



FIRST CAPITAL
TREASURY SOLUTIONS
(Pty) Limited

ECONOMY PROFILE FOR MARIENTAL

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Contributors

Martin Mwinga: Team Leader

Milner Siboleka: Manager Research

Clarinda Kavezuya: Statistician

Frieda Amadhila: Investment Analyst



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ACRONYMS

AMTA	: Agro Marketing and Trade Agency
ATM	: Auto Teller Machine
FC	: First Capital
GIPF	: Government Institutions Pension Fund
GMO	: Genetic Modification
GRN	: Government of the Republic of Namibia
Kg	: Kilogram
KM	: Kilometers
KWh	: Kilowatt Hours
LFPR	: Labour Force Participation Rate
mm	: Millimeters
MoE	: Ministry of Education
MoF	: Ministry of Finance
MoHSS	: Ministry of Health and Social Services
MTC	: Mobile Telecommunications
MTEF	: Medium Term Expenditure Framework
MWh	: Megawatt Hours
NBC	: Namibia Broadcasting Corporation
NHIES	: National Household Income & Expenditure Survey
NORED	: Northern Regional Electricity Distributor Company
NSA	: Namibia Statistics Agency
N\$: Namibian Dollar
RTC	: Mariental Municipality
Sq. KM	: Square Kilometers
TN	: Telecom Namibia
UNAM	: University of Namibia
WHO	: World Health Organization

NOTE TO THE READER

We welcome you to this research publication of the Mariental economy profile which is part of a series of our research publications on local and regional economic analysis. This research focuses on the geographical area of Mariental, the population, economic activities as well as the potentials of the town's economy. We recognize that the country's economy is made of a combination of what every region provides, and, in these reports, we take stock of what each region provides to the national economy as well as potentials that can be utilized to enhance economic activities. This report extensively uses amongst others primary data obtained through First Capital surveys, secondary data from national document sources and information from respective stakeholders. Using our research capacity, we extensively analyze and present scenarios to every conclusion we make. Using current information and other leading indicators, we also present our view on the likely scenarios for the short to medium term outlook.

ACKNOWLEDGEMENT

We thank the Local and Regional Authority (Municipality & Regional Council respectively) for their support in providing information which was useful in this report. We equally thank all local private sector companies (Mariental Piggery, !Aimab Super Farm, Octant dates farm, Hardap Green Scheme, Mariental abattoir & Farmers Meat Market Mariental abattoir and Hardap Inland Aquaculture Centre) that took time to provide us with information of how they contribute to the economy of the town. Our gratitude is equally extended to all residents of Mariental and Hardap region in general for speaking to our research team and taking time to share their experiences. We also thank all offices that were consulted at the national level to provide us with information. Finally, we are thankful to the government bureaucracy for the system which makes it possible to access the needed information from respective offices though the window for improvement exists.



MARIENTAL LOCAL ECONOMY AT GLANCE

MARIENTAL STATISTICS	
Population (2018 est.)	14,386
Annual Population Growth	2.4%
Median Age of Population	24
Area	39 Square Kilometres
Population Density	135 persons per sq. KM
Proportion of Population using public Health Services	90%
Admission capacity for Public & Private Hospitals	120 Beds for Public Hospital & No Private Hospital Admissions
Number of Doctors	5 Doctors in Public Hospital & 5 Private Consulting Doctors
Ratio of Public Medical Doctors per Population	2,590
Ratio of Private Medical doctors per Population	288
School Going Population in Hardap region	22,912 or 26% of Total Population
Number of Public Schools	3 Primary & 2 Secondary
Number of Private Schools	1 Secondary School
Number of Schools with Hostel Accommodation	2 Primary Government Schools,
Learner to Teacher Ratio	24
Grade 10 & 12 Pass Rate	54% and 38% respectively
Literacy Rate	94%
Unemployment Rate	39%
Proportion of Households farming Livestock	19.4%
Proportion of Households farming Crops	3.3%
Number of Sheep in Hardap region	627,696
Number of Goats in Hardap region	102,527
Average Annual Rainfall	200 mm
Average Day Temperature Range	15 to 28 degree celcius
Estimated Annual Maize Crop output	600 tonnes
Estimated Annual Wheat Crop output	360 tonnes
Estimated Annual Lucerne output	2,200 tonnes
Average Cost of Electricity (Pre-Paid Residential)	N\$2.06 per KWH
Average Cost of Water (Residential Customers)	N\$59 Basic Charge plus N\$18.41 per cubic metre of <6 cubic metres Monthly Water Usage
Average Cost of Water (Businesses)	N\$179 Basic Charge plus N\$18.85 per cubic metre of Monthly Water Usage

Statistics Continued	
Housing Stock	3,040
Housing Backlog (Mariental Municipality)	2,922
Average Land Price per square meter	Residential N\$40-N\$60 Business Plot (N\$60-N\$90)
Average Monthly demand for building bricks	120,000 bricks per month
Average Monthly demand for building sand	1,050 cubic meters per month
Average Cement Price (Both 42 & 32)	N\$116
Price of Building Sand	Retail Suppliers charge N\$1,350 per 6 cubic meters & N\$720 per 6 cubic meters of river (Aub) sand
Price of Super Brick	N\$2.60
Cost of Food (Basket Comparison)	Cost in Mariental: N\$1,317; Cost in Windhoek: N\$1,240
Government Capital budget to the region (MTEF, 2018/19-2020/21)	N\$ 1.390 Billion

Source: Various statistics and First Capital Survey

SECTION ONE: DEMOGRAPHIC, SOCIAL AND GEOGRAPHIC SITUATION

1. INTRODUCTION

The town Mariental was named after Marie (Translated as Maria in English), the wife of Hermann Brandt, the first colonial settler in the area. Mariental was founded in 1912 as a railway stop between Windhoek and Keetmanshoop and was later proclaimed a town in 1920 and a municipality in 1946. Mariental, measuring 39 square kilometers, is an administrative capital for Hardap region. According to the 2011 National Census, Mariental had a population of 12,478. The last labour force survey of 2016, estimated unemployment rate in Hardap region to be 46.2 percent which is above the 33 percent national unemployment rate. Mariental is nearby Hardap Dam, the largest reservoir in Namibia. The town is surrounded by thriving commercial farms which, due to the low annual rainfall in the area focus mostly on game, sheep and ostrich farming, along with cattle farming. Farms around Mariental are known for the production and export of grapes, cotton, lucerne and dairy products, which is also sustained by irrigation from the Hardap dam. The Hardap region borders Erongo region on the northwestern side, on the southern direction it borders! Karas region, in the northeastern direction is Omaheke region while in the northern central it borders Khomas region. Mariental is located 268 kilometers away from Windhoek the capital city of the country.

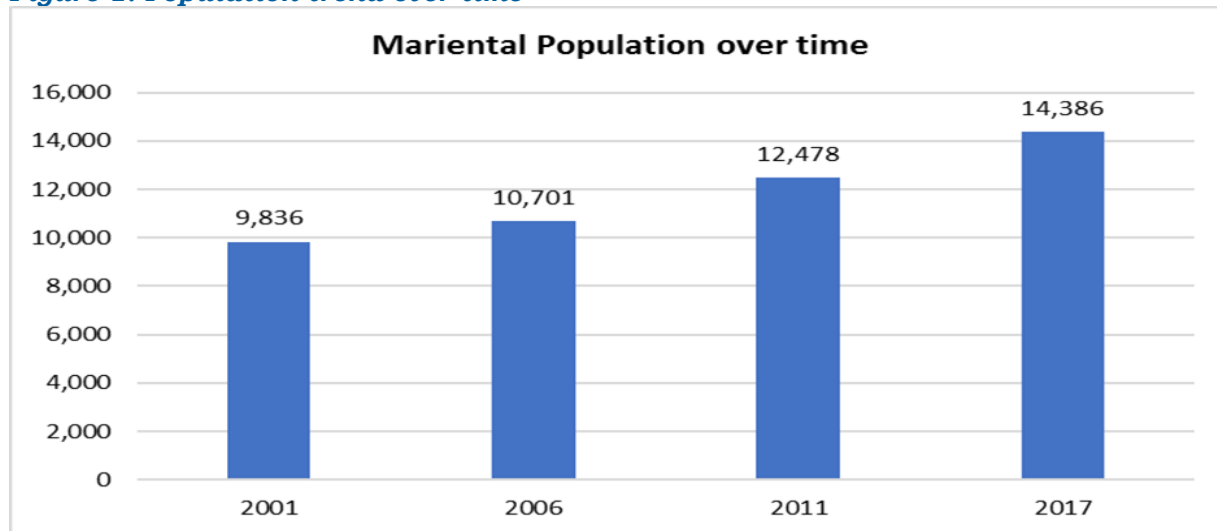
In this report, we will present the economic activities taking place in Mariental and the potential of the town's economy. The structure of the report is divided into four sections. The first section provides a situational analysis of its geography, demographic trends and labour market. The second section details the economic potentials of the town in terms of primary sector activities (Agricultural and Mining activities), Industry sector (Construction and Manufacturing activities), and Services sector activities (Education, Health Care, Water provisions and sanitation services, Financial, Tourism, Real estate, Transport network systems and services). The third section will present a summary of Human development situation and poverty incidence. The fourth summarizes major investments by government budgeted under the current MTEF period (2018/19- 2020/21). The last section draws conclusion on the research.

2. POPULATION DEMOGRAPHICS

2.1. Population Trends

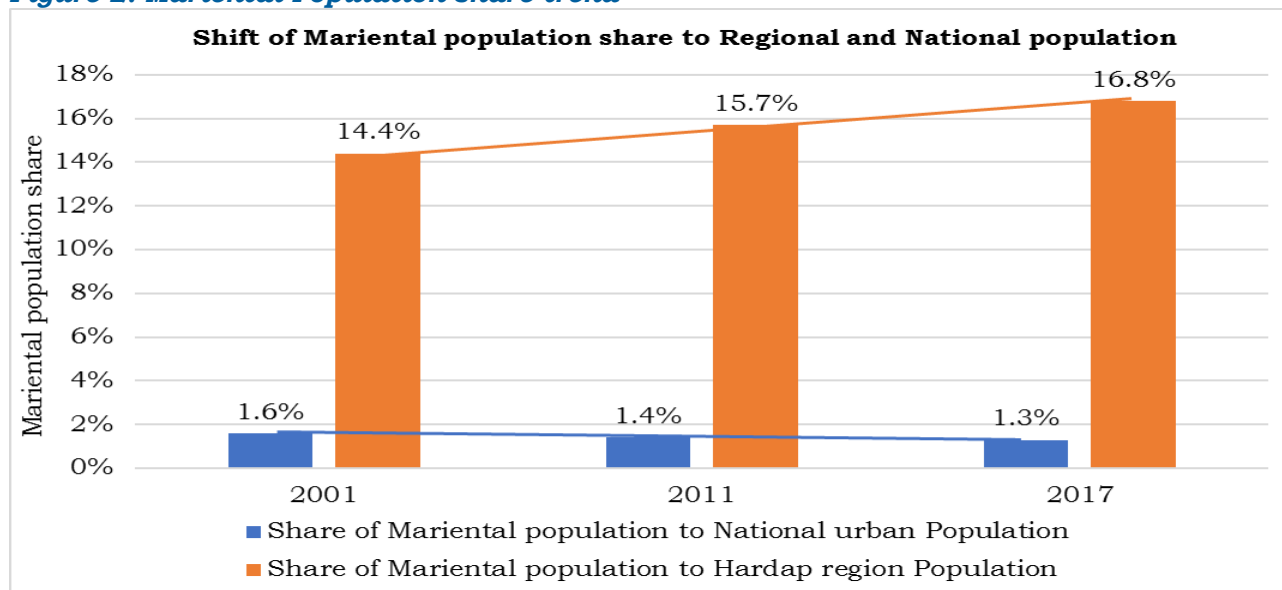
2.1.1. Mariental Population Trend

Mariental's population is estimated at 12,478 residents excluding those living in nearby villages that are not part of the jurisdiction of the town, with an annual population growth of 2.4 percent (2011 National Census). Using the population growth of 2.4 percent per annum, we estimate the population of Mariental to have reached 14,386 in 2017. This represents an absolute population increase of 1,908 over a 6 years period between 2011 and 2017. The population is estimated to further increase by 345 to reach 14,731 in 2018.

Figure 1: Population trend over time

Source: 2011 National Census & First Capital Calculations

At 2.4 percent population growth, Mariental's population is increasing at a rate lower than both the national urban population mean growth (4.2 percent) and median growth (3.3 percent). As shown in figure 2 below, Mariental's population share to that of the region has increased from 14.4 percent in 2001 to 16.8 percent in 2017. However, the Mariental town population share to the total urban population of all towns in the country has decreased from 1.6 percent in 2001 to 1.3 percent in 2017, indicating that Mariental's population growth is lower than the average national urban population growth.

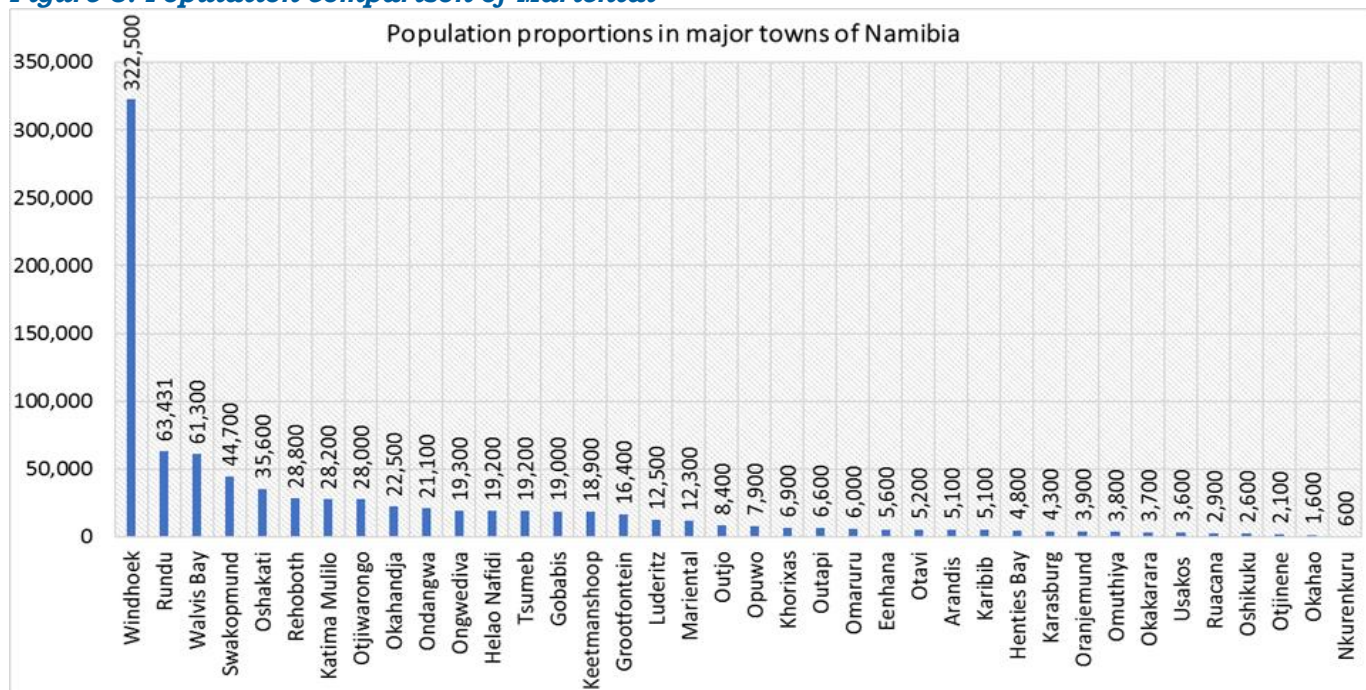
Figure 2: Mariental Population share trend

Source: 2011 National Census & First Capital Research

2.1.2. Population Comparisons by town

As shown in *figure 3* below, Mariental has the eighteenth highest population among all urban towns in Namibia. Though Mariental remains the administrative capital city of the Hardap region, its population is less than half of that in Rehoboth. Mariental's population of 12,478 is reflective of only those residing within the demarcated proclaimed boundaries of the town excluding those living in nearby villages that are not part of the jurisdiction of the town.

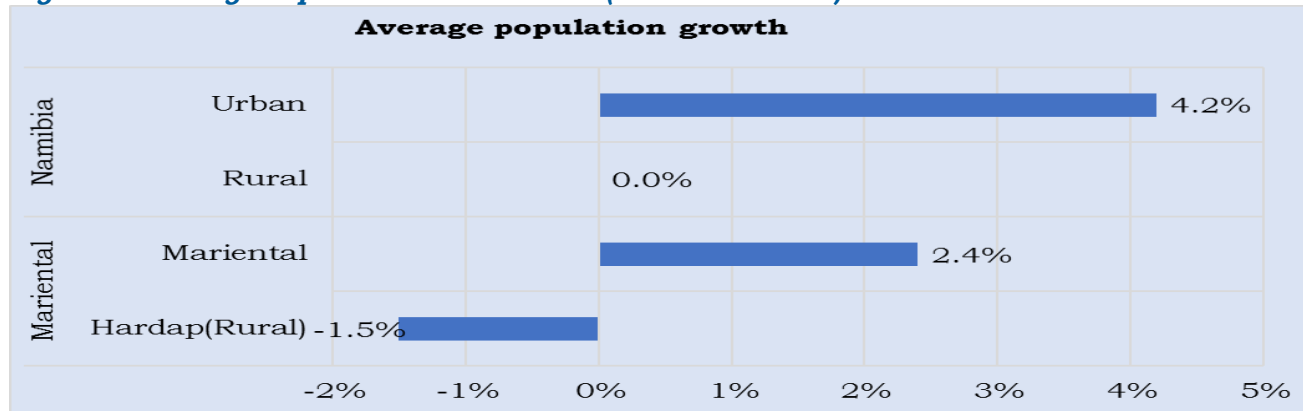
Figure 3: Population comparison of Mariental



Source: 2011 National Census

2.2. Trend of Population Growth

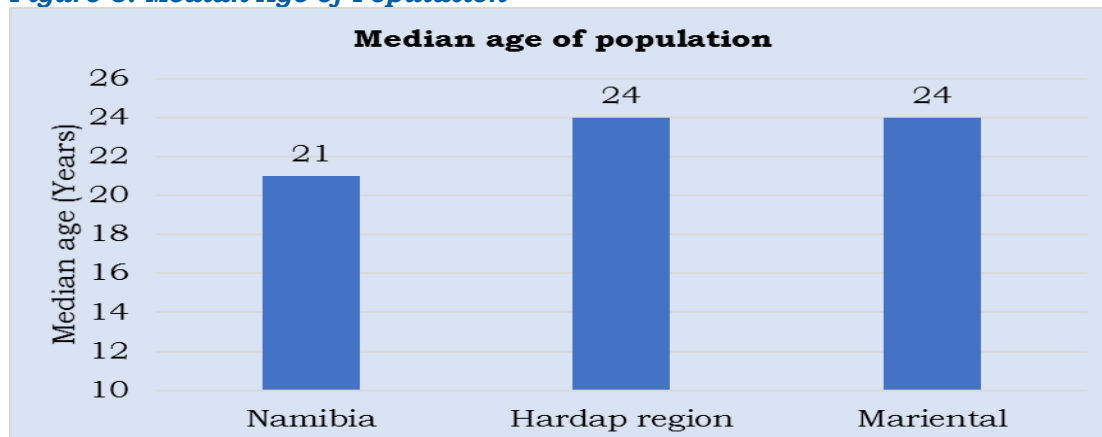
Figure 4 compares the average population growth for Mariental and surrounding villages in the region with the national urban and rural population growth. The national urban population has been growing at an average growth of 4.2 percent relative to 2.4 percent population growth of Mariental. However, the national rural population has been decreasing with 0.1 percent, a trend similar to that of Hardap region population which has been decreasing by 1.5 percent per annum. The rapid population growth in Mariental compared to rural areas in the region is similar across other regions in the country, a trend suggesting rapid urbanization.

Figure 4: Average Population Growth rate (Urban vs. Rural)

Source: 2015/16 NHIES & 2011 National Census

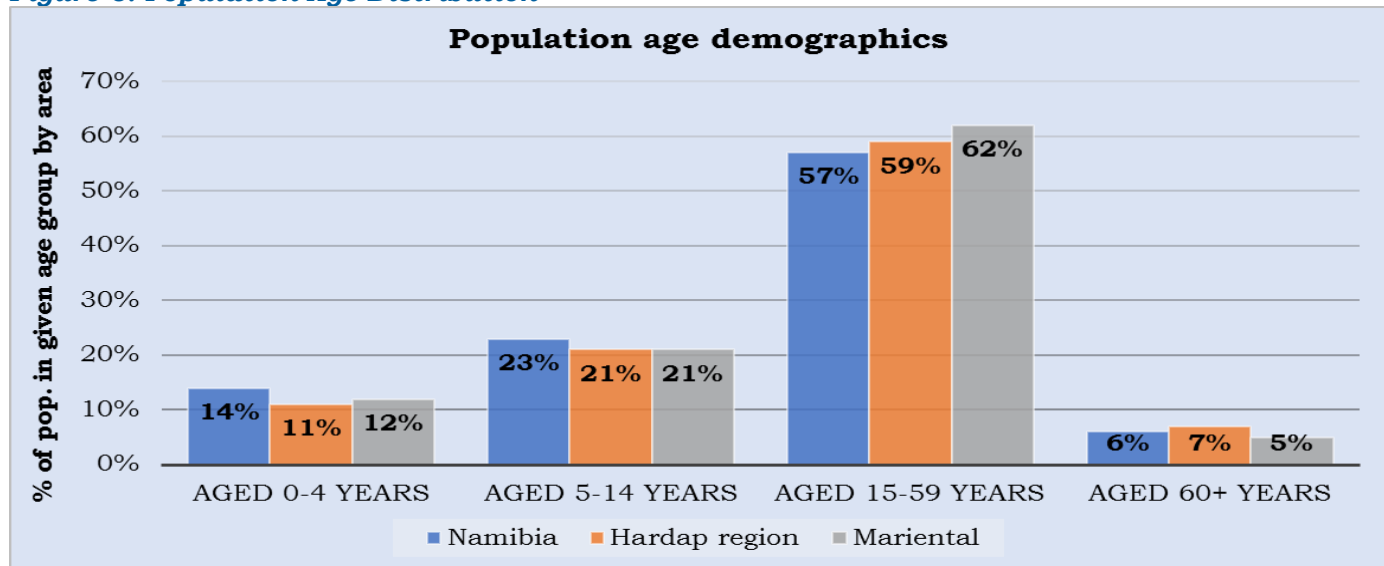
2.3. Population Age Distribution

Mariental has a median population age of 24 years, which is above the National median age of 21 years indicating that the population in Mariental is older than the national average age. The median population age of Mariental at 24 years is in line with the region's median age of 24 years.

Figure 5: Median Age of Population

Source: 2015/16 NHIES & 2011 National Census

Figure 6 below shows a breakdown of the age distribution for Mariental in comparison to that of Hardap region as well as the national distribution. Mariental's population has a share of children aged below 4 years accounting for 12 percent of the total population as opposed to the 14 percent national share of this age group in the country. Furthermore, the population aged between 5 and 14 years accounts for 21 percent of Mariental's population, while at the national level this age group accounts for 23 percent of total population. However, Mariental's population remains much concentrated on the working age population which accounts for 62 percent of the total population.

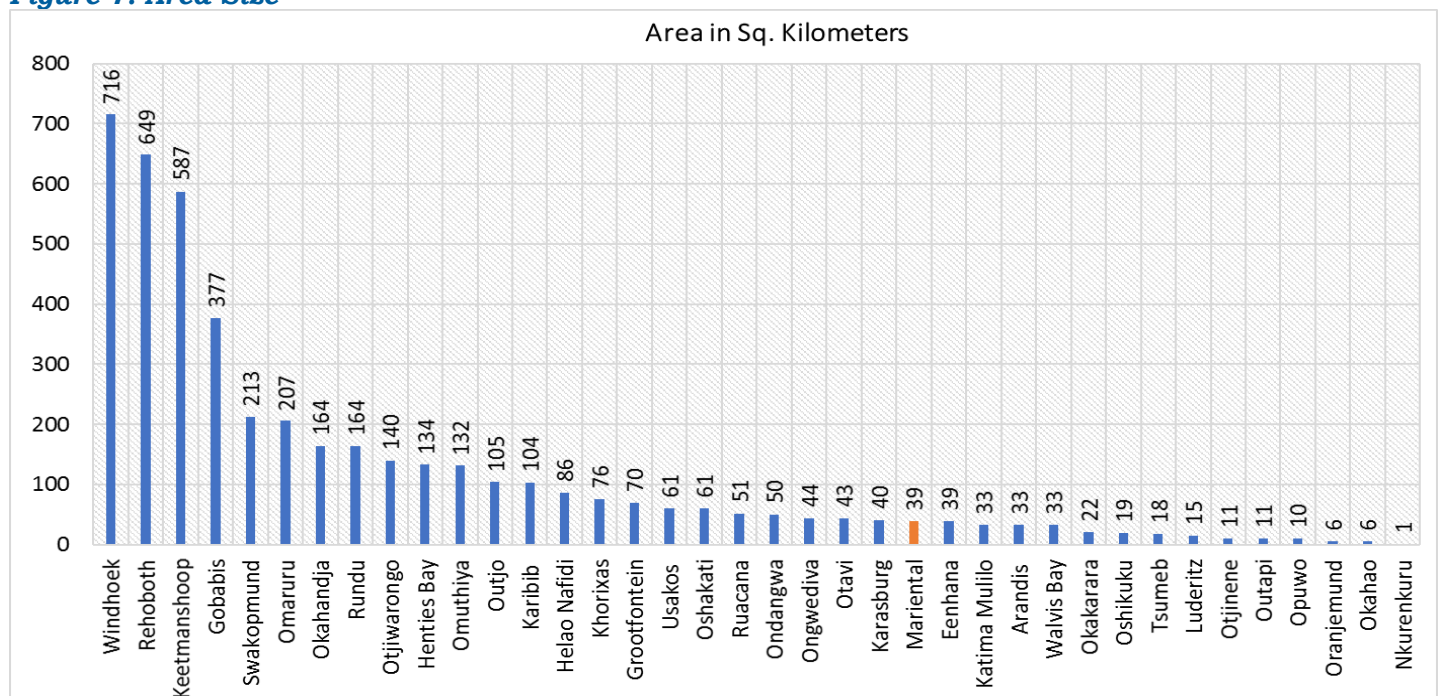
Figure 6: Population Age Distribution

Source: 2015/16 NHIES, 2011 National Census & First Capital Research

3. GEOGRAPHIC AREA

3.1. Land Size

Figure 7 below shows the geographical sizes all urban areas in the country. Windhoek remains the largest of all urban areas in the country by geographical size measuring 716 square kilometers. Mariental has an area measuring 39 square kilometers making it the 24th largest town, with an equivalent geographical size to that of Eenhana (See figure 7).

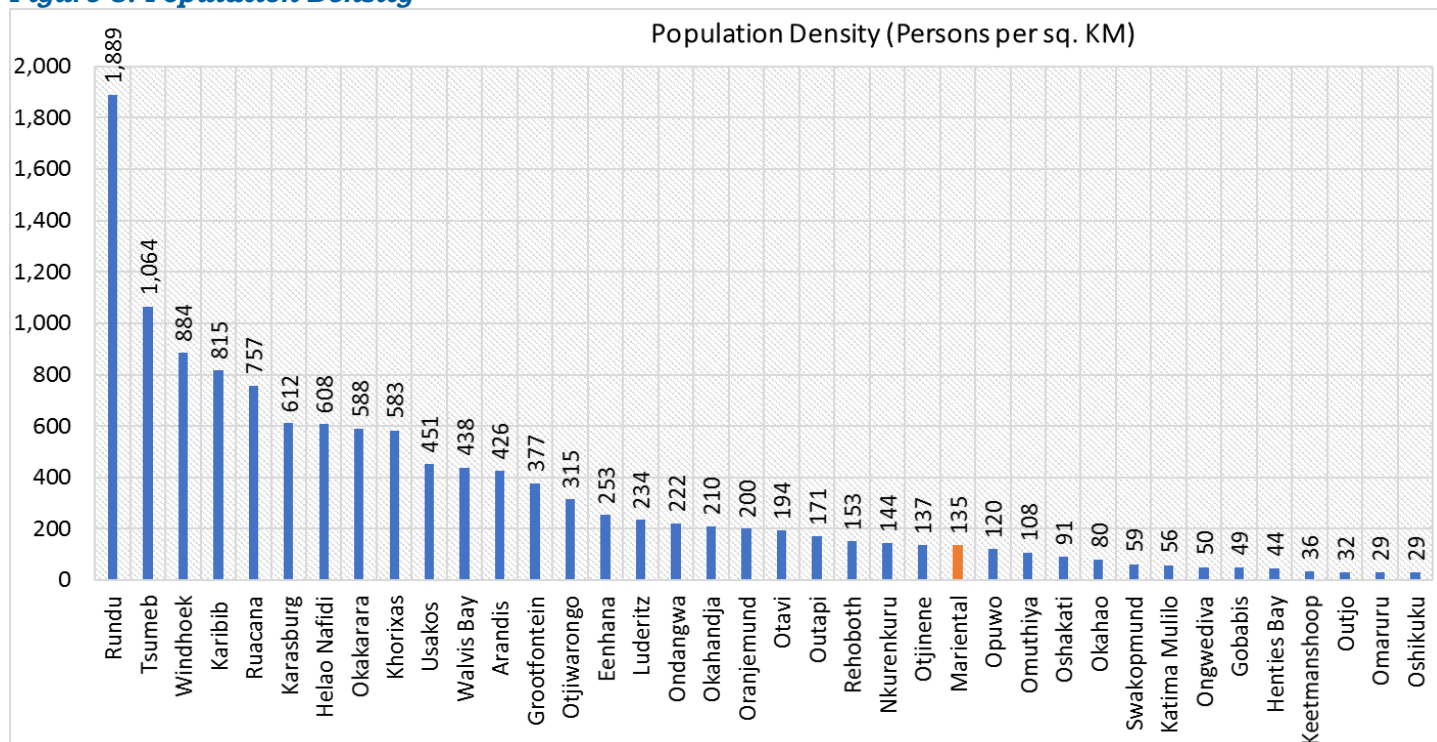
Figure 7: Area Size

Source: 2011 National Census

3.2. Population Density

Population density of a country, town or any other place shows how crowded that place is, by dividing the population by the area which is expressed as ‘number of people per square kilometer’. Mariental has a population density of 135 persons per square kilometer (See figure 8 below). At 135 persons per square kilometer, Mariental is one of the sparsely populated town’s in the country. The national population density stands at 193 persons per square kilometer. As the Municipality continue to invest in acquiring land from surrounding villages the population density is likely to decline. Central government needs to inject more funds and support Mariental Municipality to acquire and service more land to meet the demand the population.

Figure 8: Population Density

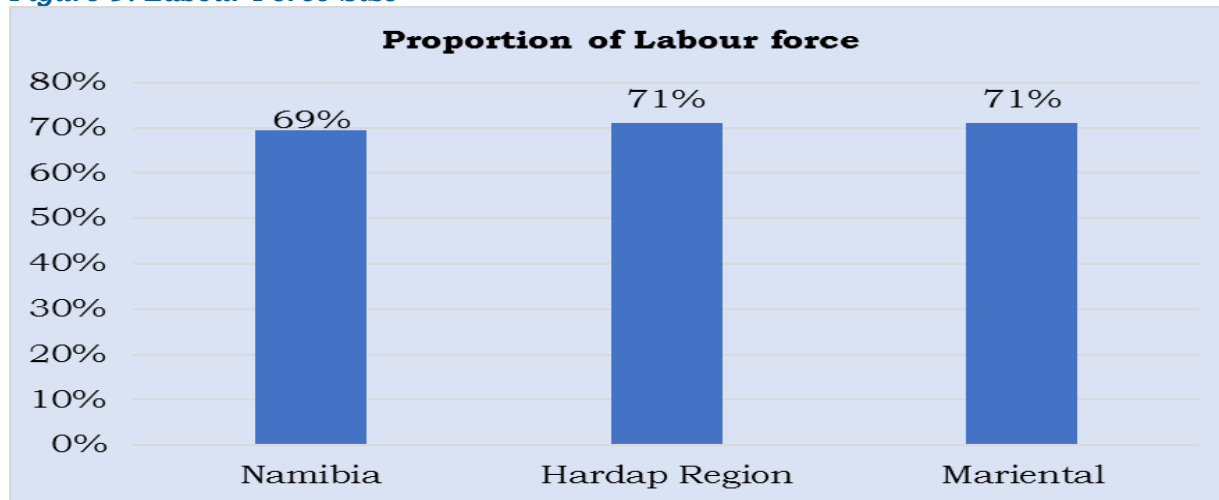


Source: 2011 National Census

4. UNEMPLOYMENT LEVELS

4.1. Labour Force Population in Mariental

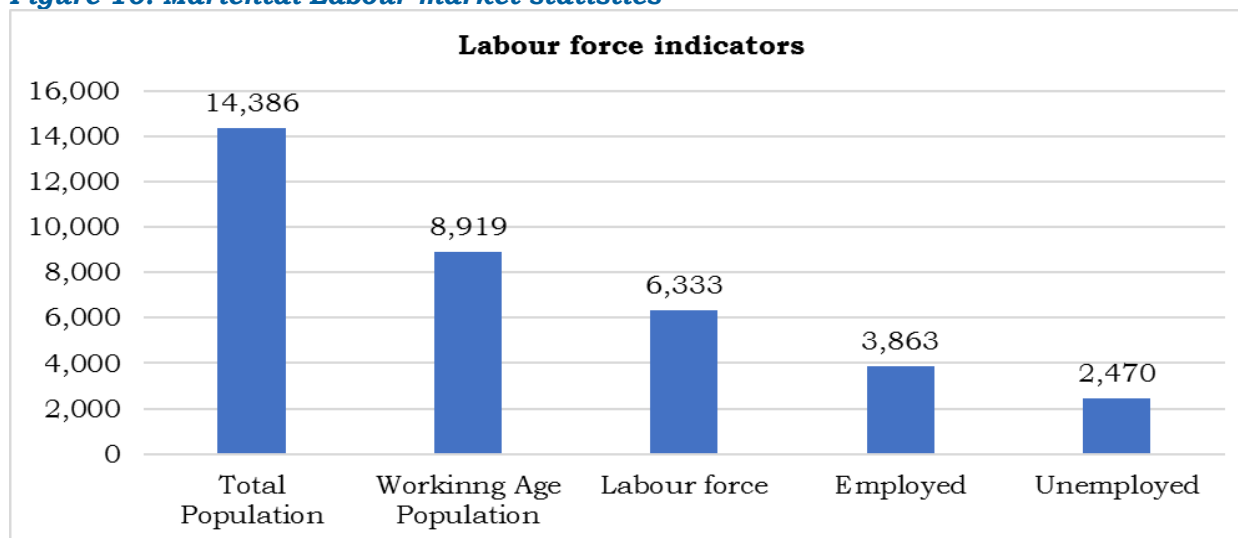
This research estimates the labour force size for Mariental at 6,333, representing a Labour Force Participation Rate (LFPR) of 71 percent. Higher LFPR indicates lower dependence rate which is an ideal demographic situation for a developing country grappling with high poverty levels like Namibia. In the case of Mariental, the LFPR is above the national indicating that more individual are available to work.

Figure 9: Labour Force Size

Source: 2015/16 NHIES, 2011 National Census & First Capital Research

4.2. Employment level

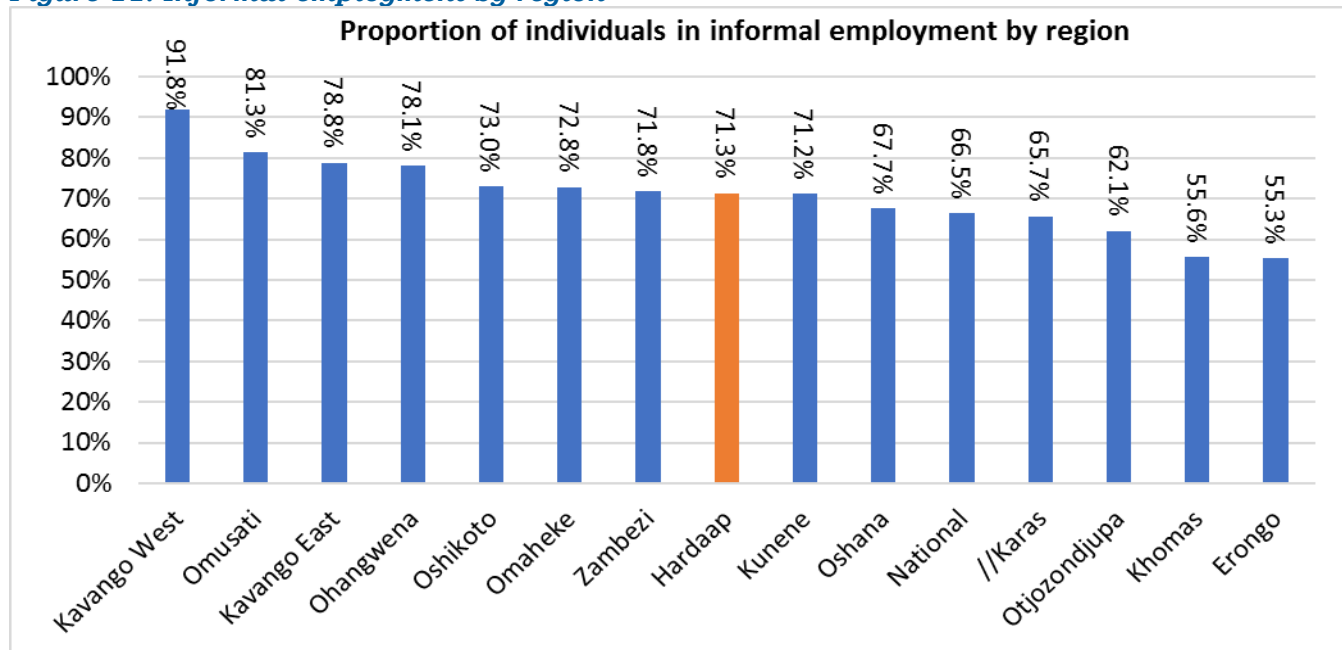
A total of 3,863 individuals are employed out of the labour force population of 6,333 (See figure 10 below). At this level 61 percent of the labour force in Mariental are employed.

Figure 10: Mariental Labour market statistics

Source: First Capital Research findings triangulated with NSA data

4.3. Formal and Informal Employment Situation

The 2016 National Labour Force Survey classifies formal or informal employment based on whether the employee is provided with some form of social protection like pension scheme, medical aid and/or social security. Hardap region has one of the highest levels of informal employment at 71.3 percent compared to the national informal employment proportion of 66.5 percent (see figure 11).

Figure 11: Informal employment by region

Source: NLFS 2016

4.4. Unemployment Situation

Out of total labour force composition of 6,333 in Mariental, we estimate about 2,470 individuals are without jobs. This translates to an unemployment rate of 39 percent. The 39 percent unemployment rate for Mariental is above the 36 percent unemployment rate derived in the 2011 National Census and the 34 percent national unemployment rate. Our research found that the unemployment rate edged up from 36 percent estimated by the 2011 National Census mainly due to job losses in agriculture, construction and wholesale retail sectors.

SECTION TWO: ECONOMIC ANALYSIS BY SECTORS

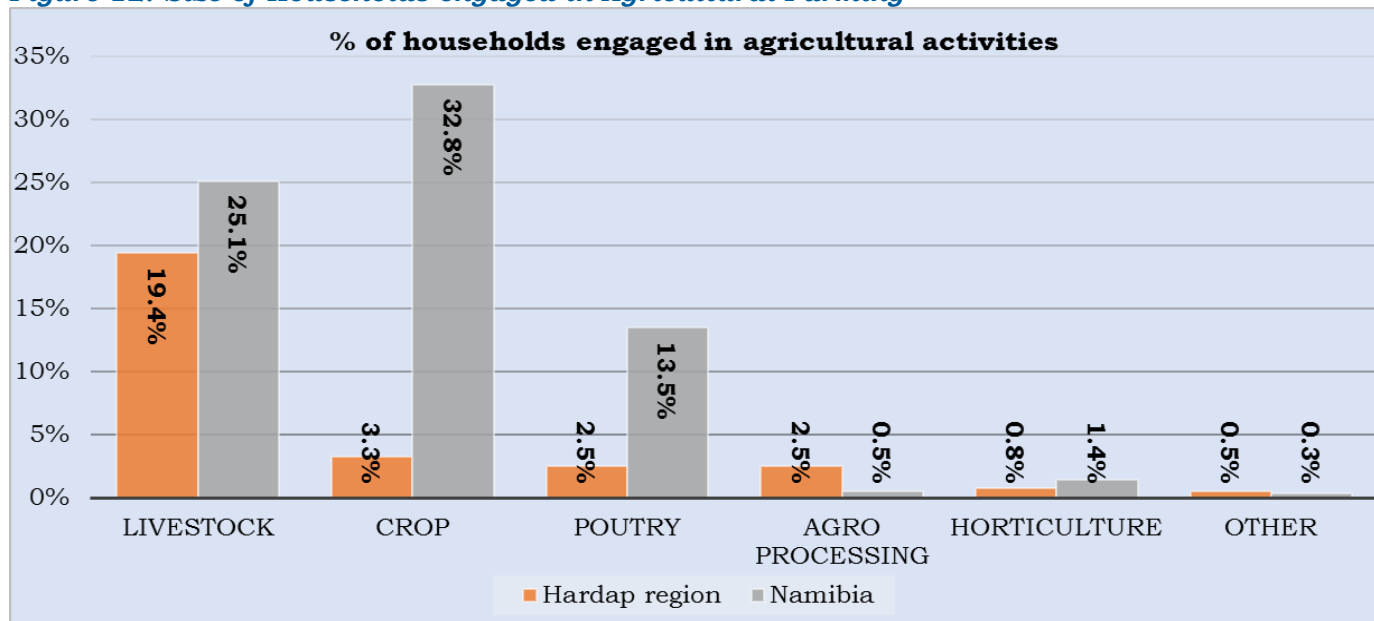
5. PRIMARY SECTOR ACTIVITIES

This section summarizes economic activities in the agricultural and mining sectors.

5.1. Agricultural Activities

Agricultural activities are common in Hardap region mostly crop and livestock farming. A significant number of residents interviewed indicated to be involved in either one or most of the common agricultural activities as mentioned above. This is in line with the findings of the Household Income and Expenditure survey which found that most households or families living in the region were engaged in agricultural activities. According to the last census, 22.8 and 53 percent of households living in Hardap region were engaged in livestock and crop farming activities respectively (See figure 12). Furthermore, only 7.8 percent of the region's households were engaged in poultry farming activities.

Figure 12: Size of Households engaged in Agricultural Farming



Source: 2015/16 NHIES, 2011 National Census & First Capital Research

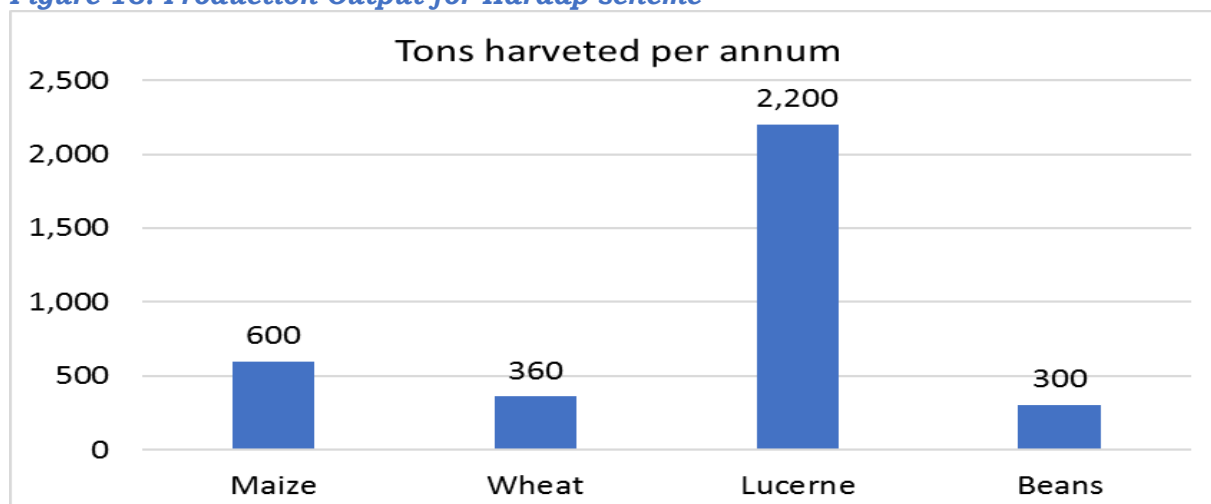
5.1.1. Crop Farming Activities

Crop production in Namibia is commonly practiced with the production of three controlled crops namely: Maize, Mahangu and Wheat. Crop and vegetable production require a good soil fertility, temperature and enough rain or water supply. Mariental and its surrounding rural areas is not conducive for crop production due to its unsuitable soil type for crops (salty and clay soil), low rainfall and non-conductive weather conditions. However, due to its rich water resources from the Hardap dam with the support of manure and fertilizers, most crops and vegetables are grown.

Hardap Irrigation Scheme

Hardap green scheme is one of the 11 government-initiated irrigation projects in the country. The farm produces wheat, maize, lucerne and beans. The farm has produced 600 tons of maize, 360 tons of wheat, 2,200 tons of Lucerne and 300 tons of beans in 2017. Maize and wheat produced at the farm are supplied to Namib mills and Bokomo for milling while lucerne is supplied to !Aimab superfarm for diary-cattle feed.

Figure 13: Production Output for Hardap scheme



Source: Hardap Scheme

Fruit Crop Farming: Dates Farming

The Octant date farm produces high quality Medjool dates, which are a unique type of date with a long shelf life (approximately 3 years). Due to its high quality and long shelf life span these dates are expensive compared to other types produced in the country. The farm has a production capacity of about 75 tons of dates per annum. Dates produced on the farm are mainly for export purposes, with only a small amount sold domestically. The dates produced on the farm are exported to the following countries: Abu-Dhabi, Dubai, Kuwait, Cambodia, Indonesia, Maldives, Singapore, the United Kingdom and Switzerland as well as the royalty houses in the Emeritus.

5.1.2. Livestock Farming Activities

Small stock farming

The most common livestock in Hardap region includes sheep and goats. There are also some farmers who own cattle. Our estimation on the total stock of sheep and goats' livestock in Hardap region is 627,696 and 102,527 sheep and goats respectively. The 627,696 stock of sheep in Hardap region accounts to a share of 36 percent to the total national stock of 1,746,642 sheep country-wide while the 102,527 stock of goats' accounts to a share of 5 percent to the total national stock of 1,968,513.

Pig Farming

Mariental piggery, founded in 2000 is currently the biggest pig farm in the country followed by Haloli piggery in Tsumeb. To date, the farm has a total mixed stock composition of 15,800 pigs which includes 1,250 sows, 8,000 growers, and 3,000 weaners. The farm carcass sales make up to 70 percent of the total domestic pork production. Namibia's domestic pork production makes up 40 percent of total domestic consumption, while the difference is imported mainly from South Africa. The Mariental piggery sells most of its pigs as baconers while a small number of pigs are sold as porkers. Baconers are largely sold to wholesalers and a few porkers to retailers. Markets for pork is mostly local retailers as well as meat markets in Swakopmund and Otjiwarongo. On average the farm produces about 2,200 baconers per month which is equivalent to 26,400 baconers per annum.

5.1.3. Livestock Abattoirs

There are two abattoirs in Mariental namely: Mariental and Farmers Meat Market Mariental.

(i) Mariental Abattoir

The abattoir specializes in slaughtering pigs, cattle and sheep. It slaughters about 2,500 pigs, 625 sheep and 25 cattle a month. The cost of slaughtering sheep, cattle and pig is N\$ 54.50, N\$ 393.89 and N\$ 193.70 per livestock respectively.

(ii) Farmers Meat Market Mariental Abattoir

Farmers meat market only slaughters lamb or sheep. The abattoir slaughters an average of 3,000 sheep per week which is equivalent to 12,000 sheep per month. The cost of slaughtering a sheep at the abattoir is N\$ 65.

5.1.4. Dairy Farming

The dairy farm was founded in 2009, and it is run by Namib Diaries. The farm stocks only Holstein Fresian breed of cows which are one of the highest milk yielding breeds. Namibia dairy supplies 70 percent of the locally produced milk while other dairy farms only produce 30 percent of milk. On average the !Aimab super farm yields about 34,000 litres of milk per day which is equivalent to 14 million litres per annum. Other than fresh milk the farm also produces processed dairy products such as Omaere, Oshikandela, Yoghurt and juice (Rietfontein, sensation, and juicy fruit).

5.1.5. Challenges faced by farmers in Hardap

Most agricultural farms face similar challenges such as high cost of electricity, access to capital due to lack of collateral and government subsidies, high transport and fuel costs, cash flow problems, high input costs (fertilizers, pesticides, seeds and herbicides for crops and feeds for livestock), lack of storage facilities

at the crop farms and cost of storage, army worms, lack of access to markets specific to vegetables, wheat price competition with international markets, wheat attacks by quelea birds and high sunk costs.

Transport and Fuel Costs: The farms use their own transport to transport products to their desired destinations which includes the processing plant in Windhoek for dairy production and millers and markets in Windhoek and Otavi for crop farmers. As transportation costs rises, the farms incur such costs. Some equipment on farms uses fuel and due to persistently recent increases in fuel cost, farmers are facing an increased cost of production.

High input costs (Feeds for livestock; and fertilizers, pesticides, seeds and herbicides for crops): Most of the farms inputs are imported either due to the high cost of buying local inputs and in most cases due to unavailability of locally produced specifications of inputs. Livestock farms (Piggery and dairy farm) in Mariental imports feeds such as soya beans, premix and hay from South Africa and Zambia. Similarly, the inputs used for crop farming especially Lucerne and maize production are also imported. The reliance of imported inputs is generally attributed as a major push factor for high cost of production which is in cases transferred as higher retail prices to consumers.

The recurring outbreaks of livestock diseases: The outbreak of listeriosis earlier this year has affected the marketing of pork and bacon. For the dairy farm, the main outbreaks affecting livestock are the mastitis and pneumonia diseases which attack lactating cows and calves. Controlling the effects of these diseases on livestock has always come at a cost to the dairy industry that already face high input costs.

Lack of skills: The country lacks specialized skills needed in some areas of farming which are common in Mariental, notably specialized veterinary services for pigs and dairy livestock. Due to this skill gap, specialized veterinary services for the pigs and dairy livestock are normally imported from South Africa.

High Cost of Electricity: Most agricultural farming activities require electricity for their operations. According to the findings of this research, electricity remains the single largest cost components of farming compared to water and other utility services.

Access to Capital: Access to capital remains a challenge especially to communal livestock farmers. Most farmers interviewed are generally suggesting that their farming outcomes would be improved by having access to capital and if government could also subsidize their farming projects.

Access to Markets: AMTA used to be the major buyer alongside local millers, but the former has scaled down on buying grains from green schemes, which had a lasting impact on their market. Equally so, vegetables produced from the local farms are struggling to meet requirements to be sold in local supermarkets.

High Sunk Costs: It takes a long time to recover sunk costs incurred during infrastructural developments. Farming requires large investments to set up physical infrastructure and to acquire farming equipment and machineries. As such, farmers find it difficult to invest due to high sunk costs.

5.1.6. Wildlife animals' farming

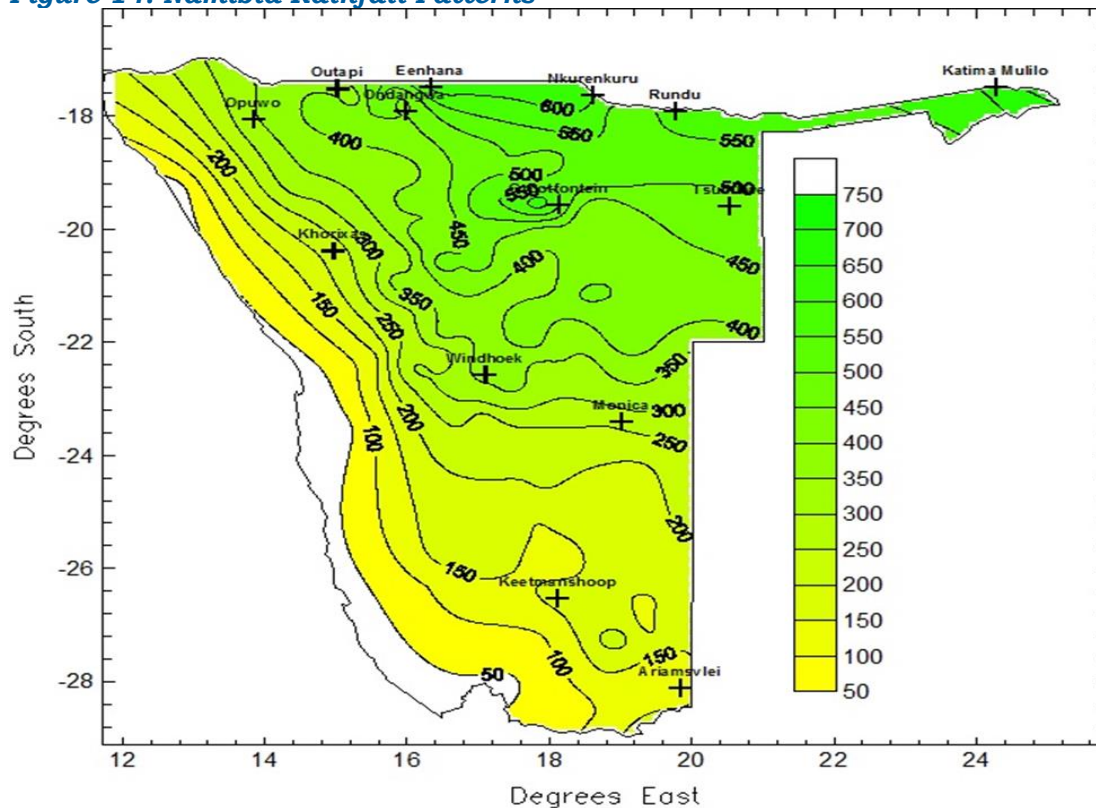
Besides livestock farming, there are two wildlife farming conservancies within Hardap region namely the Oskop and Huibes Conservancies which have both direct and indirect benefits to the local economy of the region's administrative capital city. Our research finds that hospitality facilities in Mariental, retail shops, transport services, and banking institutions derive both direct and indirect benefits from economic and social benefits accruing from the conservancy tourism services. Most common wildlife species on these conservancies include; Springbok, Oryx and Kudu.

5.1.7. Fish Farming and Fish Feed Production

Hardap Inland Aquaculture Centre which was founded in 1978 as Freshwater Research Institute, and later transformed into an aquaculture center in 2003 is a major fish farm project in the region. The centre serves the following purposes: Fingerling and fish production, fish processing and sales, aquaculture development in the regions (Erongo, Khomas, Omaheke, Hardap and //Karas), inland fisheries research and management, fish farm extension and technical services, awareness and training (students, farmers and potential farmers). The farm only breeds the Mozambique Tilapia with a production capacity of approximately 350,000 fingerlings and 60 tons of Mozambique tilapia per annum.

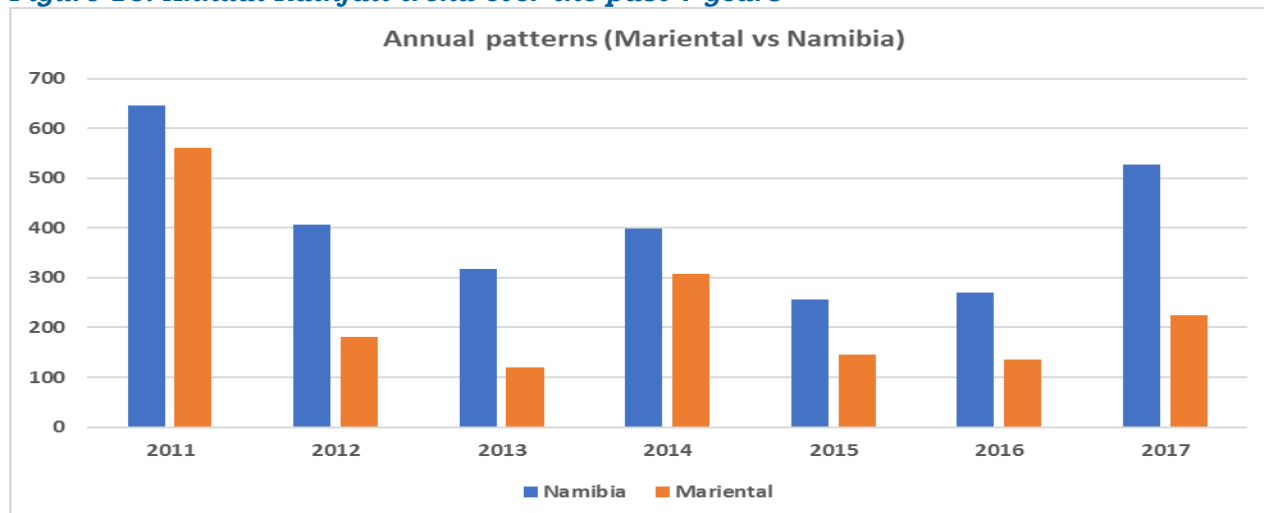
5.1.8. Rainfall Patterns

Mariental is one of the areas in the country classified to have below national average rainfall patterns. The Meteorological Service of Namibia classifies Mariental's average rainfall patterns in the range of 200 millimeters per annum which is less than the national average of 300 millimeters of rainfall per annum. The map presented below under figure 16 shows the geographic patterns of rainfall in Namibia. Higher rainfall patterns are much more concentrated in the northern parts of the country, while the coastal and southern parts of the country are classified as low rainfall pattern areas (*see figure 14 below*).

Figure 14: Namibia Rainfall Patterns

Source: Meteorological Service of Namibia

As shown in figure 15 below, on average rainfall received in Mariental over the past 7 years has been below the national average rainfall received. Over the past 7 years the year 2013 have received the lowest rainfall compared to other years in Mariental a trend like most places across the country.

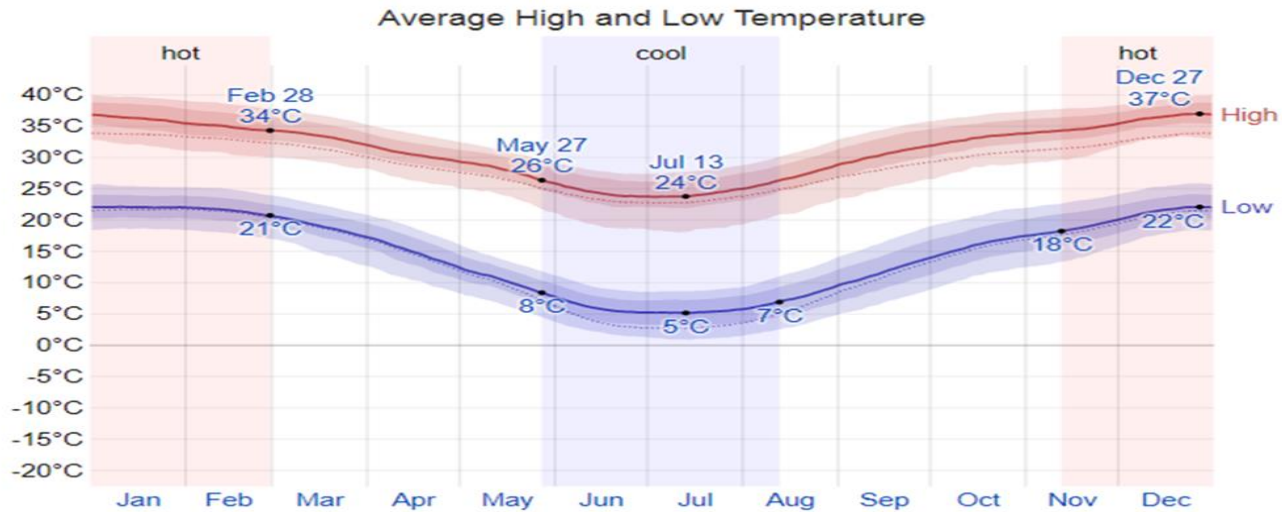
Figure 15: Annual Rainfall trend over the past 7 years

Source: Metrological Office of Namibia, calculation done by First Capital Research

5.1.9. Temperature Patterns

Most crops require temperature range of 15-28 degree Celsius during the day to ensure optimum growth and final yields. Temperatures above and below that can have a negative effect on crops at different stages of growth. Minimum temperature ranges at night should not go to freezing points since that will burn the plant tissues forcing some to dry and die. For Hardap region during hot seasons or summer, day temperature average is between 14-30 degree Celsius with some exceptionally very hot days reaching up to 37 degree Celsius and some coldest days that get up to 5 degree Celsius.

Figure 16: Mariental Average Temperature

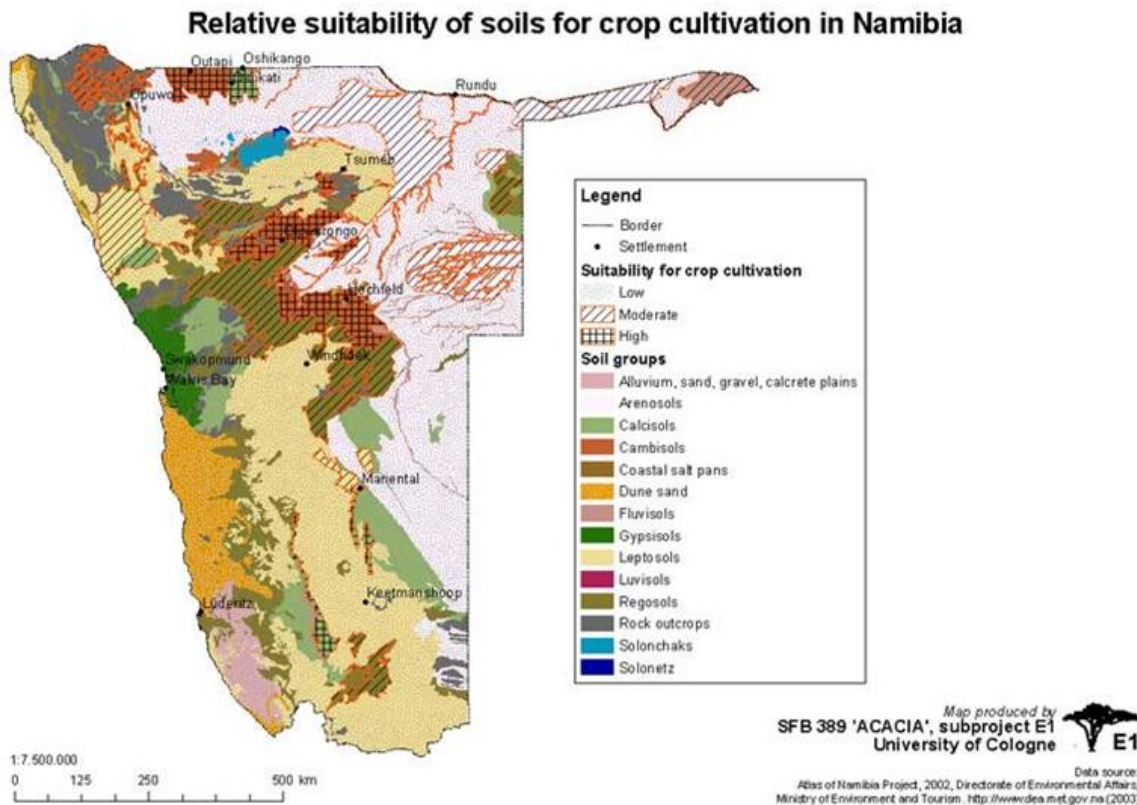


Source: Weather Sparks

5.1.10. Soil Types

In Southern Namibia, soils are moderately and lowly suitable for crop production. This is explained by clay soil found in the south, which lack nutrients and has closed particles which makes it difficult for water to penetrate. The PH of clay soil is alkaline (acidic) in nature. However, crop production in the Hardap area is aided by the abundance availability of open water from the Hardap dam and application of both organic and inorganic fertilizers.

Figure 17: Soil types in Namibia



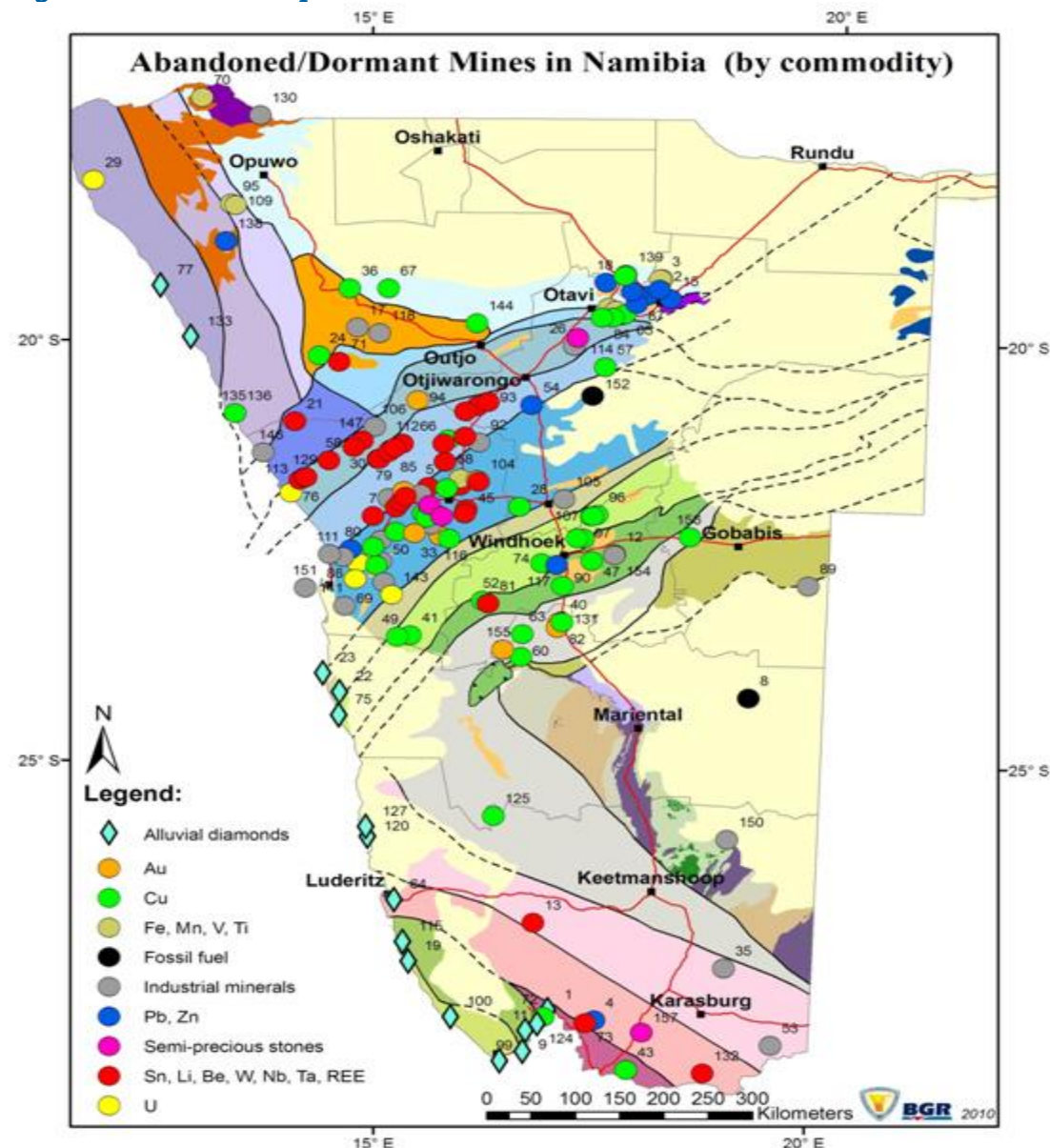
Source: University of Cologne

5.2. Mining and Quarrying Activities

5.2.1. Mineral Mining Activities

Currently there are no mining operations in Mariental and Hardap region in general. This is in line with geological maps that shows low potential of mineral deposits in the Mariental town (See figure 18 below). However, a small amount of deposits such as Copper, Silver, Lead, Iron, Manganese and Kimberlite are found in the area.

Figure 18: Mineral Deposits in Namibia



Source: Ministry of Mines and Energy

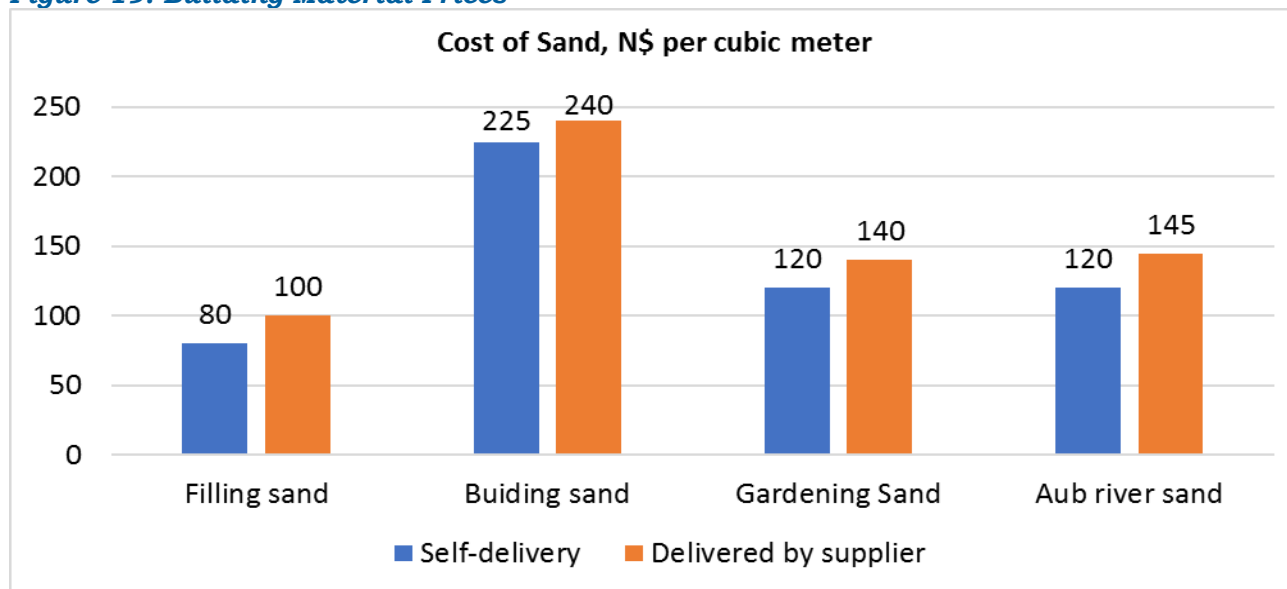
5.2.2. Quarrying Activities

Quarrying of sand is common in Mariental and Hardap region. Due to the increase of construction activities in Mariental which includes the construction of residential houses, business buildings as well as government infrastructure buildings, the demand for sand have also increased. Retail suppliers of building sand charge N\$225 per cubic meters of sand with own transport and N\$240 when delivered by the suppliers while that price is increased when the deliveries are made in areas outside the town of Mariental to cover for the transportation cost. Other than retail suppliers of building sand, the Mariental Municipality sells the Aub river sand, which costs N\$ 120 when self-delivered and N\$ 140 when delivered by the municipality. Given the government's commitments to enforce regulation of sand mining activities

in the country for environmental management purposes, we expect that competition will lessen as some suppliers would be required to close on falling short to meet requirements, and the lengthy process to apply for fitness certificates would be another factor that would see less competition in the medium.

Figure 19 below, shows the prices of sand depending on the type and purpose of sand. Overall, the price of sand is cheaper when self-delivered in comparison of when it is delivered by a supplier, because of transportation costs incurred.

Figure 19: Building Material Prices



Source: Mariental Municipality & Super sand Mariental

6. INDUSTRY SECTOR ACTIVITIES

This section summarizes economic activities involving processing and manufacturing of products for final consumption. It also involves construction activities taking place in the area.

6.1. Manufacturing and Processing Activities

The town's value addition in terms of manufacturing activities is moderate due to that most commodities produced in the town are processed in other towns. For instance, milk is sent to Windhoek (Avis plant) while pork and bacon are both sent to meat processors outside the Hardap region. Part of the reason for low value addition in agricultural output is due to the absence of processing plants for agricultural products in Mariental especially with livestock products which are sent to other towns for processing. Some manufacturing activities that are happening in Mariental includes brick making. The brick making industry has grown over the past years due to the demand from construction activities taking place within the region. The total demand for bricks in Mariental is estimated at 120,000 bricks per month.

6.2. Electricity Supply

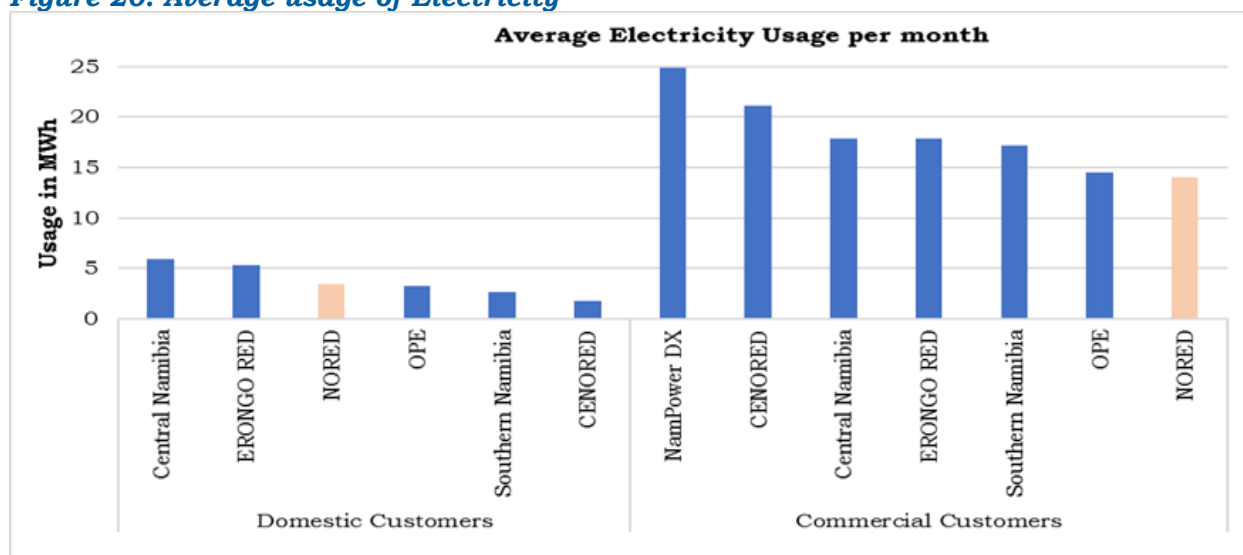
6.2.1. Access to Electricity

Electricity distribution in the town of Mariental is managed by the Mariental Municipality which charges end users on the consumption of electricity. Connecting to the local authority electricity requires a deposit of either N\$800 or N\$3,000 for prepaid or conventional electricity respectively. Furthermore, the electricity meter will cost N\$1,562.90. Using the data on access to electricity in the country it is estimated that, 61 percent of households have access to electricity in the town of Mariental.

6.2.2. Electricity Usage

The average usage of electricity in the country for individual customers is 4-megawatt hour per annum equivalent to 333-kilowatt hour per month. However, it differs by area. Individuals in the southern regions where Mariental is included uses 2.5-megawatt hour of electricity per annum (208.3-kilowatt hour per month) which is slightly below the national average of 4-megawatt hour (333.3-kilowatt hour per month). Based on the surveyed individuals we estimate the average annual electricity usage for households in Mariental to be 3-megawatt hour equivalent to 250-kilowatt hour per month. Commercial users of electricity in Hardap region uses 15-megawatt hour in a year equivalent to 1,250-kilowatt hour per month.

Figure 20: Average usage of Electricity



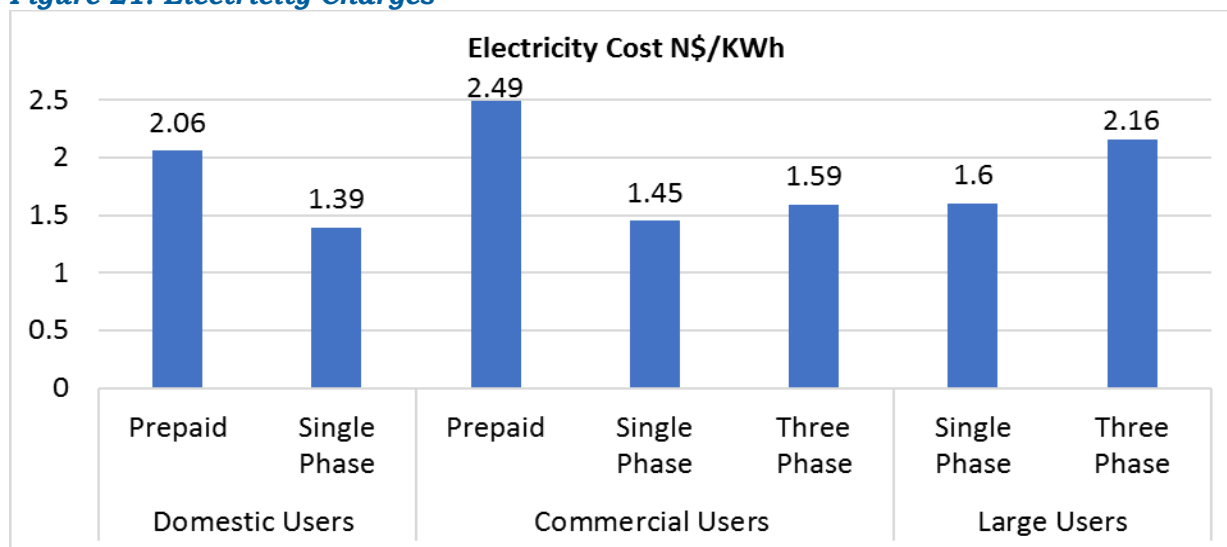
Source: ECB

6.2.3. The cost of Electricity

Electricity distribution in Mariental is managed by the Mariental Municipality. The Municipality uses three classifications for electricity charges namely: single phase, three phase and prepaid. Single phase distribution is mostly used by units with small power requirement such as households and office blocks

while three phases is used by units with large power requirements such as factories, schools with hostels, big hospitals and banks. Figure 21 below highlights the standard rates (low season) charged on electricity usage expressed in N\$/KWh. Commercial operators using prepaid meters are charged N\$ 2.49 KWh, which is the highest compared to single phase and three phases who are charged N\$ 1.45 KWh and N\$ 1.59 KWh respectively. Residential users pay the second most using prepaid meter at the rate of N\$ 2.06 KWh while Larger power users pay N\$ 2.16 KWh for three phases. Overall, the cost of electricity is higher when using prepaid meter

Figure 21: Electricity Charges



Source: Mariental Municipality

6.2.4. Simulation of electricity cost burden on households

This scenario presents a model of the average monthly electricity burden of a household in Mariental. Taking into consideration the annual usage of 3-megawatt hour of electricity equivalent to 250-kilowatt hour per month for an average family in Mariental at a cost of N\$ 2.06 per kilowatt hour for prepaid domestic users, we estimate the average bill for residents in Mariental at N\$ 515 per month.

6.3. Water Supply

Clean water supply to the town is managed by Namwater and the distribution is done by the Municipality which sells to residents. Water supplied to the town is extracted from Hardap dam by NamWater. The town has the Hardap purification plant which is situated 4km from the dam and is run by NamWater. When purification is done, the water is then sold to the Municipality for N\$15.60 per cubic meter. NamWater supplies approximately 60,000 cubic meter per month to the Mariental Municipality which is worth N\$ 936,000.

Hardap Dam

Hardap dam is situated 18 km northwest of Mariental, in the Hardap Region. The dam was established in 1963 and is far by the largest reservoir in the country. The Hardap dam has a capacity of 320 million cubic metres and a surface area of 25 km² (2,500 ha). The dam's construction began in 1960 and completed in 1963 and it sources water from the Orange river through the Fish river. The dam supplies Mariental and the surrounding areas with clean water and irrigation water. Its location close to Mariental carries of flooding it when channels have to be opened fully due to good rain. The dam's water level is kept at a maximum of 70 percent of its capacity to prevent both an overflow and an uncontrolled outflow. The dam is also a tourism attraction spot due to various activities taking place namely: Swimming, fishing and gazing at different species of birds (Great white pelican, Cormorant, Darter and Spoonbill). The surrounding area is home to the black rhino, gemsbok, hartmann's zebra, kudu, ostrich, springbok and steenbok.

6.4. Water Consumption

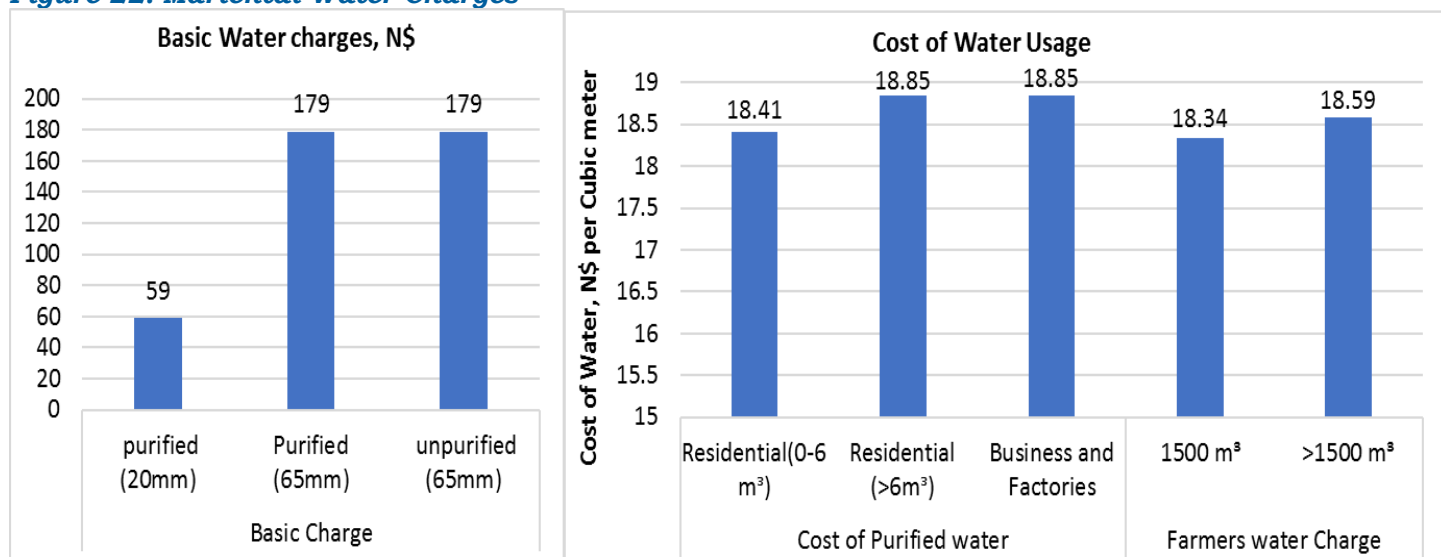
The town of Mariental consumes on average 683,211,716 cubic meters of water per month including both residential domestic consumers and commercial consumers including farms.

6.4.1. Access to Tap Water

Using various data sources our research estimate that 61 percent of households are connected to the municipality's water services in the town. Connections to the town water services is done by the Municipality. When connecting to the water supply, the municipality charges N\$1,500.43 for the water meter to be installed.

6.4.2. Price of Water

Water supplied by the Municipality to end users is charged at different rates to different clients. The measurement of water consumption is expressed in cubic meters where 1 cubic meter is equivalent to 1,000 Liters. On every transaction, a customer is subject to a basic charge depending on the type of customer namely: domestic, business & factories and farmers. On average basic charges of purified water for both residential and non-residential clients N\$ 59 and N\$ 179 respectively. Unpurified water for farming and building purposes is also subject to a basic charge of N\$ 179. In addition to the basic charge, customers pay water based on individual usage as shown in *figure 22* below. The more the consumption of water, the more they pay. The lowest rate charged per cubic meter is N\$ 18.41 for the usage between 0-6 cubic meters per month, and peaks at N\$ 18.85 per cubic meters for water usage more than 6 cubic meters for residential and 18.85 cubic meters for business as well as factories. Moreover, farmers are charged N\$ 18.34 per cubic meter for the first 1,500 cubic meters used while for any usage of more than 1,500 cubic meters the charges are N\$ 18.59 per cubic meter.

Figure 22: Mariental Water Charges

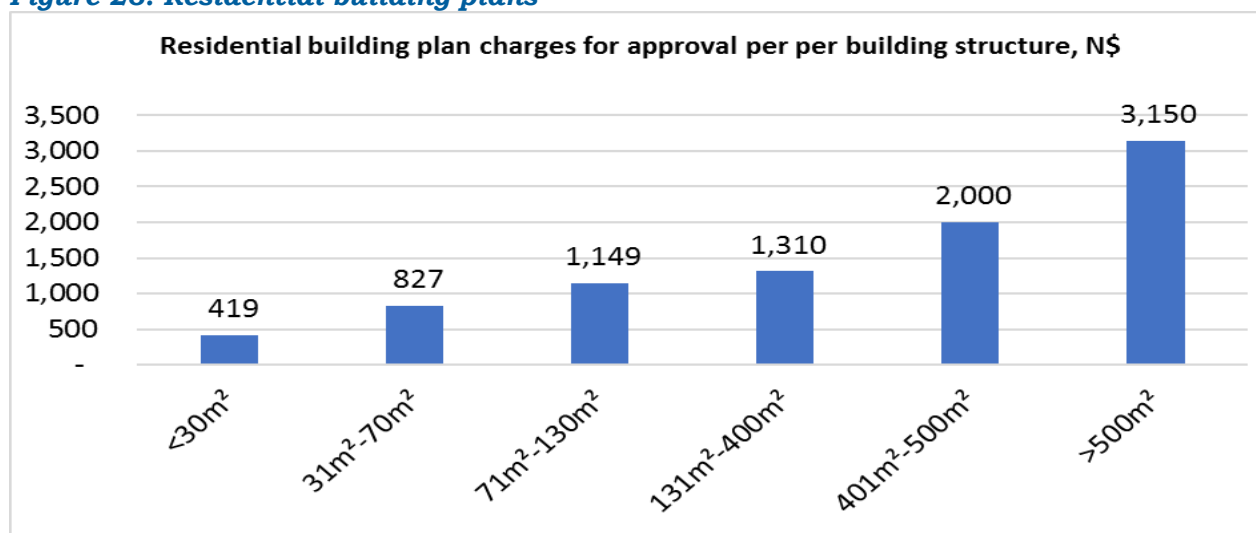
Source: Mariental Municipality

6.5. Construction Activities

The town of Mariental has experienced an increase in physical infrastructure developments which includes the construction of residential and commercial buildings.

6.5.1. Residential Building Plans

The Mariental Municipality reviews and approves building plans at a fee charged based on the size and the building structure of the plan. A building plan of a dwelling less than 30 sq. meter is charged N\$ 419 while a structure of the size ranging between 31 and 70 sq. meter is charged N\$ 827 and N\$ 1,149 for a structure between 71 and 130 sq. meter. The larger the size of the dwelling on the building plan the higher the cost for approval.

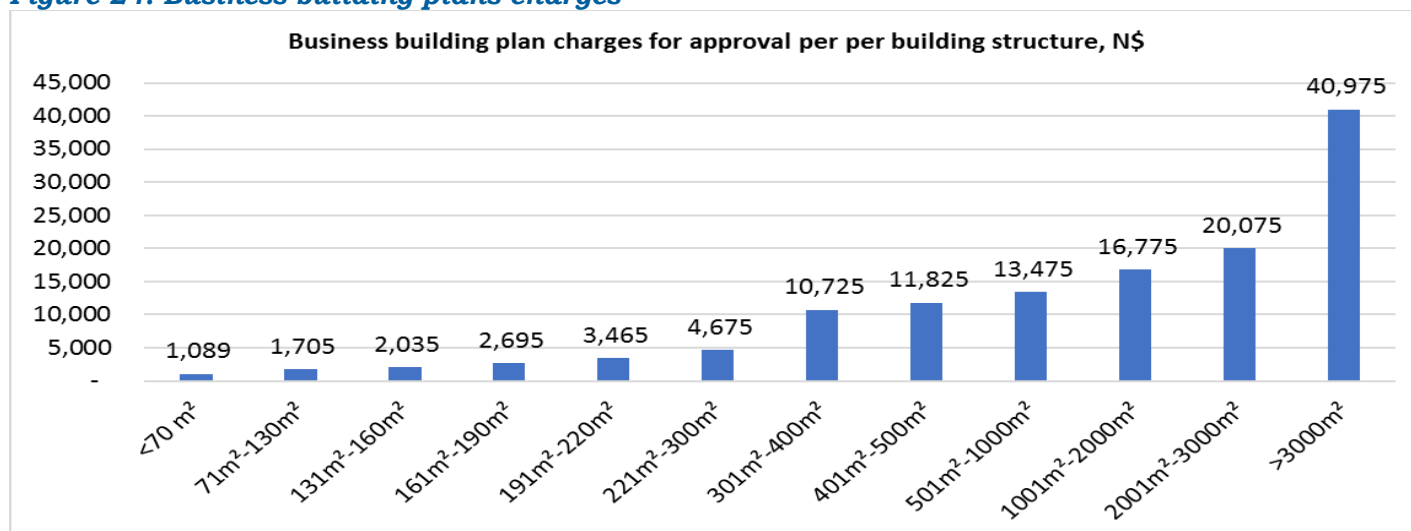
Figure 23: Residential building plans

Source: Mariental Municipality

6.5.2. Businesses building plan

Approval of business building plans (including institutional and others) is charged based on the size and the building structure of the plan. A building plan of a structure less than 70 sq. meter is charged N\$ 1,089 while a structure of the size ranging between 71 and 130 sq. meter is charged N\$ 1,705 and N\$ 2,035 for a structure between 131 and 160 sq. meter. The larger the size of the structure on the building plan the higher the cost for approval. We observed that the business building plans cost more than residential building plans for approval at the Municipality.

Figure 24: Business building plans charges

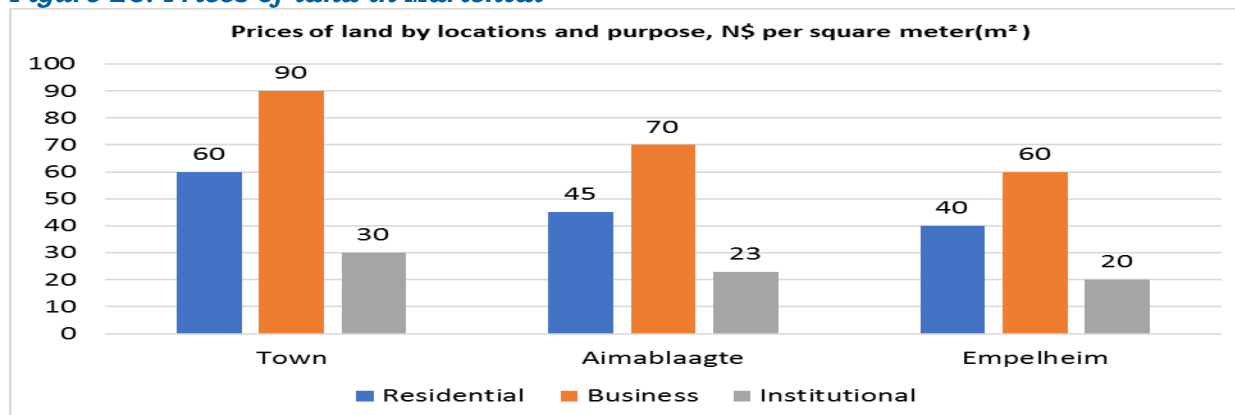


Source: Mariental Municipality

6.5.3. Price of Land by Location

Land prices differ by location and area. In Mariental prices are classified depending on whether land is used for residential, business or institutional purposes. Residential land price is cheaper in Empelheim costing N\$40 per square meter. Land for residential costs higher in Town costing N\$ 60 per square meter, comparing it to Aimablaagte and Empelheim suburbs.

Figure 25: Prices of land in Mariental



Source: Mariental Municipality

6.5.4. List of major Government expenditure projects in Mariental

Table 1 below summarizes the top major government projects budgeted for Mariental. In the year 2018/19 the government budgeted to spend N\$ 46 million on the maintenance and repair of health infrastructure in Hardap region. The total budget of the maintenance and repair of health infrastructure program is N\$ 280 million in Hardap region, which will be spent over the next 5 years. Mass land servicing was allocated a budget of N\$15 million for 2018/19. There is also a budget of N\$ 1.43 billion meant for the Horticulture Support Program.

Table 1: List of Major Capital Expenditures in Mariental

No	Project Name	Implementing Agency	Area of project implementation	Total Project Cost (N\$ Million)	2018/19 (N\$ million)	Balance to complete Project (N\$ million)
1	Massive land servicing in Mariental	Ministry Rural and urban development	Continuation of project	117	15	43
2	Massive land servicing in Gochas	Ministry of rural and urban development	Continuation of project	35	4	500
3	Massive land servicing in Gibeon	Ministry of Rural and urban Development	Continuation of project	25	7	3
4	Installation of new hot water reticulation system and fire suppression system at hardap correctional facility	Ministry Safety and Security	In Progress	2	2	500
5	Construction of a Primary School at Hardap Scheme	Ministry of Education, Arts	In Progress	80	15	32
6	Upgrading and renovation of Mariental District Hospital	Ministry of Health and social services	Project to commence in 2019	48	0	15
7	Provision of basic sanitation in Rural areas in Hardap	Ministry of Rural and urban Development	Project commenced in 2018	25	9	11
8	Construction of Hardap Regional office Park	Ministry of Rural and urban Development	Completion in 2020	87	18	15
9	Water provision for Game in Hardap	Ministry of Environment and Tourism	In Progress	42	2	22
10	Socio-Economic Development in Hardap	Ministry of Industrialization, Trade and Development	In Progress	165	10	69
11	Construction of Hostel facility at Tsumis Farm Primary School	Ministry of Agriculture, Water and Forestry	In Progress	110	0	90
12	Small stock distribution and development in communal areas in hardap	Ministry of Agriculture, Water and Forestry	Continuation of project	37	7	15
13	Establishing of Agro Processing Facilities in Hardap	Ministry of Agriculture, Water and Forestry	Commenced in 2018	50	7	36
14	Horticulture Support Programme	Ministry of Agriculture, Water and Forestry	Commencing in 2019	1,432	48	1,384
15	Upgrading and network infrastructure and expansion of IT services to the Hardap regional	Ministry of Transport	In Progress	22	2	13
16	Upgrading of Vehicle and driver testing stations in Hardap region	Ministry of Transport	In Progress	394	10	253
17	Rehabilitation of the Keetmanshoop -Mariental road (386km)	Ministry of Transport	Commenced in 2018	696	3	684
18	Rural Electrification	Ministry of Mines and Energy	In Progress	885	50	231
19	Renovation of lower courts	Ministry of Justice	In Progress	25	1	5
20	Construction of mobile courts	Ministry of Justice	Continuation of project	25	6	1

Source: MoF

7. SERVICES SECTOR ACTIVITIES

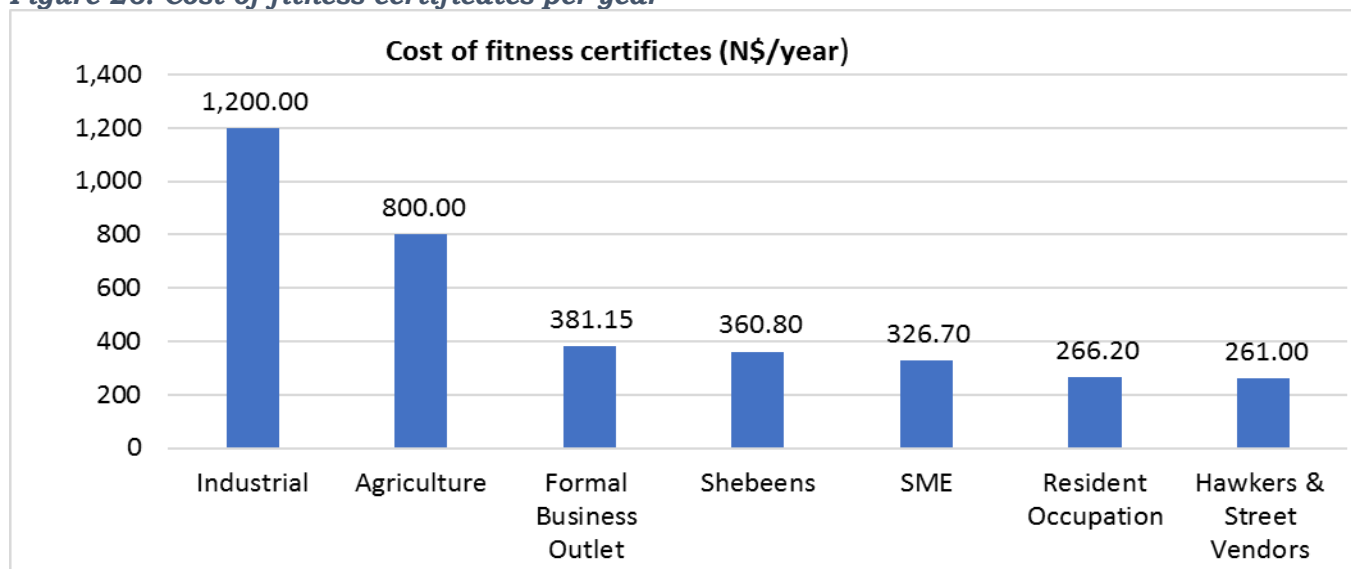
This section summarizes the services activities provided in the town of Mariental. These services range from educational, health, financial, Tourism, Transport and other administrative services provided by government and related offices.

7.1. Business activities

7.1.1. Cost of business fitness certificate

A fitness certificate certifies a business, or an organization as being fit or competent to carry a business activity or industrial project. The cost of a fitness certificate depends on the type of business or project. The municipality charges the highest fee for industrial activity, followed by agricultural projects with N\$1,200 and N\$800 respectively. The hawkers and street vendors are charged the lowest amount of N\$ 261.

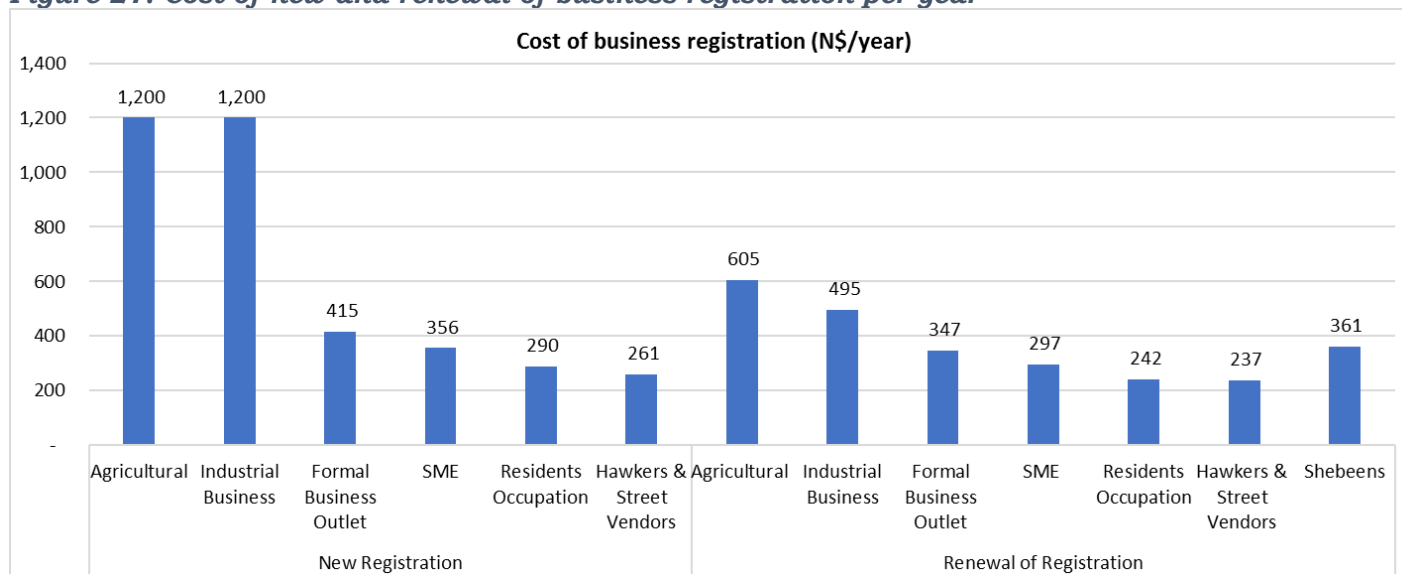
Figure 26: Cost of fitness certificates per year



Source: Mariental Municipality

7.1.2. Cost of business registration per year

The cost of registering business depends on the whether it is a newly registered or an existing business. The cost for registering a new business is more expensive than the cost of renewing a business registration. For registering a new agricultural and industrial business, the municipality charges N\$1,200 which is the highest cost while it charges N\$ 261 and N\$ 290 for Hawkers & street vendors and residents occupation which is the lowest (see figure 27). The renewal registration of an existing business cost N\$ 605 and N\$ 495 for agricultural and industrial businesses respectively. It cost N\$ 361 to renew registration for Shebeens.

Figure 27: Cost of new and renewal of business registration per year

Source: Mariental Municipality

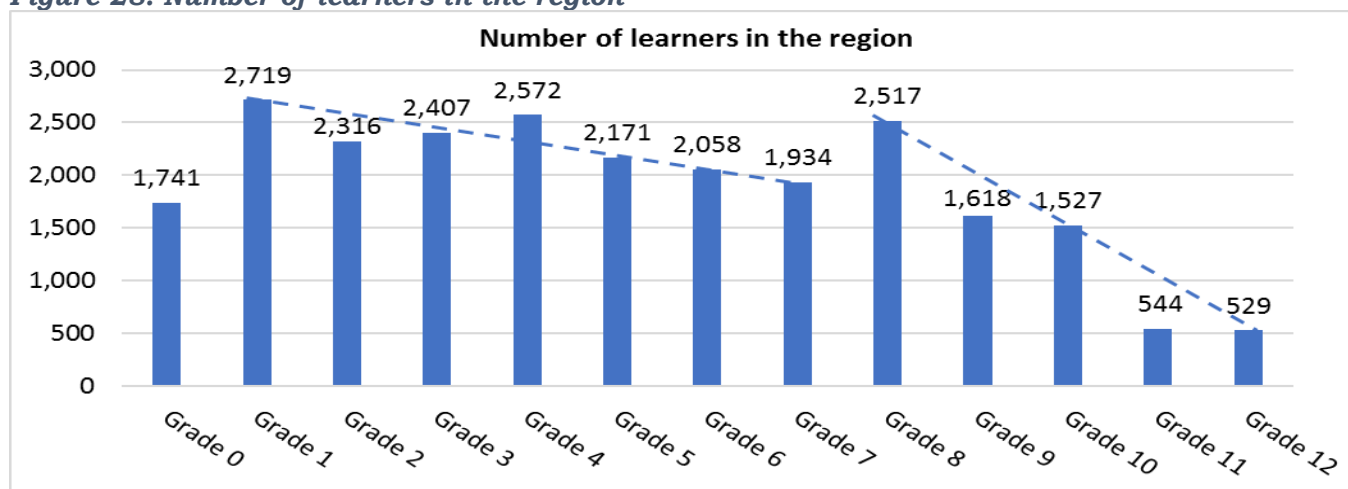
7.2. Educational Services

7.1.1. Access to Education

There is only one tertiary Institution in Mariental, namely Namibia College of Open Learning (NAMCOL) and Triumphant College. There are 3 primary schools and 2 secondary schools. All the primary schools are government schools of which two of the three primary schools have hostels. However, there is 1 government secondary school with no hostel and 1 Private secondary school with no hostel as well.

7.1.2. Number of Learners in the Region

There is a total number of 22,912 learners in Hardap region excluding 1,741 Grade 0 learners. Overall, the number of learners decreases with higher grade. Grade 1 has most enrollments than all the grades with 2,719 and lowest enrollment are in Grade 12 with 529.

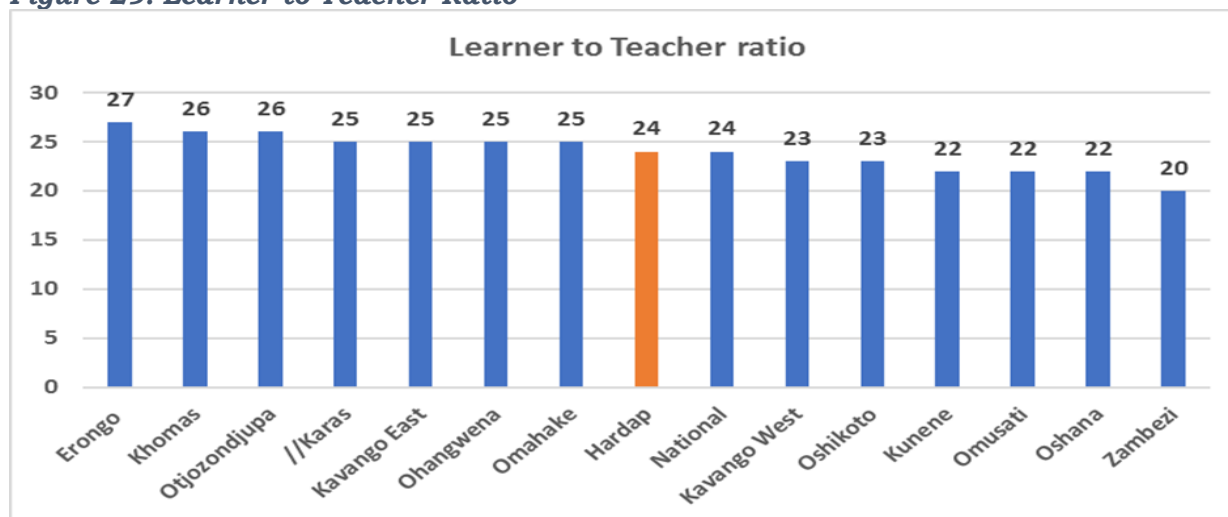
Figure 28: Number of learners in the region

Source: MoE

7.1.3. Learner to Teacher Ratio

The learner to teacher ratio indicates resource allocation to education. The learner to teacher ratio in Namibia is 24. In Hardap region it is 24 which is in line with the national average of 24.

Figure 29: Learner to Teacher Ratio

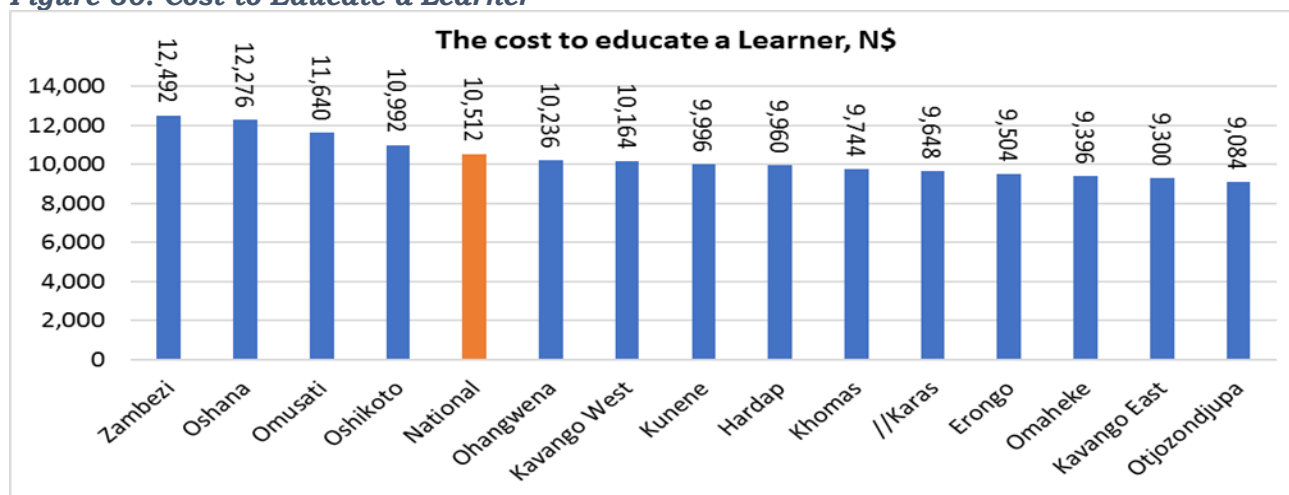


Source: MoE

7.1.4. Cost to Educate a Learner

The cost of educating a learner in this context is the operational cost on education divided by the number of learners per annum. Hardap region has an average cost for educating a learner of N\$ 9,960. This is lower than the national average cost for educating a learner of N\$ 10,512. However, interpreting this information in relation to efficiency of education can be misleading due to other confounding variables like the qualification and experience of teachers which is a determining factor for teachers wages or the number of learners in the region in relation to teachers.

Figure 30: Cost to Educate a Learner

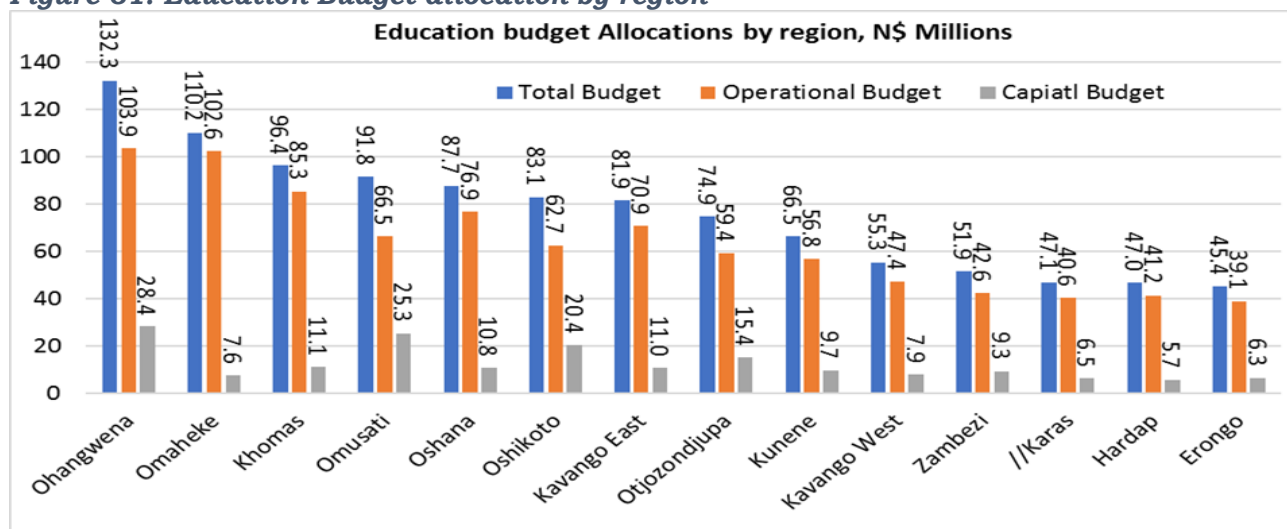


Source: MoE

7.1.5. Education Budget Allocation by Region

During 2017/18 Ohangwena region received the highest budget allocation of N\$132.3 million compared to other regions followed by Omaheke and Khomas region with N\$ 103.9 and N\$ 96.4 million respectively. Hardap region received a budget allocation of N\$ 47 million which was the 2nd lowest among all regional allocation in the country.

Figure 31: Education Budget allocation by region

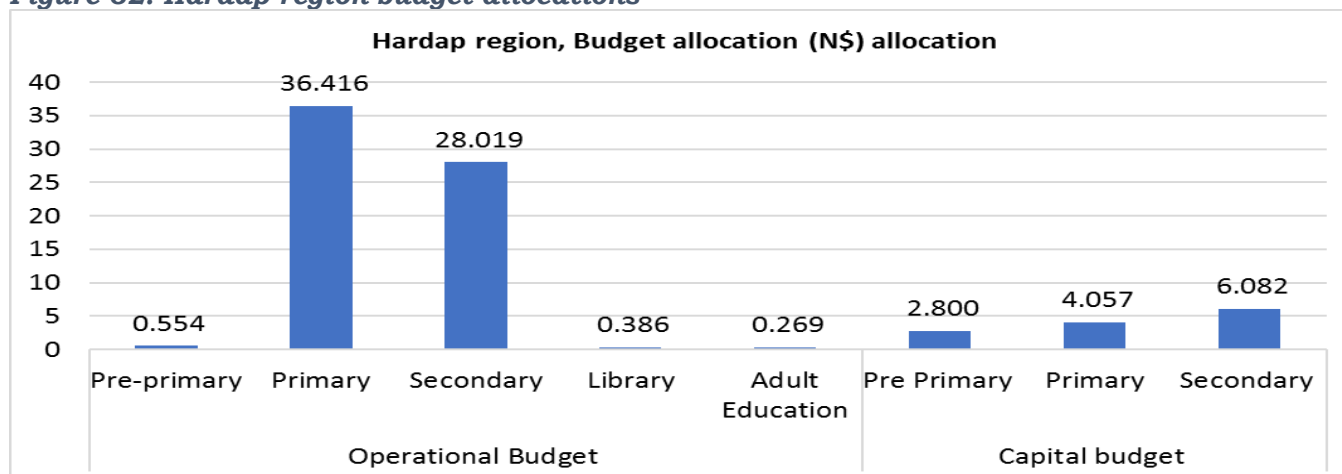


Source: MoE

7.1.6. Budget allocation For Hardap region

The budget allocation for operational expenditure is higher in Hardap region compared to capital expenditure. In 2017/18 library related operational expenditure was allocated N\$ 386 thousand and adult education operational expenditure received a budget of N\$ 269 thousand in the same period. Primary and Secondary education operational expenditures received N\$ 36.4 and N\$ 28 million respectively. Capital expenditure on primary and secondary education were allocated a budget of N\$ 4 and N\$ 6 million respectively.

Figure 32: Hardap region budget allocations



Source: MoE

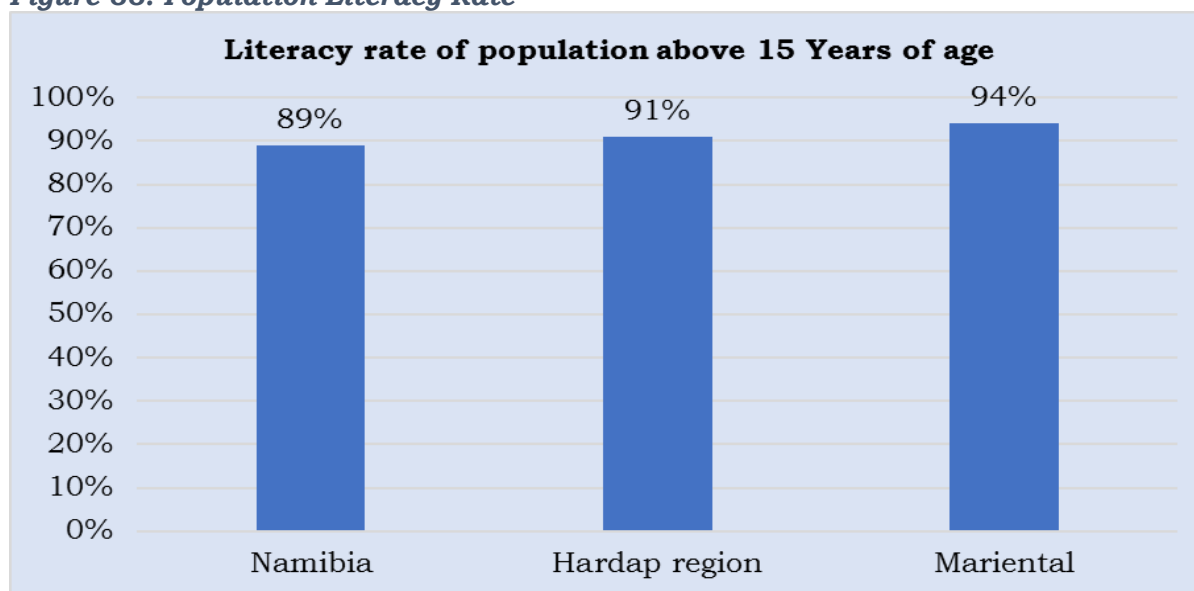
7.1.7. Access to Tertiary Education

The Namibia College of Open Learning (NAMCOL) has a center in Mariental. The NAMCOL center has a total enrollment of 150 and 250 grade 10 and 12 learners per year respectively. The courses offered at NAMCOL presents potential to address the developmental challenges in the town and Hardap region in general.

7.1.10. Literacy Rate

The literacy rate is measured in terms of people that can read and write. Mariental has a literacy rate of 94 percent which is 3 percentage points higher than Hardap region literacy rate and 5 percentage points higher than that of the country among the population aged 15 years and above.

Figure 33: Population Literacy Rate



Source: 2015/16 NHIES, 2011 National Census & First Capital Research

7.3. Health Services

7.3.1. National Situation

Namibia has a dual system of health care servicing: public (serving 85% of the population) and private (15%) health care providers. The Ministry of Health and Social Services (MoHSS) is the main implementer and provider of public health services with a four-tier system: outreach points (1,150) clinics and health centers (309), district hospitals (29) and intermediate and referral hospitals (4). Faith-based organizations operate services for the MoHSS on an outsourcing basis. The private sector is sizeable, with 844 private health facilities registered with MOHSS. A total of 342 health facilities (Hospitals, clinics & health centers, excluding outreach points) serves an estimated population of 1.9 million. On average the national public system has an infrastructure of 1 health facility per 5,700 population.

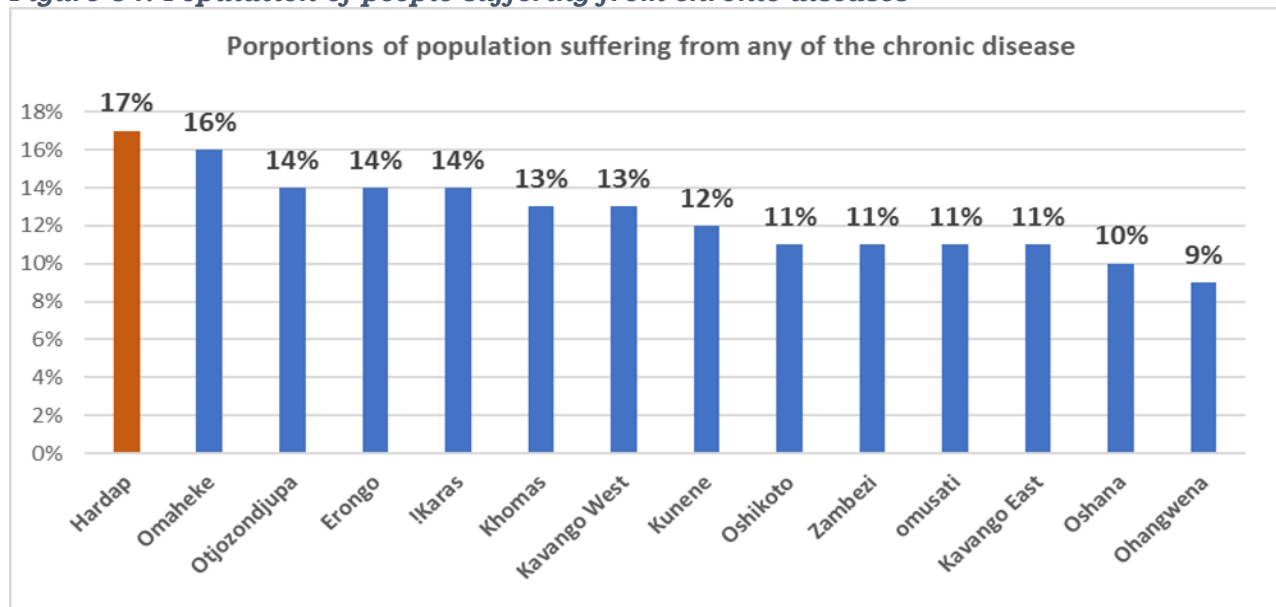
7.3.2. Situation in Mariental

Mariental has 2 health facilities made of a district hospital and a clinic serving a population of 14,386. The district hospital goes beyond serving only those living in Mariental but caters as well as those in nearby towns. This research estimates that only 10 percent (1,439) of the population in Mariental are using private medical services while 90 percent (12,947) use public health facilities. There are also 5 private health consultation facilities practices operating in Mariental which do not offer bedding to admit patients. The state hospital in town has 5 medical doctors putting the average medical doctors to population ratio at 1:2,589 which is far from the WHO recommended of 1 medical doctor per 1,000 population. The shortage of medical doctors in Mariental is a national challenge common in the health care system in Namibia. The 5 private doctors are serving a population of 1,437 people living in Mariental with an average ratio of 1:288. The public hospital has 120 beds, meaning only 120 patients can be admitted at a given time, while the private health providers has no admission capacity for patients.

7.3.3. Chronic Diseases Prevalence by Region

Namibia has a prevalence rate of 12 percent of the population or 269,400 individuals estimated to be suffering from one or a combination of chronic diseases. These diseases include among others Blood pressure, diabetes, cancer, joint inflammations, cardiac/heart diseases, respiratory diseases (e.g. Asthma), Chronic kidney diseases, Anemia, Epilepsy and psychological/mental health illness. It is notable, that Hardap region has the highest percentage of individuals suffering from chronic diseases with a 17 percent prevalence, followed by Omaheke region with a 16 percent prevalence. Ohangwena region has the least population of individual with chronic diseases with a 9 percent prevalence rate.

Figure 34: Population of people suffering from chronic diseases



Source: 2015/16 NHIES

7.4. Security Services

The town of Mariental has a police station serving with 80 police officers stationed at that police station. With 80 police officers, it translates to the ratio of one police officer to 180 residents. The town has of recent seen a scale up in private companies offering security services on properties which has been a positive intervention to aid the national police service efforts in reducing housebreaking and other security related cases within the town.

7.5. Government Administrative Services

Within the town, there are several government branch offices that are meant to provide most of the services provided by the respective ministries at the head offices in Windhoek. The ministry of Agriculture has an office to provide advises to farmers on all farming activities. They are also in charge of surveillance for any possible animal related diseases in the areas to assist farmers when there is a need. The Ministry of environment has also an office which is meant to provide services especially to those in the game tourism and farming industry. The ministry is also responsible to ensure preservation of wildlife animals and assist communities in case of conflicts with animals. Moreover, the Ministry of Education also has an office in Mariental which offers educational administrative services to the town, nearby villages and towns.

7.6. The Cost of using local recreational facilities

Residents of Mariental can access different municipal facilities for occasions. Using the community, Persianer, Show halls and chairs require a deposit of N\$ 770 and N\$ 500 respectively. The Mariental Municipality administers the rent for these facilities at a cost of N\$ 550, N\$ 1,500, N\$ 847 and N\$ 25 respectively per occasion per day. Moreover, the rental fees for Rugby club, Kiosk, Tables, Kitchen and municipal open space are N\$ 1,000, N\$ 500, N\$ 50, N\$ 308 and N\$ 28 respectively per occasion per day. The costs are as summarized in *table 2* below.

Table 2: costs of recreational facilities

Municipal facilities	Price per Occasion (N\$)
Community hall	550
Persianer Hall	1,500
Show Hall	847
Rugby club	1,000
Kiosk	500
Plastic chair (per chair)	25
Metal chair (per chair)	25
Kitchen	308
Municipal open space	28
Tables (per table)	50

Source: Mariental Municipality

7.7. Financial Services

7.7.1. Banking services

Mariental town has three branches of commercial banks namely: First National Bank, Bank Windhoek, Ned bank Standard bank serving clients with banking services with. There are 3 ATMs of First National Bank, 2 ATMs of Standard bank and 1 ATM of Bank Windhoek, with a total of 6 ATM's in the town. The deposit taking services of banks operating in Mariental are supported by the businesses that operate in the area within the retail, construction, farming, and services sectors. The Mariental local economy houses several both formal and informal businesses who sells goods and services within the local economy. Their inflows from their businesses are always deposited with commercial banks on a regular basis. Equally so with those retail business sector who frequently deposit with banks of their cash inflows from their businesses.

The availability of government offices and other related formal employing organizations like parastatals provides much spill over benefits for the demand of banking services. Most notably the town has a fair number of government employees in the ministries of education, Health and Safety and Security who are part of the clientele for banking sector in the town.

7.7.2. Non-Banking services

The town of Mariental has other non-banking financial services for residents. The non-banking financial institution services are insurance. In line with the increase in economic activities and employment within the town, the demand for insurance services has also increased. Insurance companies that have offices in the town are Hollard, Old Mutual and Sanlam. As more assets are acquired, individuals choose to insure their assets for unexpected risks. Life insurance is also common among employed individuals who have formal jobs both in the private and public sector. There is also a growing demand of pension fund services in the town and region at large due to the high population of employed individuals in the country's second largest populated region, Hardap region.

7.8. Tourism and Hospitality Services

Mariental has diverse sceneries for tourism. Most notably, the Hardap dam found 18 km north east of Mariental. Gross Nabas Mariental is also found at the South of Stampriet, 20 km along the C15 road. The other unique potentials of tourist attraction to the region is the Lapa Lange Lodge situated 35 km from Mariental in the Kalahari Desert. The lodge offers a refreshing swimming pool, a restaurant and a floodlit waterhole. Additionally, the Batelle Kalahari game ranch is found 46 km north of Mariental.

7.9. Transport Services

7.9.1. Travelling Services

Most Namibians use road transport as a means of transport comparing to other modes of transport. Most individuals in Mariental travelling to nearby towns use private small cars and mini bus public transports, there is one hiking point to various towns. Travelling to Windhoek is 268 km costing N\$ 130, travelling to Keetmanshoop is 233 km costing N\$ 130, while travelling to Rehoboth is 179 km costing N\$ 70. Travelling to Gibeon and Bethanie also from Mariental is 73 km and 267 km, costing N\$40 and N\$120 respectively. Within the town itself there are taxis operating from locations to town and back for a charge of N\$12 per trip. It can cost more depending on the destination within the town, similar to any other town.

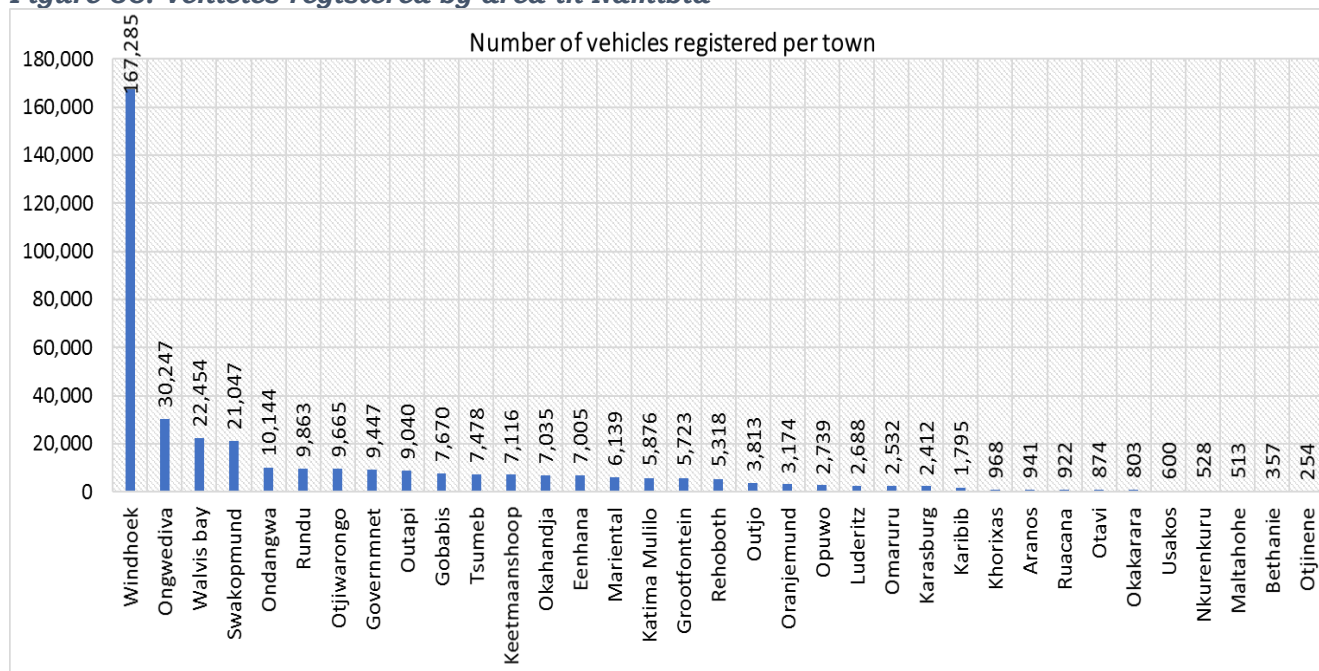
7.9.2. Road Network

The 2017/18 Global Competitiveness report ranked Namibia's road network as one of the best on the continent. Constructions and maintenance of roads in Namibia are guided by international standards under the administration of the Roads Authority. The Namibian national road network consists of 7,122 kilometers of tarred roads; 27,262 kilometers of gravel roads; 13,966 kilometers of earth roads.

According to the Roads Authority, there are 6,139 vehicles registered in Mariental town during 2016/17. This is below the national average registered vehicles per town which stands at 10,409. Out of 34 towns registering vehicles only four towns namely: Windhoek, Ongwediva, Walvis Bay and Swakopmund have the highest number of vehicles above the national average of 10,409. Number of vehicles in Windhoek alone accounts for 45 percent of the total population of vehicles in the country. The number of vehicles in the town can be used in providing an indication of the demand for transport service activities in the town. Equally one should also consider the population differences when comparing with other towns.

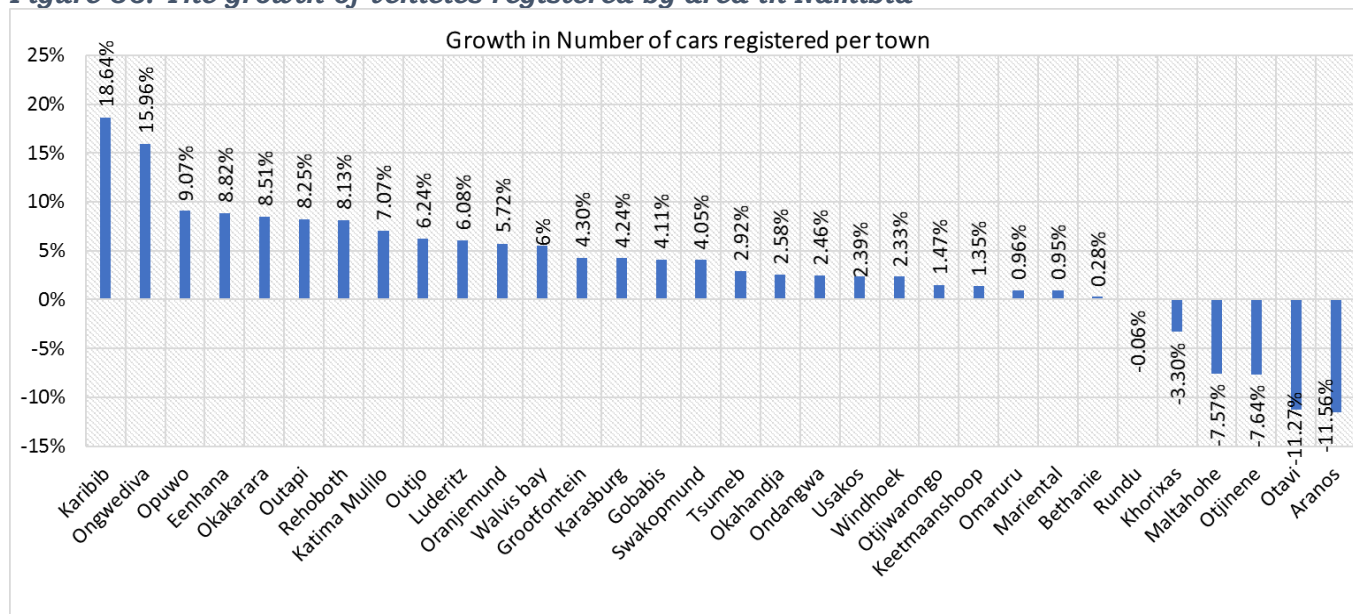
7.9.3. Number of Cars registered by town

Cars in Namibia are registered with 34 towns, excluding police and government cars. It is notable that Windhoek has the most registered cars in Namibia, while Otjinene has the lowest number. Mariental ranks number 15 for the number of vehicles registered per town in Namibia.

Figure 35: Vehicles registered by area in Namibia

Source: Roads Authority

Cars that are registered in Mariental has increased by 0.95 percent in 2017 compared to 2016. The national annual average vehicle population growth was 3.5 percent in 2017 (see figure 36).

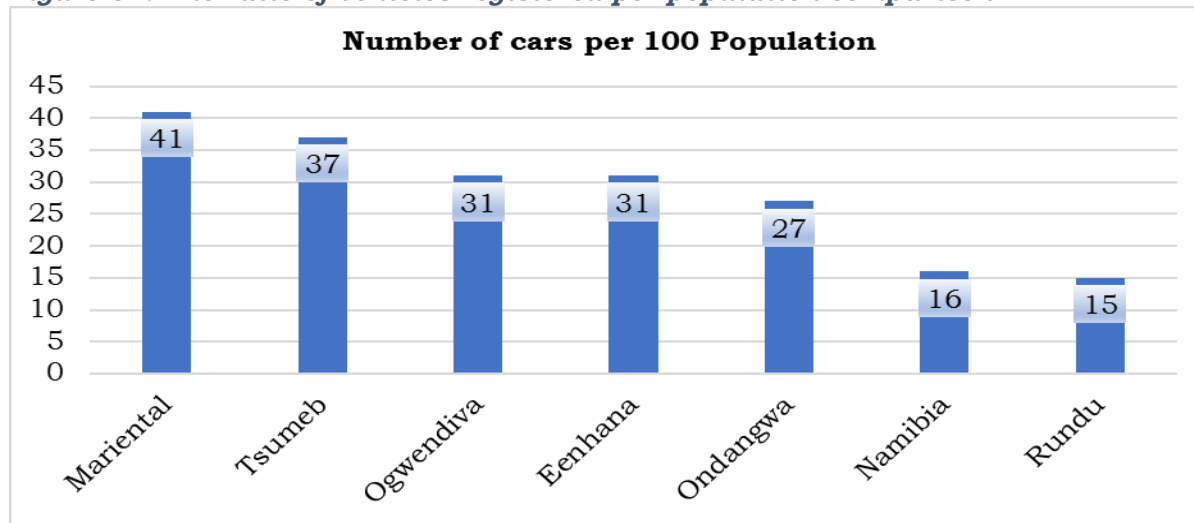
Figure 36: The growth of vehicles registered by area in Namibia

Source: Roads Authority

At 6,139 vehicles registered in Mariental, taking into consideration the population of the town, it stands out that vehicles owned per population ratio is above the national average. As of 2017, there are 41 vehicles registered in Mariental per 100 population compared to the national average of 16 vehicles per 100 population. However, the ratio of vehicles per population in Mariental is much higher than the ratio of

vehicles to population in other towns like Tsumeb, Ogwendiva, Eenhana and Ondangwa which stands at 37, 31, 31 and 27 cars per 100 population respectively.

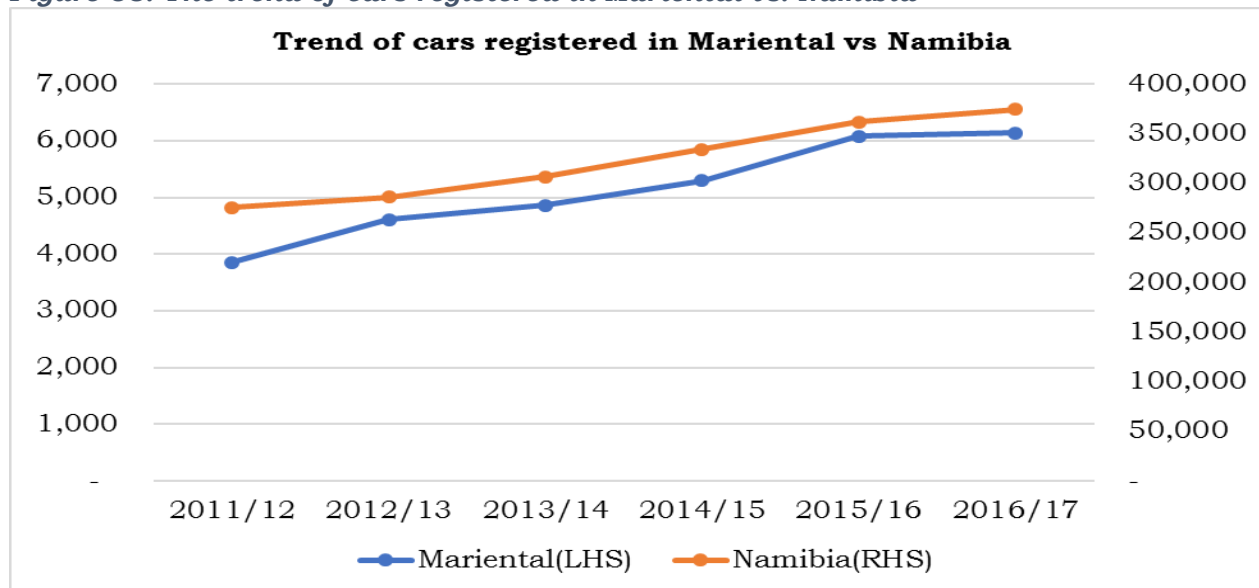
Figure 37: The ratio of vehicles registered per population comparison



Source: Roads Authority

The trend of growth in vehicles registered in Mariental has increased by 0.95 percent compared to the positive annual national average growth of 3.5 percent in 2017. The national number of vehicles in the country registered during 2016/17 was 374,710.

Figure 38: The trend of cars registered in Mariental vs. Namibia



Source: Roads Authority

7.9.4. Rail Infrastructure

Namibia has a rail network covering 2,750 kilometers linking towns and other countries. Mariental's history since dating in 1912 was known as a railway stop between Windhoek and Keetmanshoop. The

town is connected to the railway line which connects Windhoek to Keetmanshoop on the main road.

7.9.5. Harbours

Namibia has only two harbours handling merchandise imports and exports situated in Walvis Bay and Lüderitz. Though the landlocked town of Mariental is without a harbour, it has always utilized the country's largest Port of Walvis Bay (502 kilometers) which is situated at the west Coast of Africa and provides an easier and much faster transit route between Southern Africa, Europe and the Americas. The other Port of Lüderitz located to the Southern Coast of Namibia is 569 kilometers (which is 67 km longer than the distance to Walvis bay Port) and caters for Southern Namibia as well as providing access to markets in the Northern Cape of South Africa.

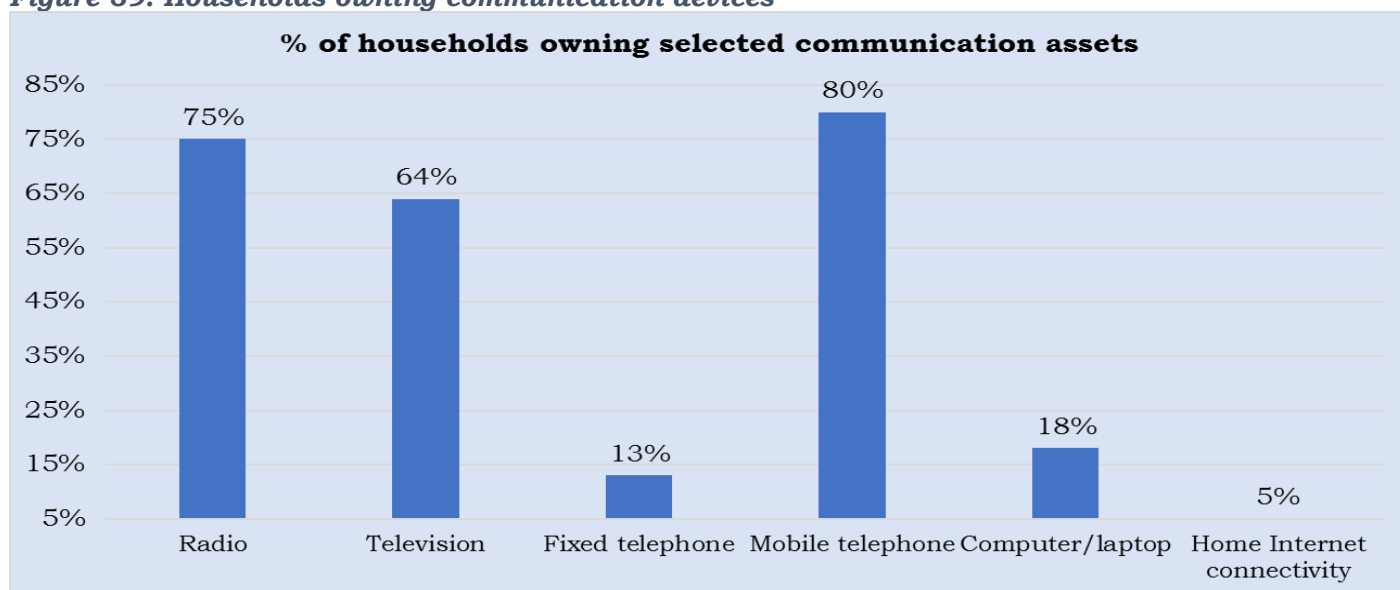
7.9.6. Air Network

Mariental airport is serving the town of Mariental in the Hardarp region of Namibia. It is situated on the B1 road from Windhoek to Mariental.

7.10. Information and Communication Services

Access to information is made effective with the population having access to communication devices. The figure below, shows the proportion of households owning various communication devices. In Mariental, radio and mobile phone remains the most common forms of communication assets owned by households. About 75 percent and 74 percent of households in Mariental own radio and mobile phones respectively. About 64 percent of households owns television meaning more than half of families own a television. However, only 5 percent of households have connectivity to internet services which indicates that internet usage could be low though mobile phones provide access to internet as well.

Figure 39: Households owning communication devices



Source: 2015/16 NHIES, 2011 National Census & First Capital Research

7.10.1. Radio and Television Access and Infrastructure

Namibia's infrastructure development in information and technology has always enabled the Mariental residents to have access to information through radios and television. In Mariental, all the 7 national radio channels in various languages of the country administered by the Namibian Broadcasting Corporation (NBC) can be accessed. Furthermore, there are 7 extra radio channels available to Mariental residents which are equally accessible to most parts of the country. As shown in *figure 41*, most families have Mariental own a radio given the low cost to own a radio as well as the wide network access of the use of radio in the country. Equally, since radio owners are not obliged to pay license fees subjected on television owners, owning a radio remains cheap for most households. Access to television in Namibia is subject to annual license fees. Equally noted from observations is that still several households own a television.

7.10.2. Telecommunication Access and Infrastructure

The Namibian telecommunication market is, compared to African standards, a well-developed market due to infrastructures put in place by both Telecommunications (Telecom) and the Namibian Mobile Telecommunications Company (MTC). Through observations and engagements with residents of Mariental, it was common that cellphones are widely owned and used as medium of communication by most of the individuals. MTC estimates that there are 2.4 million active cellphone customers in the country which could be an indication that almost every adult individual could have a cellphone, with some owing more than one cellphone.

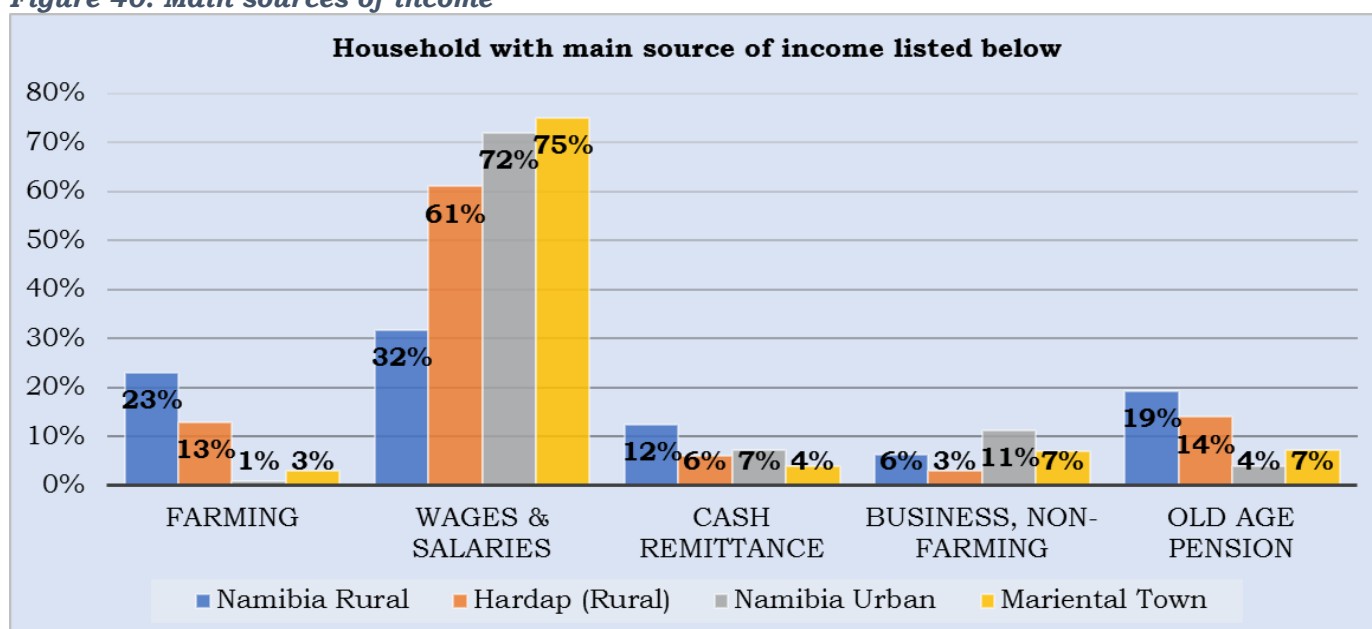
Using the list of residential telephones registered with Telecom and the household population in Mariental, we estimated the coverage of access to telephones. Our estimates indicate that about 13 in every 100 households owns a telephone. This is in line with the available statistics of the national household survey.

SECTION 3: HUMAN DEVELOPMENT

8. SOURCES OF INCOME

The source of income for individuals show how they makes a living. Figure 40 below shows sources of income for most households. The main source of income to Mariental households remain wages and salaries accounting 75 percent of families relying primarily on wages and salaries. This is above the national urban population average of 72 percent households with wages and salaries as main source of income. The second main source of income is both business & non-farming activities and old age pension accounting for 7 percent. However, in rural areas of Hardap region the most source of income is wages and salaries with 61 percent of households. Overall, the country wide majority of households in urban areas depend on wages and salaries, which is in line with that of Mariental.

Figure 40: Main sources of income



Source: 2015/16 NHIES, 2011 National Census & First Capital Research

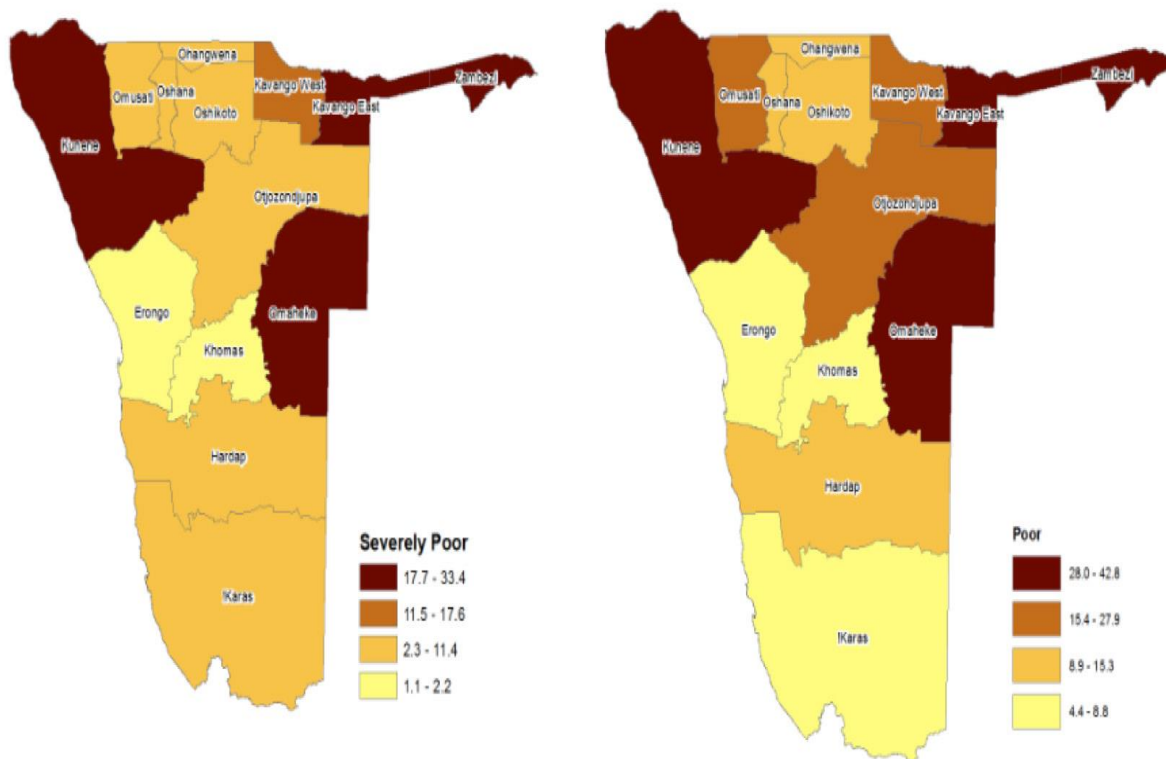
9. POVERTY INCIDENCE

According to the 2015/16 NHIES, 17.4 percent of households in Namibia are classified as poor of which 10.7 percent are severely poor. The classification of poverty lines in the country is defined by how much a household spends on basic needs of which the poverty line for Namibia is N\$ 520.80 meaning households that spends less than N\$ 520.80 are considered poor and those spending less than N\$ 389 are considered severely poor.

Figure 43 below shows the poverty distribution by region. Poverty is very high in Kunene, Kavango East, Zambezi and Omaheke regions. These regions have poverty levels above the national average of 17.4 percent. Lower levels of poverty are observed in Khomas, Erongo and \\\Karar regions. Similarly, the

distribution of severely poor households across the country is highly concentrated in Kunene, Kavango East, Zambezi and Omaheke regions. These regions have severely poverty rate above the national average of 10.7%. Lower levels of severely poor incidences are found in Khomas and Erongo regions. Hardap region lies between 2.3 to 11.4 percent of severely poor and 8.9 to 15.3 percent poor, which is both the second lowest categories of poverty incidence in the country.

Figure 41: Poverty Incidence



Source: 2015/16 NHIES

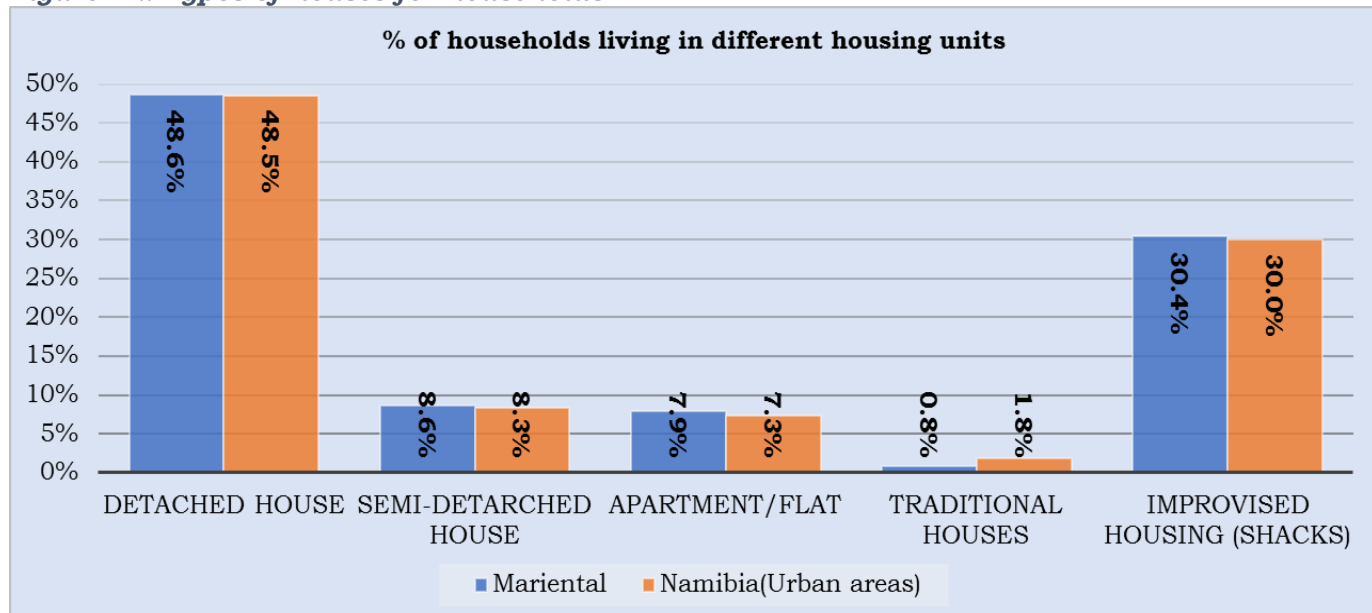
10. HOUSING SITUATION

Over the years Mariental Municipality have made progress towards the delivery of houses. The figure below shows, the proportion of households living in various types of housing units. About 0.8 percent of residents are living in traditional structures in Mariental which is lower than the national average (*See figure 42*). A significant number of residents in Mariental (30.4 percent) are living in impoverished (shacks) structures, the situation indicates that Mariental is also in a shortage supply of housing units. About 48.6 percent of families live in detached structures (stand-alone houses). More investment required to go to agriculture and businesses to diversify sources of income for the town's population.

10.1. Housing Delivery

Over the years Mariental Municipality have made progress towards the delivery of houses. The figure below shows, the proportion of households living in various types of housing units. About 0.8 percent of residents are living in traditional structures in Mariental which is lower than the national average (See figure 42). A significant number of residents in Mariental (30.4 percent) are living in impoverished (shacks) structures, the situation indicates that Mariental is also in a shortage supply of housing units. About 48.6 percent of families live in detached structures (stand-alone houses). More investment required to go to agriculture and businesses to diversify sources of income for the town's population.

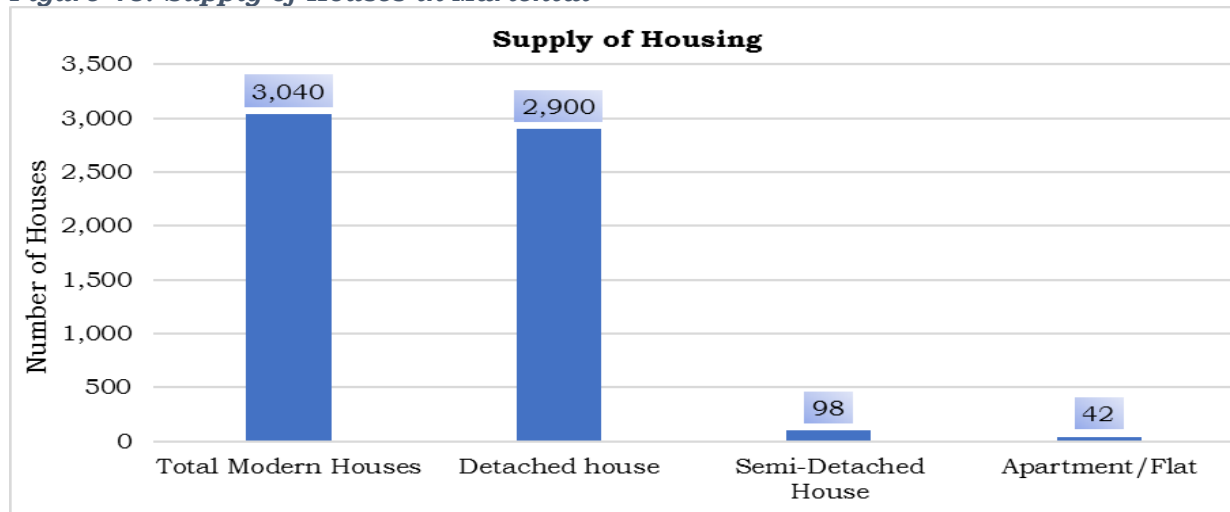
Figure 42: Types of houses for households



Source: 2015/16 NHIES, 2011 National Census & First Capital Research

10.1.1. Supply of Houses in Mariental

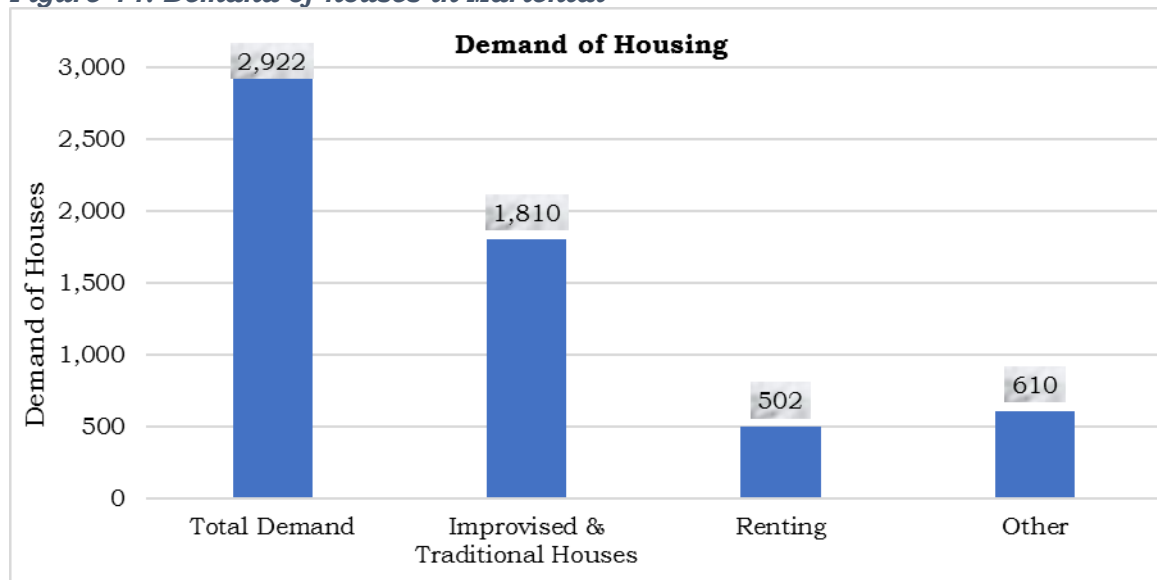
We have estimated the number of households by the type of housing units in Mariental. Figure 45 below shows that there are 3,040 modern houses in Mariental of which 2,900 or 95 percent are standalone houses while 3 percent are semi-detached houses (see figure 43 below).

Figure 43: Supply of Houses in Mariental

Source: First Capital Survey

10.1.2. Demand for Houses

Our estimated total demand for households that need houses is 2,922. This is comprised of a total of 1,810 families that live in impoverished houses. Also included is 502 families that are renting either from private landlords or employers. Furthermore, we also estimated that about 610 families who are either living outside the town of Mariental who needs houses. These includes individuals from Mariental who work in rural areas or happen to work in other parts of the country.

Figure 44: Demand of houses in Mariental

Source: First Capital Survey

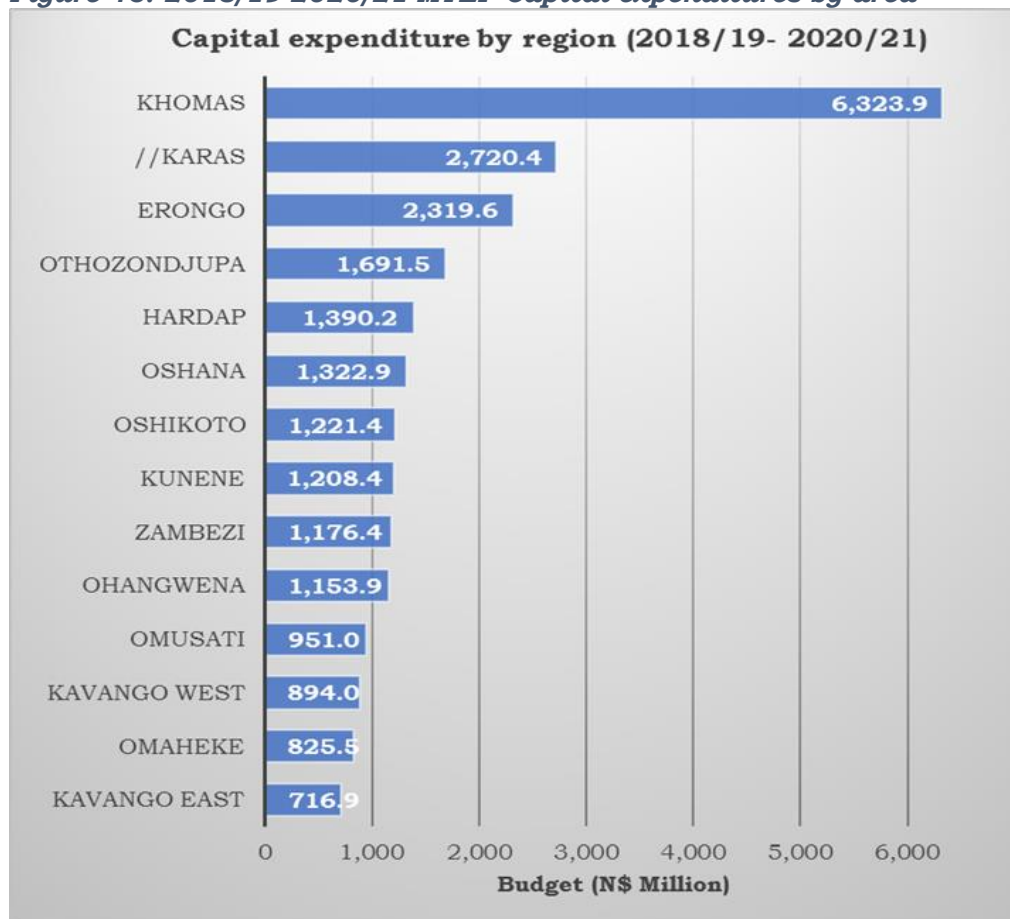
SECTION 4: NATIONAL INFRASTRUCTURE PROJECTS

11. INFRASTRUCTURE DEVELOPMENT

11.1. Government Expenditure by Region

During the period 2018/19 Government has budgeted to spend N\$7.8 billion on capital projects with new projects initiated while others will be a continuation from the previous periods. Over the medium term (2018/19- 2020/21) government budgeted to spend N\$24.3 billion on capital projects. The figure below shows the MTEF budget allocations by region for the budgeted projects. The government has budgeted to spend about N\$716.9 million on infrastructure developments in Hardap region. The budget allocated for capital projects in Hardap region is the fifth highest compared to investments in other regions. However, the Hardap region has been attracting private investments in agriculture that compliments the high government investment in the region.

Figure 45: 2018/19-2020/21 MTEF Capital expenditures by area



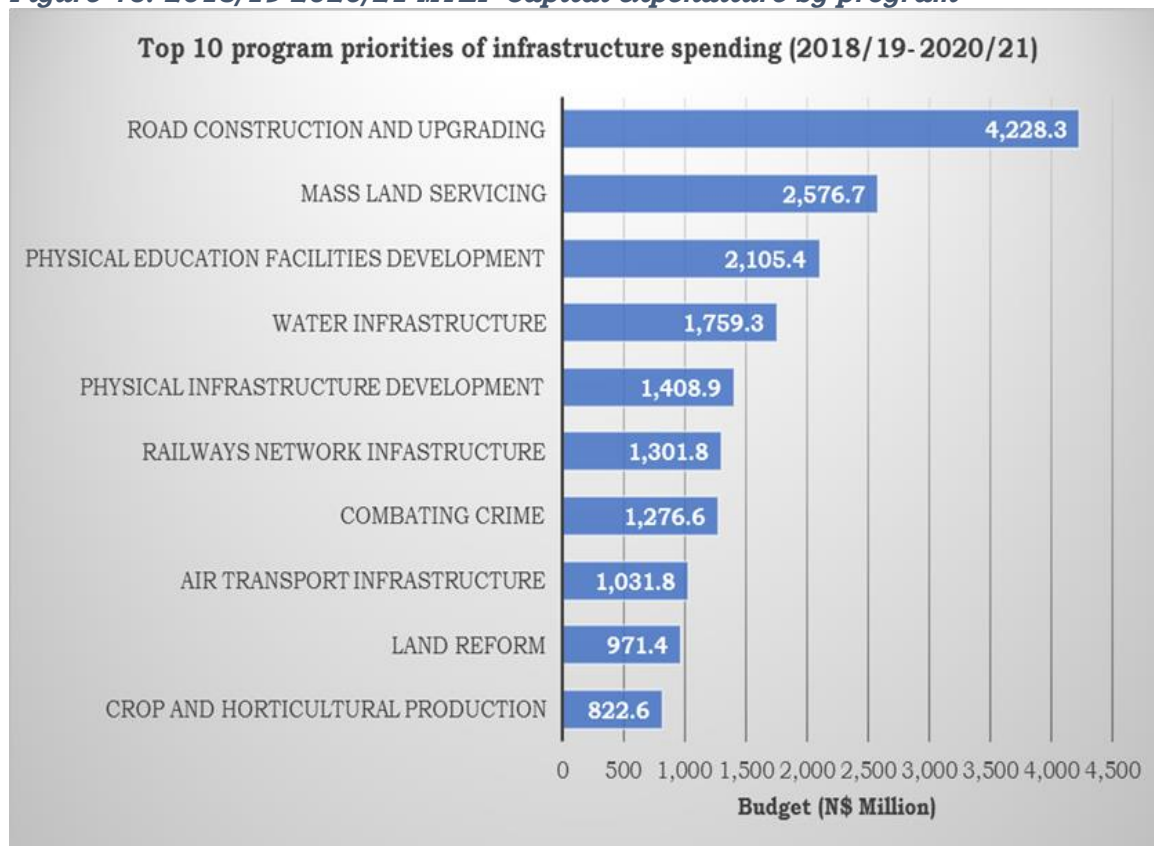
Source: Ministry of Finance

11.2. Top Programs of National Government Expenditure

Government's top 10 spending priorities on capital projects are shown in the *figure 46*. The most priority of investment for the MTEF period (2018/19- 2020/21) is the construction and upgrading of roads

throughout the country which is budgeted to cost government more than N\$4.2 billion. The second spending priority is on mass land servicing within local authority areas which have a budget of N\$2.5 billion. The government has further budgeted to spend not less than N\$1.3 billion on each of the following programs: Physical education facilities, water infrastructures, Physical and railway infrastructural developments.

Figure 46: 2018/19-2020/21 MTEF Capital expenditure by program



Source: MoF

11.3. List of Major Government Expenditure Projects

Listed below in table 3 are major projects budgeted for the MTEF Period under review. During the MTEF period (2018/19- 2020/21) the government budgets to spend N\$776 million on the upgrading of the Windhoek-Hosea Kutako 44 kilometers dual carriageway road. About N\$653 million will be spent on the Nekatel dam in the Karas region. The upgrading of the Walvis Bay-Swakopmund 44 kilometers road received a budget of N\$617 million. The upgrading of Leopards Valley Military Base, rehabilitation of the 67 kilometers Windhoek Okahandja road and the construction of head office for the Ministry of Home Affairs and Immigration all received budgets above N\$350 million.

Table 3: List of Government's Major Capital Expenditures

No.	Project Name	Implementing Agency	Area of project implementation	2018/ 19- 2020/21 Budget (N\$ Million)
1	Upgrading the TR9/1: Windhoek-Hosea Kutako road to a dual carriage (44km)	Ministry of works	Khomas region	776.1
2	Construction of Large Dams, Desalination and Provision of Water to larger Settlements	Ministry of Agriculture	Karas region	653.6
3	Upgrading of the MR 44: Swakopmund- Walvis Bay Road (44KM)	Ministry of works	Erongo region	617.4
4	Upgrading of Leopards Valley Military Base	Ministry of Defence	Khomas region	444.2
5	Rehabilitation of the TR 1/16: Windhoek -Okahandja Road (67km)	Ministry of works	Khomas & Otjozondjupa region	355.4
6	Construction of Head Office for the Ministry of Home Affairs and Immigration	Ministry of Home Affairs and Immigration	Khomas region	355.3
7	Northern Railway Line Extension	Ministry of works	Northern regions	325.0
8	Building and Maintenance	Ministry of Education, Arts and Culture	Khomas region	315.8
9	Rehabilitation of Eros Airport Runway, Taxiway & Apron Extension	Ministry of works	Khomas region	278.2
10	Construction of Swakopmund- Henties Bay- Kamanjab Road (412KM)	Ministry of works	Erongo & Kunene region	275.4
11	Construction of Forensic Laboratory in Windhoek	Ministry of Safety & Security	Khomas region	213.2
12	Railway Network Upgrading	Ministry of works	Otjozondjupa region	194.4
13	Construction of gravel road: Isize - Sifuha - Malindi- Schuckmannsburg (50km)	Ministry of works	Zambezi	193.8
14	Rehabilitation of Southern Railway Line Section Sandverhaar-Buchholzbrunn	Ministry of works	// Karas region	181.1
15	Railway Network Upgrading	Ministry of works	Erongo region	166.8
16	Construction of Opuwo Aerodrome	Ministry of works	Kunene region	157.9
17	Rehabilitation of the Keetmanshoop- Mariental Road (386KM)	Ministry of works	// Karas & Hardap region	156.5
18	Construction of Sites and Premises Industrial Estates	Ministry of Industrialisation, Trade and SME Development	Khomas region	151.0
19	Widening of Tsumeb Aerodrome	Ministry of works	Oshikoto region	149.0
20	Construction of Police Accommodation	Ministry of Safety & Security	Khomas region	116.0
21	Construction of a new Area Control Tower for the Windhoek FIR	Ministry of works	Khomas region	112.9
22	Upgrading of Mpacha Airport	Ministry of works	Zambezi	112.8
23	Green Scheme	Ministry of Agriculture	Zambezi	103.1
24	Upgrading and Development of Informal Settlements & Low Income Townships in Windhoek	Ministry of Rural and Urban Development	Khomas region	98.0
25	Upgrading and Rehabilitation of Aus-Luderitz Railway Line	Ministry of works	// Karas region	81.1
26	Upgrading of the High Court	Ministry of Justice	Khomas region	73.7

Source: MoF

CONCLUSION

In this report we have presented and profiled the economy of Mariental and how it fits within the national economy. The town holds much potential especially for manufacturing sector. Due to high potential of small livestock and dairy farming, there is a strategic need to grow the manufacturing sector by locally processing and adding value to the raw agricultural products produced in the Hardap region. The local economy is private sector driven, and the rapid growth in local infrastructure developments indicates the future growth potential of the town's economy. Despite its growing agricultural farming base, access to financing especially for communal farmers remains a challenge to enhance the potential further. The town's population concentration in the working age population highlights the availability of employable

individuals for industries in the town. Given the small population of Mariental, there is need for more public and private sector investments to provide opportunities which will attract people and investors to the town, thus boosting the town's economy in the long run. The available water resources from the Hardap dam provides an opportunity to development in the town.

ABOUT US

First Capital Namibia is a financial services company specialized in providing treasury and asset (investment) management services. Established in July 2009, First Capital have in-depth, personal knowledge of the Namibian capital markets and the resulting insight enables us to manage Namibian assets across different spectrum including cash management, equity, fixed income, specialist agriculture and property mandates. We are licensed to manage money for private investors, pension funds, insurance groups, public (government) sector, and charities. Our credibility as asset managers is tightly governed by the Namibia Financial Institutions Supervisory Authority (NAMFISA). We are a Namibian based investment team and focus exclusively on the Namibian market and we add value to portfolios through offering specialized Namibian mandates.



FIRST CAPITAL TREASURY SOLUTIONS (Pty) Limited

RESEARCH

Milner Siboleka

milner@firstcapitalnam.com

Martin Mwinga

mwinga@firstcapitalnam.com

Clarinda Kavezuva

clarak@firstcapitalnam.com

Frieda Amadhila

frieda@firstcapitalnam.com

SALES

Lizah Bezuidenhout

lizah@firstcapitalnam.com

Claudia Guedes

claudiag@firstcapitalnam.com

LENDING

Albertina Shoopala

albertinas@firstcapitalnam.com

Jean P Dushimire

johnp@firstcapitalnam.com

PORTFOLIO MANAGEMENT

Martin Mwinga

mwinga@firstcapitalnam.com

Tafadzwa Mashozhera

mashozhera@firstcapitalnam.com

Milner Siboleka

milner@firstcapitalnam.com

Frieda Amadhila

frieda@firstcapitalnam.com

Telephone: +264 61 446700

Fax: +26461401353

No. 124 John Meinert Street
Windhoek West
Windhoek

P.O. Box 4461
Windhoek
Namibia

Website: www.firstcapitalnam.com

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