

## **The Effect of Urbanisation on Housing Conditions in Namibia**

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**Abstract:** *The main aim of the paper was to examine the effect of urbanisation on housing conditions in urban areas in Namibia in terms of access to basic needs; as well as to assess factors associated with homeownership using 2011 Population and Housing census PUMS data. It is evident that Namibia has experienced rapid urbanisation since independence. Urbanisation did not only happen because of rural-urban migration but the level has also increased because of the reclassification of settlements from rural to urban. The influx of people to urban areas has resulted in expansion of informal settlements in most towns of Namibia, causing high demand for services in urban areas and increased poor housing conditions. Renting is more common among the young who are in moderate to low paid jobs; however the lowly paid ones are more likely to live in informal settlements. Although housing conditions in urban areas are generally perceived to be good, those in improvised housing units lack basic facilities including toilet facilities and electricity. There is therefore need for formal housing in most towns of Namibia, especially to cater for the low income earners in order to avoid illegal occupation of unserviced land.*

**Keywords:** *Urbanisation, housing conditions, house ownership, informal settlements, Namibia.*

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### **1. INTRODUCTION**

Africa is now well on its way to becoming a much more urbanized continent where cities both large and small will harbor the majority of the population. By 1990, 33% of Africa's 645 million people were living in urban areas. Currently more than 40% of Africa's population is urban and it is projected that this proportion will increase to 60% (1.23 billion) by 2050 (UN-Habitat 2010). Thus rapid urbanisation is a distinguishing characteristic of contemporary Africa and it is greatly spurred by rural-urban migration. In many Africa's cities and towns, less than 10 percent of the population lives in formal sector housing. In Zambia 74% of urban dwellers live in slums, in Nigeria 80% and in Sudan 85.7% (Zulu et al. 2011). Research reported that the Kibera slum in Nairobi has more than half a million people packed into 225 hectares (2000 people per hectare). Typically, African slums and informal settlements lack adequate shelter, portable water and sanitation systems, electricity and affordable public transportation. They may also be located far from centers of employment and on environmental hazardous sites.

In 2004, the Government of the Republic of Namibia launched a national development blueprint, "Vision 2030". Under Vision 2030, it is envisaged that by that time Namibia would have become an industrialised and knowledge-based economy. This development plan highlights things that need to be done and those that need to be avoided if the Vision is to be realised. Some of the things considered important for Namibia's industrialisation include: improved quality of life of the people; infrastructure development; a sustainable resource base; and creating an enabling environment. Urbanisation has been explicitly highlighted as one of the components that need to be carefully monitored and controlled if Namibia is to smoothly transform into an industrialised, knowledge-based economy.

According to the 1991 Namibia Population and Housing Census, the urban population of Namibia stood at 28%. Subsequently, this population increased to 33% in 2001 and further to 42% in 2011 (Namibia Statistics Agency, 2012). This trend is not unique to Namibia but it is also observed in most southern African countries where levels of urbanisation are estimated to have reached over 50% (i.e. 61% in Botswana, 62% South Africa). Urbanisation in Namibia is affected by population dynamics in urban population growth and internal migration, rural poverty that causes people to migrate to the city to improve their livelihood and re-gazetting of some urban areas.

Although there has been an overall increase in urban population in Namibia, Windhoek City has by far been the major focus of urbanisation. Its population increased from 13.7% in 2001 to 16.2% in

2011 and constitutes 36% of the total urban population. Other towns such as Swakopmund, Oshakati and Ongwediva have also seen an increasing trend in urban population especially after independence. For instance, Ongwediva urban population doubled between 2001 and 2011. Due to insufficient accommodation in the city, individuals working in Windhoek opt to live in other neighbouring towns, Okahandja and Rehoboth greatly increasing its day time population. High population growth implies that more housing units will be required to cater for the shelter needs.

In the urban areas, the municipalities are confronted with a multitude of key problems, like high urban densities, transport, traffic congestion, energy inadequacy amongst others. Other related problems are unplanned development (illegal construction; informal markets; informal settlements); lack of basic services and other negative attributes (Ichimura, 2003; Satterthwaite, 2008). This automatically translates into increased demand for the necessary basic inputs into housing development. The residential housing market in Namibia is characterized by fundamental imbalances in terms of demand and supply dynamics. The demand for housing has been rising at a fast pace, while supply has not been growing at the same rate (Bank of Namibia, 2011). This situation has resulted in high house prices, and difficulties in accessing formal housing among low income earners.

This paper examines the effect of urbanisation on housing conditions in Namibia. Specifically, the study aims to describe the housing conditions in urban areas in terms of access to basic needs; as well as assess factors associated with home ownership and renting.

## 2. METHODOLOGY

The analysis is based primarily on secondary data. The paper discusses Namibia's urban housing conditions in relation to rapid population increase and housing demand. The main source of data is the 2011 Namibia population and housing census data. The analysis was carried out using the PUMS file which is a sample of population and housing records from the Namibia 2011 Population & Housing Census. The PUMS file includes population and housing records with information such as relationship, sex, education attainment, labour force status, tenure status, of head of households etc. It should be noted that, some responses have been edited to ensure confidentiality of respondents. The PUMS file includes sample weights for person and housing records, which can be applied to the individual records to expand the sample to estimate totals, percentages, means, and medians of the full population. In the PUMS file, the unit of analysis is households which include actual questionnaire responses. The trend is examined making reference to 1991 and 2001 Population and Housing Censuses.

The analysis is mainly descriptive. The growth of households in urban areas in relation to the population will be assessed. Cross tabulations between type of housing and other housing conditions by background characteristics of the head of household is examined and tested for significance in relationship. Multivariate logistic regression was performed to assess the likelihood of head of household living in improvised housing units in urban areas or other housing type. The likelihood of head of households in urban areas renting was also assessed. The logistic regression was applied as follows: in the first model, the response variable was housing type coded as 1 if a household is an improvised housing unit and 0 if a household is of any other type. Other types of households include detached, semi-detached, flats etc. In the second model, the response variable was housing tenure coded as 1 if it household is renting and 0 for any other form of ownership.

Logistic regression is of the following form  $P(Y) = \frac{e^{b_0 + \sum b_i X_i}}{1 + e^{b_0 + \sum b_i X_i}}$  where Y is the response variable;

$X_i$  are the associated factors predicting Y and  $b_i$  are the coefficients. In all cases, the first category is chosen as a reference category. The results are interpreted in terms of odds ratios.

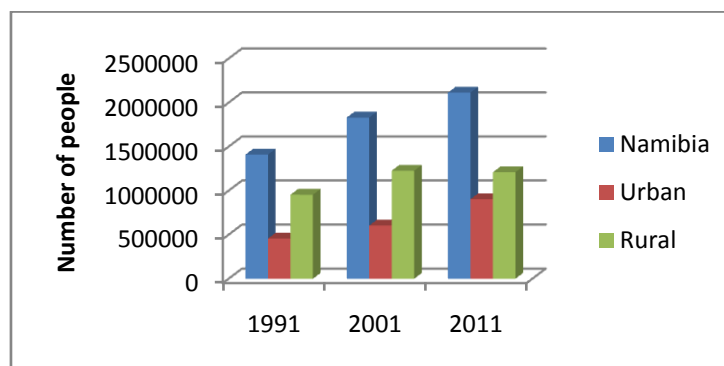
## 3. KEY FINDINGS OF THE STUDY

### 3.1. Population Growth

The impact of rapid population growth on urban development and conditions is far more than merely a demographic or quantitative one. Whereas the urbanisation process in the developed countries was the result of rapid industrialization, the urbanisation in Namibia like most other developing nations is a consequence of the "push" of the rural areas and the "pull" of the town. The majority of African urban centers developed and continues to develop as commercial-administrative and servicing

entities. Consequently, urbanisation in most of the African countries is characterized by a growing gap between employment opportunities and demand, and an ever increasing shortage of urban services and facilities which are accessible to a diminishing share of urban population. The implication is the deplorable and alarming situation which aggravates the already acute housing problem. The population growth results in overcrowding increased pressure on infrastructural facilities and the rapid deterioration of housing and living conditions.

In Namibia, urbanisation occurred rapidly after independence, when apartheid restrictions of living were abolished. Reasons why people move to urban areas in Namibia should be looked at in terms of the bigger picture which encompass factors such as poverty, environment and political history which defines the context within which people move. Clearly, the proportion of people living in urban areas rise not only due to migration, but also due to the natural growth of the existing urban population. In the African context, it is reported that urbanisation levels also increases because of the reclassification of settlements from rural to urban. The 2011 Namibia Population and Housing Census shows that the urban population grew by 49.7% between 2001 and 2011. Much of this growth is attributed to demographic shifts in the form of rural-urban migration leading to urban sprawl. This growth has seen the Windhoek city's population changing from 233 529 in 2001 to 325 858 in 2011. Erongo and Khomas regions have the highest population increase between 2001 and 2011. A study conducted in major city and towns in Namibia indicated that the main reasons given by the majority of respondents on why people move from rural to urban areas is to seek for employment (75.3%); for education (57.2%) and some moved because of work (50.8%). Figure 1 depicts evidence of internal migration in Namibia. There is evidence of rural-urban migration and overall, the population in urban areas in Namibia has steadily increased while a decrease is evident among rural population.



**Fig1.** Population by rural and urban

**Source:** Namibia Statistics Agency, 2012

### 3.2. Type of Housing and Tenure

Research has consistently shown the importance of the housing sector on the economy and long term social and financial benefits to individual homeowners (Aluko, 2010, p.65; Lanrewaju, 2012, p.424). The prevalence of home ownership is not universal. It varies across different demographic groups and even within different regions of the country. Differences in economic circumstances and the age composition attributes to large part of the gap in home ownership. Overall, the number of households in Namibia has significantly increased since independence and the increased trend is highly significant for households in urban area (figure 2). Although detached houses pre-dominate in urban areas, it is important to note that about 27% of households in urban areas in Namibia are improvised housing units (shacks) and the fast urbanizing regions (Erongo and Khomas) have the highest number of improvised housing units. Figure 3 shows the increasing trend of improvised housing units in Namibia since 1991. It is also important to note that there is a decreasing trend in the proportion of detached households in urban areas in Namibia; and the proportion of other types of households has remained fairly constant (figure 1). In Namibia two main tenure categories exist: state land (freehold) and communal land (individual use and communal grazing land). The Local Authorities Act of 1992 brought all land under the jurisdiction of municipalities. As a result, customary areas changed jurisdiction, having serious effects on the tenure situation. Customary land right holders and informal land right holders were reclassified as tenants, as they had to pay a monthly plot rent to the local authority. Informal settlement dwellers are reported to be 'accepted' by the authority, only the ones living in so-called impermanent houses, like iron shacks are particularly vulnerable to eviction

(Fjeldstadet *al*, 2005). Urbanisation is described by several researchers (Mukiibi 2009, Opoko & Olutawayo, 2014, p.17; Ali & Sulaiman, 2006) as one of the root causes for the spread of informal settlement and in such settlements, conditions are far from acceptable. People living in shacks are likely to be overcrowded and this poses a risk of spread of infectious diseases. Hence, the sprawling of poorly controlled settlement developments has resulted in many environmental and health related problems. The results show that the majority of never married head of households (53.7%) live in improvised housing units and they are also likely be renting when compared to married respondents. Only few head of households who are divorced (0.9%) or separated (0.7%) live in improvised housing units. The proportion of individuals renting housing units in urban areas has increased over the years. Private landlords provide the bulk of rental accommodation. While most detached houses are owned with or without mortgage, the different types of flats are mostly rented. A high proportion of improvised housing units are also owned without mortgage (47.3%).

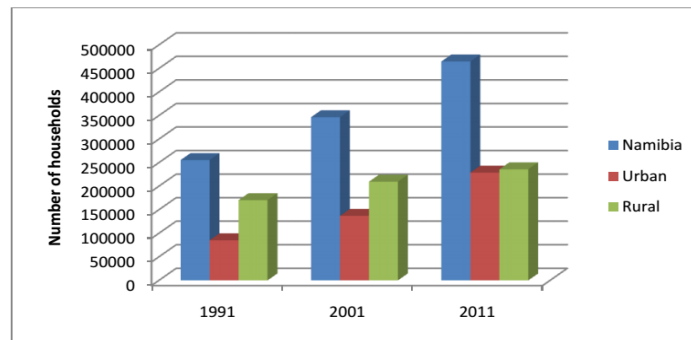


Fig2. Number of household by year

Source: Namibia Statistics Agency, 2012

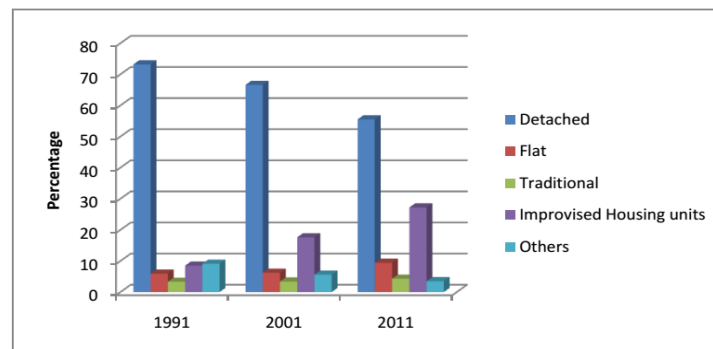


Fig3. Percentage distribution of type of housing by year

Source: Namibia Statistics Agency, 2012

One of the primary drivers of homeownership is income. Higher income widens the choice of available home for purchase and increases the likelihood that a household will qualify for a mortgage (Opoko & Olutawayo, 2014; Gollin *et al*, 2012). While home ownership is not limited to those with higher income, households with low incomes face barriers such as too few homes in lower price ranges in locations near their place of employment. House ownership and renting is highly dependent on salaries and wages as main source of income (Atlaw, 2012). Most government employees occupy households with mortgage while employees in private sector are more likely to be renting. Homeownership and stable housing go hand in hand. Homeowners move far less frequently than renters, and hence are embedded into the same neighborhood and community for a longer period. Housing tenure is also associated with age and education attainment of head of household, with younger ones more likely to be renting and those with at least secondary education highly likely to own a housing unit. Renters are young, that is changing and searching for ideal jobs, not yet married and hence literally less committed.

### 3.3. Housing Conditions

Much attention has been given to the rapid pace of urbanisation in developing countries in recent years and to the possibility of declines in the level of living in cities as a consequence of this trend. It is considered that unless prompt and adequate measures are taken, the large influx of people into the

cities will greatly overburden the municipal facilities whose function is to maintain and improve social and health standards. Earlier research shows that there is around 50-60% of the population of urban areas that live in urban slums where basic facilities such as water, sanitation, health, electricity etc. are poor (Tsinda *et al.*, 2013; p6941). Poor sanitation and inadequate access to safe water are public health concerns because they create conditions conducive to the spread of diseases. Access to basic amenities is the most important aspect of the quality of urbanisation (Bhagat, 2011).

The amenities like electricity, water, sanitation and clean fuel are the critical determinants of living conditions and health of the urban people. In Namibia, almost all urban households have access to safe water (98%) in the form of piped water inside or outside their dwellings, or from public pipes or boreholes. Improvised household units mainly use piped water from public pipes. The proportion of households in urban area with no toilet facility has increased since independence ranging from 12% in 1991 to 17.4% in 2001 and increased to 22.4% in 2011. In 2011 a high proportion of those living in improvised housing unit indicated that they do not have toilet facilities (47.5%). It was observed that the majority of the informal low income communities are located in difficult terrains such as marshy land, swamps, steep slopes, flood plains and rocky areas. Building toilets in these soil conditions can sometimes be challenging due to the instability of the soil and the difficulty of digging into rocks. Most households in urban areas have access to electricity as source of lighting, however only 38.1% of improvised housing units use electricity for lighting. The majority 47.2% use candles as source of lighting.

### 3.4. Factors Associated with Housing Type and Condition in Urban Areas

The likelihood of living in improvised housing units in urban areas is determined by a number of factors. Characteristics of head of households including age, education attainment, marital status and occupation are associated with housing type and ownership of the house. Other housing factor like toilet facility is also significantly associated with housing type and ownership of house. Results from regression analysis also show that head of households who have completed primary or higher education are less likely to be living in improvised housing units when compared to those with no formal education. Education is a key to secure good employment and earn better income which is associated with opportunities to secure finance at banking institutions for housing.

It is evident from the results that adults aged 40 years and above are less likely living in improvised housing units. They are at the peak of their working life with steady jobs and high likely to be in marital union. The results on marital status also indicates that head of households who are in union or ever been in union are less likely to be living in improvised housing units than those who are never married. The majority of people in union or ever been in union are aged 40 years and above (65% and 90.1%, respectively). It is also important to note that head of households who are employed in elementary occupations, service workers, skilled agricultural and fisheries workers and craft and related trade workers are more likely to live in improvised housing units. These are some of the occupations that are not well paying and with low or no housing benefits. The results indicate that a high proportion of people employed in these occupation have at most primary education i.e. service workers with 64.2%; skilled agricultural and fisheries workers (91.9%); craft and related trade workers (73.4%) and elementary occupation (86.5%). A study by Mwilima *et al.* (2011, p16) revealed that affordability plays a critical role in determining access to housing. An analysis of dwelling type and main source of income revealed that many people who depend on insecure source of income such as remittances/grants and informal business mainly live in improvised houses. The odds of households in urban areas using pit latrine as toilet facility is 4.8 times more likely for households in improvised housing units than those living in other housing types. This is mainly because improvised housing units are constructed in unserviced lands on the outskirts of towns or cities making it difficult for such households to have access to flushed toilets and other municipal services.

A similar pattern is observed with regard to house tenure (ownership). Households with Heads who are in union or previously in union (widowed or divorced) are less likely to be renting than the never married ones. Similarly, the likelihood of renting decreases with increasing age of the Head of household. This pattern has also been reported by Andrews & Sanchez (2011) that the probability of home ownership rises significantly during the family formation years and tends to peak at aged 50 years and above. The results also indicate that households with heads in low paid jobs are more likely to be renting than owning a house (table 1). Those in lowest paid jobs are also more likely to own improvised housing units. Education plays a major role in house ownership. It is associated with

employment and permanent income earning. Earlier researchers also argued that homeownership is associated with financial inclusion because of the implied financial stake in the occupied residence (Bramley & Karley 2007, p.5). They reported that most aspire to be homeowners because of perceived benefits including more choice, better investment opportunities and greater ability to borrow against future income. Overall, the study supported that homeownership is associated with better housing condition, household stability, avoidance of financial exclusion and insecurity and its effects on wider attitudes and behavior.

**Table.** *Estimated odd ratios for living in improvised housing unit and for renting in Namibia*

	Housing Type			Housing Tenure (ownership)		
	Exp(B)	95% CI for EXP(B)		Exp(B)	95% CI for EXP(B)	
		Lower	Upper		Lower	Upper
<b>Education Attainment</b>						
No formal education	1.000			1.000		
Incomplete primary	1.086	0.952	1.240	1.028	0.891	1.187
Complete primary	0.795	0.708	0.892	1.126	0.997	1.271
Secondary or higher	0.356	0.314	0.404	1.299	1.148	1.470
<b>Occupation</b>						
Armed force	1.000			1.000		
Legislators, senior officials and Managers	0.701	0.534	0.920	0.775	0.640	0.939
Professionals	0.482	0.368	0.631	0.729	0.606	0.876
Technician and associate professionals	0.631	0.485	0.821	0.878	0.728	1.058
Clerk	0.807	0.622	1.047	0.904	0.746	1.096
Service Workers	1.530	1.217	1.924	1.003	0.838	1.200
Skilled Agricultural and Fishery workers	3.542	2.720	4.612	1.104	0.885	1.377
Craft and Related trades workers	2.076	1.653	2.607	0.861	0.719	1.031
Plant and Machine operators and assemblers	1.760	1.382	2.241	1.048	0.863	1.271
Elementary occupations	2.335	1.858	2.934	0.879	0.732	1.054
<b>Marital Status</b>						
Never married	1.000			1.000		
In union	0.888	0.830	0.950	0.727	0.687	0.769
Previously in union	0.653	0.541	0.788	0.748	0.658	0.850
<b>Toilet Facilities</b>						
Flushed Toilet	1.000					
Pit Latrine	1.960	1.746	2.201			
No toilet	4.802	4.447	5.185			
<b>Age Group</b>						
0-19	1.000			1.000		
20-29	1.051	0.696	1.589	1.803	1.241	2.620
30-39	1.035	0.686	1.563	1.084	0.747	1.573
40-49	0.631	0.417	0.954	0.672	0.462	0.977
50-59	0.363	0.238	0.554	0.522	0.358	0.763
60+	0.312	0.195	0.500	0.510	0.340	0.764

#### 4. CONCLUSION

As the urban population grows, the housing needs will continue to increase, forcing more agricultural land to be converted into human settlements and the prolific growth of huge informal settlement. The critical issue that needs to be addressed is the extent to which government can formulate development policies that can have a definite impact on trends of urban growth. Comprehensive rural development policies backed up with a sound decentralization programme offer a glimmer of hope for the deceleration of rural-urban influx and eventually the slow growth of the urban informal settlements. The extent of the housing shortage and affordability in urban areas in Namibia is enormous. Urgent multi-faceted intervention is needed to address the situation since housing is affected by policies in other sectors. There is no doubt that urbanisation is a process that is good for business and economic development. The movement of people to urban areas brings with it opportunities to earn income, and increased buying power. Urbanisation has also contributed to increased number of men and women accessing good education, specifically tertiary education which is a proxy for wealth. However, the influx of people to urban areas has resulted in expansion of informal settlements in most towns of Namibia, causing high demand for services in urban areas and increased poor housing conditions

(unsuitable shelters; lack of access to hygienic ablution facilities etc.). There is need for formal housing in most towns of Namibia, especially to cater for the low income earners in order to avoid illegal occupation of unserviced land. Although the Government of Namibia has embarked on Mass Housing programme, its impact is yet to be assessed. Agencies responsible for establishing new towns should open up new areas serviced with relevant infrastructures in order to tackle the growth of informal settlement. Since urbanisation is an inevitable process which is not anticipated or planned for, the challenges faced by it are many and tackling them requires good knowledge of the characteristics of the people accessing the urban areas as well as accurate projections of future urban growth.

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