately owned which are expensive 	Unsafe environment

The analysis established the challenges of informal settlement dwellers as; absence of essential social amenities, inadequate housing facilities, and an unsafe environment. Importantly, the findings presented reinforce and largely corroborate earlier research indicating the challenges faced by informal settlements. For instance, some of the issues

previous studies have established that informal communities are regarded as unregulated (Akintoye 2008; Drakulich & Crutchfield 2013) and often suffer from social exclusion and stigmatization (Kovacic et al. 2019; Basile & Ehlenz 2020; Rains & Krishna 2020). Furthermore, the findings provide support for authors who argue that informal settlements impede economic growth, restrain investors, and obstruct globalization (Zhu 2010b; UN-Habitat 2014).

Challenges of informal settlement dwellers

The data revealed that informal residents in Kwa-Bulo encountered a multitude of issues jeopardizing their well-being and survival, a finding consistent with existing literature on informal settlements (Monney et al., 2013). These challenges were broadly categorized into three main themes: absence of essential social amenities, inadequate housing facilities, and an unsafe environment (Table 5).

highlighted in the literature pertain to deficient and insufficient infrastructure as well as substandard housing. (Khalifa 2015; Mahabir et al. 2016b; Stacey & Lund 2016; Jones 2017), and flood risk, drainage, and sanitation (Sakijege et al. 2014; More et al., 2017; UN-Habitat 2017; Jones 2019).

Contributions of informal dwellers to economic and urban development

The analysis indicated that informal residents in Kwa-Bulo made substantial contributions to the economy and overall development of Mombasa County and Kenya in general, despite facing numerous challenges. These contributions were systematically grouped into three main categories for clarity: revenue generation, labor force provision, and employment creation (Table 6). The analysis of the data demonstrates that despite the multitude of challenges impacting the livelihoods of informal settlers within their community, they significantly contributed to revenue generation for Mombasa County

through various means. The findings outlined the contributions of informal dwellers to economic and urban development as; revenue generation, labor force provision, and employment creation. The study context aligns with those of prior research, indicating that informal settlers include numerous entrepreneurs whose talents remain underutilized. Consequently, these entrepreneurs are often willing to provide inexpensive labor to the city (Awumbila et al., 2014; Tipple 2015). Similarly, our findings support the findings made by Kellett & Napier (2014), Mahabir et al. (2016c) and Turok (2015) that the informal economy provides more employment to youths than does the formal economy.

Table 6. Informal settlers' contributions to economic and urban development

Illustrative codes	Aggregated codes
<ul style="list-style-type: none"> • The community generates revenue to the county • The county staff is always here to collect tax from business owners 	Revenue generation
<ul style="list-style-type: none"> • They are skillful people who are unemployed in Kwa-Bulo area. • Many of the men here work on construction site and do other labour intensity jobs. • All forms of skills and trade available and less expensive 	Provision of labour
<ul style="list-style-type: none"> • There are numerous small-scale businesses operating here, including food stalls, water and juice vendors, grocery stores, hair salons, bakeries, and more. These enterprises typically employ one or two individuals from the community. • Small business owners have employed others to help them run the business 	Creation of employment

Conclusion

The discovery indicates that despite the numerous negative stereotypes linked with residents of informal settlements and the multitude of obstacles they encounter, they make substantial contributions to the economic and urban development of Mombasa. These

contributions include generating revenue, creating job opportunities, and supplying labor. These findings are in line with those of previous studies (Oteng-Ababio & Grant, 2019) which emphasizes the importance of acknowledging the initiative and potential of informal settlers for fostering economic and urban progress through

innovative entrepreneurship. The latter finding implies that informal settlement dwellers, out of 'hopelessness' and the struggle in these informal communities, instigate 'innovativeness' to survive (Oteng-Ababio & Grant, 2019). In using their entrepreneurial skills, informal dwellers can recognize and identify opportunities and invest in them accordingly, to create a small business that will help them to survive. The argument raised in this report may not be new but the article offers an analytical compilation of scholarly ideas about informal settlements. Critically, there is a need to question the assumptions and rationale behind local government policies and strategies directed towards informal settlements and slums. This research has suggested a paradigm shift in thinking by critical stakeholders, particularly state and city administrators, towards informal and slum dwellers. It is important to state that previous studies have documented attributes of informal settlement (Agyabeng et al., 2022). However, their findings do not support the fact that informal settlements impede economic growth, restrain investors, and obstruct globalization. Furthermore, in contrast to suggestions made by some authors, we conclude that informal settlements are very unlikely to disappear. Hence, there is a need to pay closer attention to informal settlements and to capture these settlements in local government policies

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