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Land, livelihoods and housing Programme 2015-18 Working Paper

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Working Paper No. 7 Housing in Namibia: The challenges and prospects for adequate future provision

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1. Introduction – macroeconomic context

Housing is an important socio-economic variable that is usually guaranteed in national constitutions as a basic right. Access to housing should not be determined by gender, race, religion, political affiliation and/or wealth status. Fundamentally, adequate housing should be safe, secure and affordable, and must provide freedom from forced eviction. This guarantees security for the occupants, both in formal and in informal structures. These protected rights are usually guaranteed by the government, drawing from national (the constitution) and international conventions and agreements (e.g. the African Charter, the Universal Declaration of Human Rights, the Convention against Discrimination and Racism, UN Committee on Economic, Social and Cultural Rights etc.).

The analysis of the housing situation in a country can be divided into 1) the analysis of housing provision (i.e. the supply side), and 2) access to housing (the demand side). The house provision process starts with land surveying and servicing, followed by the construction of the housing units, and then the occupation/utilisation. The supply side of housing depends on the rules set by the land use and planning system. The demand side of housing is generally characterised by the commodification of housing, which limits the accessibility and affordability of (quality) housing by poorer sections of the community. Affordability is determined by price, and household factors like income level, housing quality, tenants' choice, and locality factors (e.g. the proximity and availability of services, the quality of infrastructure, the aesthetic environmental effect, etc.). Generally poor people find it expensive to buy or to rent houses, resulting in them being relegated to the fringes of society, and, in urban areas, to informal settlements. This research is premised on this view that the majority of (urban) people in Namibia, are excluded from the housing market driven by the market mechanism. To fully understand the gravity of the problem, it is necessary to conduct in-depth analyses of the functioning of the market mechanism in the housing market. The proponents of the market argue that the allocation of housing should indeed be left to the market because the market is efficient. However, the antagonists argue that markets sometimes fail because, where there is imperfect competition, they result in inequality (Stiglitz, 1989).

The application of the market economics to the Namibian housing market has resulted in a serious housing crisis characterised by a shortage of housing units, especially in urban areas, and the proliferation of informal settlements. The latter often lack basic services and sanitation facilities, posing the danger of the outbreak of diseases. There are three basic problems to the housing situation: first, many households lack adequate finance to buy or rent houses, in part because the existing stock of housing is less than demanded, and also because it is too expensive for many households; second house prices are too high, and the prices have been increasing at a fast rate over the past few years; and thirdly, many Namibians are excluded from the housing finance market because they have low incomes, are poor, or they are unemployed. These conditions have resulted in higher demand for cheaper houses, and property developers tend not to concentrate their efforts on this section of the market in part because it is excluded from the mortgage market.

The paper is structured as follows: the next section provides the macroeconomic background of the country, highlighting the variables that impact on the demand and supply of housing. This is followed by an analysis of the current house delivery system in the economy in section 3. Section 4 analyses the classification of households by income level. It also assesses their potential to participate in the housing market. Section 5 delves into the economics of housing supply and demand, while section 6 examines the housing finance market and its potential. Lastly, section 7 presents the key implications and conclusions of the study.

2. Macroeconomic background

Namibia is characterised by high but falling overall income inequality. Existing data shows that overall income inequality declined between 1990 and 2010. Detailed analysis of the changes in income distribution show significant redistribution from the richest population to the poorer population. The proportion of income going to the richest 20 per cent of the population declined from 78.7 per cent in 1993/94 to 57.3 per cent in 2009/10, while the proportion going to the poorest 20 per cent increased from 1.4 per cent to 5.5 per cent during the same period. That to the second poorest 20 per cent increased from 3 per cent to 8.2 per cent during the same period. However, inequality between quintiles has been increasing since 1993, which indicates growing inequality. The table below shows the percentage difference between the proportion of income going to the next 20 per cent of the population and the proportion going to the 20 per cent below it. There is growing inequality between adjacent quintile groups, and this may generate a growing sense of injustice. The situation is worse between the bottom quintiles. At the top of the income distribution, the inequality between the richest and second richest quintiles has been decreasing over time.

	1993/94	2003/04	2009/10
2 nd Poorest <i>less</i> Poor 20per cent	1.6	2.4	2.7
Middle Quintile <i>less</i> 2nd Poorest 20per cent	2.4	3.0	2.8
Second richest 20per cent <i>less</i> Middle 20per cent	6.1	7.0	7.1
Richest <i>less</i> Second richest 20per cent	67.2	53.6	39.2

Table 1: Inter-quintile percentage income differences

Source: Calculated from the Fourth National Development Plan (NDP4) (Republic of Namibia, 2012).

The main challenge for Namibia is to find mechanisms to curb the between-quintile inequality growth trend. In addition, the Gini Coefficient figures indicate that there is greater income inequality in urban than in rural areas. This may not be surprising given the rising unemployment, low average incomes, and high cost of accommodation within urban areas. Overall inequality decreased between 2009 and 2016. As of 2016, the Namibia Statistical Agency (NSA) stated that income inequality as measured by the Gini Coefficient had declined from 0.597 in the 2009/10 period to 0.572 in the 2015/16 period (NSA, 2018).

Namibia also faces high but declining levels of poverty. The extent of severe poverty¹ declined from 15.3% to 11% between 2009 and 2016, while the general headcount poverty level declined from 28.7% to 18% during the same period (Republic of Namibia, 2015). Infant mortality, a proxy for the level of poverty, declined from 50 per thousand in 2000 to 33 per thousand in 2016 (World Bank, 2018). This indicates that the investment made in providing primary healthcare, potable water and in controlling child killer diseases is bearing fruit. On this front, Namibia compares favourably with South Africa that had an infant mortality rate of 34 per thousand in 2016. The country has also managed to reduce malaria cases from 71 per thousand people in 2007 to only 14 per thousand in 2016. Botswana and South Africa have lower malaria incidence statistics.

Regional countries had higher infant mortality figures: Mozambique had 57 per thousand, Angola had the highest figure of 96 per thousand, and Zambia and Zimbabwe had figures in the 40s. Malaria cases are higher in Angola, Zambia and Zimbabwe. Namibia's success in controlling malaria comes from successful anti-malaria spraying campaigns, education programmes, availability of health services, and housing that exclude mosquitoes. Presumably, a rural housing programme that improves the housing in malaria-prone areas can help to further reduce the number of cases. However, the challenge is that there is no rural housing policy in place. The existing national housing policy refers and is more suitable to an urban than rural setup. Table 2

¹ The severe poverty line is based on the cost of meeting basic requirements for life.

summarises the economic outcomes of Namibia's development programmes. As stated above, the table shows that both poverty and inequality have been declining over time.

The development programmes had other development targets, for example, social transformation and skills development. The current development plan (NDP5) emphasises the need for skills training and tackling youth unemployment. The past NDPs missed their growth targets, in part because the targets were rather ambitious, and also because of exogenous shocks that affected the economy.

Despite the improving socio-economic statistics, one dimension remains stubbornly high: unemployment in the country remains high and increasing, measured at 28.1% in 2014 and 34% in 2016. Unemployment remains very high among the youth – it averaged 38.7% over the period 2011-2014, and over 40% in 2016. The existence of high unemployment means a large proportion of the population lacks income and therefore the ability to pay for its housing needs. Women are over-represented among the unemployed (31.7% in 2014; and 38.3% in 2016). Overall unemployment is also higher in rural than in urban areas. There has been consistent growth in the rate of urbanisation. For instance, while 39% of the population lived in urban areas in 2007, the proportion had increased to 46.7% by 2015 (World Bank, 2018). This implies that in 2015, close to half of the population lived in rural areas and on farms. The United Nation's Department for Economic and Social Affairs' 2014 Revision of World Urbanisation Prospects estimates that by 2020, the rural and urban populations will be 50% apiece (UN, 2015). Thereafter the urban population will continue to increase while the rural population decreases such that by 2050, about 68% of the population will be living in urban areas. The growing rate of urbanisation calls for concerted efforts towards the provision of services like water, sanitation and housing. The problem is much more serious for a country like Namibia where a growing proportion of the population lives in informal settlements and has low average incomes. The following table shows the proportion of households with access to protected water and sanitation facilities in the country.

Table 2: poverty and inequality targets and outcomes, 1995-2016

	Poverty reduction		Reduction of	inequality	Economic Growth		
	Target	Outcome	Target	Outcome	Target	Outcome	
NDP 1	Reduce the proportion of poor households from 47% to 40%.	Progress reduced by slow economic and employment growth.	Reducing income inequality (National Human Development Report (UNDP, 1998) the Gini coefficient was 0.7 for 1993/94)	Gini coefficient of 0.701.	Targeted growth average: 5%	Actual average growth: 3.6%	
NDP 2	10% reduction of poor households; 5% reduction of severely poor households.	Poor households declined from 38% (1993/4) to 28% (2003/4); severely poor from 9% to 4%.	Reduce the Gini Coefficient from 0.67 to 0.6; increase female representatives in parliament from 19% to 35%.	Gini Coefficient of 0.604 (2003/04); female representation in parliament was 28% (2004)	Targeted growth average: 4.3%	Actual average growth: 4.7%	
NDP 3	Eliminating severe poverty.	Severely poor households fell from 13.8% (2003) to 10.3% (2009); child poverty fell from 43.5% to 34.4% ² .	A targeted Gini Coefficient of 0.58; increase income of the poorest 25% by 12%.	0.58 (2009/10); incomes of the poorest 25% grew by 7.2%.	Targeted growth average: 5%	Actual average growth: 3.6% (cp. 6.1% in emerging and developing countries).	
NDP4	Reducing poverty from the 2009/10 level.	Extreme poverty fell to 5.8% from 7.3% (2009/10); General poverty fell from 28.7% (2009/10) to 18% (2015/16).	Increase income equality.	Gini for 2016 – 0.572	Targeted growth average: 6%	Actual average growth: 4.6%	

Compiled from the NDP2 (Republic of Namibia, 1999), NDP3 (Republic of Namibia, 2007) and NDP4 (Republic of Namibia, 2012), and the NHIES 2015/16 (NSA, 2018).

² The poverty statistics are based on national poverty lines.

Table 3 shows that there still exists a large segment of the population that does not have access to proper toilet facilities, especially in rural areas. That about a fifth of the urban population did not have access to toilet facilities in urban areas shows poor access to critical infrastructure, and this is chronic in informal settlements. Poor sanitation facilities tend to correlate with poor housing.

	2003/4		2009/1	0 (NHIES)	2013 (DHS)	
	Rural	Urban	Rural	Urban	Rural	Urban
Protected water source	79.4	99.4	74.6	98.9	71.9%	97.8%
Toilets	25	77	25.6	80.4	20%	73.2%
Bush system or no toilet	73	21.5	72.1	17.5	76.4%	20%
Bucket system	1.87	1.34	0.97	0.9	0.4%	0.6%
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 Table 3: Proportion of households accessing protected water and sanitation facilities

Source: UNICEF Namibia (UNICEF, n.d.) and DHS Programme (Republic of Namibia, 2014).

Compared to countries in the region, the rate of urbanisation in Namibia is less than that of South Africa (64.8% as of 2015) and that of Botswana (57.4%). However, Namibia's urbanisation rate exceeds that of Swaziland (21.3%), Tanzania (31.6%) and Zimbabwe (32.4%). Housing is topical in Namibia because of the fast urbanisation rate, driven by rural-urban migration fuelled by the desire for better services and jobs in urban areas. A high urbanisation rate puts pressure on services like water and sewerage provision, roads, housing, education and health services. For instance, Windhoek acts as a magnet attracting migrants from around the country. This puts a lot of pressure of the existing services, and the situation is made worse by the scarcity of water in areas around the capital. This calls for long term plans to manage migration and the provision of services in the capital city. Growing demand for housing with constrained housing supply have resulted in a shortage of affordable housing. In consequence, informal settlements have been established around major towns, and they have been growing. The Mass Housing Development Programme is an appealing and rational project aimed at addressing the housing situation in the country. The provision of affordable housing is a developmental goal in line with the provisions of international conventions to which Namibia is signatory. The MHDP fits into the current development policy as outlined in the NDPs that prioritise poverty and inequality reduction and affordable housing. Further, the 2015 Harambee Prosperity Plan (HPP), argue for the construction of the all-inclusive 'Namibian house' (Republic of Namibia, 2016, pp. 12, 41). However, the challenge is in ensuring that everyone has a place in the Namibian house when economic inequality and poverty are still high as mentioned above. To establish the structure and capacity of Namibian households to effectively participate in national development, especially on the housing side, the next section examines household incomes and income distribution in the country.

3. Current housing and provision

The structure of housing ownership

As an entry point into analysing hosing provision, this section starts by presenting the structure of housing ownership, based on the 2011 population and housing census data. Table 4 shows that the majority of households owned their houses, with no outstanding debts. The majority of such households were in rural areas and in informal settlements. Less than 15% of the households had mortgage loans to finance their housing needs. The low number of mortgage holders points to affordability problems. The low number is also partly explained by the low-income capacity of most households and the strict criteria applied by banks. As a result, mortgage finance is mainly available to high-income groups. In an interview conducted with NHE (Chiripanhura & Jauch, 2015), the institution argued that even low-income households receiving housing subsidies were being accepted for mortgage finance by banks. However, there is no information to corroborate this claim since the respective banks cannot provide the required information, and the 2011 data is rather old.

Tenure	Namibia	Urban	Rural
Owned with no outstanding debts	56.1%	23%	5.7%
owned but not yet fully paid off (e.g. with mortgage)	14.2%	37.4%	74.3%
Occupied free	12.6%	10%	15.1%
Rented without subsidy	9.1%	17.3%	1.1%
Rented with subsidy ¹	7.1%	11.9%	2.4%
Other, specify	0.9%	0.4%	1.3%

Table 4: Types of housing tenure in Namibia, 2011

Source: The Namibia 2011 Population and Housing Census Main Report, Table 7.2 (NSA, 2011).

¹ Assumes that dwelling rented by government, local authorities, parastatals and private firms for accommodation purposes are subsidised.

The table also shows that 16.2% of the households were in rented accommodation, of which 7.1% received housing subsidies. The bulk of rented accommodation is in urban areas, and only special groups receive subsidised rent. Key problems in the Namibian housing market are that the existing housing stock and rental accommodation are too expensive for the majority of the people. This has had the effect of pushing low income earners into high density areas and into informal settlements. The competition for cheaper housing is intense, causing low-income groups to face relatively higher rents. The situation is made worse by the lack of serviced land on which these groups can build their own houses. In the informal settlements, there is limited to no provision of electricity, potable water and sanitation facilities. Lack of these basic services reduces the quality of life of the inhabitants.

Housing delivery modes

The provision of housing in Namibia is largely left to individuals, non-governmental organisations and the private sector. For historical reasons, the government does not want to directly provide houses to households. The National Housing Policy envisages a number of possible modes of housing delivery in the economy. It proposes the provision of credit-linked housing (houses for sale), rental accommodation (including the rent-to-buy option), houses built by their owners, and subsidised housing for low-income households. The policy also includes a role for the government through the National Housing Enterprise (NHE) and councils to construct low-cost rent-to-buy housing for the poor. In addition to the policy targeted beneficiaries, there are special groups that need direct government attention to address their housing needs. These include war veterans, the disabled, the old-aged and other vulnerable persons.

The NHE builds houses for people earning N\$5,000 to N\$20,000 per month, or a combined income of up to N\$30,000 (Remmert & Ndhlovu, 2018). However, under the MHDP, the NHE's mandate was expanded to cover lower income households that used to be covered by the Build Together Programme (BTP). The BTP was initiated in 1992. It targeted low-income households with a monthly income of less than N\$3,000. The coverage overlaps the income group targeted by the Shack Dwellers' Federation of Namibia (SDFN). The SDFN was formed in 1998 as a housing savings scheme to assist the ultra-low-income households to save towards building their own houses. The SDFN gets government subsidies and builds houses for the very low-income groups (with monthly incomes below N\$2,000).

One aspect that is missing from the housing policy is the possible role that can be played by housing cooperatives. There is mention of community-driven housing processes (Republic of Namibia, 2009, p. 14) but without elaboration on the nature and structure. Although the SDFN is already doing this, it was not mentioned as an example. The community-driven housing processes could be linked to what the housing policy calls 'supporting people-housing processes'. Individuals can form cooperatives, contribute money to buy land and to construct houses, and allocate the houses to the members. In addition, employers can come up with housing schemes where both employers and employees contribute to a pot that will be used to buy land and/or construct houses.

Land servicing and allocation

The government leaves it up to local authorities to service and allocate land for housing, and through various development programmes, provides finance for the servicing of residential plots. Some local authorities partner with the private sector (i.e. public private partnerships (PPPs)) to service land. Others contract the private sector to service the land in return for other land elsewhere as payment. These arrangements are regarded as costly and driving up house prices. For instance, a prominent case is the land in Academia, Windhoek, that was serviced under a PPP arrangement. The plots were sold through an auction system and they attracted very high bids³ that many households could not afford.

Local authorities decide on the appropriate mechanism of allocating serviced plot, and this in turn impacts on housing supply. The auction system came under the spotlight in Windhoek with the criticism that it tended to favour established property developers and high-income people while disadvantaging low-income groups. This resulted in the supply of new houses being dominated by property developers who constructed houses affordable to middle and high-income groups. The approach used by the City of Windhoek perpetuated inequality. It is not surprising that the City was pressured to abandon the auction system (The Namibian, 2014c).

The MHDP and housing supply

The MHDP is a N\$45 billion housing initiative that was launched in 2013 to foster low cost housing for low income households that find it difficult to access housing through the competitive housing market. The BTP became temporarily put on hold during the MHDP. The components of the MHDP were land servicing, the construction of credit-linked low-cost housing, upgrading of informal settlements, improvements in rural housing and sanitation, and providing social housing. The responsible authority for the delivery of the houses was the NHE, which in turn contracted private sector companies to build the houses. The programme faced a lot of challenges ranging from costly houses to poor construction of the houses, leading to it being suspended in 2015.

The re-launched MHDP continues to deliver houses around the country, under the supervision of the NHE. The houses are subsidised by the government to make them affordable. The MHDP has different types of houses targeted at low and middle-income groups, and the government is committed to constructing about 5,000 new houses annually, in addition to serviced plots under the HPP. An example of the application of the subsidy is as follows: someone earning N\$2,700 per month can afford a type of house valued at N\$70,000, with a monthly instalment of N\$550 (Republic of Namibia, 2018). This entails a 65% subsidy (of N\$129,561) covering the cost of the land.

To qualify for the subsidised houses, a number of criteria must be met, including that one must be on the NHE waiting list, that the beneficiary must be a first-time buyer, that shacks won't be built on the plot, and that the houses should not change ownership for at least ten years from the day of allocation, after which the government holds the right of first option to buy any such house. It is anticipated that a revolving housing fund will be created, with the NHE playing a central role in setting up a housing loan facility (New Era, 2018a). It cannot be established whether or not the NHE has the institutional capacity to handle this role.

In 2014, over 60% of the population earned below N\$2700 (see Table 5). Assuming that the country's housing backlog of 110,000 consists of persons earning below N\$2,700, if all these people were to get the subsidised accommodation, the total subsidy bill will be a maximum of N\$297 million. This is not an impossible figure, given that the total amount initially envisioned for the MHDP was N\$45 billion. Effective implementation of the programme will increase the stock of houses, which should force prices down. However, there is need consider how this impact will affect the stability of the housing market in general, given the dominance of mortgage loans on banks' asset books. The IMF (2016) warned of a housing bubble building in the economy. The buy-to-let market that has been quite active

³ The lowest priced plots of land were sold for was N\$850,000 (The Namibian, 2014b)

on the middle to upper sections of the housing market may face significant challenges servicing mortgages, which will in turn affect banks and the financial sector as a whole.

The fear of a housing bubble caused the Bank of Namibia to take action. In early 2017, it introduced a policy that makes it increasingly expensive to buy a second, third or fourth property. The policy states that, as from the 22nd of March 2017, Namibian first-time buyers will be given mortgage loans with zero deposit (that is, 100% mortgages). However, the purchase of a second house is supposed to be backed by a 20:80 loan to value home loan; a third house requires a 30:70 loan to value home loan; and so on for additional home loans. The central bank argues that the policy gives an advantage to first time buyers to get up the property ladder. However, a closer analysis of household incomes (below) shows that it is unlikely that many people will have access to mortgage finance to get on the first step on the property ladder.

Another concern is that the MHDP may not benefit households that do not have a foothold in the formal labour market because they lack a consistent flow of income to service the housing loans. The programme would need to be refined to ensure that it accommodates the peculiarities of ultra-low-income households. Thus, instead of burdening such households with monthly loan obligations, the housing initiative must priorities allocating serviced plots to poor households so that they can, through an expanded BTP programme or in collaboration with the SDFN, build their own houses on an incremental basis with no binding mortgage obligations. In addition, the condition that the houses cannot be disposed of within a period of ten years may imply that the houses are not usable as collateral, thus denying households the benefit of a house as a financial and economic asset.

4. Household income analysis

This research on mass housing examines the housing situation in Namibia with the aim of improving the provision and accessibility of housing by low income households. The demand and supply of housing depend on the macroeconomic performance of the economy. Households rely on their earned income to pay for their housing needs. Existing data shows that the average household income in Namibia in 2014 was N\$6,626 per month (NSA, 2015). Table 5 shows that the majority of the households earn monthly incomes below this average. First, 55.1% of the households surveyed in 2014 earned less than \$1,000 per month. Secondly, 91.1% of the households earned monthly incomes that fell below the average income. This situation has not changed significantly since then, given that house prices have been increasing, unemployment has been increasing, and that wages have been growing slowly.

There are a lot of households of different sizes and structure in the economy. Household sizes also differ by region. Table 5 shows that the average household size consists of five persons, and the size has not changed significantly over the past six years. Ohangwena has the largest households, and Erongo has the smallest. Multiplying the total number of households by average household size gives a total population of 2.45 million people. Of this population, 2.23 million people are in households that had average household incomes below N\$6,000. This is worrying because it indicates that the majority of the people in the country have low incomes, and their participation in the formal housing market is therefore limited. As discussed later, the low incomes preclude the majority of the population from accessing mortgage finance from banks.

Columns 4 and 5 in Table 5 are obtained by applying the World Bank USD-denominated income classification categories (World Bank, n.d.-a)⁴ to the NLFS 2014 income data. The conversion gives comparable thresholds across countries. The upper limits of the NLFS 2014 income groups are converted to USD using the average exchange rate of the month of August 2014 (column 4), expressed

⁴ Themselves based on the Atlas method (World Bank, n.d.-b)

in per capita terms, and compared to the World Bank (monthly) per capita income classification groups:

- i) households with monthly per capita income that was less than or equal to USD87.08 (N\$4,367.48) fell in the low-income class;
- ii) those with monthly per capita incomes ranging from USD87.09 to USD343.75 (N\$17,238.72) were lower middle-income households;
- iii) those with monthly per capita incomes ranging from USD343.76 to USD1061.25 (N\$53,220.63) were upper middle-income households; and
- iv) those with average monthly per capita income above USD1061.25 were high income households.

The conversion and classification result in column 5. Converting the World Bank's upper middleincome limit to Namibian Dollars gives a minimum household income of N\$53,220.63 for the highincome group.

Household income (N\$)	No. of households	Proportion of total	NLFS Upper Limit Average household monthly income (USD) – WB equiv.	World Bank Income classification	Region	Average household size
<1000	286853	0.551	19.94	Low income	Zambezi	4.7
1000-2000	95756	0.184	39.88	Low income	Erongo	3.5
2001-3000	39212	0.075	59.82	Low income	Hardap	4.2
3001-4000	24358	0.047	79.76	Low income	//Karas	3.7
4001-5000	16759	0.032	99.70	Lower middle income	Kavango	6.5
5001-6000	11744	0.023	119.64	Lower middle income	Khomas	4.1
6001-7000	7422	0.014	139.58	Lower middle income	Kunene	4.4
7001-8000	6195	0.012	159.52	Lower middle income	Ohangwena	6.1
8001-9000	4537	0.009	179.47	Lower middle income	Omaheke	4.1
9001-10000	7219	0.014	199.41	Lower middle income	Omusati	5.2
>10000	20862	0.040	> 199.41	Lower middle income	Oshana	4.9
			>1061.25	High income	Oshikoto	5
					Otjozondjupa	4.1
Total	520917				Namibia	4.7

Adapted from the NLFS 2014 (NSA, 2015); Household sizes from the NHIES Report, 2009/10 (NSA, 2012); Income classification calculated from the World Bank Income Classification. Column 4 figures are based on a household size of 4.7 persons and the average August 2014 exchange rate of N\$10.67 per USD.

Applying the World Bank income classification to Table 5 shows that households that earned N\$4,000 per month and below can be classified as low income. These households constitute 85.7% of all households. Households that earned N\$4,000 and N\$10,000 were the (lower) middle-income group, and they constituted 10.4% of all households. As stressed later, the low-income group could not qualify for a mortgage to buy a house; and only 8.9% of Namibian households could afford to get a mortgage in 2014. The majority of the households that could afford mortgage finance were concentrated on the lower level of the housing market where transactional activity was highest and prices were pushed up because demand outstripped supply. This is because of a limited number of entry level properties, which forced prices to increase significantly, resulting in over-valuation (IMF, 2016) and extra pressure on household finances. The situation has not changed significantly since 2014. In fact, there has been significant expansion of informal settlements in urban areas, especially in Windhoek, since that time. This is because of high rural-urban migration with restricted supply of affordable urban housing.

Applying the World Bank classification on the NLFS 2014 data indicates that less than 15% of Namibian households can be classified as middle income, and about 4% can be classified as high income. Splitting the middle-income group into lower and upper groups may not be functionally useful in the case of Namibia. According to Table 5, the majority of Namibian households (85.7%) are low income and cannot access the formal housing finance market. These households should be the primary beneficiaries of a government-driven mass housing development programme. Another classification of Namibian households was done by the NPC (Republic of Namibia, 2018) at the beginning of the NDP4. Households were classified into three segments, namely ultra-low and low-income households (alternatively called the blue-collar class), the middle-income households (alternatively identified as the white-collar class, which consists of low, middle and upper middle-income earners), and the high-income households (or upper class) consisting of the rich and the super-rich. The low and middle-income groups were hardest hit by the shortage of housing in the country as they did not qualify for mortgage finance.

Another classification of Namibian households by income status was done by the Minister of Urban and Rural Development in a 2016 speech (Shaningwa, 2016). The minister identified the lowest income sector as having monthly incomes ranging from zero to N1,500 (p.4). She also identified a second income group with incomes falling in the range N1,501 to N4,600. The Minister identified the lower and middle-income categories that are intended to benefit from the government's grants and subsidies as falling within the income range N1,501 to N4,900 (p. 8). It is paradoxical that the government grants and subsidies will be targeted at this group to the exclusion of the lowest income group (0 – N1,500 monthly income).

The discussion above shows that there are a number of ways of classifying households by income level. The different categorisations do not read to the same conclusions, and may impact on policy focus. The MURD classification shows that the government wants the MHDP to focus on approximately 34% of the households, to the exclusion of the lowest income category that constitutes about a fifth of all households.

5. The economics of housing supply and demand

According to the national consumer basket, households allocate 28.4% of their incomes to housing (NSA, 2017). Increases in rents that exceed increases in incomes cause households to allocate an increasing proportion of income to housing, which reduces the amount of income left for other requirements. An analysis of the rental cost of accommodation, including imputed rent for owner-occupied houses, shows that housing costs (that is rentals, water, electricity, gas and other fuel charges) increased by an average 3.4% between 2010 and 2015. The highest increase in the cost of housing was recorded in 2011 when rentals increased by 7.45%. Given that the cost of other components of the consumer basket also increased during this period, it is apparent that on average household real purchasing power declined as incomes grew at a slower rate. Despite the increase in the cost of living, the demand for housing in the country remained high.

Housing demand

The demand for housing stems from the basic need for shelter. Households demand accessible, sufficient / appropriate and affordable housing, and this is not available on the market in Namibia. In addition, the growth of informal settlements where there is inadequate water and sanitation facilities is linked to the unaffordability of decent accommodation in urban areas. The Namibia Household Income and Expenditure Survey of 2009/10 reported that nearly a quarter of the population lacks access to decent housing. The main challenge that households face is the lack of affordability of existing houses. The Minister of Urban and Rural Development, Sophia Shaningwa (2016) defined affordable housing as 'the provision of housing units that are priced in that manner that will allow the

target beneficiaries, that is the lower and middle-income earners, to also be able to afford other basic living costs such as food, clothing, transport education and medical care" (p. 2). In the USA and in Australia, affordability is defined as a situation when a household can pay no more than 30% of its annual income on housing, while the UK's National Housing Federation uses a cut-off point of 25% (Colliers International, 2014). The 30% cut off is consistent with the weighting of housing expenditure in the national consumer basket used by the Namibia Statistics Agency to calculate inflation. The analysis of affordability can be divided between affordability in the rentals market, and in the sales market.

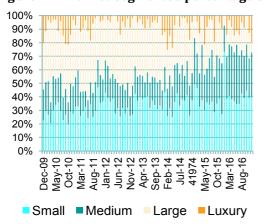
There is no consistent set of statistics showing the extent of the demand for housing in the country. However, such demand is exhibited by the proliferation of informal settlements around the country, the large numbers of people living in informal housing and settlements, sporadic demonstrations by different groups fighting for access to land, and the high density of occupation per room especially in towns, among other indicators. Although the average household size is about five persons, there are some large households consisting of up to 15 persons (NSA, 2012). Towns and local authorities do have some disjointed statistics of estimated housing backlogs. For instance, in 2008, Kalili, Andongo and Larson (2008) estimated a backlog of 61,710 units. In 2011, the IPPR estimated that the backlog amounted to 89,000 units, the bulk of which was at the bottom of the income distribution. The NHE Strategic Plan (2017-2022) estimated the backlog to be about 110,000 units, growing at an annual rate of 3,700 units. Housing Finance Africa (CAHF, 2018) put the NHE backlog alone as having increased from 76,800 in 2016 to 84,940 by mid-2017. The Minister of Urban and Rural Development, in 2016, quoted a national backlog of 100,000 housing units, with the largest backlog of 45,000 units being for the lowest income group with incomes ranging from zero to N\$1,500 (Shaningwa, 2016). The minister also mentioned that the National Housing Enterprise (NHE) had, as at October 2016, a housing waiting list of over 80,000 applicants. City councils have their own waiting lists, and there is no system of consolidating the backlog lists, and of eliminating double applications or listings. Despite the inconsistent estimates, it is apparent that the demand for housing is high and that it outstrips the supply, in part because of lack of affordability. In 2015, the median house price was \$868,000 (FNB Namibia, 2015). This has increased since then, and is not affordable to the majority of the people.

The growth in the backlog is a result of limited supply growth and higher demand due to growing numbers of households. Household size has been declining over time (from 5.7 persons in 1995 to 4.4 persons in 2016), and, according to Kalili (2017), new households increased from 63,426 in 1994 to 80,853 in 2016. During the same period, the number of shack accommodation increased by a ratio of 4:1 relative to modern housing. These figures point to significant challenges affecting the supply side of housing delivery, of which land use and valuation are important factors

The demand for housing is linked to the demand for land on which to build the houses. Access to land is very important in both rural and urban areas. In rural areas where land ownership is communal, individuals can be allocated land on which to farm and build a homestead by the traditional authorities and there is no need for servicing it (i.e. the provision of roads, water and sewer lines). New families can also construct their houses in or near the family compound. In urban areas where land is a scarce commodity the dynamics are different. It is the local authority that is responsible for giving access to serviced land, and this is done through the market mechanism. Supporters of the market mechanism argue that it is efficient in allocating resources, but this is usually at the expense of equity. The market tends to be ruthless, failing to take cognisance of social justice and power imbalance issues. It does not take into account the initial resource allocation. And this is the major problem with housing in urban areas where there is a growing housing gap as demand outstrips the supply of houses.

The housing gap differs across regions and cities, and by income group. It is more severe in towns than in others e.g. in Windhoek, Walvis Bay and Swakopmund. There are a number of factors that drive up the demand for housing. First, the urbanisation rate has been increasing over the years, and the growth in the urban population has not been met with similar growth in housing units. The growth of the urban population is driven by migration from rural to urban areas, and by reproduction and household formation within the urban areas themselves. As households grow, their demand for more living space also increases. With limited supply of housing units, the demand for housing ends up outstripping the supply. In addition, there may be a shortage of particular types of housing demanded by households. The market for low cost housing has fewer units relative to the demand, while the market for up-market and expensive houses tends to have houses available both for rental and for purchasing. The majority of the population cannot afford the latter. Figure 1 shows the activity rate in Market segments different segments of the market. Overall, the market seems concentrated in the small to medium

Figure 1: A market-segmented percentage breakdown of housing transactions approximately N\$2.6mn. These two segments constituted 70% of



Source: FNB Housing Index, December 2016 (FNB Namibia, 2016)

Annual growth across main

The figure shows that the volume of transactions of small houses the soundry thereasing since 2009. The segment recorded N\$3.5mn. In the medium segment houses segment of the market is the most active and has experienced significant price pro

because of der	-35%	
houses osansti	-32%	
prices shifted	-24%	
housing mark	-19% -17%	
smalbanadgued	-8%	
TKeettennshade fo	-8%	
with low of nc	0%	1%
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restricted thoi		7%
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for large houses continues to decline with volumes down to -47% during 4Q2016. Central property 1as also here gran wing transaction activity of medium sized transactiops of harge about servity is likely that growing house usest the wering reasing a competition over the lower year poor the or housing encodeds (13%) souppley undersoupples about that and the on secthon property an and the thrices bay of started to weaken. Across the household minicipalities in generative might be and the second se

the total volumes across the country as seen in the adjacent

graph. Volume trends upwards (16%q-o-q) in these segments as

Within the luxury segment (property deals over N\$6.5mn),

Isolated transactions took place at the coastal town and in central

Namibia which pushed the median price in the segment to

N\$16mn. Growth in this segment tends to be volatile as it is

dependent on movements of a few expensive transactions and

therefore may not be indicative of overall market strength or

weakness. Within, the large segment (property deals between

N\$2.7mn and N\$6.5mn) price growth tapered to 14%q-o-q during the fourth quarter with prices leveling at N\$3.4mn. The appetite

the prices remain within the affordability band of most.

high density and informal settlement areas of cities, Given average after prices averaged N\$900k in Gobabis, N\$1,300k in uality in the economy the majority of the population has Windhoek and N\$874k in Okanandja. 1 to the high-density areas which have not been expanding popelation those income households cannot access land at d from the prior to age has a class. Continue the chiegle powersty mate ous glowith safter prifes cook red 191460% - quffitter convergenteh dioseen of ilts valuenes comeined angels contraction theorized, in the final schedules Price growth has been substantially poor in areas such as Henties Bay; however, this has been overshadowed by higher prices in Swakopmund and at Walvis Bay, Median price, as at ing becenner for households in the middle of the income becenner for the was institution swakopmund and N\$790k in ot beichassified and way in some hence cannot access housing g Development Programme, and they do not have high e. This group has been growing while the suitable housing 77% and for housing. This shortage has been worsened by ^{84%}tion of the market where home owners tend to charge high

speculative activities in the rene to rentals in order to service their mortgages. The high rentals crowd out some households to lower sections of the housing market. The rising demand for housing is, as mentioned earlier, driven by fast growing urban population. Rural-urban migration is taking place at a fast rate, leaving town councils in a reactive mode. Shortage of affordable housing forces people into informal settlements. Despite the existence of programmes to upgrade informal settlements to provide decent housing, the slow pace of implementation of the programmes, together with financial constraints, means the existence of persistent excess demand for housing. The rate of rural infrastructure development is also very slow and is therefore unable to reduce rural-urban migration. The slow pace of house supply growth also causes excess demand for hosing to persist.

Housing supply

The housing gap can be examined from a supply side. In general, the supply of housing units has lagged behind the demand, resulting in higher housing prices. In addition, the housing supply curve is rather unresponsive, meaning there is a low response of the quantity of housing supplied to a change in the price of housing. With growing demand for housing, the average house price increases very fast, making houses unaffordable to low income households.

The housing backlog is an indication of the shortage of housing units, itself a result of the shortage of serviced land. Although there are many complex factors affecting housing supply, it is smarter to focus on the supply of serviced land. The limited supply of serviced land implies that it takes a long time for land applicants to be allocated serviced land from local authorities (Immanuel, 2015). There are accusations that some developers hoard land in order to push up house prices (Mwilima, Fillipus, & Fleermuys, 2011), but there is no data to verify the claim. Nonetheless, developers are fitting many small housing units on the available land. This maximizes the number of units for sale but it reduces the space available to households.

The land delivery system is long and cumbersome because it requires several approval processes by the local authorities and government (Sweeney-Bindels, 2011). Local authorities argue that they lack the resources to expedite land servicing. For example, the Windhoek City Council argues that the mountainous landscape around the city makes it more expensive to service the land, and this feeds into higher house prices. They also argue that land around towns and cities is private land that they have to buy from the owners before developing it, which takes time.

The slow supply of serviced land and its impact on house prices was also acknowledged in the government. It has introduced a number of interventions aimed at alleviating the problem. For instance, it offered funding for residential land servicing to some local authorities under the Targeted Intervention Programme for Employment and Economic Growth (TIPEEG) programme. Under the MHDP, the government committed to providing more serviced land around the country. The programme aimed to deliver 185,000 housing units by 2030 with an annual target of 10,300 units. However, in 2014, only 4,204 units were developed. The programme faced some challenges that resulted in the government stopping it in 2015 in order to reform the institutional framework and to renegotiate some of the contracts which were viewed as too costly. Nonetheless, new houses continue to be delivered and allocated around the country.

The government further committed to social transformation and provision of housing in the HPP. The HPP seeks to deliver 6,500 serviced residential plots and 5,000 housing units per year. As of April 2016, there were 34,483 urban serviced plots and 100,447 un-serviced ones. The distribution of the plots varies across regions. There are two separate sets of statistics linked to the MHDP and to the HPP. There is no clarity from the government whether one set subsumes the other or not.

Despite the government's interventions, property developers and individuals complain of failing to get serviced land from local authorities, which results in reduced housing construction. Restricted land supply results in high land prices and consequently costly houses, which many Namibians cannot afford to buy or rent.

The price of land accounts for a substantial portion of the cost of a new home. The impact of land cost on housing has been examined elsewhere, notably by MacFarlane (MacFarlane, 2017) for Scotland, who concluded that the rising house prices were mainly driven by rising land prices. Other studies that link land prices to house price volatility include Hannah, Kim and Mills (1993), Kok, Monkkonen and Quigley (2014), Knoll, Schularick and Steger (Knoll, Schularick, & Steger, 2017) among others. Wen and Goodman (Wen & Goodman, 2013) argued that there is significant reverse causality between urban land price house prices. Chiripanhura and Jauch (2015) stated that on average, the cost of land in Namibia constituted up to 40% of the cost of a new house. This indicates that land economics is at the centre of the housing situation in the country. As with goods, there is no one uniform land market: the land market varies across regions, in part because of differences in topography, availability of services (and/or cost of putting up services), and neighbouring developments. Apart from the limited supply of serviced land, Windhoek, until a few years ago, had the additional problem of allocating serviced land to the highest bidder. The competitive system resulted in poor and low-income people being unable to afford land. The people that won the bids tended to construct high value properties whose prices and rentals were unaffordable to the majority of the population.

Generally, there is no single consistent source of data on housing costs and supply. This research puts together data from different sources in order to enhance the picture of the housing situation. Table 6 below shows the average costs of buying and/or renting housing units in Namibian towns.

	Cost	Source	
1-bedroom apartment rental: in city centre	N\$4,500 - N\$8,962.13 per month	(Numbeo, 2018)	
: outside city centre	N\$3,500 - N\$7,500 per month		
3-bedroom apartment rental: in city centre	N\$8,000 - N\$18,000 per month		
: outside city centre	N\$6,273.49 - N\$17,000 per month		
Buying an apartment in city centre	N\$8,333 - N\$20,000/m ²	(Numbeo, 2018)	
: outside city centre	N\$4,500 - N\$17,000/m ²		
	SDFN: N\$900/m ² ;	(Chiripanhura &	
	Construction company average: over N\$6,000/m ²	Jauch, 2015)	
Construction costs	Otjomuise NHE houses: N\$4,393/m ²	(The Namibian, 2010)	
	NHE core house (2009): N\$5,900/m ²	(Sweeney-Bindels,	
	Conventional house (2009): N\$4,300/m ²	2011)	

Table 6: Average cost of buying and/or renting housing units in Namibia

The table shows the range of rent that one can pay for urban accommodation. Living in the city centre costs more than living in the outskirts. The same applies to buying in the city centre compared to buying in the outskirts of town. Outside the city centre, different residential areas have different rental and selling prices because of neighbourhood effects and income class. What is striking is the difference in cost per square metre in building a house between the SDFN (which builds houses for people on the lowest income level) and construction companies/property developers (that build houses for the middle to high income groups). One argument that has been advanced is that houses are expensive because of the high cost of building materials. It is baffling that the SDFN and the property developers are buying construction materials from the same suppliers, yet they have such a huge difference in their construction cost per square metre. A similar question was raised by the adviser to the Minister of Urban and Rural Development in 2014, querying why the NHE's cost per square metre was higher than that of a private developer that was constructing the Omeya Estate outside Windhoek (that caters or high-income households). These figures suggest there are some inefficiencies within the housing market that are forcing up prices.

The low supply of housing units around the country has contributed to rising prices. The most authoritative sources on the changes in house prices around the country is the FNB Housing Index. The index shows the average house prices in major towns. On average, house prices increased by 11.4% between 2010 and 2016. During that period, disposable incomes grew by an average 8% per year (Namibia Economist, 2016), which shows that incomes lagged behind house prices. The highest average price increase occurred in Katima Mulilo, Oshakati, Rundu and Windhoek. Between 2011 and 2016, the housing volume increased by approximately 30.5% and the average price increased by nearly 90%.

	2010	2011	2012	2013	2014	2015	2016	Average price increase (%), 2010-2016
Gobabis	383	481.50	608.5	620	630.2	783.5	900	15.8
Katima Mulilo	286	275	326.35	430	528.75	543	997.08	26.0
Oshakati	486.3	475	416.00	420	964.1	686	826.8	17.9
Otjiwarongo	377.5	447	592.5	678	735.08	750	755	12.8
Rundu	280	320.7	331	401	553.23	614.8	676.29	16.3
Swakopmund	612	580.5	700	787.5	750	875.8	1164.17	12.1
Walvis Bay	489.35	415	450	617.5	800	795.5	900	12.1
Windhoek	544	682.5	800	980	910	1150	1300	16.2
Namibia	450	480	609.75	640	700	800	850	11.4

Table 7: House prices in selected towns, 2010-2016 (N\$'000)

Source: FNB Housing Index, December 2016 (FNB Namibia, 2016)

Given the structure of income distribution, many households cannot afford to buy the existing stock of houses. The 2017 Africa Housing Finance yearbook reports the 2017 average cost of a newly build house in Namibia as N\$700,550 (or US\$52,681), and that only 19% of urban households could afford the house, given the existing mortgage financing arrangement. Linking Tables 4, 6 and 7 illustrates why many houses are unaffordable. Take the average house price in 2014 against the average household income: given that access to mortgage finance is determined by earnings, the average monthly income of N\$6,626 was inadequate to allow the average households to secure mortgages. Banks work with the assumption that the individual allocates a maximum of 30% of monthly income to housing/servicing the loan. This percentage determines the amount that the bank advances as a mortgage, which in turn determines the type of property an individual can afford. With our 2014 average household income of N\$6,626, an average household would have afforded monthly mortgage payments of N\$1,988 per month. Assuming a 25-year mortgage, the average household would have been granted a mortgage loan of approximately N\$596,340 when the average house price was N\$700,000. The average household would have been able to purchase a house in Katima Mulilo or Rundu only, but still had to come up with the necessary deposit and transfer costs amount. According to Table 5, over 90% of the households would not qualify for a mortgage. It is not surprising that Namibia is often ranked among the most expensive places in the world in terms of housing and housing provision (The Namibian, 2014a). The discussion above shows that apart from the constrained supply of houses, there is a serious problem of lack of affordability. Affordability is a function of three factors: income, price and finance terms.

6. The housing finance market

The performance of the housing market depends on the performance of the housing finance market. In Namibia, the main source of housing finance in mortgage finance. Since there are no building societies, it is commercial banks that offer mortgage loans. With existing data, it is not possible to extract information on the value of houses purchased on mortgage. There are ten licenced commercial banks in Namibia, the majority of which are foreign-owned. The concentration of lending in mortgages is a vulnerability threat to the banking sector that has forced the central bank to warn about rising household debts. Because of the structure and conduct of the banks, their lending policies are discriminatory and they mainly target formally employed persons. Even so, not all formally employed people have access to mortgage finance.

Access to mortgage finance is restricted to people that can meet set criteria that include a minimum monthly income threshold. Individuals that offer acceptable collateral can access mortgage finance, provided they can prove that they will be able to service the loan. The self-employed and those with low incomes have limited access to formal housing finance because they often fail to meet the stringent qualifying conditions. The key issues that determine the access to a mortgage are:

- (i) a consistent monthly income (and banks allocate 30% of normal after-tax income to mortgage repayment);
- (ii) a 'good' personal balance sheet with all monthly incomes and expenses; and
- (iii)good credit history. Banks check the credit history of loan applicants by checking whether or not the applicants are blacklisted by TransUnion⁵. Banks also check potential borrowers' other financial obligations that may impact on repayments.

Many low-income individuals fail to qualify for mortgages because they cannot meet requirements, even with the zero deposit as instructed by the Bank of Namibia. The type of house that a person earning the average income can afford is scarce on the market, especially in Windhoek. Lack of access of mortgages is partly to blame for the housing backlog in the country. The NHE stated that the beneficiaries of the MHDP are encouraged to source finance from banks, but the banks have generally been unwilling to do so. The government has often complained that banks were not playing their part in addressing the housing challenges that the nations is facing. This resulted in cabinet allowing the NHE to finance the purchase of houses constructed under the MHDP (New Era, 2018b). As mentioned above, it is not possible at this stage to ascertain whether the NHE has the institutional capacity to deal with low income mortgages. In addition, there is a danger that, where the state guarantees loans, a moral hazard problem arises where individuals enter into finance deals when they are quite aware of their inability to pay back the loans. Instead, they cause the burden to fall into the guarantor. For example, there is risk associated with an institution like the NHE offering subsidised houses where the occupiers use bank finance to pay off their portion of the cost of the house. Suppose the occupier fails to fulfil his/her loan obligation, banks will be more than willing to repossess the house and sell it in order to recover their money. The banks may or may not sell the house at market value. But the problem that arises is that this will transfer the subsidy value from the poorer occupier to richer buyers of houses at auction, thus perpetuating inequality in the economy. Where the house is sold at market value, the bank will profit from the state subsidy instead of the low-income household.

An additional problem affecting the housing market is possible lack of knowledge about the functioning of the mortgage market. IPPR (2011) argues that there is need for publicity by financial institution on the conditions and availability of mortgages. Banks would also need to become more creative and take on more risk by diversifying the clientele of the loan market. Since a large a section of society cannot access mortgage finance, then there is need for alternative forms of finance and housing delivery.

An alternative source of housing finance is people's own savings. It takes a lifetime for one person to save up enough money to buy a house. However, pooling of resources can reduce the time to acquiring a property. This can be achieved through housing savings clubs pooling their resources to buy land and/or to build houses. Thriving savings clubs exist under the initiatives of the SDFN. The SDFN reports that in 2013 it had a membership of over 20,000 households operating 605 savings schemes, and by that time had saved \$13 million for housing construction (SDFN, n.d.). The federation uses the generated resources to negotiate and buy land on which to build houses for the members. In cases where a basic structure is put up, the members have the chance to incrementally expand the structure to suit their needs. Because they do this with their own resources, they save on loan interest payment, and they have the flexibility to build at their own pace. Further, the SDFN collaborated with local authorities in implementing the BTP.

Another growing source of finance for housing is microfinance. The Consultative Group to Assist the Poor⁶ (CGAP, 2004, p. 1) defined housing microfinance as consisting of loans to low-income people for renovation or expansion of an existing home, construction of a new home, land acquisition, and basic infrastructure (e.g. connecting up to city sewage lines). Microfinance can potentially play an important role in providing finance for housing, especially when combined with the incremental housing process (Habitat for Humanity, 2015). Although microfinance institutions tend to charge higher interest rates

⁵ TransUnion is an independent commercial credit bureau (Informante, 2013).

⁶ A global partnership of more than 30 leading organizations that seek to advance financial inclusion housed at the World Bank.

than conventional banks, they may be the only accessible source of finance for financially excluded individuals. The loans make it possible for financially excluded households to speed up the construction of their houses, thus reducing costs in the long run. The loans tend to be short-term, and this affects how much households can borrow. In some countries, some microfinance institutions offer more than just financial assistance, but include construction advice, assistance and supervision.

Although there are microfinance institutions in Namibia, there is no record of any one of them specialising in providing housing finance. Given the cost of housing in the country, the existing institutions are unlikely to have adequate resources to advance as loans. Many of the existing microfinance institutions operate pay-day loan schemes geared towards consumption. A variant of housing microfinance is what is called a 'micro-mortgage'. This is more like a normal mortgage, but with a short duration (e.g. five to ten years). The loan amount is small enough to be affordable to poor households. It is mainly used to buy land, or to renovate existing structures, or for improvements like linking up to the electricity or sewerage network. These micro-mortgages are also more expensive than traditional finance.

Lastly, pension funds are another possible source of housing finance. Pension funds tend to have huge financial resources which can potentially be invested in housing schemes for their members (more like housing associations in developed countries) or for rental. Pension funds can provide long time finance beyond what traditional banks are willing to. Longer term finance (e.g. 30-year mortgages) comes with lower repayments for borrowers even though they pay more in the long term. With the low incomes in the economy, this is a good alternative. One challenge that such schemes may face is if the members lose their jobs and fail to service their loans (if it is a rent-to-buy arrangement). If the fund owns the houses and rents them out, then this problem disappears. The role of pension funds in housing is determined by the regulatory framework which may inhibit such investments. Since the government also uses pension funds monies to finance recurrent expenditure, it may not be willing to allow them to lock their funds in real estate.

7. Implications and conclusions

The housing situation in Namibia is a mixture of blessing and tragedy. It is a blessing to house owners that are experiencing growing equity. It is also a blessing to those in the buy-to-let market that are experiencing healthy returns. However, it is also a tragedy to the majority of the people who cannot access decent housing because it is too expensive for them. The macroeconomic analysis has shown troubling statistics of high inequality and growing unemployment.

The classification of households by income level has shown that nearly 90% of them earn no more than N\$2,700 per month. This is over two and half times less than the average monthly income. It has been argued that the low income makes it impossible for the majority of households to afford decent accommodation. It has been argued that the high cost of houses and the shortage of affordable accommodation have forced households to move down the housing structure. This has resulted in higher density on the lower levels of the housing spectrum, which has contributed to the proliferation of informal settlements.

A review of the MHDP has shown that it has recently been given a new lease of life. More houses are being constructed under the programme. Although the allocation of the houses is said to be based on the NHE housing list, there appear to exist some inefficiencies in the way waiting lists are maintained in the economy. Local authorities have their own lists, while the NHE has its own. There is no consolidated waiting list to eliminate duplicate allocations and/or registrations, and even to inform future planning. Despite the conditionalities that come with the house allocation, there are some loose ends that are not explicitly spelt out. For example, if the main beneficiary dies before the house is fully paid for, will it be left in the name of the household or will it be repossessed by the government, given that the houses must not change ownership within a period of ten years? These issues may not have been encountered yet, and there is no source that explains how they will be handled. The effective administration of the subsidised housing system requires that there be a comprehensive and up-todate property register linked to the national registration system and allowing for data sharing between social welfare ministries. This can help to address some problems that are likely to affect the MHDP like speculative acquisitions and double allocations.

The implementation of the MHDP gives the government the opportunity to address other problems in the economy. For example, it can link the construction of the houses with skills development. The HPP and the fifth national development plan stress the need for technical skills training, and for the provision of attachments to trainees. The tendering process can be modified to explicitly incorporate skills training, especially for the youth. There is also potential to cultivate linkages between manufacturing SMEs and construction companies where the former could manufacture and supply construction materials like window and door frames for the latter, thus creating more jobs and a sustainable local construction materials manufacturing industry. This can enhance value chains and backward and forward linkages in the economy. The employment creation possibilities of the MHDP are absent from current discussion of the programme, even though the Ministry of Labour conducted research exploring how the MHDP could be made employment-intensive.

The National Housing Policy needs to consider the possibility of using alternative technologies in constructing houses. This can help reduce construction costs. Building standards may therefore need to be revised to allow for this. For example, there are low cost housing programmes in other countries that use alternative construction materials. It is possible to adopt and adapt some of these technologies and produce the materials locally, which guarantees sustainability. It is possible that such alternative technologies may reduce labour usage in the short term, thus reducing the employment creation capacity, but the advantages will be lower construction costs, faster house completion rates, and decent affordable housing. Another example is that although land costs can be as high as 40% of the total cost of a house, SDFN has developed a cost effective and participatory method to deliver housing to people earning less than N\$1,500 per month. The people in the local community are engaged to build the houses, and this creates local jobs and boosts local incomes. Further, the government may not need to construct the social housing itself, but rather allocate serviced land to individuals to build their own houses. This approach allows households to participate effectively in building their own houses. Those that desperately need help can be assisted individually through a means-tested approach. The current system is rather political and populist in nature, but it has serious implications for government finances, especially given the current drive to reduce government debt.

Lastly, the housing processes in the country need to consider the implications of mass housing on energy demand. Namibia is a net energy importer, and massive expansion of the housing stock (especially in urban areas) put pressure on the national grid as demand for energy increases. The new houses require energy, and if the housing and energy policies are not communicating, there will likely be serious energy shortages in the future. This potential problem can be alleviated if the new housing initiatives consider the possibility of using energy-efficient construction methods and of renewable energy sources. There is also need for consideration of other services that come with housing to ensure that they are adequately provided and are affordable. Therefore, there is need for greater collaboration and coordination between government ministries to ensure that the resultant situation in the country is one that promotes higher living standards and quality of life.

References

- CAHF. (2018). Namibia| Centre for Affordable Housing Finance Africa. Retrieved from http://housingfinanceafrica.org/countries/namibia/
- CGAP. (2004). Helping to Improve Donor Effectiveness in Microfinance. Housing Microfinance (Donor Brief No. 20). Consultative Group to Assist the Poor. Retrieved from https://www.cgap.org/sites/default/files/CGAP-Donor-Brief-Housing-Microfinance-Aug-2004.pdf
- Chiripanhura, B., & Jauch, H. (2015). *Optimising the Potential for Job Creation and Skills Development through the Mass Housing Programme*. International Labour Organisation.
- FNB Namibia. (2015). *Housing Index. Third quarter 2015*. FNB Namibia.
- FNB Namibia. (2016). FNB Housing Index December 2016. Windhoek: FNB Namibia.
- Habitat for Humanity. (2015). *The State of Housing Microfinance. A snapshot of housing microfinance practice around the globe.* Habitat for Humanity. Retrieved from https://www.habitat.org/sites/default/files/cisf-hmf-survey-2015.pdf
- Hannah, L., Kim, K.-H., & Mills, E. S. (1993). Land use controls and housing prices in Korea. Urban Studies, 30(1), 147–156.
- IMF. (2016). 2016 Article IV Consultation Press release; Staff report; and statement by the Executive Director for Namibia (IMF Country Report No. 16/373). Washington, D.C.: International Monetary Fund. Retrieved from
 - https://www.imf.org/external/pubs/ft/scr/2016/cr16373.pdf
- Immanuel, S. (2015, February 20). Namibia's house prices spark land grab fears. *The M&G Online*. Retrieved from https://mg.co.za/article/2015-02-19-namibias-house-prices-spark-land-grab-fears/
- Informante. (2013, May 6). TransUnion tracks Namibian debtors | Informante. Retrieved from http://www.informante.web.na/node/12035
- Kalili, N. (2017, February). *The Namibian Housing Market and the FNB Housing Price Index*. Presented at the Department of Economics, University of Namibia, Windhoek. Retrieved from
- http://www.unam.edu.na/sites/default/files/events/public_lecture_mr_namene_kalili_27_february_2017.pdf Kalili, N., Andongo, J., & Larson, T. (2008). *Overview of the housing finance sector in Namibia* (Access to housing finance in
- Africa: exploring the issues. No. 5). FinMark Trust. Retrieved from http://www.housingfinanceafrica.org/wp-content/uploads/2008/11/AHFA_Namibia.pdf
- Knoll, K., Schularick, M., & Steger, T. (2017). No price like home: Global house prices, 1870-2012. *American Economic Review*, *107*(2), 331–53.
- Kok, N., Monkkonen, P., & Quigley, J. M. (2014). Land use regulations and the value of land and housing: An intra-metropolitan analysis. *Journal of Urban Economics*, *81*, 136–148.
- MacFarlane, L. (2017). *The housing land market in Scotland: A discussion paper*. Scottish Land Commission. Retrieved from https://landcommission.gov.scot/wp-content/uploads/2017/12/Land-Lines-Discussion-Paper-Housing-Land-Market-Dec-2017.pdf
- Mwilima, N., Fillipus, H., & Fleermuys, F. (2011). Evaluating the Namibian Housing Market: Opportunities and Constraints. Presented at the Housing in Namibia: Has the situation changed 21 years after independence?, Bank of Namibia.
- Namibia Economist. (2016, February 5). FNB housing volume and value index retreated. *Namibia Economist.* Retrieved from https://economist.com.na/15330/retail/fnb-housing-volume-and-value-index-retreated/
- New Era. (2018a, January 31). NHE to provide mortgage for mass houses. *New Era Newspaper Namibia*. Retrieved from https://www.newera.com.na/2018/01/31/nhe-to-provide-mortgage-for-mass-houses/
- New Era. (2018b, March 26). NHE starts funding Mass Housing units in Bukalo. *New Era Newspaper Namibia*. Retrieved from https://www.newera.com.na/2018/03/26/nhe-starts-funding-mass-housing-units-in-bukalo/
- NSA. (2011). 2011 Population and Housing Census Main Report. Namibian Statistics Agency.
- NSA. (2012). Namibia Household Income and Expenditure Survey (NHIES) 2009/2010. Namibian Statistics Agency. Retrieved from http://www.nsa.org.na/files/downloads/NHIES%20Main%20Report.pdf
- NSA. (2015). The Namibia Labour Force Survey 2014 Report. Windhoek: Namibian Statistics Agency.
- NSA. (2017). Namibia Consumer Price Index NCPI. Windhoek: Namibia Statistics Agency. Retrieved from
 - https://cms.my.na/assets/documents/NCPI_-_February_2017.pdf
- NSA. (2018). Namibia Namibia Household income and Expenditure Survey, 2015/16. Namibia Statistics Agency. Retrieved from https://nsa.org.na/microdata1/index.php/catalog/28/related_materials
- Numbeo. (2018). Cost of Living in Namibia. Retrieved from https://www.numbeo.com/cost-ofliving/country_result.jsp?country=Namibia
- Remmert, D., & Ndhlovu, P. (2018). *Housing in Namibia. Rights, Challenges and Opportunities*. Windhoek: Institute for Public Policy Research. Retrieved from http://ippr.org.na/wp-content/uploads/2018/03/IPPR_HousingBook_PRINT.pdf
- Republic of Namibia. (1999). National Plans / NDP 2 National Planning Commission of Namibia. Office of the President,
 - National Planning Commission. Retrieved from http://www.npc.gov.na/?page_id=206

- Republic of Namibia. (2007). *National Plans | NDP 3 National Planning Commission of Namibia*. Office of the President, National Planning Commission. Retrieved from http://www.npc.gov.na/?page_id=204
- Republic of Namibia. (2009). Namibia National Housing Policy. Cabinet Approved July 1991 and Reviewed July 2009. Ministry of Regional and Local Government, Housing, and Rural Development.
- Republic of Namibia. (2012). National Plans / NDP 4 National Planning Commission of Namibia. Office of the President, National Planning Commission. Retrieved from http://www.npc.gov.na/?page_id=202
- Republic of Namibia. (2014). *Namibia Demographic and Health Survey 2013*. Windhoek: Ministry of Health and Social Services & Namibia Statistics Agency. Retrieved from https://dhsprogram.com/pubs/pdf/FR298/FR298.pdf
- Republic of Namibia. (2015). Namibia Poverty Mapping. National Planning Commission.
- Republic of Namibia. (2016). Harambee Prosperity Plan 2016/17-2019/20. Republic of Namibia.
- Republic of Namibia. (2018). Special Programmes | Housing Sector National Planning Commission of Namibia. Retrieved from http://www.npc.gov.na/?page_id=424
- Republic of Namibia. (2018). Statement by Honourable Dr. Peya Mushelenga, MP, Minister of Urban and Rural Development on the Official handover of 54 houses constructed under the Mass Housing Development Programme (MHDP). Retrieved from

http://www.murd.gov.na/documents/99085/234750/MHDP+Katima+Mulilo+Draft+Speech+17+March+2018.pdf/88ff2ba6-7d3f-4339-9899-47aa16c32f3d

SDFN. (n.d.). Shack Dwellers Federation of Namibia. Retrieved May 27, 2018, from http://sdfn.weebly.com/

Shaningwa, S. (2016). Affordable Housing and Property Development Opportunities. Presented at the Invest Namibia Conference, Safari Hotel, Windhoek. Retrieved from

http://www.investnamibia.com.na/media/downloads/presentations/day2/affordable-housing-property-development.pdf

- Stiglitz, J. E. (1989). Markets, market failures, and development. The American Economic Review, 79(2), 197-203.
- Sweeney-Bindels, E. (2011). Housing Policy and Delivery in Namibia. Institute for Public Policy Research (IPPR).
- The Namibian. (2010, February 8). Long waiting lists for NHE houses. *The Namibian*. Retrieved from
 - https://www.namibian.com.na/index.php?page=archive-read&id=62558
- The Namibian. (2014a, May 22). Namibia: House prices rise higher than South Africa and U.S. Retrieved November 28, 2014, from http://allafrica.com/stories/201405220815.html
- The Namibian. (2014b, October 29). Some Academia plots to be re-auctioned. *The Namibian*. Retrieved from https://www.namibian.com.na/index.php?page=archive-read&id=129838
- The Namibian. (2014c, October 31). City to review land auction ban. *The Namibian*. Retrieved from https://www.namibian.com.na/index.php?page=archive-read&id=129905
- UN. (2015). *World Urbanization Prospects: the 2014 Revision*. New York: United Nations Department of Economic and Social Affairs.
- UNICEF. (n.d.). *Sanitation: A Namibia fit for children*. United Nations Children's Emergency Fund. Retrieved from https://www.unicef.org/namibia/Sanitation_fact_sheet_print.pdf
- UNDP. (1998). *Human development report 1998*. New York: United Nations Development Programme. Retrieved from http://hdr.undp.org/sites/default/files/reports/259/hdr_1998_en_complete_nostats.pdf
- Wen, H., & Goodman, A. C. (2013). Relationship between urban land price and housing price: Evidence from 21 provincial capitals in China. *Habitat International*, *40*, 9–17.
- World Bank. (2018). World Development Indicators | DataBank. Retrieved from

http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators

- World Bank. (n.d.-a). How are the income group thresholds determined? World Bank Data Help Desk. Retrieved from https://datahelpdesk.worldbank.org/knowledgebase/articles/378833-how-are-the-income-group-thresholdsdetermined
- World Bank. (n.d.-b). The World Bank Atlas method detailed methodology World Bank Data Help Desk. Retrieved from https://datahelpdesk.worldbank.org/knowledgebase/articles/378832-what-is-the-world-bank-atlas-method