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Working Paper

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Working Paper No. 8

Assessment of Housing Needs in Namibia

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DEFINITIONS

The Definitions stated below are as per the Namibian Statistics Agency 2001 Population and Housing Census Report (Central Bureau of Statistics, National Planning Commission, 2003, p. 85) if not otherwise referenced.

TERM	DEFINITION
Commercial or Industrial Flats:	Living premises, which are also used for commercial or industrial purposes. That is a housing unit that is also partly used as a bottle store or a supermarket, or a workshop, is categorised as a commercial or industrial flats.
Detached House:	A house on its own and not attached to another house.
Economically Active Population:	The economically active population is composed of employed and unemployed persons in the working age (15 years and above), also referred to as the labour force (Namibia Statistics Agency, 2012b, p. 13).
Flat:	A self-contained living premise in a building with one or more floors, and with common entrances. Flat is used interchangeably with "apartment."
General Valuation Roll:	A legal document that consists of property information of all rateable properties within the boundaries of a municipality (City of Johannesburg, 2007, p. 1). In Namibia it is produced according to legislation at least every 5 years (Government of the Republic of Namibia, 1992, para. 66(2)) contains i.e. name of owner, size, extent and total value of the property. Value of land and value of improvements are shown separately (Government of the Republic of Namibia, 1992, para. 67(1)(d)).
Guest Flat:	A self-contained living premise in the same compound as a detached house.
Household:	A person or group of persons, related or unrelated, living together in the same house/dwelling. They have the same catering arrangements and are answerable to the same household head (Central Bureau of Statistics, National Planning Commission, 2003, p. 81).
Housing:	Any shelter, lodging or dwelling house or dwelling unit, residential land, etc.
Housing Backlog:	A housing backlog is the under provision in housing that has accumulated against previously planned targets (Cornwall Council, 2013, p. 1) or unfulfilled demand.
Improvised Housing:	Housing units built of discarded materials (such as cardboards, plastic sheeting, flattened empty tins, etc.), corrugated iron roofing sheets, derelict vehicles parts and carts, clay or mud, cow dung, etc.; but that are not traditional housing.
Mobile Homes:	Living premises that be moved or transferred or transported, such as tents, caravans, etc.
Semi-Detached House:	A house that is attached to another but with its own facilities and a separate entrance.
Single Quarters:	A room or a set of rooms with shared toilet and kitchen facilities, and commonly leased by the occupants or residents.
Suitable Housing:	Housing that is fit for human habitation (such as detached house, semi-detached house, flats, guest flats, commercial or industrial flats, traditional dwelling, etc. Suitable housing excludes single quarters, improvised housing (such as shacks) and any other types of housing not suitable for human habitation.
Traditional Dwelling:	Housing that comprises of a hut or a group of huts walled or un-walled with sticks, poles with or without thatch or grass.
Unsuitable Housing:	Housing that is not fit for human habitation such as shacks.

1. Introduction

The need for urban housing depends highly on the number of people living in towns and cities. Globally the number of people is increasing rapidly and it is estimated that by 2030 the population will be around 9 billion rising to 11 billion by 2050 (Rizvi, 2016). At the same time urbanisation rates are high and it is expected that two-thirds of the global population will be living in urban areas in 2030 and of which around 50% "will be living in poverty, in substandard housing or in slums" (Rizvi, 2016) due to a shortage in the provision of affordable serviced land. This global trend is also noticeable in many African countries which are facing massive urbanisation and thus putting even more pressure on the housing demand which comes in addition to the already existing high backlog on affordable housing. This is also the scenario in several urban areas in Namibia.

According to the Namibia National Housing Policy (NHP), housing is one of the Namibian government's development priorities (Ministry of Regional and Local Government, Housing and Rural Development, 2009, p. 4). The NHP further outlines that it is the role of the government to ensure an inclusive development process and to make provision for people excluded from the formal housing market to access land, housing and services. The NHP acknowledges that empowerment of local rural and urban communities as well as individuals depends on property rights and people's access to credit by making use of their properties assets. The NHP further suggests an integrated approach to housing, including both rural and urban development, while aiming at "creating sustainable human settlements" (Ministry of Regional and Local Government, Housing and Rural Development, 1991, p. 4). The vision is that "[b]y 2017, Namibia will have a robust and effective housing delivery programme where affordability is the key feature of the programme; and that 60% of households will be living in modern houses" (Office of the President, National Planning Commission, 2012, p. xvi). Despite national intentions to enhance housing infrastructure, the number of people living in substandard housing in informal settlements is on an increase, due to various challenges.

The main challenges in the Namibian housing sector are exorbitant prices partly due to mismatches between the demand for and the supply of housing. According to the National Planning Commission (NPC), there has also been a lack of governmental funding for housing programmes for the low-income and middle-income groups. A study carried out by the Bank of Namibia (BoN) in 2011 concluded that around 70% of Namibians are excluded from credit access and thus "cannot access urban freehold land due to, amongst others, limited disposable income, poverty and exclusion from conventional home loan facilities" (Bank of Namibia, 2011, p. 19).

Country-wide, there are issues with the provision of sufficient land, and particularly in urban areas there is a shortage of affordable land. The urban population has increased from 28% in 1991 to 42% in 2011 (Namibia Statistics Agency, 2012a, p. 38) and is currently estimated to be around 50%. According to a study by the Bank of Namibia the country had a housing backlog of 300,000 units in 2011 with an increase from 80,000 units in 2007 (Bank of Namibia, 2011, p. 12). The increase in the housing backlog is amplified by the fact that there is a decrease in the average household size nationwide, from 5.1 in 2001 to 4.4 in 2011 (Namibia Statistics Agency, 2012a, pp. 39 & 44). The decrease in household size combined with the increase in population puts more pressure on the demand for housing. Notwithstanding the decrease in average household size, the main shortage of housing is amongst households earning less than NAD 5,000 per month (Chiripanhura & Jauch, 2015, p. 9).

The housing related issues outlined above call for an analysis of the current and future housing needs in Namibia in order to estimate the future need for housing. However, currently there is no methodological approach that is being used by local or regional or national governments in Namibia to estimate the number of households required over a certain period. Some local authorities based the housing needs on the applications they receive for residential land. However, this is not good enough since the number of current applicants does not include the projected households who have not yet applied for residential land (or housing).

Hence, this report analyses the housing assessment methodological approaches used by other authorities outside Namibia and applies one of those approaches to assess the housing needs in Namibia.

2 Housing Needs Assessment

2.1 Housing Needs Definition

There are various definitions of housing needs. According to Heath (2014), housing needs can be defined as a normative notion, which focuses on groups of people with no access to housing of acceptable standards. Heath defined housing needs as "the number of households that do not have access to accommodation that meets certain normative standards".

2.2 Housing Needs Categories

Despite the different definitions that exist, housing needs can be categorised into two groups, being need-as-aspiration and need-as-demand (Peter Brett Associates, 2015). Housing need-as-aspiration depends on individual preferences, and it is thus an individual's behavioural response to his or her housing situation (Steele, 2010 and Opoko, Ibem & Adeyemi, 2015). This is attained by relocating or altering existing housing environment. The housing need-as-aspiration creates a much larger number of housing needs compared to the housing need-as-demand. However, housing need-as-aspiration has some practical implications for plan targets and land allocations.

On the other hand, housing need-as-demand refers to the "scale and mix of housing and the range of tenures that is likely to be needed in the housing market area over the plan period [which] cater for the housing demand […] and identify the scale of housing supply" (Peter Brett Associates, 2015, p. 41). Hence, in the context of this report, the housing need assessment focuses on the housing need-as-demand.

2.3 Housing Needs Assessment Methodological Approaches

There are various methodological approaches for assessing housing needs in a country, region or local area. Determination of the housing needs is therefore not a precise science, as there is no specific approach that can deliver a definitive answer.

Despite numerous methodological approaches, this section reviews two approaches that can potentially be used to establish housing needs in Namibia. These are Leung's Need-Gap Analysis and the United Kingdom's Department for Communities and Local Government's Strategic Housing Market Assessment (SHMA).

2.3.1 Leung's Need-Gap Analysis

The housing needs assessment can be undertaken in accordance with using the Need Gap Analysis approach. According to Leung (2003), a Need-Gap Analysis is an exercise that determines how much land is required to accommodate housing needs in a city or town. Such analysis is to be carried out by following the steps outlined in Figure 1 below:

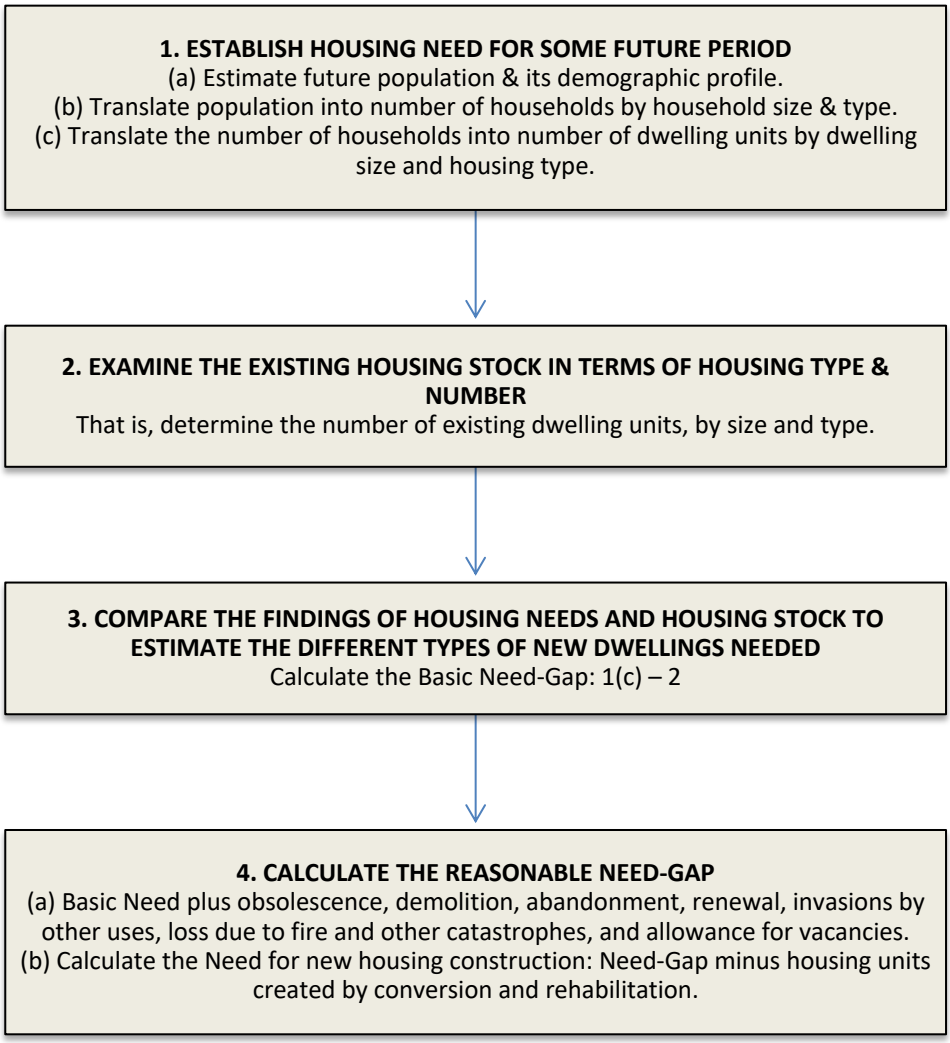


Figure 1: Need-Gap Analysis
Source: Leung, 2003.

2.3.2 United Kingdom's Department for Communities and Local Government's Strategic Housing Market Assessment

The United Kingdom's Department for Communities and Local Government's Strategic Housing Market Assessment (SHMA) is conducted by following the four stages outlined by Figure 2 (Department for Communities and Local Government, 2007).

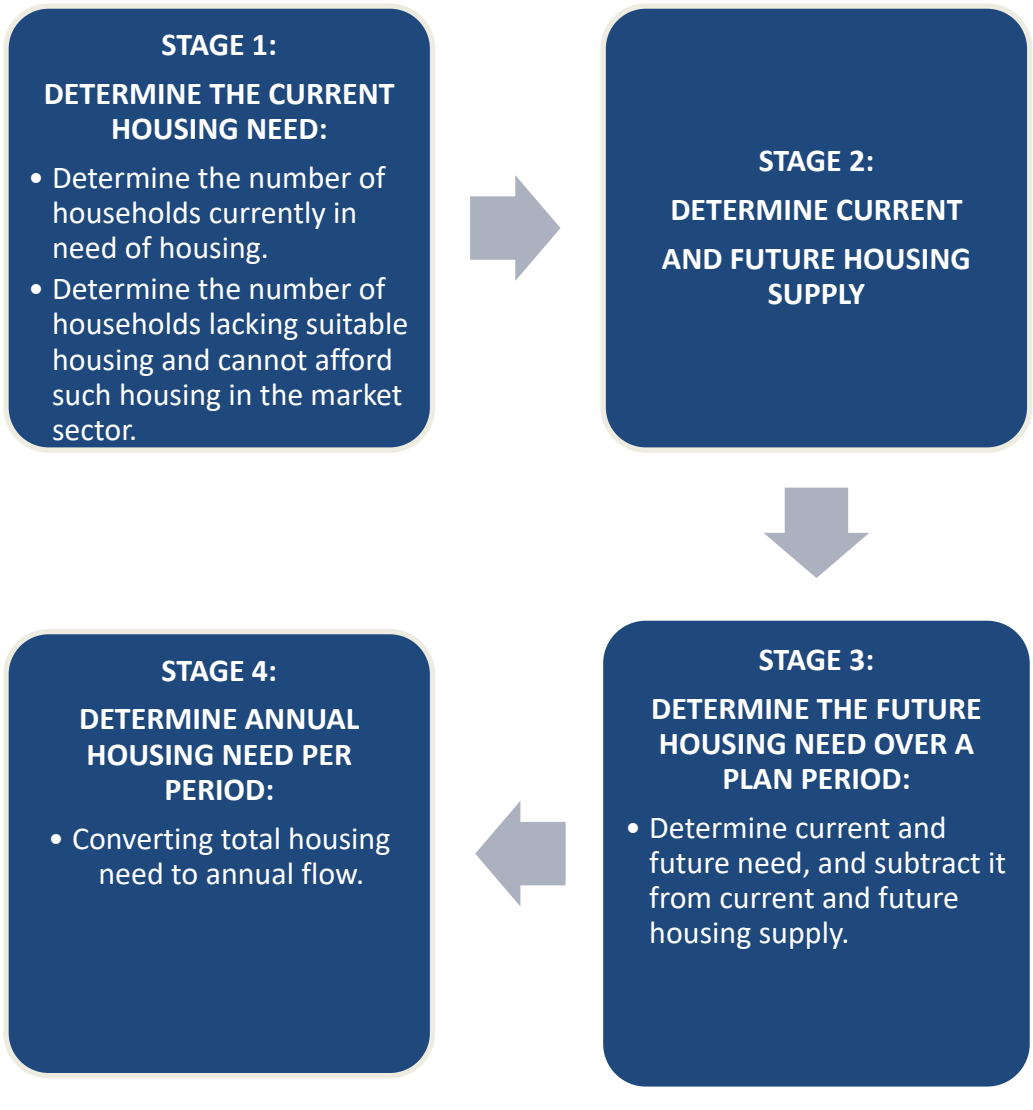


Figure 2: Housing Needs Assessment Methodological Approach
Source: Department for Communities and Local Government, 2007.

3 Methodological Approach for Housing Needs Assessment in Namibia

There is no specific methodological approach that is being used by governments at local, regional or national levels in Namibia to determine housing needs. In view of this, this study utilises the U.K.'s Department for Communities and Local Government's housing needs assessment sequential approach as outlined in Section 2 of this report, by determining: current housing needs in Namibia; current and future housing supply in Namibia; future housing need over the plan period in Namibia; and annual housing needs per period in Namibia. Leung's Need-Gap Analysis could not be used in assessing the housing needs in Namibia, due to limited data that is required to factor into the analysis.

3.1 Stage 1: Determine the Current Housing Needs

This stage involves determining the existing number of the households who are currently in need of housing. These are the households who either reside in unsuitable housing and/or who cannot afford housing in the formal market sector. In the context of this report, unsuitable housing is defined by the following criteria:

- Improvised Housing (includes shacks);
- Mobile Housing such as caravan or tent;
- Single Quarter Housing, and
- Other types of housing not mentioned above (excluding detached and semi-detached housing, town houses, flats, flats in a commercial or industrial area).

3.2 Stage 2: Determine the Current and Future Housing Supply

(a) Current Housing Supply

This stage establishes the current and future supply of housing. The current housing supply is determined from the current residential vacant erven (as per the latest General Evaluation Rolls from local authorities). In particular, the number of vacant erven that are zoned as "Single Residential" or "Residential" or "General Residential" or "Residential 2 and above" have been compiled to determine the current available vacant residential erven.

It is important to take into account the density zoning of "General Residential" or "Residential 2 and above" zoned erven, because these types of erven cater for high-density residential developments and thus can accommodate more than one dwelling unit. However, the density zonings for the high residential density erven could not be obtained from local authorities. In the absence of the density zonings of the aforementioned erven, in terms of this study, such erven were evaluated as standard erven that can only accommodate one dwelling.

(b) Future Housing Supply

The future housing supply was derived from the total number of available residential land (serviced and un-serviced). The total number of available residential land parcels was obtained from some local authorities and from the Ministry of Urban and Rural Development's Massive Urban Land Servicing Project Report (Draft Implementation Plan) dated 2016.

Of those serviced or un-serviced residential land parcels that make up the "future housing supply", some of the land parcels have:

- only been approved by Council, but not approved by the Minister of Urban and Rural Development (through the Namibia Planning Advisory Board and/or the Townships Board);
- been approved by the two aforesaid boards, but not yet been surveyed;
- been surveyed but not yet registered by the Registrar of Deeds; and
- gone through all the planning processes, whereby approval have been granted by Councils and the two boards, the surveying has been concluded and diagrams or general plans have been approved by the Surveyor General and the properties have been registered in the Deeds Office.

(c) Overall Housing Supply

The current and future housing supply, as determined in sections (a) and (b) above, were thereafter added together to get the overall housing supply per region. Although the overall housing supply is for all regions, not all local authorities or village councils have available data on their current and future housing supply. Furthermore, the rural areas that are not yet proclaimed as village councils or settlements are excluded from the calculations due to the unavailability of data.

3.3 Stage 3: Determine the Future Housing Needs Over the Plan Period

The determination of the future housing needs over the plan period involves projecting the total number of needed housing over the plan period. In projecting the future housing needs, three periods are used, namely:

- Short Term: 2017 – 2020;
- Medium Term: 2021 – 2030; and
- Long Term: 2031 – 2041.

The year 2011 is used as a base year, because the household data used is based on the 2011 Census Data. The "current housing needs" identified in Stage 1 is added to the "future housing" needs for the 2017-2020 period to determine the actual housing needs for the 2017-2020 period.

3.4 Stage 4: Determine the Annual Housing Needs per Period

The total housing needs for the plan period is converted into an annual flow per period.

4. Results of Housing Needs Assessment in Namibia

The results of the assessment of housing needs in Namibia are outlined by the proceeding sections. This was undertaken using the secondary data derived from the Namibia Statistics Agency's census data, the General Valuation Rolls of various local authorities in Namibia, as well as from the Ministry of Urban and Rural Development's Massive Urban Land Servicing Project Report dated 2016,

4.1 Current Housing Needs in Namibia

In order to establish the "current housing needs" it is first vital to determine the existing and projected number of households, and household types in Namibia. A household is defined as a group of related or unrelated people who live in the same dwelling unit and share catering arrangements (Namibia Statistics Agency, 2012a).

4.1.1 Existing and Projected Number of Households in Namibia

The number of households per region in Namibia in 2001 and 2011 were derived from the 2011 Census. On the other hand, the number of projected households from 2016 - 2041 is calculated using the geometric growth projection method using the year 2011 as the base year. A geometric change method is appropriate when it is expected that ''a population will change by the same percentage rate over a given increment of time in the future as during the base period" (George, Smith, Swanson, & Tayman, 2004, p. 566). Geometric projections can be calculated using the following formula:

$$Pn = Po\ (1+ r)$$

Where:

Po is the total number of households in 2011.
t is the period of time, in years (being 9, 19 & 30 years for 2020, 2030 & 2041 respectively).
r is the annual rate of increase.
Pn is the total number of households at the end of each period (2020, 2030 or 2041).

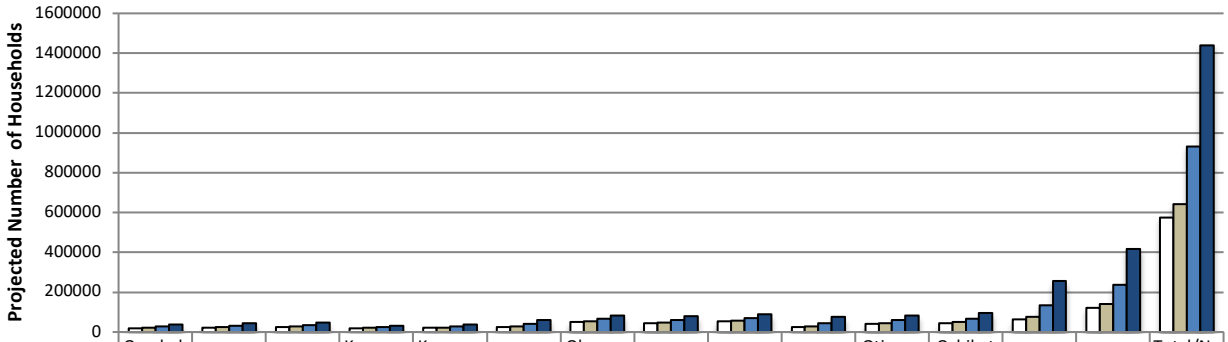
Table 1 shows that the Khomas Region has the highest number of households, with about 121,700 households in 2017. The second and third regions with the highest number of households are Erongo and Omusati Regions with over 50,000 households in 2017.

Table 1: Number of Total Households per Region

Region	2001*	2011*	2016**	2017**
Omaheke	12,590	16,174	9,551	19141
Hardap	15,039	19,307	22,207	22837
Zambezi	16,839	21,283	24,244	24883
Kavango East	15,406	18,011	19,586	19917
Kavango West	15,061	18,730	21,125	21640
‖Karas	15,481	20,988	24,996	25885
Ohangwena	35,958	43,723	48,652	49703
Oshana	29,557	37,284	42,419	43528
Omusati	38,202	46,698	52,127	53286
Kunene	12,489	18,495	23,391	24516
Otjozondjupa	25,338	33,192	38,665	39864
Oshikoto	28,419	37,400	43,695	45076
Erongo	27,496	44,116	59,161	62737
Khomas	58,580	89,438	115,610	121700
TOTAL	**346455**	**464839**	**545430**	**574714**

* Source: Namibia Statistics Agency, 2012a.
** Source: Geometric Growth Projection Calculation.

The number of households is expected to increase in all regions across the country. As shown by Figure 3, it is projected that by the year 2020, the number of households in Khomas and Erongo Regions will increase the most compared to other regions. In 2030, Khomas Region is expected to have the largest number of households in Namibia followed by Erongo Region.



	Omaheke	Hardap	Zambezi	Kavango East	Kavango West	//Kharas	Ohangwena	Oshana	Omusati	Kunene	Otjozondjupa	Oshikoto	Erongo	Khomas	Total/Namibia
2017	19141	22837	24883	19917	21640	25885	49703	43528	53286	24516	39864	45076	62737	121700	574714
2020	20822	24837	26906	20945	23260	28747	52993	47032	56921	28226	43687	49486	74815	141964	640640
2030	27570	32857	34912	24768	29590	40776	65615	60879	70925	45147	59282	67547	134546	237207	931622
2041	37543	44701	46496	29785	38559	59895	82998	80864	90340	75686	82938	95113	256592	417227	1438736

Figure 3: Projected Number of Households Regionally and Nationally
Geometric Growth Projection Formula: Pn = Po (1+ r)

The household projections for 2020, 2030 and 2041 vary widely across the country. The variance in projections can be attributed to migration and other factors. By 2041 the Khomas, Erongo and Oshikoto Regions will have the highest number of households, while the Zambezi, Omaheke and Hardap Regions are projected to have the least number of households.

4.1.2 Household Types in Namibia

This section focuses on the current household types in Namibia, as stated in the "Definitions" section of this report. The Namibia Statistics Agency (2012a; 2012b), identified the following types of housing in Namibia:

- Detached house;
- Semi-detached/townhouse;
- Apartment/flat, guest flat;
- Flat in commercial/industrial;
- Mobile home (caravan, tent);
- Single quarters;
- Traditional dwelling; and
- Improvised housing unit (shack).

According to the Namibia Statistics Agency (2012a), and as shown by Figure 4, detached and semi-detached housing, and traditional housing make up 38% of all households in Namibia.

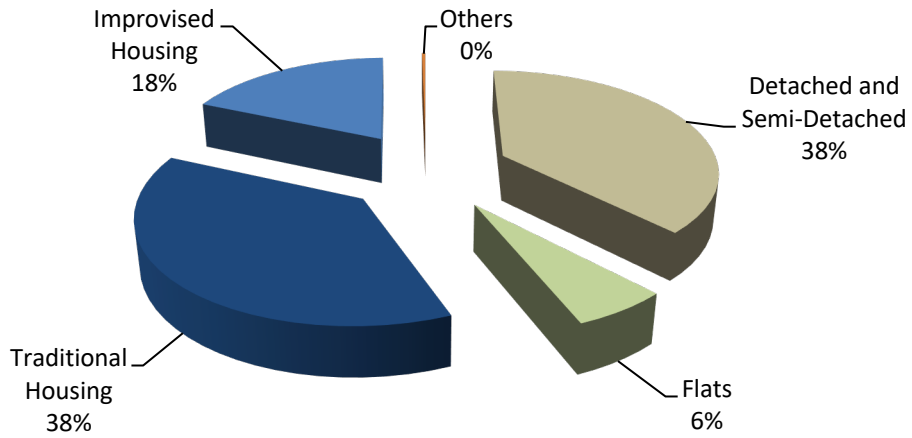


Figure 4: Household Types in Namibia
Source: Namibia Statistics Agency, 2012a.

Traditional housing is most common in rural areas. Traditional dwellings are mostly used in the northern regions, such as Omusati, Ohangwena and Kavango Regions. The number of traditional housing is also higher because it is deemed more affordable when it comes to building costs. People mostly use materials available in their vicinity, such as clay soil for the walls, sticks for foundation, hay or grass for the roof, depending on the area in which they live. It should also be pointed out that, nowadays some inhabitants in rural areas are building houses using durable materials such as cement bricks (for the walls), cement concrete floors, iron sheets/tiles roofs like in urban areas.

Detached and semi-detached housing makes up the second most common type of housing, making up 44% of the households in Namibia. Detached and semi-detached housing are the most popular kind of housing in urban areas.

Improvised housing has the third largest share, being 18% of the existing households. Improvised housing is found in all urban areas. This type of housing emerged due to various circumstances. One of the reasons is the slow pace of land delivery in Namibia, and subsequently unavailability of serviced residential land. Another reason is unaffordability of housing in the formal market sector, which lead people to erect shacks on mainly municipal land.

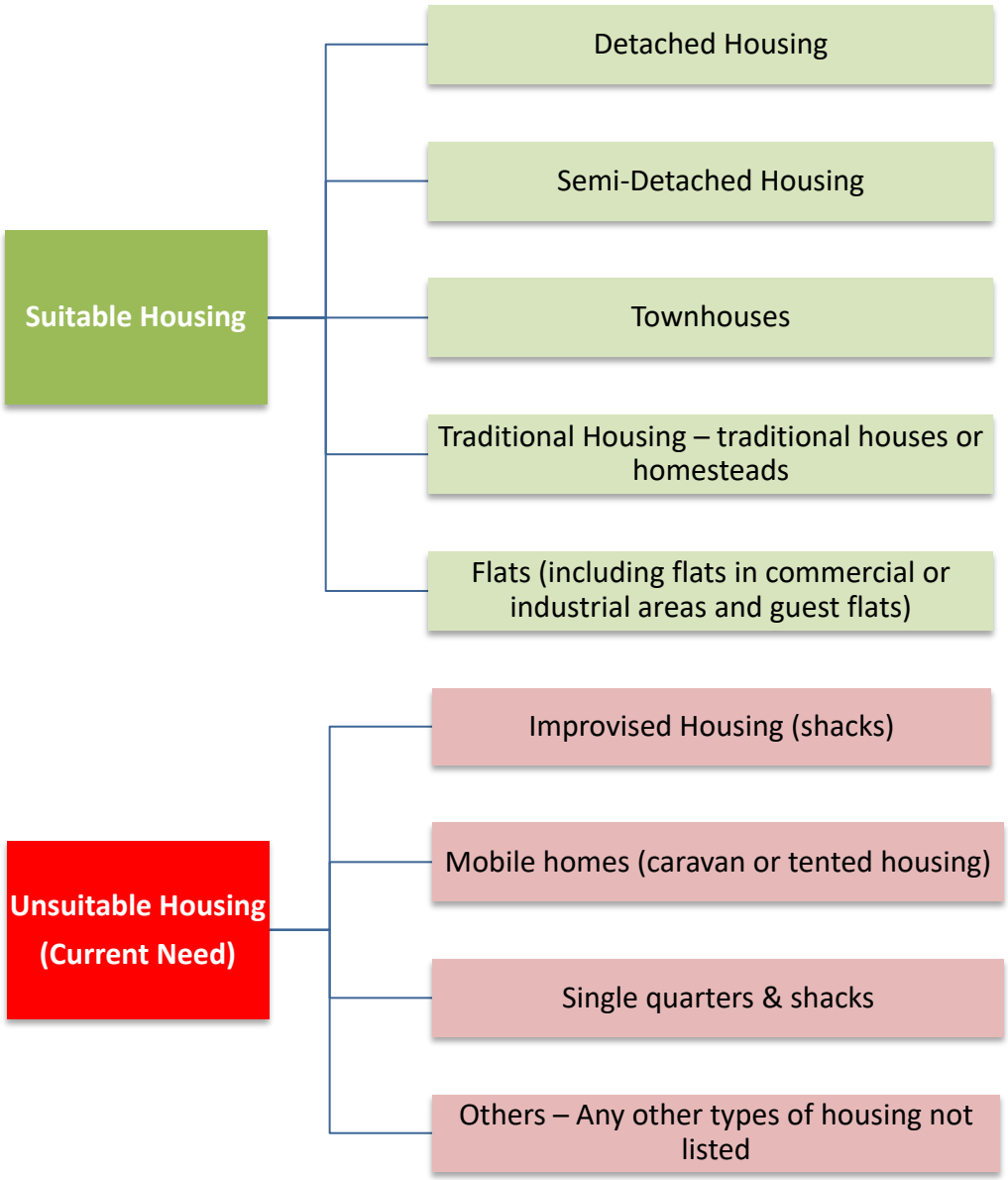
In the context of this assessment, the household types identified by the Namibian Statics Agency are consolidated into two categories, being:

- Suitable Housing – comprising of detached housing, semi-detached housing, townhouses, traditional housing and flats (including flats in commercial or industrial areas and guest flats) housing types; and

- Unsuitable Housing - comprising of various housing types such as improvised housing (e.g. shacks), single quarters and mobile housing (caravan or tented housing), and any other types of housing not listed under Suitable Housing.

Suitable and Unsuitable Housing Types are shown by Figure 5.

Figure 5: Housing Categories and Types



The housing that is categorised as "Unsuitable Housing" includes housing such as shacks. Table 2 shows the percentage of unsuitable housing on a regional level from 2001 to 2016 in Namibia, based on the 2001 and 2011 census data. The 2016 data was derived from geometric projection calculations.

Table 2: Unsuitable Households per Region in Namibia from 2001 -2016

	PERCENTAGE OF UNSUITABLE HOUSEHOLDS			NUMBER OF UNSUITABLE HOUSEHOLDS
REGION	2001*	2011*	2016**	2016
Erongo	27.0%	35.3%	41.1%	**24,297**
Hardap	20.2%	26.3%	30.5%	**6,777**
ǁKaras	21.9%	30.2%	36.4%	**9,092**
Kavango East	23.3%	32.1%	38.6%	**7,568**
Kavango West	18.6%	15.2%	13.9%	**2,928**
Khomas	29.4%	32.9%	34.9%	**40,354**
Kunene	9.8%	12.7%	14.7%	**3,602**
Ohangwena	4.2%	6.6%	8.7%	**4,240**
Omaheke	19.0%	21.5%	23.0%	**2,192**
Omusati	3.4%	2.7%	2.4%	**1,268**
Oshana	7.8%	10.4%	12.3%	**5,198**
Oshikoto	6.6%	6.6%	6.6%	**2,884**
Otjozondjupa	19.0%	22.6%	24.8%	**9,598**
Zambezi	4.0%	15.2%	52.2%	**12,662**
			TOTAL	**134,676**

* Source: Data from Namibia Statistics Agency, 2001 and 2011.
** Source: Geometric Projection Calculation using 2001 and 2011 census data.

In accordance with Table 2, the Zambezi, Erongo, Kavango East, ǁKaras Khomas and Hardap Regions are the regions with the highest percentage of unsuitable households (making up over 30% of the total households), as of 2016. Omusati, Oshikoto and Ohangwena Regions have the lowest percentage of unsuitable households, being less than 10% of the total households. The number of unsuitable housing for 2016 reveals the housing needs for 2016.

4.1.3 Preliminary Housing Needs in Namibia for 2017-2020 Period

The housing needs for the current period (being from 2017 to 2020) in Namibia was determined by adding the number of households needed (or unsuitable households depicted by Table 2) for the year 2016 to the projected number of households needed for the 2017-2020 period. Table 3 and Figure 6 show the housing needs for the current period.

Table 3: Preliminary Housing Needs in Namibia for 2017-2020 Period

REGION	2016 HOUSING NEEDS	2017-2020 PROJECTED HOUSEHOLDS	2017-2020 HOUSING NEEDS
Erongo	24,297	15,654	39,951
Hardap	6,777	2,630	9,407
‖Karas	9,092	3,751	12,843
Kavango East	7,568	1,359	8,926
Kavango West	2,928	2,135	5,063
Khomas	40,354	26,353	66,708
Kunene	3,602	4,835	8,437
Ohangwena	4,240	4,341	8,580
Omaheke	2,192	11,272	13,464
Omusati	1,268	4,794	6,063
Oshana	5,198	4,613	9,810
Oshikoto	2,884	5,791	8,675
Otjozondjupa	9,598	5,022	14,620
Zambezi	12,662	2,662	15,324
TOTAL	**134,676**	**95,211**	**227,871**

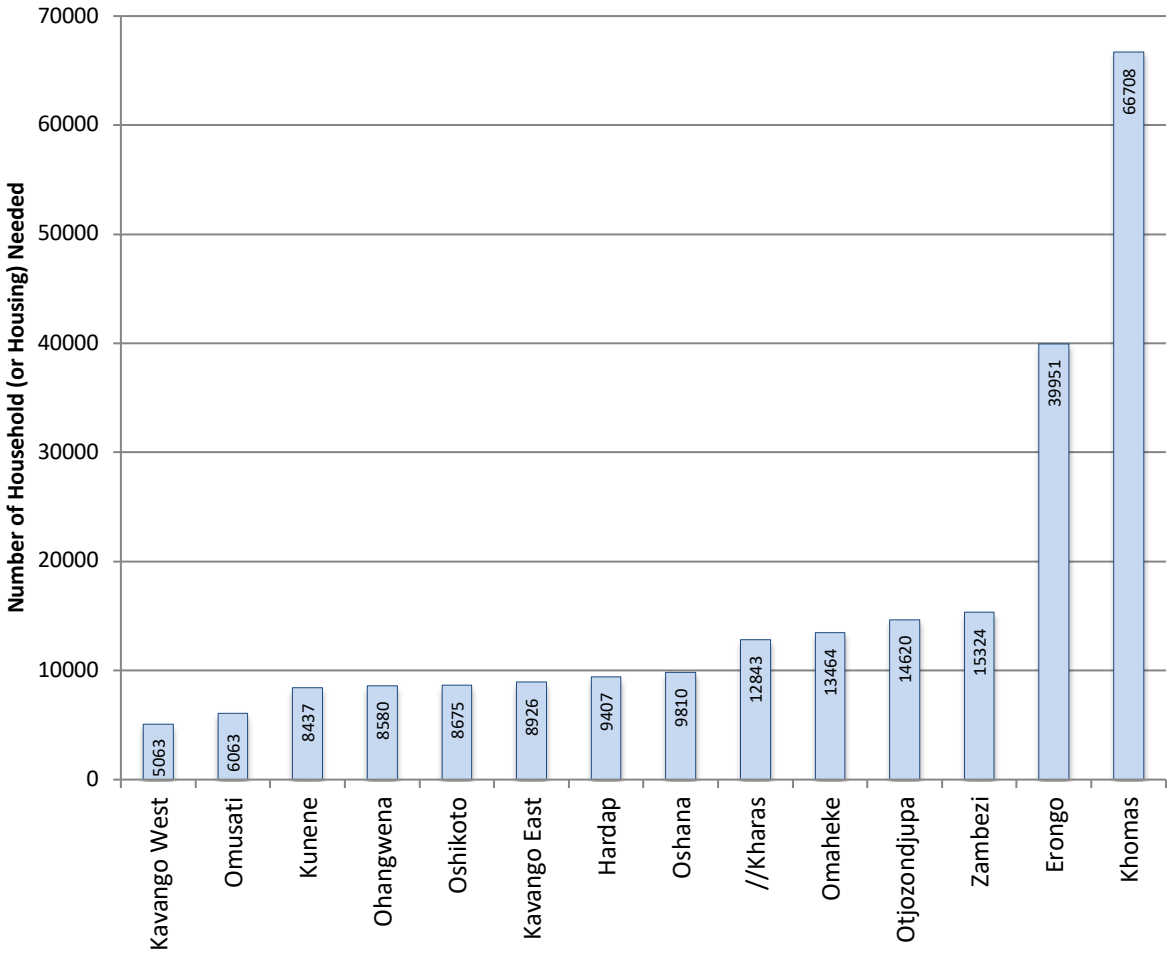


Figure 6: Preliminary Housing Needs in Namibia for 2017-2020 Period

As indicated in Figure 6, Khomas, Erongo and Zambezi Regions are the top three regions with the highest number of housing needs. On the other hand, Kavango West, Omusati and Kunene Regions are the regions with less housing needs during this short-term period (2017-2020).

4.2 Current and Future Land Residential Land Supply in Namibia

4.2.1 Available (Current) Residential Land Supply in Namibia

The current residential land supply was determined using the General Valuation Roll data from various local authorities. In particular, the number of vacant Single Residential (or Residential) and General Residential (or Residential 2 or 3) was compiled from the local authorities' General Valuation Roll, to determine the current supply of residential land.

Figure 7 below shows the available housing supply in eight of the fourteen regions in Namibia.

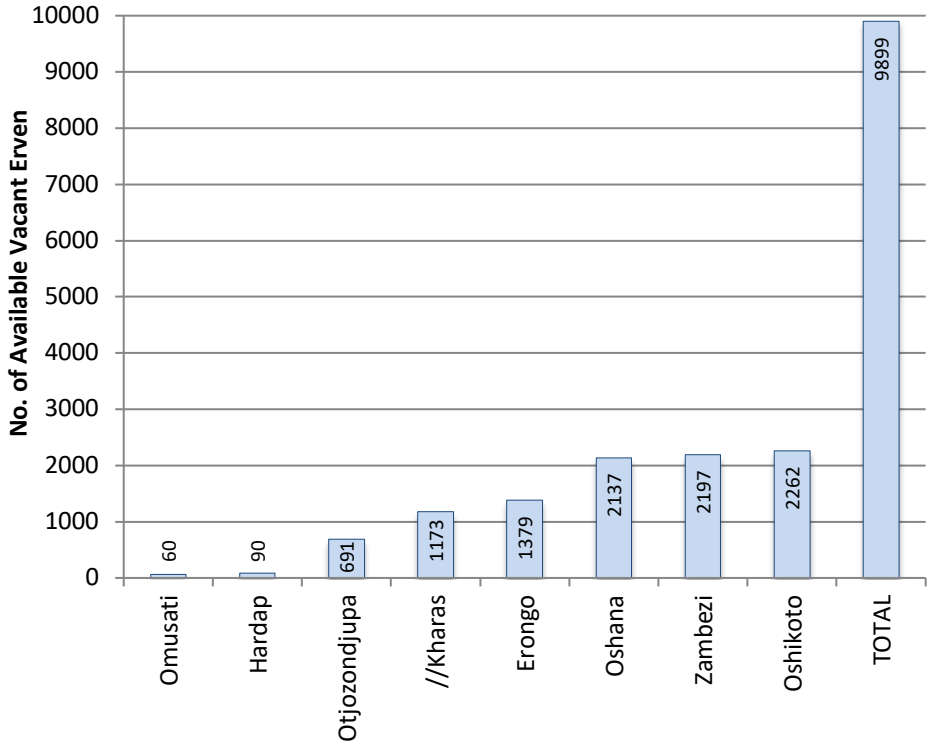


Figure 7: Available (Current) Housing Supply in Eight Regions in Namibia
Source: General Valuation Rolls of Various Local Authorities in Namibia.

The researchers could not obtain the General Valuation Roll from some local authorities. Hence, the data analysed is only based on the information obtained from Erongo Region (from Henties Bay and Usakos towns), Hardap (Gochas), Omusati (Tsandi town), Oshikoto Region (Omuthiya and Tsumeb towns), Oshana Region (Ondangwa, Ongwediva and Oshakati towns), //Karas Region (Keetmanshoop town), Otjozondjupa (Grootfontein town), and Zambezi Region (Katima Mulilo town).

As per Figure 7, the Oshikoto Region is the region with the highest number of vacant residential erven. This is also evident in Figure 8, which displays the spatial distribution of available residential land (or housing).

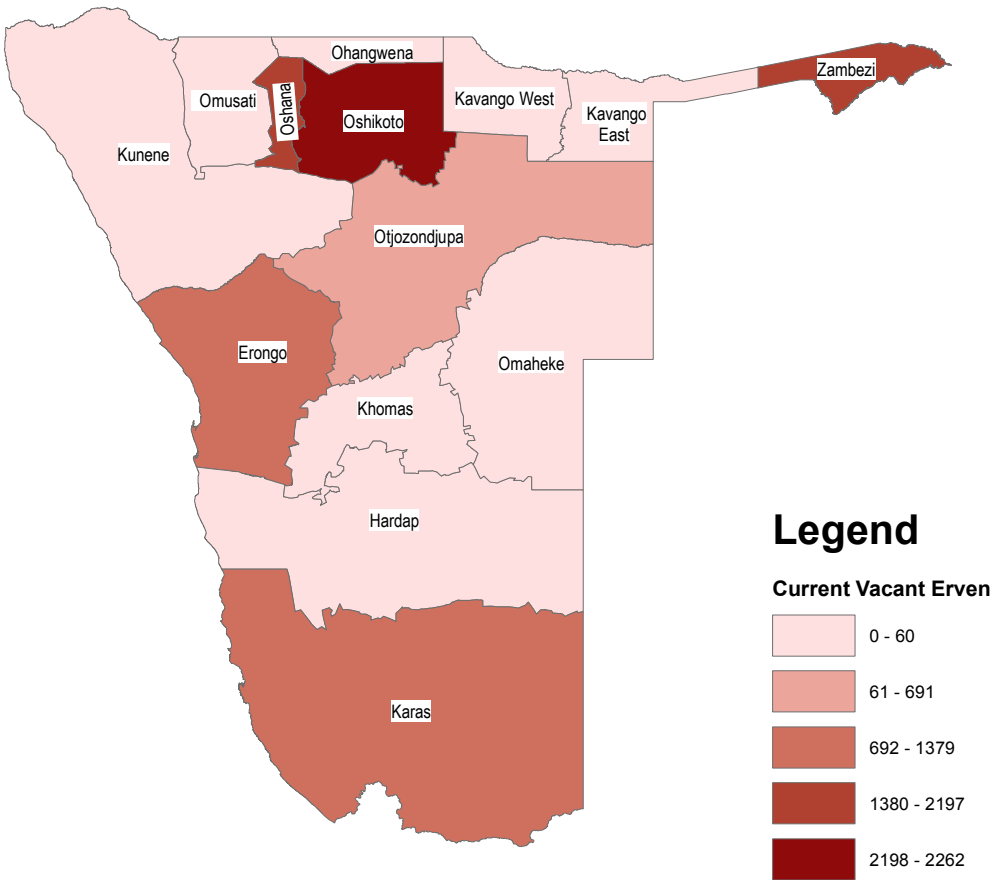


Figure 8: Spatial Distribution of Available Housing Supply in Namibia

The total available vacant residential land parcels as obtained from the eight regions is 9,899. This amount will contribute less towards the alleviation of the housing backlog of 300,000 as stipulated by the Bank of Namibia (2011).

4.2.2 Future Residential Land Supply in Namibia

The future residential land supply is determined using the data on un-serviced residential erven that the researchers, as mentioned, obtained from some local authorities in Namibia in 2017. Additionally, the future land supply was also derived from the data contained in the Ministry of Urban and Rural Development's Mass Urban Land Servicing Project (MULSP): Draft Implementation Plan.

Some of the future residential plots have not yet been approved by Namibia Planning Advisory Board (NAMPAB) or Townships Board; some have been approved but not yet surveyed; and some have been approved by the said boards and surveyed. Nevertheless, the information is crucial in determining the potential number of erven that can be availed for housing developments in various regions in Namibia. Figure 9 shows the total number of future land supply (i.e. future residential erven) per region.

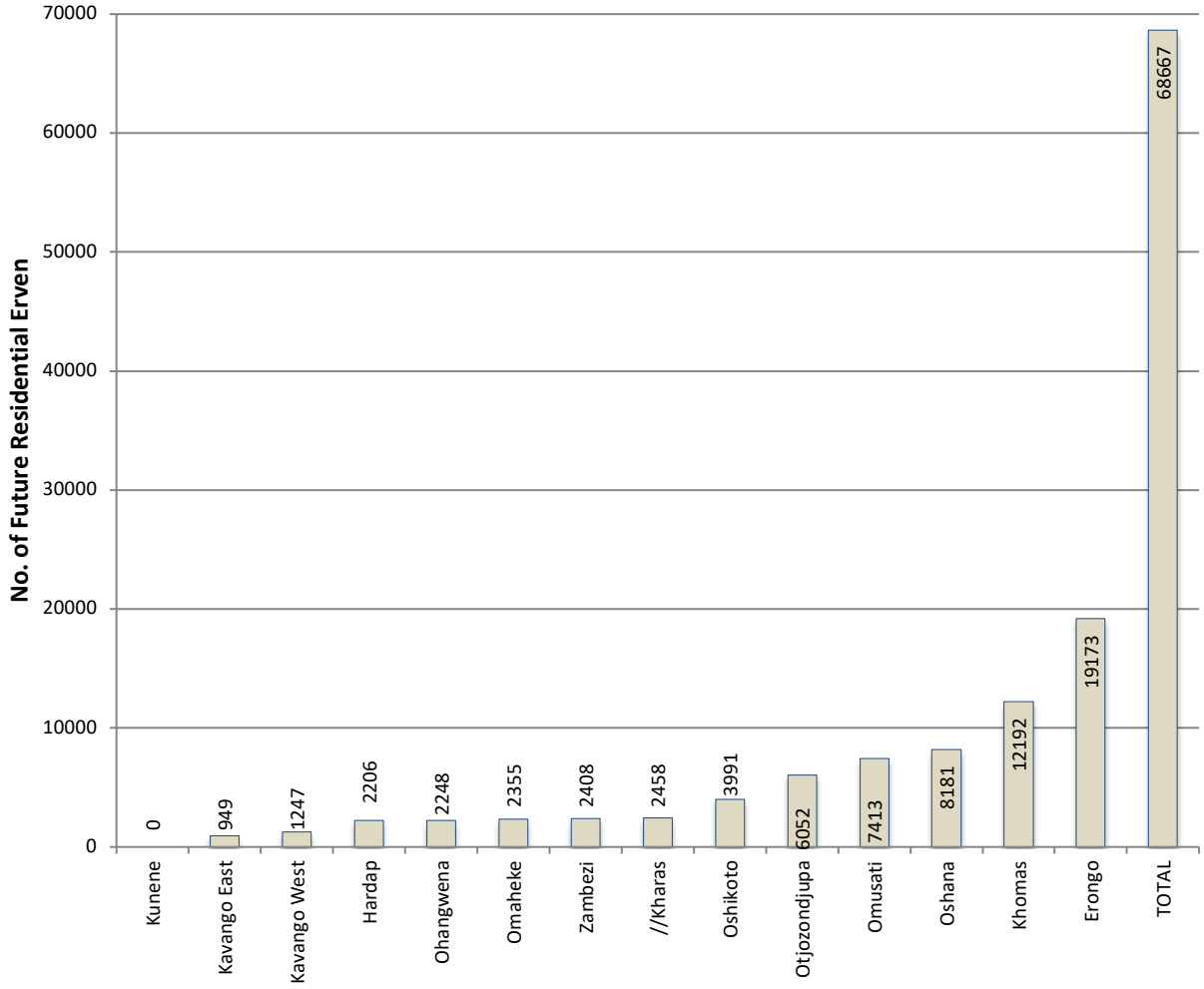


Figure 9: Future Housing (Residential Land) Supply in Namibia
Source: Ministry of Urban and Rural Development, 2016.

The Erongo Region has the highest number of future residential plots, with a total of 19,173 residential plots. The Khomas Region is the second highest, with 12,192 future residential plots. The Kavango East and West, and Hardap Regions have the least number of potential residential erven. No data was obtained from the Kunene Region.

4.2.3 Overall Residential Land Supply in Namibia

The total land supply across the nation is illustrated by Table 4.

REGION	CURRENT AVAILABLE RESIDENTIAL ERVEN*	FUTURE RESIDENTIAL ERVEN**	TOTAL RESIDENTIAL LAND SUPPLY***
Kunene	0	0	0
Kavango East	949	0	949
Kavango West	1247	0	1247
Ohangwena	2248	0	2248
Hardap	2206	90	2296
Omaheke	2355	0	2355
‖Karas	2458	1173	3631
Zambezi	2408	2197	4605
Oshikoto	3991	2262	6253
Otjozondjupa	6052	691	6743
Omusati	7413	60	7473
Oshana	8181	2137	10318
Khomas	12192	0	12192
Erongo	19173	1379	20552
TOTAL	**70873**	**9989**	**80862**

Table 4: Total Residential Land (Housing) Supply in Namibia

* Source: General Valuation Roll from Local Authorities.

** Source: Ministry of Urban and Rural Development, 2016 and Various Local Authorities in Namibia.

*** Total Residential Land Supply = Current Available Residential Erven + Future Residential Erven.

The Erongo Region is the region with the highest number of the total number of residential land (combined current and future residential erven). Windhoek and Oshana Regions are the second and third highest respectively. The Kavango East and West, and Ohangwena Regions are the regions with less number of combined current and future residential erven. The Kunene Region was not assessed as no data was available and the proposed number of residential erven was obtained from this region. The spatial distribution of available residential erven is indicated by Figure 10.

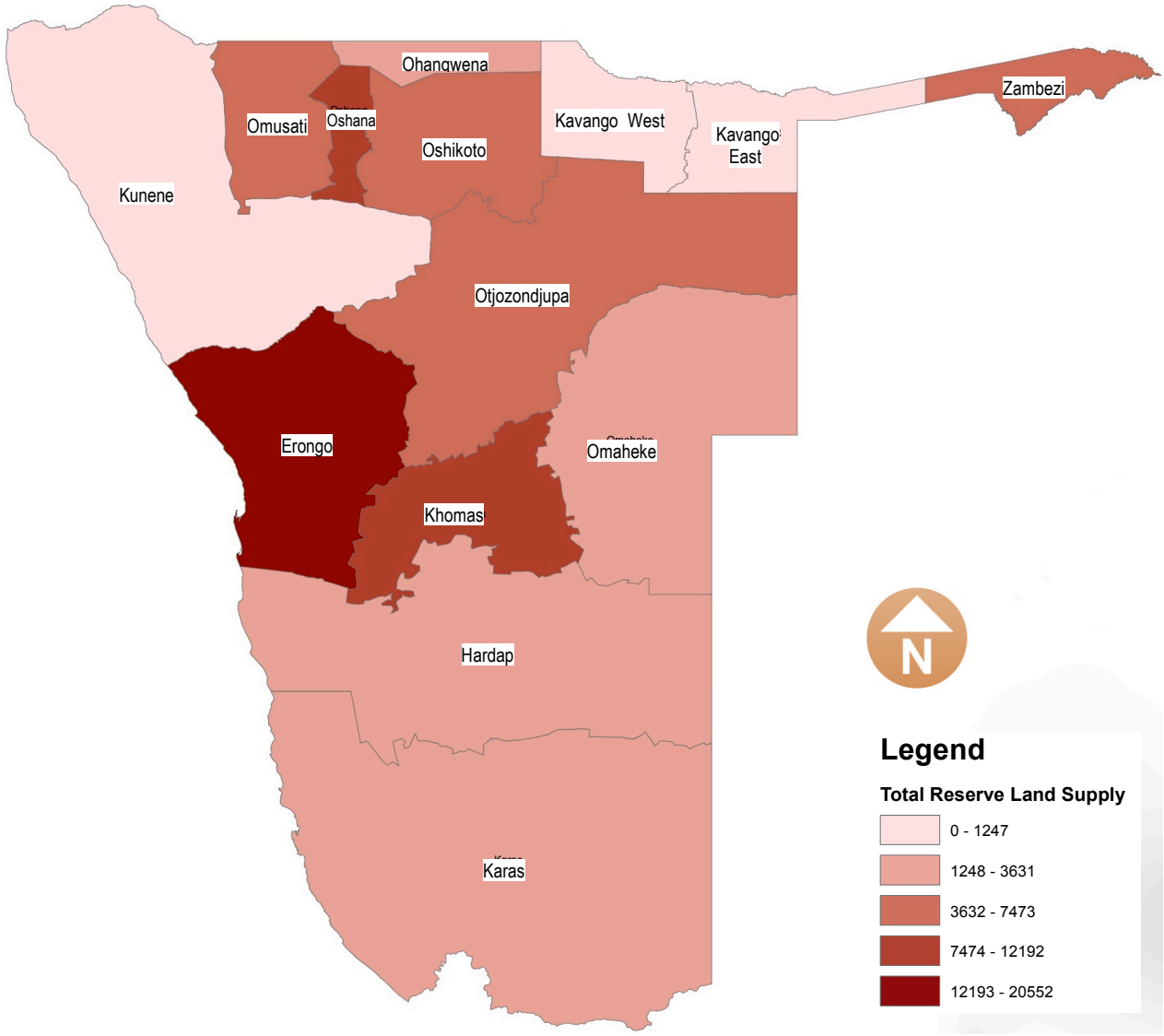


Figure 10: Spatial Distribution of Overall Residential Land Supply in Namibia

4.3 Determining the Total Future Housing Needs in Namibia

4.3.1 Short-Term Period Housing Needs: 2017-2020

The future housing needs for the short-term (2017-2020) period was determined by applying the following formula:

2017-2020 Final Housing Needs	=	*2017-2020 Preliminary Housing Needs*	-	*Total Housing (Residential Land) Supply*

Table 5 shows the results of the calculation as per the aforesaid formula.

Table 5: Final Housing Needs for 2017-2020 Period

REGION	2017 TOTAL LAND SUPPLY	2017-2020 PRELIMINARY HOUSING NEEDS	2017-2020 FINAL HOUSING NEEDS
Omusati	7,473	6,063	**-1,410**
Oshana	10,318	9,810	**-508**
Oshikoto	6,253	8,675	**2,422**
Kavango West	1,247	5,063	**3,816**
Ohangwena	2,248	8,580	**6,332**
Hardap	2,296	9,407	**7,111**
Otjozondjupa	6,743	14,620	**7,877**
Kavango East	949	8,926	**7,977**
Kunene	0	8,437	**8,437**
‖Karas	3,631	12,843	**9,212**
Zambezi	4,605	15,324	**10,719**
Omaheke	2,355	13,464	**11,109**
Erongo	20,552	39,951	**19,399**
Khomas	12,192	66,708	**54,516**
TOTAL	**80,862**	**227,871**	**147,009**

According to these calculations, the Omusati and Oshana Regions appear as currently oversupplied with housing. On the other hand the Khomas Region needs over 50,000 houses during the short term-period.

4.3.2 Medium & Long Terms Periods: 2021-2030 and 2031-2041

The future housing needs the medium- and long-term periods was determined as follows:

2021-2030 Housing Need	=	*2030 Housing Projection*	-	*2020 Housing Projection*

2031-2041 Housing Need	=	*2041 Housing Projection*	-	*2030 Housing Projection*

The results of the calculation as per the above formulas are shown by Table 6.

Table 6: Housing Needs for Medium and Long Term Periods

	Households Projections			Medium Term	Long Term
Region	**2020**	**2030**	**2041**	**2021-2030**	**2031-2041**
Omaheke	20,822	27,570	37,543	**6,747**	**9,973**
Hardap	24,837	32,857	44,701	**8,020**	**11,844**
Zambezi	26,906	34,912	46,496	**8,006**	**11,584**
Kavango East	20,945	24,768	29,785	**3,824**	**5,017**
Kavango West	23,260	29,590	38,559	**6,330**	**8,969**
‖Karas	28,747	40,776	59,895	**12,028**	**19,119**
Ohangwena	52,993	65,615	82,998	**12,622**	**17,383**
Oshana	47,032	60,879	80,864	**13,847**	**19,985**
Omusati	56,921	70,925	90,340	**14,004**	**19,415**
Kunene	28,226	45,147	75,686	**16,922**	**30,539**
Otjozondjupa	43,687	59,282	82,938	**15,595**	**23,656**
Oshikoto	49,486	67,547	95,113	**18,061**	**27,566**
Erongo	74,815	134,546	256,592	**59,731**	**122,045**
Khomas	141,964	237,207	417,227	**95,243**	**180,020**
Total/Namibia	**640,640**	**931,622**	**1,438,736**	**290,981**	**507,115**

4.3.3 Overall Housing Needs in Namibia Regionally and Nationally

The overall number of required houses nationally, during the short, medium and long terms are shown by Figure 11 below.

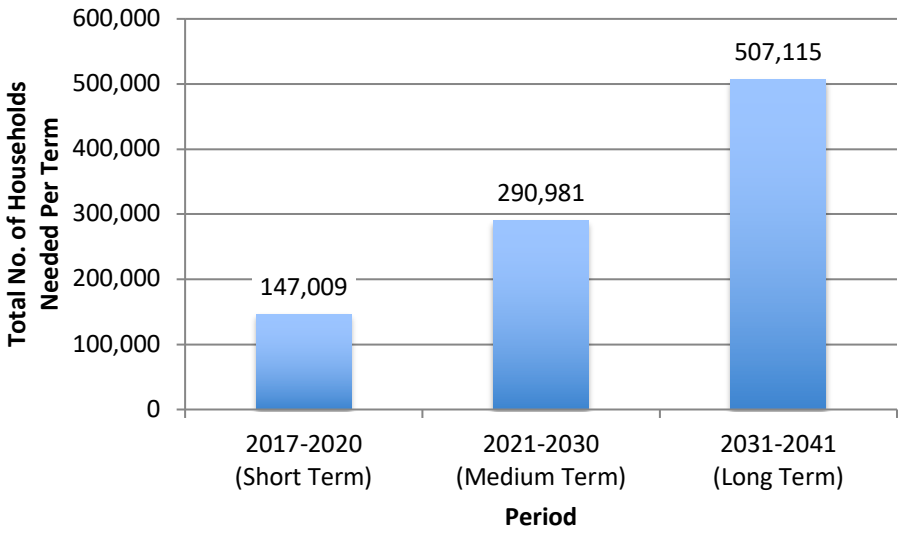
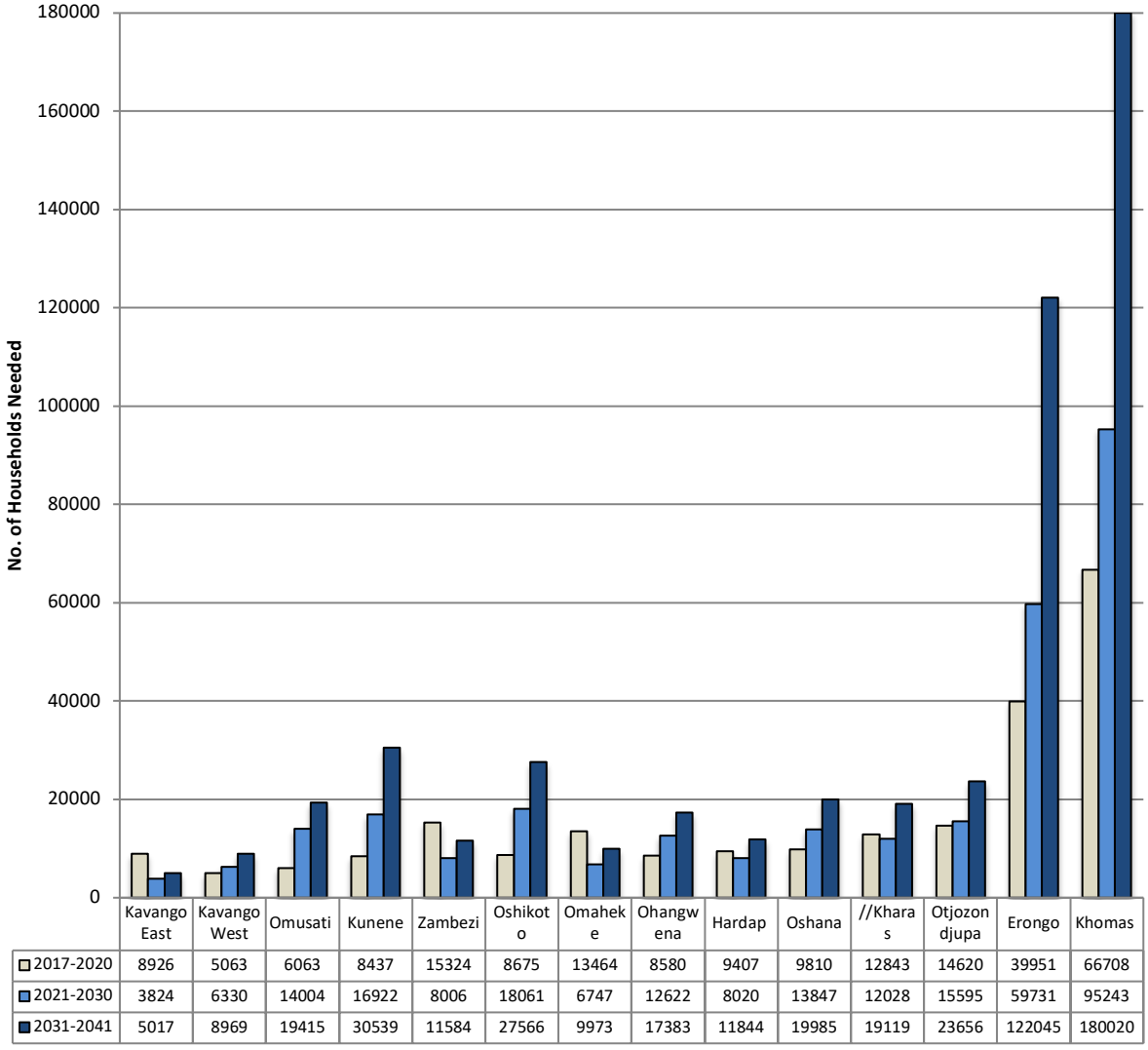


Figure 11: National Housing Need in Namibia in the Short, Medium and Long Term Periods

It is evident from Figure 11that the number of required houses in Namibia will continue to escalate from 147,009 in the short term to 507,115 in the long term. The current overall housing supply in Namibia (as hitherto stated in Table 4) is 80,862 dwellings, which is just 55% of the required 147,009

households by 2020. This compels local, regional and national governments to be proactive in the provision of suitable housing to address the current and anticipated housing needs. Apart from the overall national needs, it is crucial to examine the distribution of the housing needs on regional base. Figure 12 below illustrates the region-by-region housing needs in Namibia.



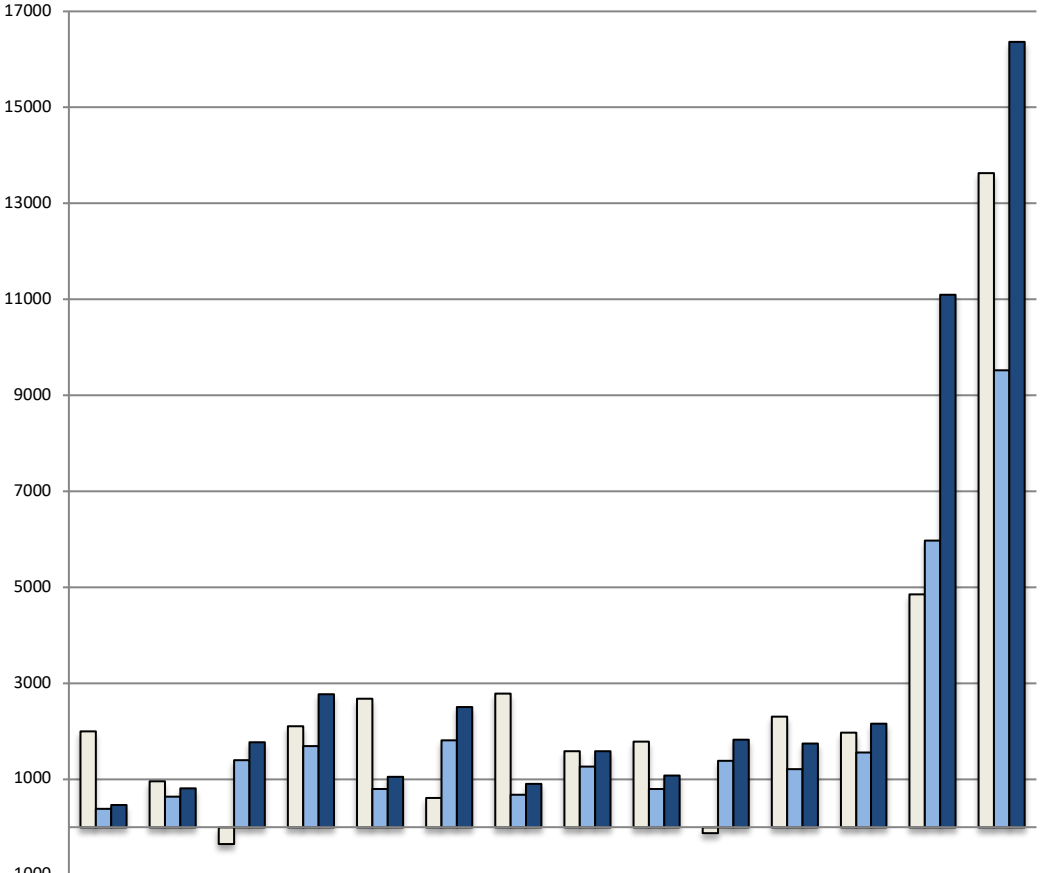
	Kavango East	Kavango West	Omusati	Kunene	Zambezi	Oshikoto	Omaheke	Ohangwena	Hardap	Oshana	//Kharas	Otjozondjupa	Erongo	Khomas
2017-2020	8926	5063	6063	8437	15324	8675	13464	8580	9407	9810	12843	14620	39951	66708
2021-2030	3824	6330	14004	16922	8006	18061	6747	12622	8020	13847	12028	15595	59731	95243
2031-2041	5017	8969	19415	30539	11584	27566	9973	17383	11844	19985	19119	23656	122045	180020

Figure 12: Regional Housing Needs in Namibia

As illustrated by Figure 12 above, the Erongo and Khomas regions are the two regions with the highest needs of housing for all periods.

4.4 Annual Future Housing Needs per Period in Namibia

A noteworthy component of the housing needs assessment is the determination of the expected housing needs per year during the plan period. Hence, it is imperative to convert the projected housing needs into annual housing needs. This will enable urban and regional planners, other professionals in the built environment, as well as policy and decision makers to determine the number of houses or dwelling units or residential land parcels that will be required every year during the short-, medium- and long-term periods. In view of this, the projected housing need in Namibia was converted to annual flow per region as shown by Figure 13.



	Kavango East	Kavango West	Omusati	Kunene	Zambezi	Oshikoto	Omaheke	Ohangwena	Hardap	Oshana	//Kharas	Otjozondjupa	Erongo	Khomas
2017-2020	1994	954	-353	2109	2680	605	2777	1583	1778	-127	2303	1969	4850	13629
2021-2030	382	633	1400	1692	801	1806	675	1262	802	1385	1203	1560	5973	9524
2031-2041	456	815	1765	2776	1053	2506	907	1580	1077	1817	1738	2151	11095	16365

Figure 13: Regional Housing Needs per Annum per Period

The spatial distributions of the housing needs per annum for all the regions during the short-, medium- and long-term periods are depicted by Figures 14, 15 and 16, respectively.

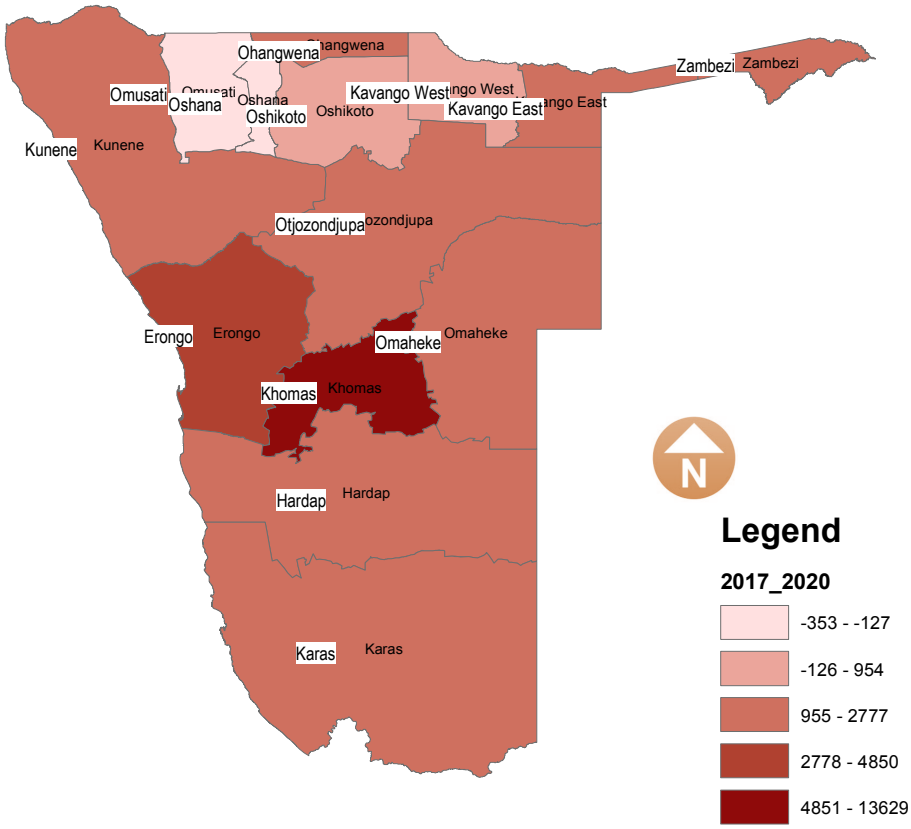


Figure 14: Short-Term Regional Housing Needs per Annum

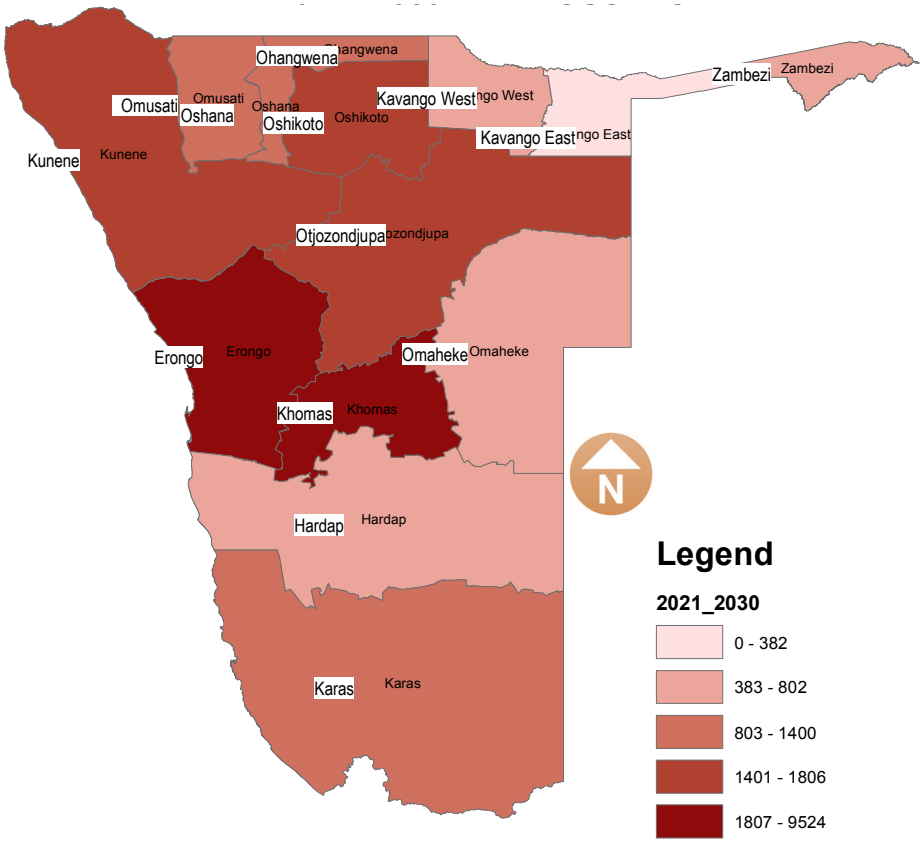


Figure 15: Medium-Term Regional Housing Needs per Annum

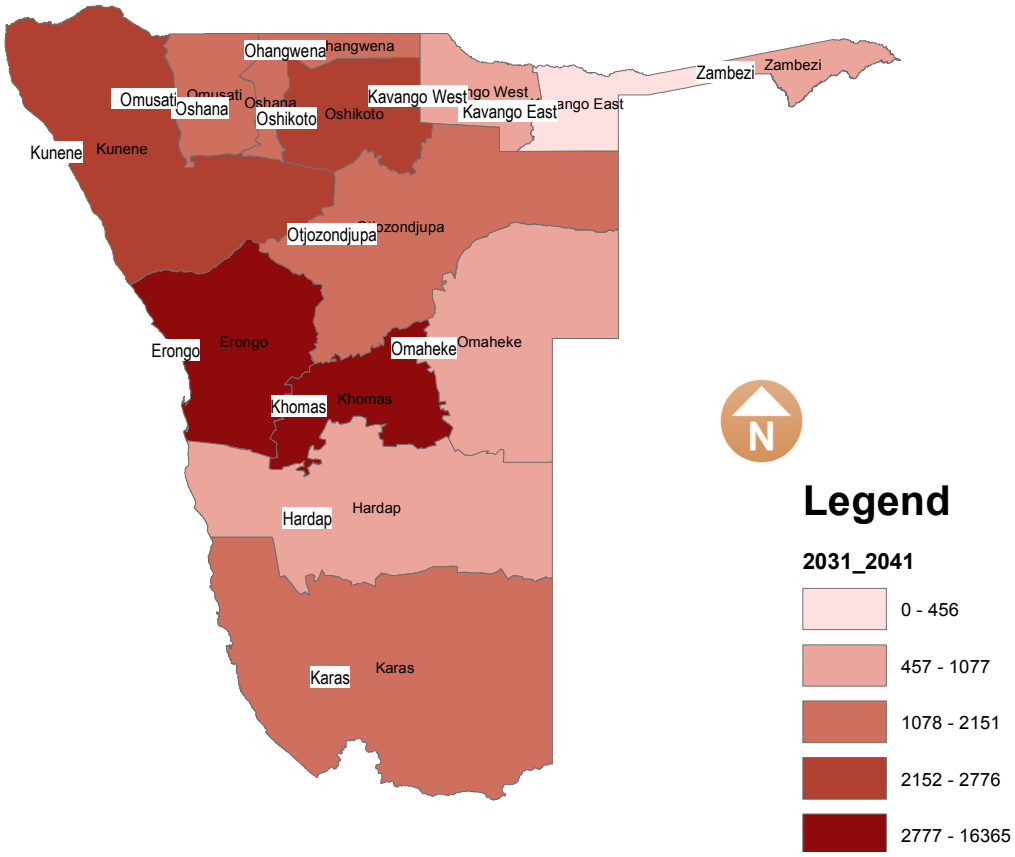


Figure 16: Long-Term Regional Housing Needs per Annum

The spatial distributions of the housing needs per annum illustrate that the Khomas and Erongo Regions are the two top regions with the highest housing needs during short-, medium and long-terms. On the other hand, the Omusati and Oshana regions have the lowest needs during the short-term, while the Kavango East Region is the region with lowest number of housing needs per annum during the medium and long-term periods.

Nonetheless, the housing needs are anticipated to increase nationally for the short-term period (2017-2020), drop down during the medium period (2021-2030) and escalate again during the long-term period (2031-2041). In particular, 36,752 households, 29,098 households and 46,101 households will be required every year during the short-, medium- and long-term respectively, as shown by Figure 17 below.

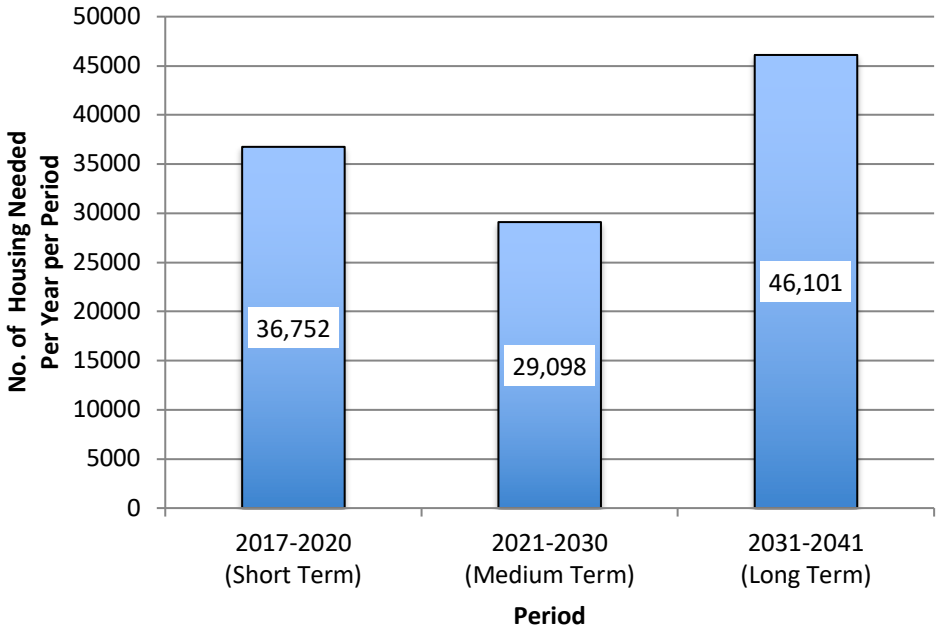


Figure 17 National Housing Needs per Annum per Period

The Harambee Prosperity Plan aims to develop 26,000 residential parcels nationally by 2020 (Office of the President, 2016). The Harambee target of 26,000 will not sufficiently meet the provision of annual housing needs of 36,752 households between 2017 and 2020 as depicted by Figure 17 above.

5. Conclusion

Provision of suitable housing (including residential land) is a developmental drawback in Namibia, especially in urban areas where there is a substantial housing backlog. The housing scarcity calls for an analysis of the extent of current and future housing needs in Namibia. Such analysis requires the application of methodological assessment approaches. However, Namibian local, regional and national governments have not established such methodological approaches.

Hence, this report assesses the urban housing needs in Namibia on regional and national levels by employing the United Kingdom's Department for Communities and Local Government's Strategic Housing Market Assessment (SHMA). The SHMA follows the sequential methodological approach by determining the current housing needs; current and future housing supply; future housing needs over a plan period (being from 2017 to 2041); and annual housing needs per period. This approach was confronted by data limitations in this study. In particular, some local authorities did not supply data on current and future housing (including residential land). Furthermore, there are no secondary sources demonstrating projected number of households in Namibia. However, the geometric projection formula was applied to project the number of households. Nevertheless, the results obtained proved to be worthwhile in demonstrating the extent of current and future housing needs in Namibia.

The study's outcomes confirm that the overall current and future housing supply (including residential land) as available in, and planned by, local authorities in Namibia is 80,862. However the 80,862 housing supply on a national level is still less than the anticipated 147,009 households that need to be provided with suitable housing by the end of 2020. Therefore, in order to ensure suitable housing is provided to meet the current demand and projected households growth, the following number of houses are required to be provided in Namibia annually during the short, medium and long term periods: 36,752 households between 2017 and 2020; 29,098 households between 2021 and 2031 and 46,101 households between 2031 and 2041.

In culmination, the SHMA approach attests to be a valuable methodological approach that can be applied in assessing housing needs in Namibia, subject to the availability of various households variables that can be factored into the methodology.

6. Recommendations

This study brings forward the following recommendations:

I. The Namibia Statistics Agency (NSA) should avail data on projected number of households, and projected types of households, in order to enable accurate assessments of housing needs in Namibia.

II. The local authorities in Namibia need to design databases with records of:
(a) available single residential land parcels that can accommodate one individual main household;
(b) available high density residential land parcels that can accommodate more than one household, and the maximum number of households that can be accommodated on such land parcels;
(c) projected number of single residential and high density residential land parcels (and envisaged number of households) based on their Structure Plan.

III. As there is no formula of conducting housing needs assessment in Namibia, further research is needed to establish guiding criteria for housing needs assessment in Namibia. In particular, the United Kingdom's Department for Communities and Local Government's Strategic Housing Market Assessment (SHMA) needs to be explored further to comprehend if there are variables that need to be supplemented or obliterated to tailor make the approach to Namibia's housing needs standards.

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