Rural Urban Migration Contribution To The Emergence Of Informal Settlements: The Case Of Ondangwa, Namibia

Ismael Namgongo¹ & Nelago Indongo²

¹Chief Executive Officer, Ondangwa Town Council, Ondangwa Namibia, email: inamgongo@ondangwatc.org.na
 ²Associate Professor & Director, Centre for Research Services, University of Namibia, Windhoek, Namibia
 email: nkanime@unam.na

Corresponding author: nkanime@unam.na

Abstract

This study sought to investigate the extent to which rural-tourban migration contributes to informal settlements in Ondangwa, Namibia. Data were collected from a random sample of 200 residents living in informal settlements around Ondangwa self-administered using a structured questionnaire. The data was analysed using descriptive statistics, correlation analysis, and principal components analysis. The study established that most residents living in informal settlements around Ondangwa were male and female youths between ages 20 and 35 and coming from diverse rural locations with limited access to basic facilities. Results showed that some residents considered the informal settlements their permanent place of residence, as suggested by a median length of stay of 7 years. Many people who migrated desired greater independence and selfreliance, as revealed by significant changes in living arrangements before and after the migration. The push and pull factors and the initiatives taken by the town council to address the challenge of informal settlements including poverty and drought had significant, strong positive correlation, highlighting the impact of natural disasters on people's livelihoods before migration. Economic factors, such as seeking employment, were the most common motivators for migration for almost half of migrants. The results also indicated that the initiatives taken by the Ondangwa Town Council were twofold: first, to receive and accommodate migrants through initiatives such as low-cost housing, meetings on housing provision, basic amenities, settlement committees, and reception facilities and to address the challenges of informal settlements through efforts of providing access to basic amenities, infrastructure, and services. The study recommended that initiatives put in place by the authorities should be targeted towards youth empowerment and that the town council should prioritise the formalisation of informal and reception areas to give land ownership tenure to informal migrants.

Keywords: rural, urban, migration, informal settlement, Ondangwa

Introduction and Background

Rural-to-urban migration has been a growing trend in many developing countries, including Namibia (Weber & Mendelsohn, 2017). This phenomenon significantly affects rural and urban areas and the individuals and families who migrate. One of the most visible consequences of rural-tourban migration is the proliferation of informal settlements in urban areas. These settlements are characterized by inadequate housing, poor sanitation, and limited access to basic services such as water, electricity, and healthcare (Baye et al., 2023; Wu et al., 2013). Despite the prevalence of informal settlements in Namibia, there is a dearth of research on how rural-to-urban migration contributes to their growth. This paper sought to address this gap by examining the relationship between rural to urban migration and the formation and expansion of informal settlements in Namibia.

Rural-to-urban migration is a global phenomenon that has risen over the past few decades, and this trend is driven by various factors, including population growth, economic opportunities, and environmental pressures (Ward, 2015). As a result, many cities in the developing world are experiencing rapid and unplanned urbanization, which has significant implications for urban development, poverty reduction, and social inclusion. According to the United Nations reports, the world's urban population is expected to reach 68% by 2050, with most of this growth occurring in developing countries (Awumbila, 2017). The African continent has experienced significant urbanization in recent years, with the urban population expected to double by 2050, reaching 1.34 billion people (African Development Bank, 2016). Rural-to-urban migration is expected to account for 40% of urban population growth in the coming decades (Frayne, 2004). This rapid urbanization presents opportunities and challenges for African cities, including the need to provide affordable housing, basic services, and infrastructure to growing urban populations.

Rural-to-urban migration has also been a significant trend in Asia, particularly China and India. China's urban population grew from 18% in 1978 to 60% in 2017, with rural-to-urban migration playing a significant role in this growth

(United Nations, 2018). In India, the urban population is expected to reach 404 million by 2050, with rural-to-urban migration expected to account for 40% of this growth (United Nations, 2018). Latin America and the Caribbean have also experienced significant urbanization recently, with the urban population reaching 81% in 2018. Rural-to-urban migration has significantly affected this growth, particularly in Brazil, Mexico, and Colombia.

In Namibia, it is reported that the country's urban population has increased from 28% in 1991 to 46% in 2018 (Venditto et al., 2022; World Bank, 2018). This growth has resulted in the formation and expansion of informal settlements in urban areas, particularly in the capital city of Windhoek (Pendleton et al., 2014). Informal settlements in Namibia are often characterized by overcrowding, poor sanitation, and limited access to basic services such as water and electricity. These settlements are also vulnerable to natural disasters such as floods, which can exacerbate residents' already precarious living conditions. Despite the prevalence of informal settlements in Namibia, there is a lack of research on how rural-to-urban migration contributes to their formation and expansion (Frayne, 2004; Pendleton et al., 2014).

Initially established by Finnish missionaries in the 1890s, Ondangwa grew rapidly due to its strategic position in the three northern regions of Oshikoto, Ohangwena, and Oshana (Kambowe, 2017). The town has become a development hub in northern Namibia with various developmental activities. The rapid growth of Ondangwa triggered an influx of migrants from various corners of the country, putting pressure on providing housing and related services (Nandjato, 2020). Of late, there have been emergences of informal settlements, and this has become one of the challenges Ondangwa town council is currently facing challenges of the provision of clean water, sanitation, and other social basic services. Informal settlements are ticking time bombs regarding health, crime, and other social ills (Weber & Mendelsohn, 2017). The need for interventions to mitigate the emergence of informal settlements is a priority. Therefore, this paper intends to contribute to the knowledge of why people are migrating despite the seemingly adverse living conditions in informal settlements of our towns and make holistic recommendations. Ondangwa Town is faced with a high number of migrants who are hoping for better job opportunities and other services (Nandjato, 2020). There are visible informal areas with sprawling shacks in most of the town. This paper intendeds to investigate the extent to which rural-urban migration, among other factors, contributes to the emergence of informal settlements in Ondangwa so that informed interventions can be recommended to mitigate against the challenges. By addressing this research gap, the paper provides valuable insights into the relationship between rural-to-urban migration and informal settlements in Namibia. This has the potential to inform policy and practice aimed at addressing the challenges associated with rural-to-urban migration and informal settlements in Namibia. Specifically, the paper analyses the reception methods and procedures employed by the council in receiving and accommodating migrants in the past five years; examines the living conditions of migrants who joined the informal settlement in the past five years and evaluates initiatives taken by Ondangwa Town Council in solving the challenge of informal settlements in the last five years.

Data and Methods

Data Source

The analysis is based on empirical data collected from respondents who live in Ondangwa. The target sample for the study was estimated using Slovin's sample size formula as follows:

$$n = \frac{N}{1 + Ne^2}$$

Where n is the required sample size, N is the population size, and e is the margin of error = 0.05.

$$n = \frac{900}{1 + 900(0.05)^2} = 277$$

The study targeted about 277 respondents from the residents of the informal settlements around Ondangwa. The sampling unit were the household heads living in informal settlements. The individuals who were eligible for completion of the questionnaire were the household heads above 18 years of age. As guided by the questionnaire, these participants include both males and females with diverse backgrounds. The questionnaire was distributed to the targeted participants, whereby a starting point was identified, and every second household was selected for interview and upon completion of each questionnaire, a special code or identifier was assigned to the questionnaire to allow data capturing. The data collected was coded and captured using Microsoft Excel.

Method of analysis

After performing the necessary data cleaning, exploratory data analysis was initially performed in IBM SPSS Statistics v26 to visualize patterns emanating from the data. The data for the study was analysed using frequencies, descriptive statistics, principal components analysis, and correlation analysis. Frequencies were run for nominal and ordinal level data, while descriptive statistics were estimated for continuous variables.

Principal Components Analysis (PCA) was used to evaluate the underlying components for push and pull factors and initiatives the town council put in place to receive and accommodate migrants. Finally, correlation matrices were used to examine the extent to which the items for each component move together as a set.

Results

Sample description

In total 200 respondents were successfully interviewed, a response rate of 72%, whereby 55% were females and respondents heavily concentrated between 20 and 35 years of age. This is the most adventurous and economically active age group in any given economy, where individuals migrate to seek new opportunities. From information on the birth regions of the respondents it appeared that respondents originated from various regions with a higher number born in Oshana (25.0%), followed by Oshikoto (18.0%), Ohangwena (13.5%), and Zambezi (13.5%). The smallest proportions were born in Kunene, Kavango West, //Karas, Erongo, and Omaheke, representing 1.5% to 6.0% of the total participants. Respondents indicated that they migrated for different reasons, including seeking employment, better access to health services, better access to education, better living conditions, being with a partner, and wanting to be on their own. Majority (46.5%) migrated to seek employment opportunities. This suggests that economic factors were key motivators for migration, and individuals may have been seeking better job prospects or higher wages in Ondangwa town. A smaller proportion of individuals migrated for better access to education (16.5%) or better living conditions (13.5%). This suggests that individuals may have sought to improve their quality of life or educational opportunities. Only a few migrated to be with a partner (7.5%) or alone (6.0%). These reasons suggest that personal and social factors may also affect migration decisions, while a small percentage of individuals (4.5%) migrated for better access to health services.

Findings

One of the objectives of the paper was to examine the living conditions of migrants living in informal settlements around Ondangwa. To achieve this objective, it was essential to evaluate the length of stay, living arrangements and income, before and after migration. The results show that the median length of stay was 7 years, and the mode was 3.0 years. The standard deviation was 8.58, indicating considerable variability in the length of stay among participants. The skewness of .882

indicates that the distribution of length of stay was slightly skewed to the right, with a long tail on the right side of the distribution. The kurtosis of -.191 indicates that the distribution was relatively flat compared to a normal distribution. The average length of stay of 7 years is long enough for respondents to have witnessed the initiatives implemented by the town council to deal with informal settlers. On the other hand, seven years is a long time to stay in informal settlements, which means some individuals now consider staying in informal settlements a permanent solution. Unless the town council implements some initiatives, these individuals will remain to stay in informal settlements.

For most respondents, before migration, the common living arrangement was staying with parents, renting in another town, living with a partner, and living with other family members. Only a few respondents owned a house in another town or village. After migration, the living arrangements for most respondents changed as indicated in table 1. The percentage of those living with parents dropped, and the percentage of those owning a house increased. After migration, renting was the most common living arrangement, followed by living with other family members and a partner. These results provide valuable insights into the changes in living arrangements after migration by people living in informal settlements of Ondangwa. Many people who migrated found new housing arrangements, such as renting after they moved and also noticed a decrease in the number of people living with their parents or other family members after migration, indicating a greater desire for independence and self-reliance for those who migrated to Ondangwa.

Table 1: Living arrangements before and after migration

Living arrangement	Living arrangements before migration		Living arrangements after migration	
	number of responde nts	perce ntage (%)	number of respond ents	perce ntage (%)
Living with parents	81	40.5	36	18
Own House in another town	6	3	n/a	n/a
Own house in the village	9	4.5	n/a	n/a
Renting in another town	37	18.5	n/a	n/a
Living with other family members	31	15.5	41	20.5
Living with a partner	36	18	30	15
Currently renting	n/a	n/a	66	33
Own House	n/a	n/a	27	13.5
Total	200	100	200	100

The assessment of respondents' source of income before and after migration is also presented in figure 1. The percentage of individuals who relied on formal employment as their primary source of income increased from 22.5% before migration to 37.5% after migration. This suggests that migration provided new job opportunities or that individuals may have secured better-paying jobs in the Ondangwa.

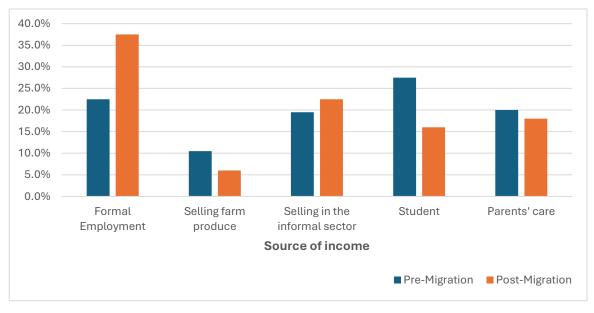


Figure 1: Source of income before and after migration

The article aimed to analyse the reception methods and procedures employed by the council in receiving and accommodating migrants in the past five years. This was analysed using the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity. These tests are commonly used in factor analysis to assess whether the data is suitable for factor analysis. The KMO measure of sampling adequacy assesses the degree to which the observed variables in the data are related. A KMO value of 1 indicates that the observed variables are perfectly related, while a 0 indicates that the observed variables are uncorrelated. The results showed that the KMO value is 0.836, which suggests that the observed variables in the data are sufficiently related to each other, and that the data is suitable for factor analysis. Bartlett's test of sphericity assesses whether the observed variables in the data are correlated, indicating that the data is suitable for factor analysis. The test statistic for Bartlett's test is an approximate chi-square value, and the number of degrees of freedom (df) indicates the number of observed variables in the data. The analysis showed an approximate chi-square value of 2342.431, with 78 degrees of freedom. The p-value for the test is less than 0.001, indicating that the null hypothesis of sphericity is rejected and that the observed variables in the data are significantly correlated.

Information on the total variance explained by each principal component in a Principal Component Analysis (PCA) are given in figure 2. A PCA is a commonly used technique in data analysis to identify underlying dimensions or factors that explain the variation in the data. The figure presents each principal component's initial eigenvalues, extraction sums of squared loadings, and rotation sums of squared loadings. The initial eigenvalues represent the variance in the data explained by each principal component. The results reveal that the first principal component explains 56.40% of the total variance in the data, while the second principal component explains an additional 14.48% of the variance. The cumulative percentage of variance explained by the first two principal components is 70.88%. The remaining principal components explain smaller amounts of variance in the data.

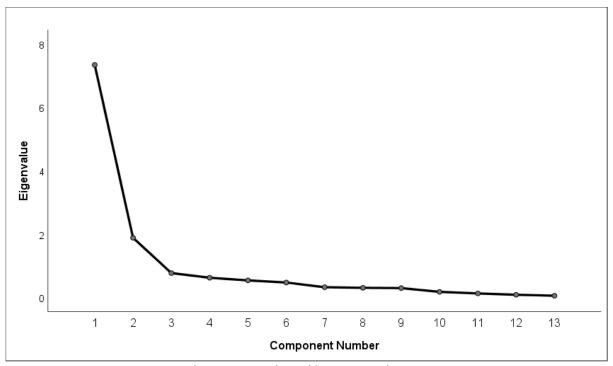


Figure 2: Total variance explained by extracted components

Table 2 is the pattern matrix for the PCA with an oblique rotation method. The pattern matrix shows the factor loadings between each variable in the analysis and each principal component. The first principal component was named push and pull factors. The first principal component is strongly correlated with variables related to push factors for migration, such as lack of employment, drought, poor education, and poverty, and pull factors for migration, such as better employment opportunities and better living conditions. The second principal component referred to initiatives the town council took to accommodate and deal with challenges brought by informal settlements. The second principal component strongly correlates with variables related to initiatives taken to address migration, such as low-cost housing, meeting housing provision, basic amenities, settlement committees, and reception facilities. Interestingly, all the items had factor loadings above 0.7, indicating a high correlation between the underlying component and the observed item. This paper therefore argues that push and pull factors are essential in determining the causes of migration among the participants. Niva et al. (2019) claim that the inflow of urban population and the creation of informal settlements result from a convergence of numerous variables including migrants from rural regions, individuals from formal to informal settlements within the same town, and people relocating from other urban centers to the same town (Duda et al., 2018; Nickanor et al., 2016).

Table 2. PCA pattern matrix results

Pattern Matrix						
	Component					
	1	2				
Push: Lack of employment	.897					
Push: drought	.837					
Push: Poor education	.836					
Pull: Better employment	.781					
opportunities						
Push: poverty	.764					
Pull: Better living conditions	.698					
Pull: raise money	.672					
Init regular meetings		927				
Initiative: Low-cost housing		916				
Initiative: Meetings housing		879				
provision						
Initiative: basic anemities_2		862				
Initiative: Settlement		861				
committee						
Initiative: Reception facility		711				
Extraction Method: Principal Component Analysis. Rotation						
Method: Oblimin with Kaiser Normalization.						

Additionally, the specific initiatives put in place by the Town Council can also be taken as a complete set. As a set, these initiatives significantly contribute to alleviating and dealing with the challenges associated with informal settlements in Ondangwa. The matrix for initiatives, shown in Table 3, which the Ondangwa town council implemented, included a reception facility, settlement committee, basic amenities, regular meetings, low-cost housing, and housing provision meetings. The matrix shows that all initiatives are significantly correlated with each other, with the magnitude of the correlations ranging from moderate to strong. This is an indication that the town council has implemented several initiatives with a significant positive correlation. The initiatives aimed at receiving and accommodating migrants when they arrive in Ondangwa include providing basic amenities and a reception facility to ensure that migrants are welcome. These two factors have a significant, strong positive correlation signifying that they are essential in alleviating some of the challenges which are likely to be faced by the town council if informal settlers are not well recognized in society. A reception facility allows the Ondangwa town council to identify and register the arriving individuals and give them essential information on the various facilities and avenues they can utilize to access formal settlements. Researchers (Awumbila,

a. Rotation converged in 7 iterations.

2017; Awumbila et al., 2014) argued that people moving to cities for better economic and social opportunities and to escape deteriorating natural environments is a significant factor in urbanization and population expansion. Hence, in agreement with findings, Duda et al. (2018) and Onyango et al. (2021) also reported that governments, city authorities, and often host communities take a negative stance on migration into urban areas due to a lack of capacity to plan for and cater to the increasing migrants by providing employment, access to land, and basic amenities.

Table 3. Correlation matrix on initiatives implemented by the council.

Correlat	ion Matr	ix				
	Recep tion facilit y	Settle ment commi ttee	Basic ameni ties	Regul ar meeti ngs	Low- cost housi ng	Housi ng provi sion meeti ngs
Recept ion facility Settle	_					
ment commi ttee	0.625 ***	_				
Basic amenit ies Regula	0.513 ***	0.603* **	_			
r meeti ngs Low-	0.448	0.650* **	0.729 ***	_		
cost housin g Housin	0.668	0.755* **	0.597 ***	0.740 ***	_	
ត provisi on meeti ngs	0.753 ***	0.768* **	0.671 ***	0.694 ***	0.895 ***	_

Table 4 shows the correlation coefficients between push and pull variables. The push variables were poverty, drought, lack of employment, and poor education, while the pull variables

were employment opportunities, better living conditions, and desire to raise money. The correlation matrix provides information on the degree of association between each pair of variables in the analysis. Poverty and drought had a significant positive correlation (r = 0.68, p < 0.001). Drought is a natural disaster that can lead to crop failure, livestock death, and water scarcity, which can, in turn, contribute to poverty. Areas with high poverty rates may also lack the infrastructure and resources to cope with drought, exacerbating the effects of the disaster. These factors, in turn, push individuals to seek alternative sources of livelihood.

Lack of Employment and the need to find employment opportunities also had a significant, robust, and positive correlation (r = 0.663, p < 0.001). Lack of employment may be related to people seeking better job opportunities in new areas. This will see individuals migrating from rural to urban areas. The same also explains the significant correlation between the other variables and the need to raise money, get better living conditions and education.

Table 3. Correlation matrix of push and pull variables.

Correlation Matrix

Correia		46117					
	Pov erty	Dro ugh t	Lack of empl oyme nt	Poor educ atio n	Emplo yment oppor tunitie s	Bett er livin g cond ition s	Rai sin g mo ne y
Povert	_						
У							
Droug	0.68 ***	_					
ht	***						
Lack of emplo yment	0.65 4** *	0.69 ***	_				
Poor educa tion Emplo	0.51 5** *	0.70 8** *	0.617 ***	_			
yment oppor tunitie s	0.53 4** *	0.65 5** *	0.663	0.51 7***	_		

```
Better
         0.45
                0.55
living
                       0.531
                                        0.431*
                                0.55
         2**
                7**
condit
ions
Raisin
         0.64
                0.54
                       0.613
                                0.44
                                        0.553*
                                                 0.76
g
                5**
                                2***
                                                 1***
mone
Note. * p < .05, ** p < .01, *** p < .001
```

Discussion and Conclusion

This paper argues that if migrants are welcome in society, chances are high that they will abide by the rules and regulations and the bylaws of the local authority. This also limits the conflict between formal and informal settlers. Suppose the local authority recognizes the informal settlers and holds regular meetings with them, chances are high that these individuals realize that they are part of society and can contribute to the good of the community. Okoro et al, 2023 emphasised that community engagement programs and social support structures improves community cohesion and promote a strong sense of community and integrated urban informal settlement. Findings show that the provision of basic amenities including water provision, refuse collection, provision of energy, and access to health facilities and education had a significant strong positive correlation with initiatives implemented by the town council like settlement committee. A settlement committee that engages with residents of informal settlements will initiate dialogue with the informal settlers on what the Town Council expects and what can be done to resolve challenges.

These initiatives implemented by town council are meant to deal with challenges that may arise because of the increase in population in informal settlements. It is commonly reported (Weber & Mendelsohn, 2017) that increased population in informal settlements can be challenging if not adequately handled by the responsible authorities. Increased crime, pollution, and other forms of human-related challenges can also be witnessed because of the high population density in informal settlements. Findings in this study are thus in line with what numerous researchers concluded (Hope, 1998; Ampofo, 2024) that rapid and unplanned urbanization bring profound risks including increased social instability, threats to critical infrastructure, potential shortages of water and other vital resources, crime and the potential for the devastating spread of disease. They further concluded that one of the major consequences of the rapid urbanization experienced by African nations has been the increasing supply of urban job seekers which far exceeds demand.

The paper concluded that most residents living in informal settlements around Ondangwa were youths between 20 and 30 from diverse rural locations with limited access to basic facilities. They migrated for various reasons, including to seek for better opportunities in urban areas. Majority had stayed in informal settlements for a significant amount of time. The paper further revealed that without interventions from the town council, some individuals may view it as a permanent place of stay. Many people who migrated desired greater independence and self-reliance after moving to Ondangwa, as evidenced by the most common living arrangement was renting, followed by living with other family members and a partner.

The results further indicated that after migration, informal settlers relied on formal employment as their primary source of income. It is therefore prudent that initiatives the Ondangwa Town Council took should focus on receiving and accommodating migrants through low-cost housing, meetings on housing provision, basic amenities, settlement committees, and reception facilities; as well as addressing the challenges of informal settlements through efforts to provide access to basic amenities, infrastructure, and services. The land tenure system in informal areas does not give the settlers any rights or ownership status to the land they are settling on, and many of them live there, unsure if they can stay forever or if they will move. This situation has restricted them from developing the area or using their land as collateral to get access to financing from financial institutions such as commercial banks. This paper therefore recommends that the town council should prioritize formalizing the informal and reception areas to give land ownership tenure to informal and migrant dwellers. This will subsequently give them collateral options to develop their houses further. In summary, the findings of this paper call for a paradigm shift in how policymakers and stakeholders approach informal settlements, recognizing their resilience and potential for sustainable development. It is therefore important that governments can work towards addressing the root causes of informal settlements and fostering more equitable urban environments.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Funding

The authors received no financial support for the research, authorship and/or publication of this article.

References

- Ampofo, J. A., Iddrisu A., Arfasa, G. F., Mantey, I. and Aniah, E. (2024). Causes of Informal Settlement in Africa: A systematic review. ADRRI Journal of Contemporary African Development, Ghana: Vol. 1, No. (1), Pp.1-18, E-ISSN: 2961-0257.
- Awumbila, M. (2017). Drivers of Migration and Urbanization in Africa: Key Trends and Issues Drivers of Migration and Urbanization in Africa: Key Trends and Issues Background Paper prepared for UN Expert Group Meeting on Sustainable Cities, Human Mobility and International Migration.
- 3. Awumbila, M., Owusu, G., & Teye, J. K. (2014). Can Rural-Urban Migration into Slums Reduce Poverty? Evidence from Ghana. https://opendocs.ids.ac.uk/opendocs/handle/20.500.124 13/14825
- Baye, F., Adugna, D., & Mulugeta, S. (2023).
 Administrative failures contributing to the proliferation and growth of informal settlements in Ethiopia: The case of Woldia Township. Heliyon, 9(3). https://doi.org/10.1016/j.heliyon.2023.e13758
- Duda, I., Fasse, A., & Grote, U. (2018). Drivers of rural-urban migration and impact on food security in rural Tanzania. Food Security, 10(4), 785–798. https://doi.org/10.1007/S12571-018-0788-1/METRICS
- 6. Frayne, B. (2004). Migration and urban survival strategies in Windhoek, Namibia. Geoforum, 35(4), 489–505. https://doi.org/10.1016/J.GEOFORUM.2004.01.003
- 7. https://www.az.com.na/
- 8. Hope K. R. (1998). Urbanisation and Urban Growth in Africa. Journal of Asian and African Studies 33(4): 345-358.
- 9. Kambowe, H. (2019). A qualitative study into the advocacy and activism of carers of adolescents with Down Syndrome in Oshana, Namibia (Master's thesis, Faculty of Health Sciences).
- 10. Nandjato, I. (2020). Ondangwa a growing economic hub, Retrieved from
- 11. Nickanor, N., Crush, J., & Pendleton, W. (2016). Migration, rural-urban linkages and food insecurity. Rapid

- Urbanisation, Urban Food Deserts and Food Security in Africa, 127–142. https://doi.org/10.1007/978-3-319-43567-1 10/COVER
- Niva, V., Taka, M., & Varis, O. (2019). Rural-Urban Migration and the Growth of Informal Settlements: A Socio-Ecological System Conceptualization with Insights Through a "Water Lens." Sustainability 2019, Vol. 11, Page 3487, 11(12), 3487. https://doi.org/10.3390/SU11123487
- 13. Okoro C, Adediran A, Umeokafor N (2023). Health and Wellbeing characteristics and impacts in informal settlements: Thematic and priority research areas. Digital transformation of health and safety in construction.
- Onyango, E. O., Crush, J., & Owuor, S. (2021). Migration, Rural–Urban Connectivity, and Food Remittances in Kenya. Environments 2021, Vol. 8, Page 92, 8(9), 92. https://doi.org/10.3390/ENVIRONMENTS8090092
- Venditto, B., Kamwanyah, N. J., & Nekare, C. H. (2022). Climate change, migration and urbanisation in contemporary Namibia. https://www.sitesideas.org/category/working-papers https://ideas.repec.org/s/awm/wpaper.html
- 16. Ward, P. M. (2015). Housing rehab for consolidated informal settlements: A new policy agenda for 2016 UN-Habitat III-1. www.lahn.utexas.org
- 17. Weber B, & Mendelsohn, J. (2017). Exploring ways to make Namibian urban development more socially just and inclusive Informal settlements in Namibia: their nature and growth Exploring ways to make Namibian urban development more socially just and inclusive (1st ed., Vol. 1). Development Workshop Namibia.
- 18. Weber, B., & Mendelsohn, J. (2017). Informal settlements in Namibia: Their nature and growth, Development Workshop Namibia, Windhoek.
- 19. Wu, F., Zhang, F., & Webster, C. (2013). Informality and the Development and Demolition of Urban Villages in the Chinese Peri-urban Area. Urban Studies, 50(10), 1919–1934. https://doi.org/10.1177/0042098012466600