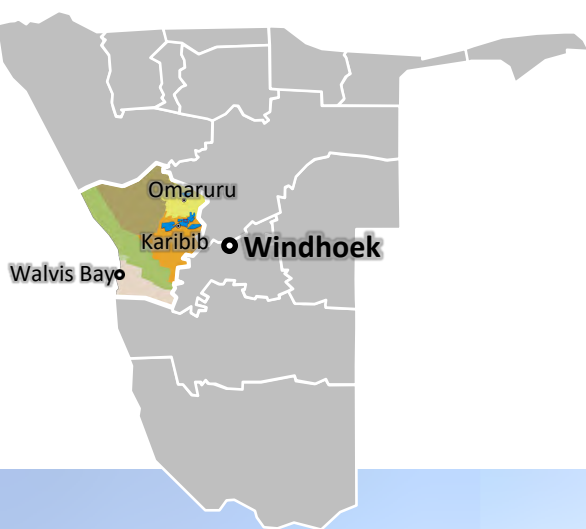
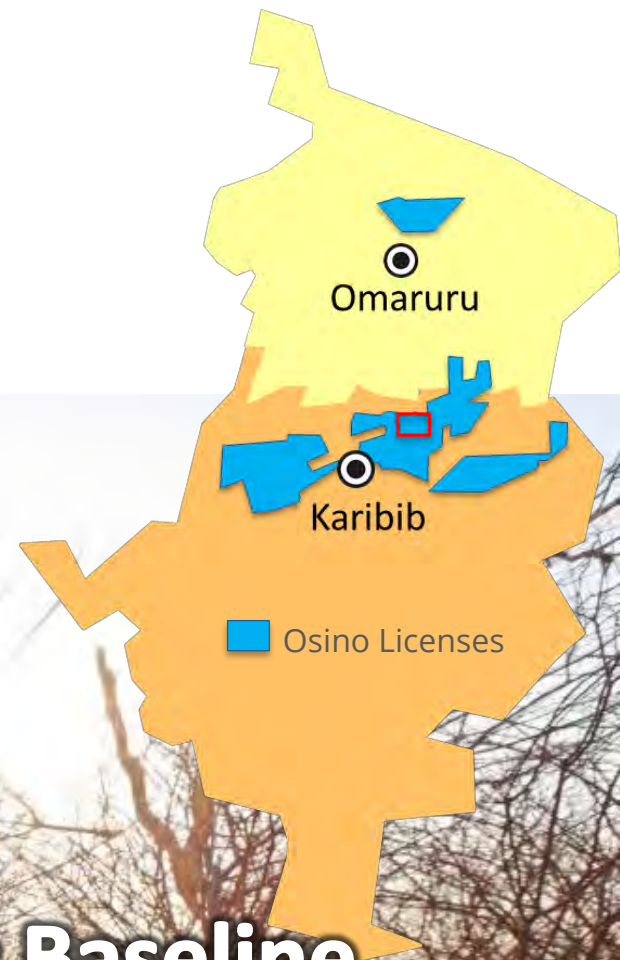




Osino Resources Corp.



High-level Socio-economic Baseline and Impact Study

Deon Wessels
May 2020



Socio-economic Baseline

The objective of this Study is to provide Osino with an understanding of the socio-economic characteristics of its area of influence and how the Company, through its exploration activities, have a positive influence on this area.



Socio-economic Impact



Osino Resources Corp. is a Canadian gold exploration company, focused on the acquisition and development of gold projects in Namibia. The Company is advancing a range of gold discoveries, prospects and targets within the Omaruru and Karibib Constituencies in Namibia. Osino has a regional base in Omaruru town that hosts its field operations.



- Local, Regional and National socio-economic data analysis
 - Namibia Household Income & Expenditure Survey
 - Namibia Census 2011
 - Labour Force Surveys
 - EMIS Education Statistics
 - FNB Residential Property Report
 - Namibia Demographic and Health Survey
- 2018 estimates through extrapolation of known data sources

Desk top, high level study

Local stakeholders' needs & priorities

Company data used to assess socio-economic impact of Osino Resources



National & Regional

Socio-economic Baseline

Walvis Bay

Omaruru

Karibib

Windhoek



Namibia

49% 51%



2.0%



2 113 077

2 413 643

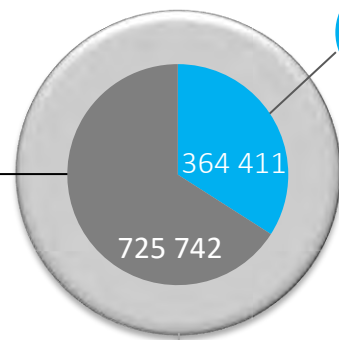
2011
Census Actual
Population

2018
Population
Estimate



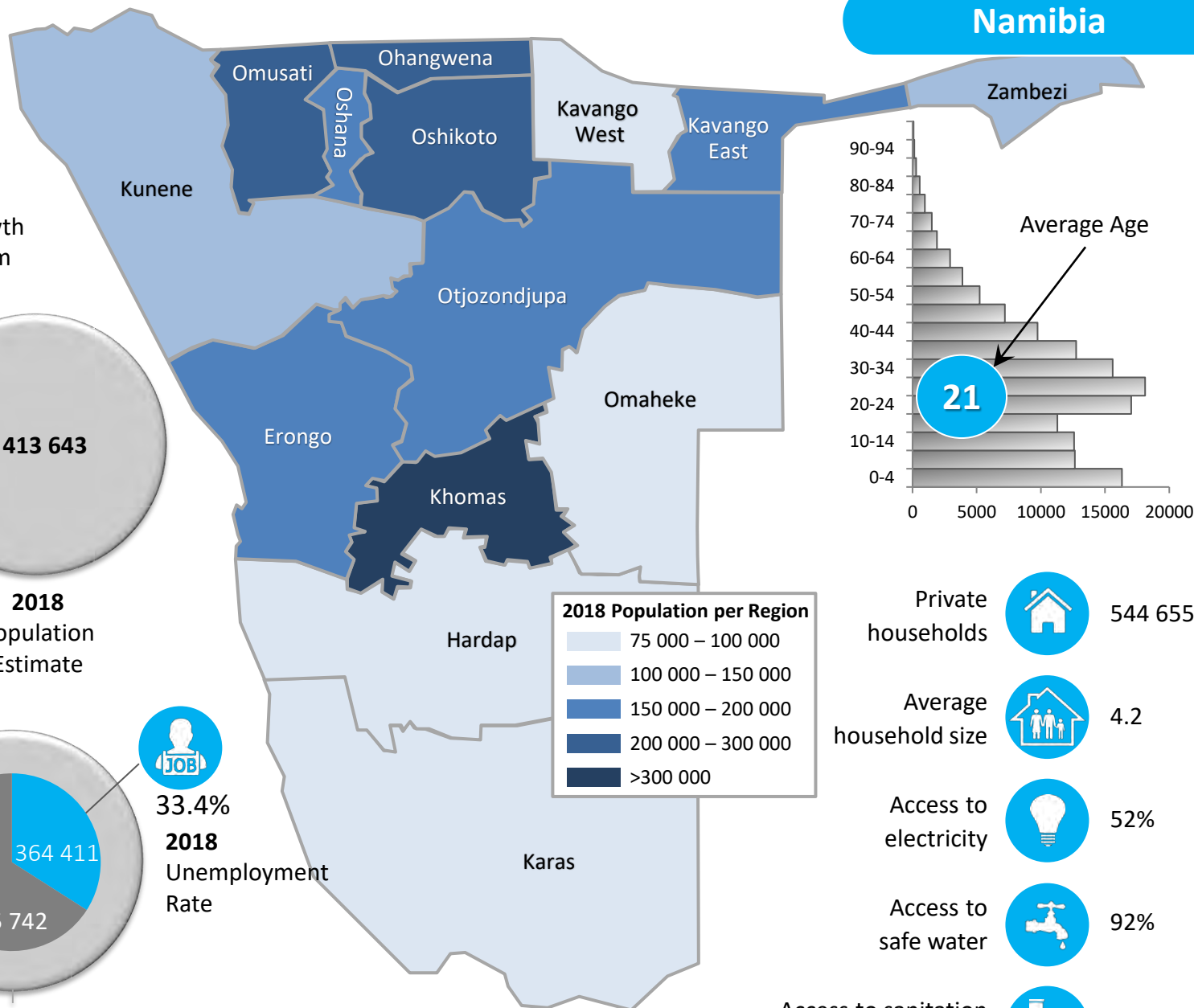
33.4%

2018
Unemployment
Rate

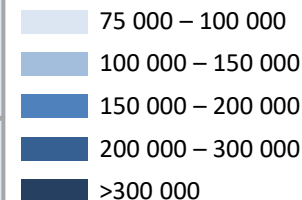


2 413 643

2018
Population
Estimate



2018 Population per Region



Private households

544 655

Average household size

4.2

Access to
electricity

52%

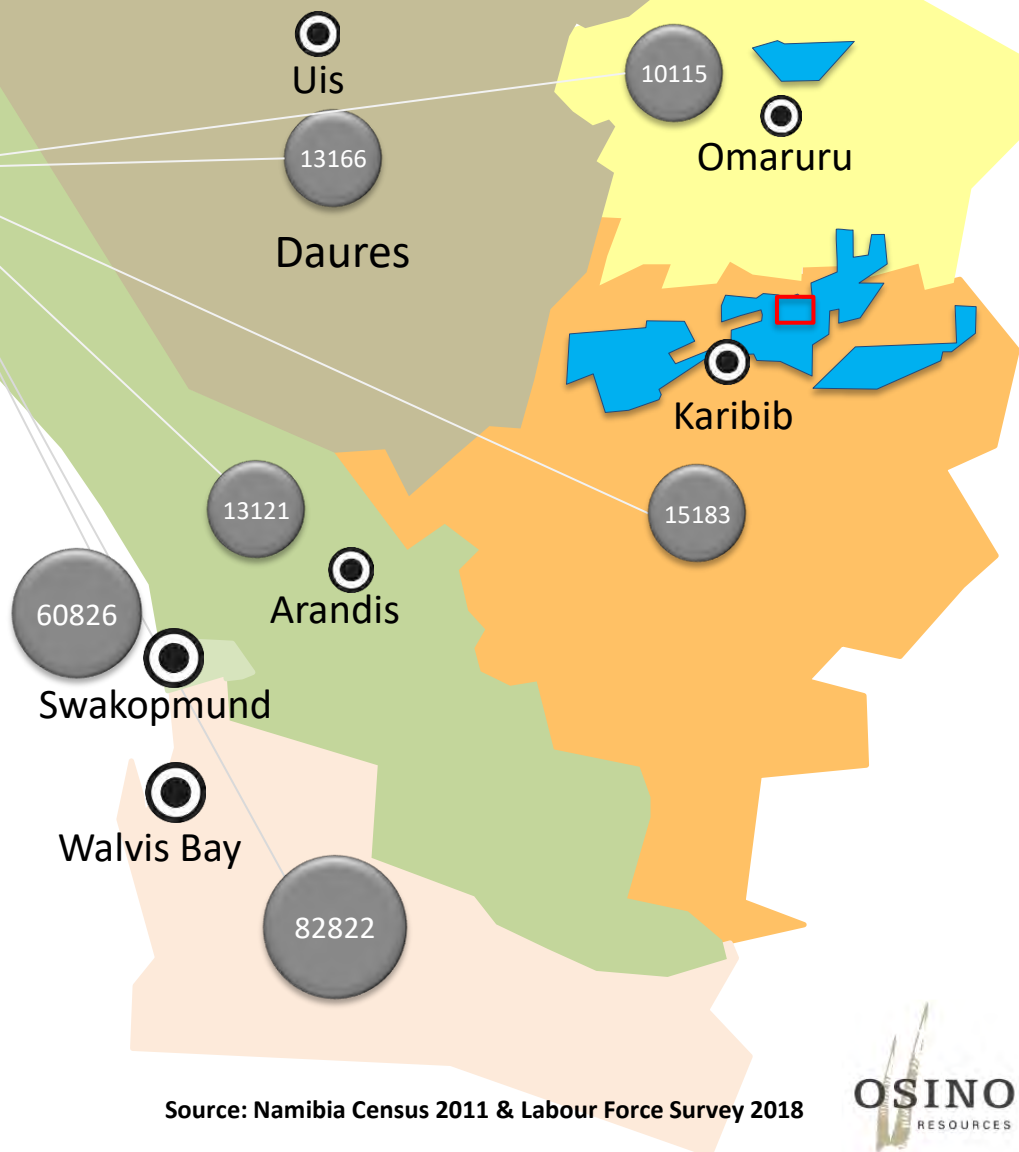
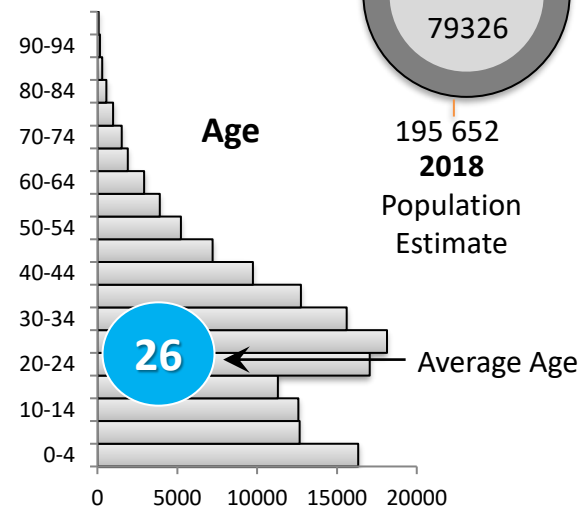
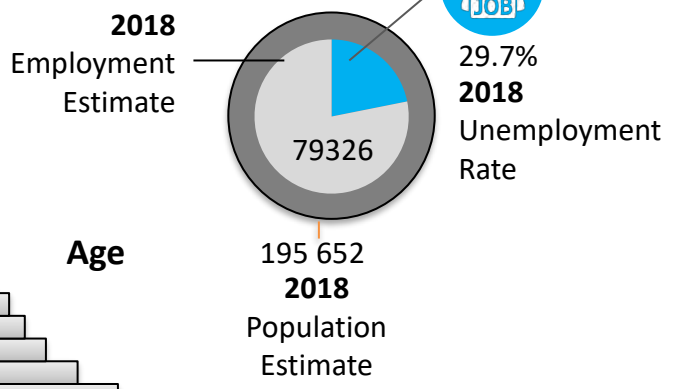
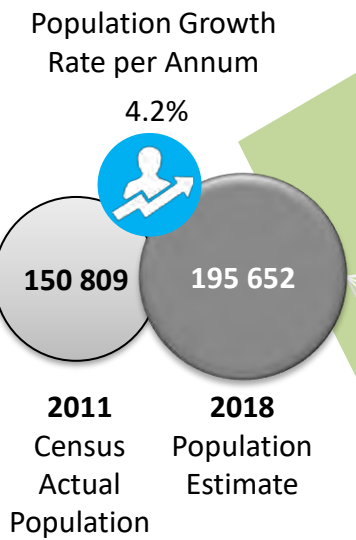
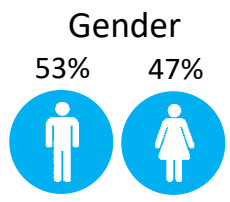
Access to
safe water

92%

Access to sanitation facilities

55%

Erongo Region

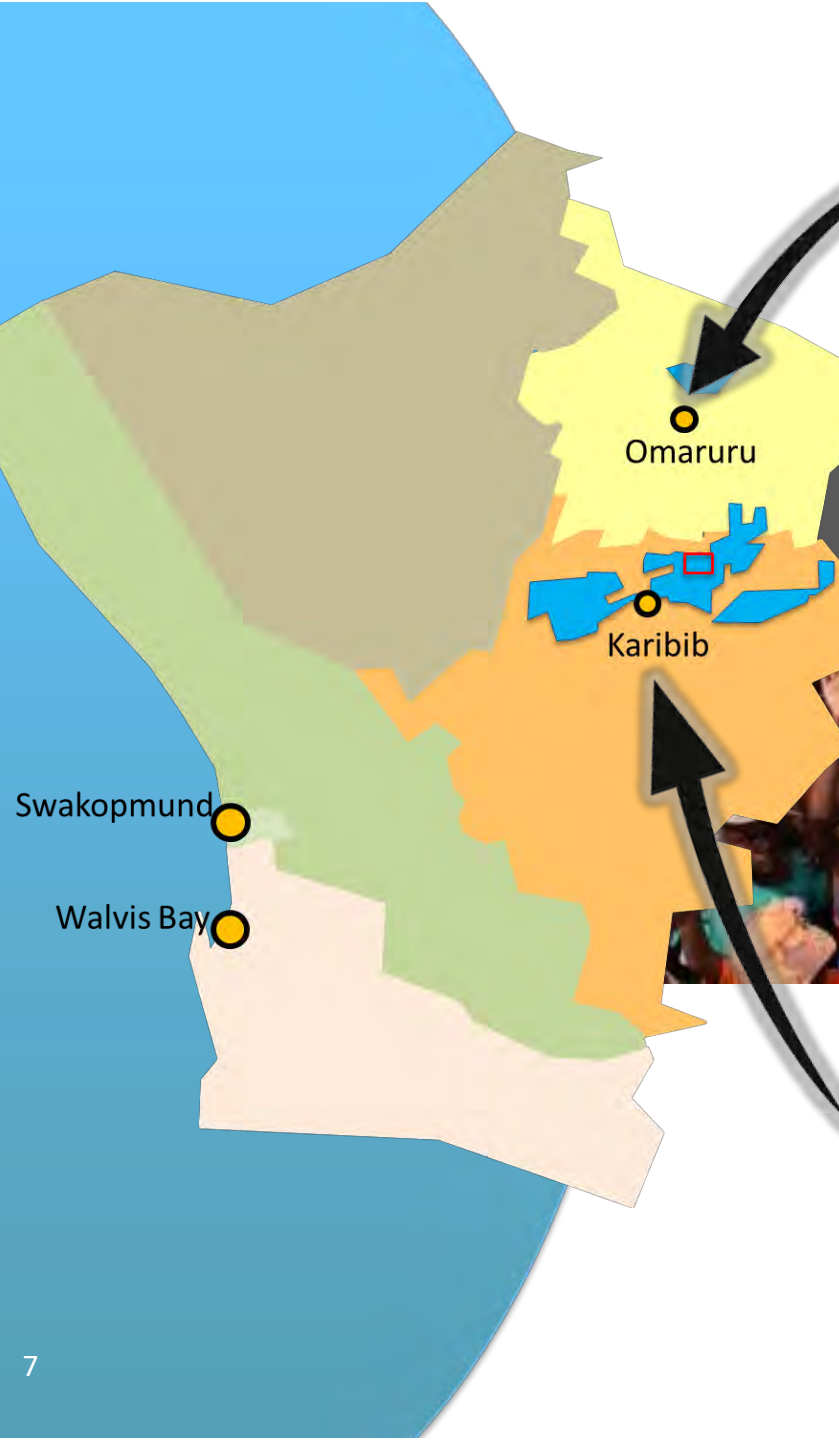


Source: Namibia Census 2011 & Labour Force Survey 2018

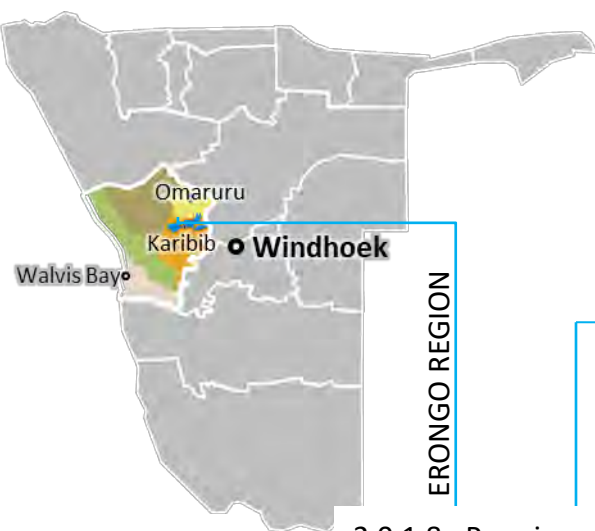
Omaruru is the district capital of the Omaruru electoral constituency. It is located about 2.5 hours northwest of the capital of Windhoek and has a population mostly from the Herero and Damara ethnic groups. The center of town is well established with stores, banks and restaurants, but the majority of the people live in Ozonide, the former township. In recent years, Omaruru has a growing reputation as an arts and crafts center. Estimated population of the town in 2018 is 7 850 (Constituency = 10 100).

Local

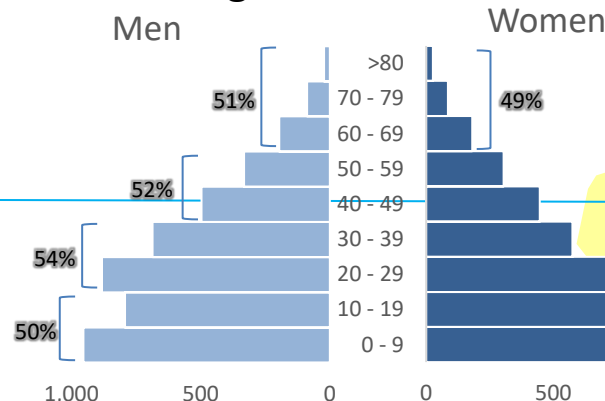
Socio-economic Baseline



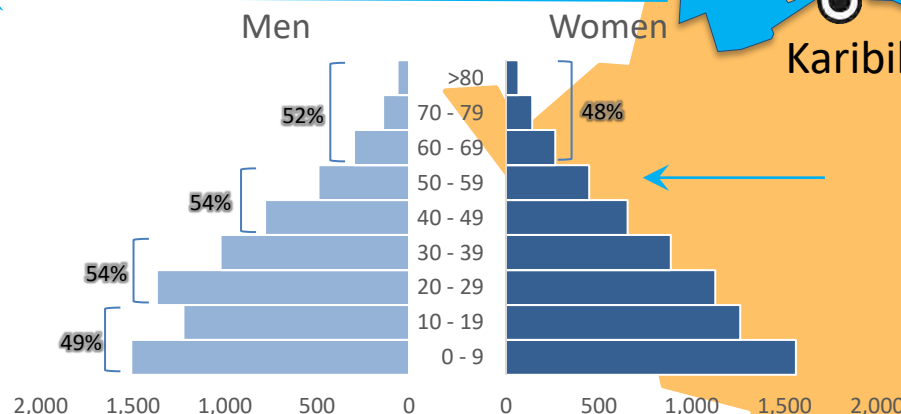
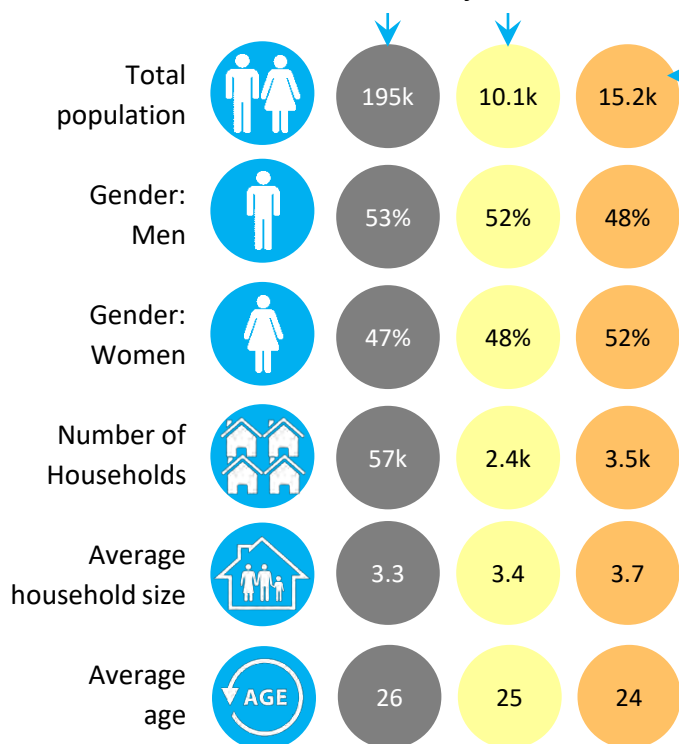
Karibib is the district capital of the Karibib electoral constituency. It is situated halfway between Windhoek and Swakopmund on the B2 (Trans-Kalahari Highway), the main road between Walvis Bay and Johannesburg. The town is known for the Navachab Gold Mine and its aragonite marble quarries. Over 750 people employed at Navachab live in the town, contributing to Karibib's economy. Estimated population of the town in 2018 is 6 250 (Constituency = 15 200).



Age breakdown



2018 Projections



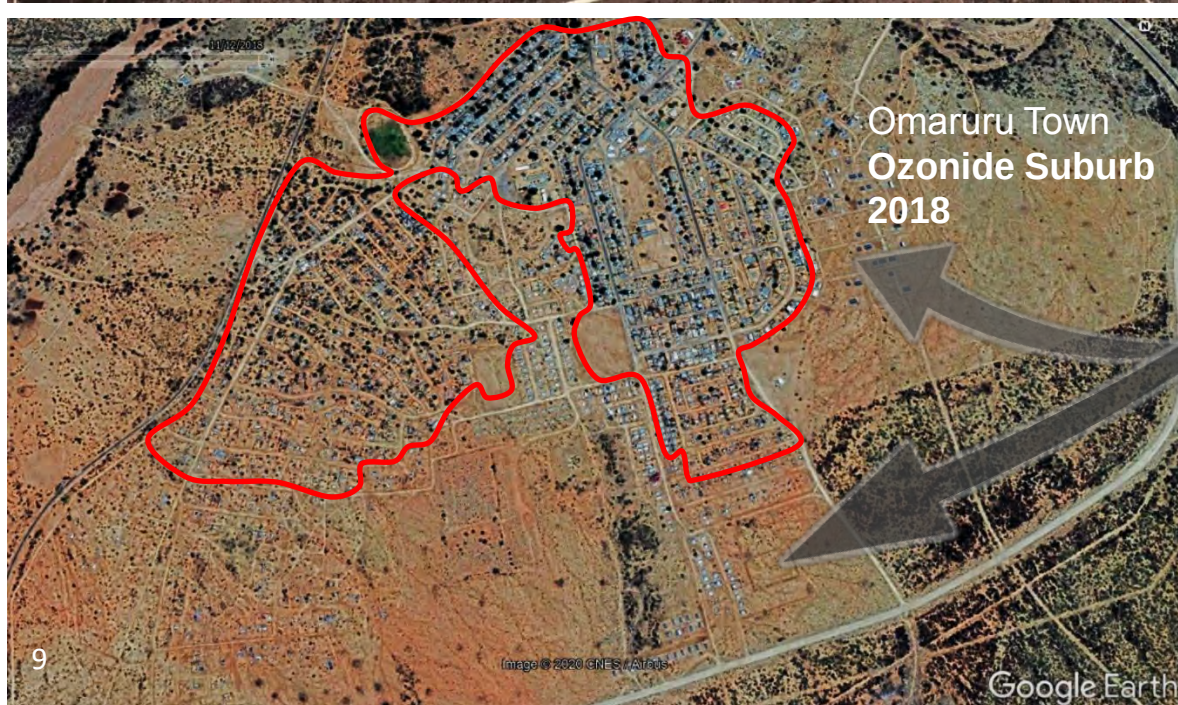
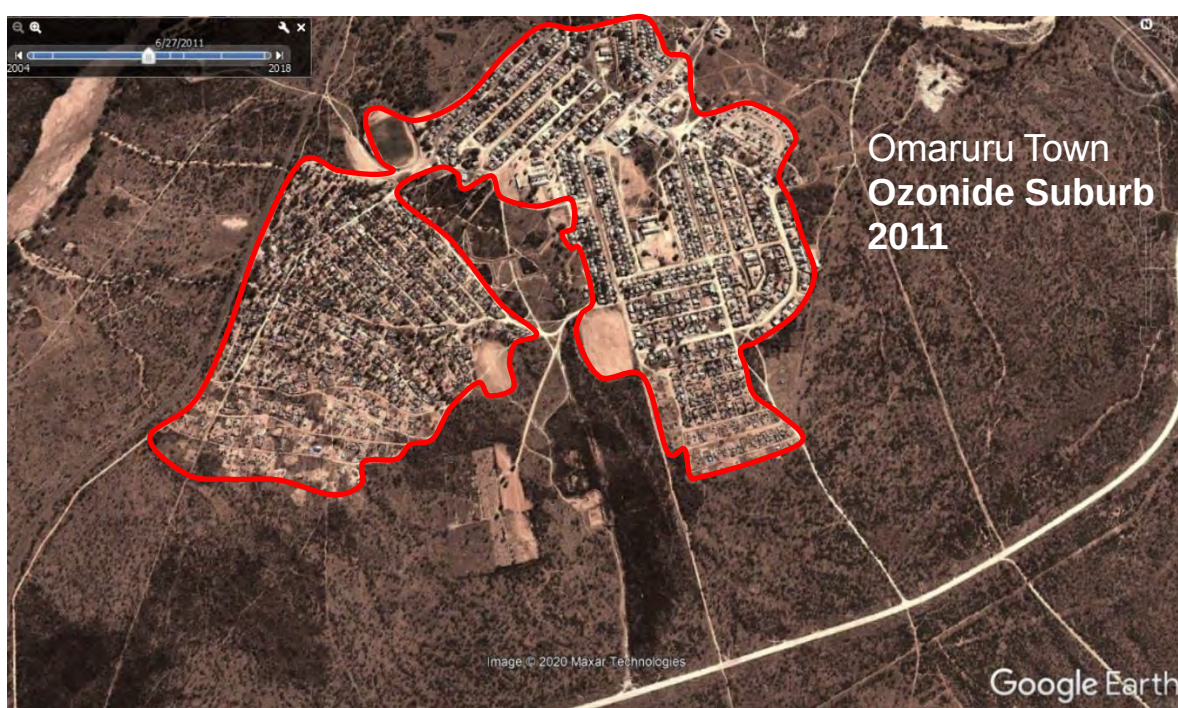
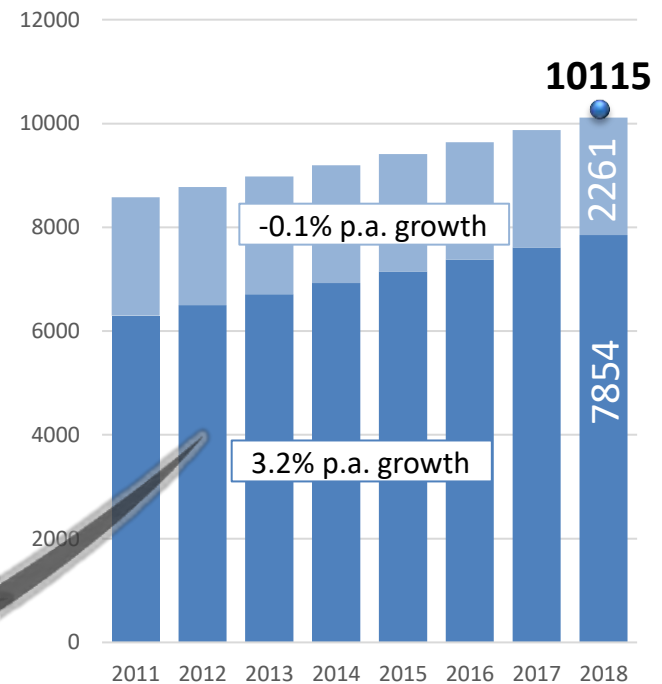
Headlines:

- Greater household size and women representation in Karibib compared to the Region and neighbouring Omaruru.
- Particular high numbers of men compared to women in the age category 20 to 39 for both constituencies.
- Osino's workforce has an average age of 30. Improvement on the current women representation of 11% could be challenging.

Omaruru Population Growth

Headlines:

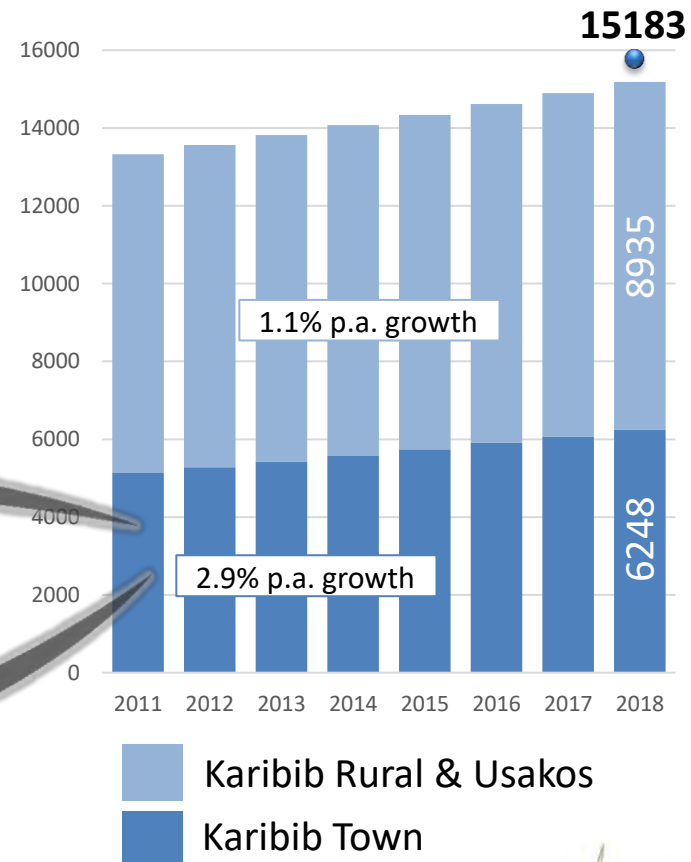
- High urban population growth of 3.2% per annum – higher than National average of 2% but lower than Regional average of 4.2%.
- Growth mainly in low income Ozonide Suburb / Township with increase in informal houses (shacks) from 25% in 2011 to 28% in 2018.



Karibib Population Growth

Headlines:

- High urban population growth of 2.9% per annum – higher than National average of 2% but lower than Regional average of 4.2%.
- Growth mainly in low income Usab Suburb / Township with increase in informal houses (shacks) from 29% in 2011 to 31% in 2018.



Karibib Town
Usab Suburb
2011



Image © 2020 Maxar Technologies

Google

Karibib Town
Usab Suburb
2018

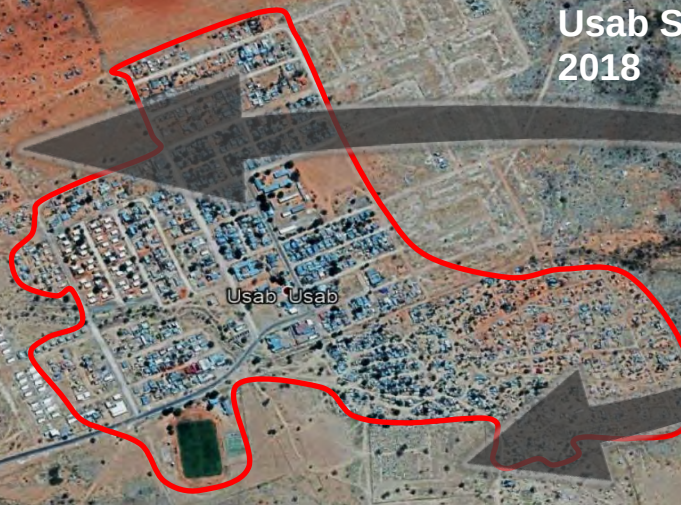


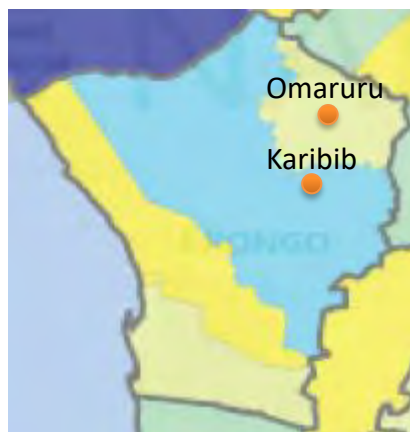
Image © 2020 CNES / Airbus

Google



Deprivation: the damaging lack of material benefits considered to be basic necessities in a society

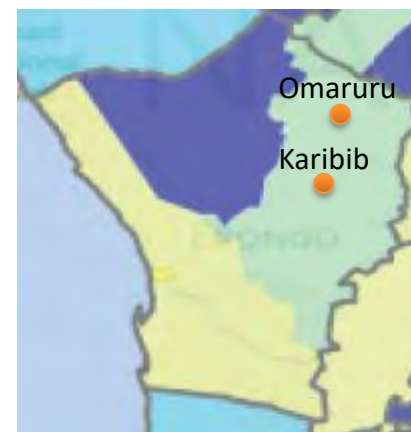
Employment deprivation



Health deprivation



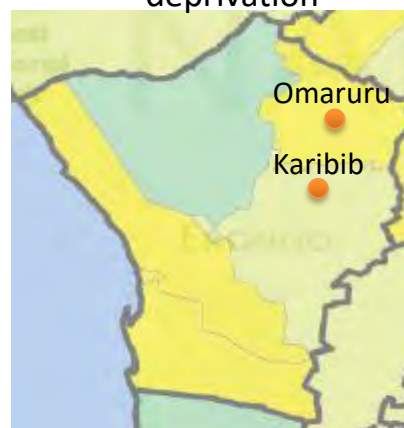
Education deprivation



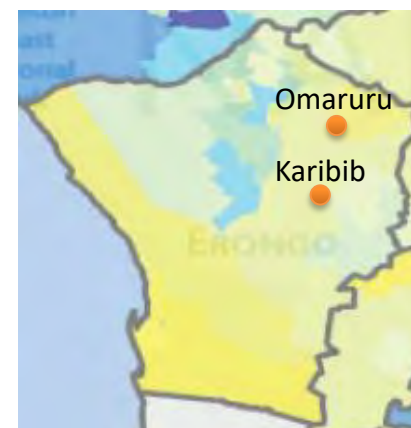
Material deprivation



Living environment deprivation

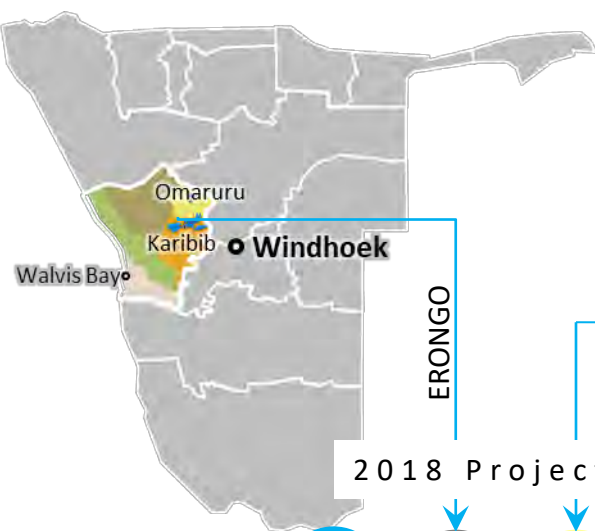


Multiple-deprivation



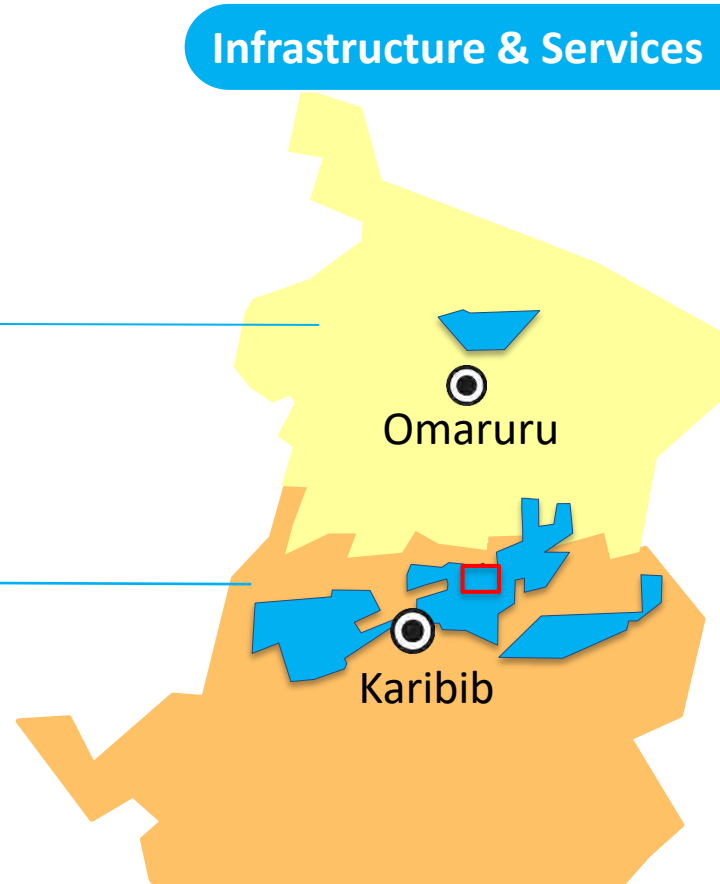
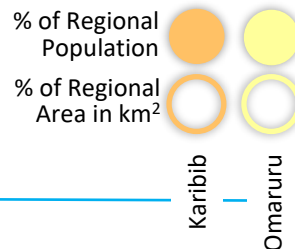
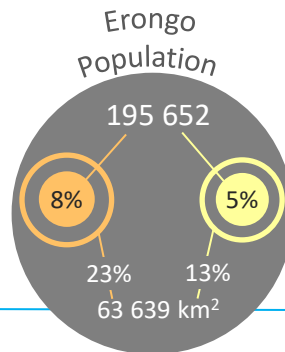
Headlines:

- Daures experiences higher levels of deprivation across all parameters, followed by Karibib Constituency.



ERONGO

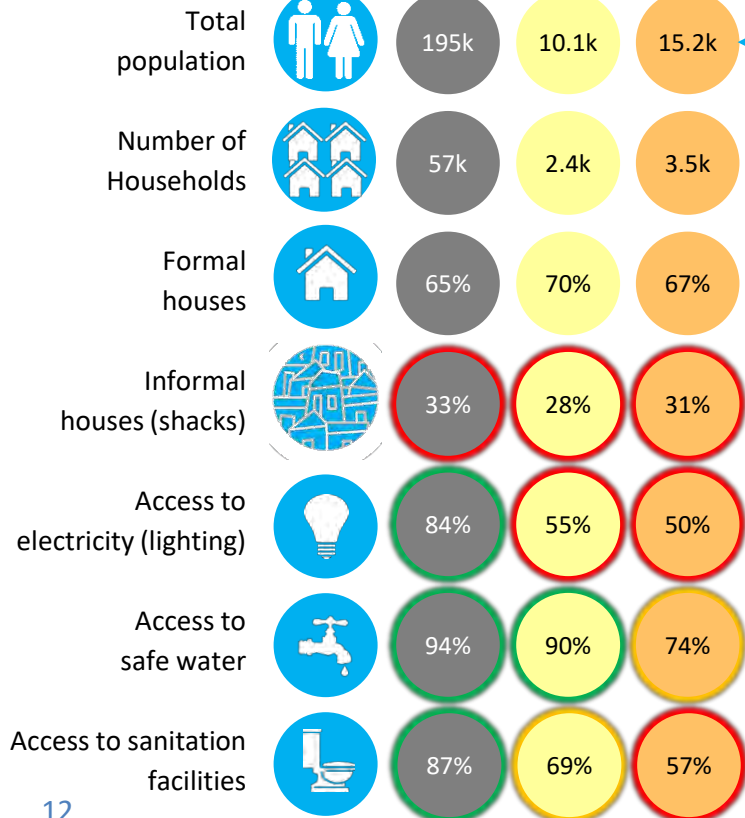
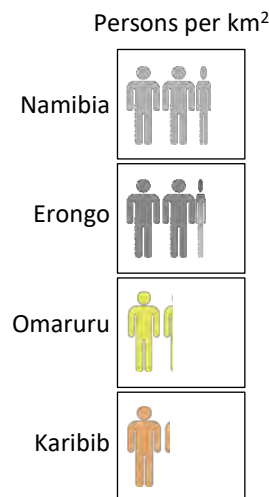
2018 Projections



Infrastructure & Services

Headlines:

- Large number of houses are informal (shacks) – 28% to 33% - poverty levels are high in both Omaruru and Karibib.
- Poor service delivery (electricity and sanitation) in both Omaruru and Karibib compared to the Erongo Region.
- In 2019 news article residents of Omaruru complained about mismanagement and the decay of the town.

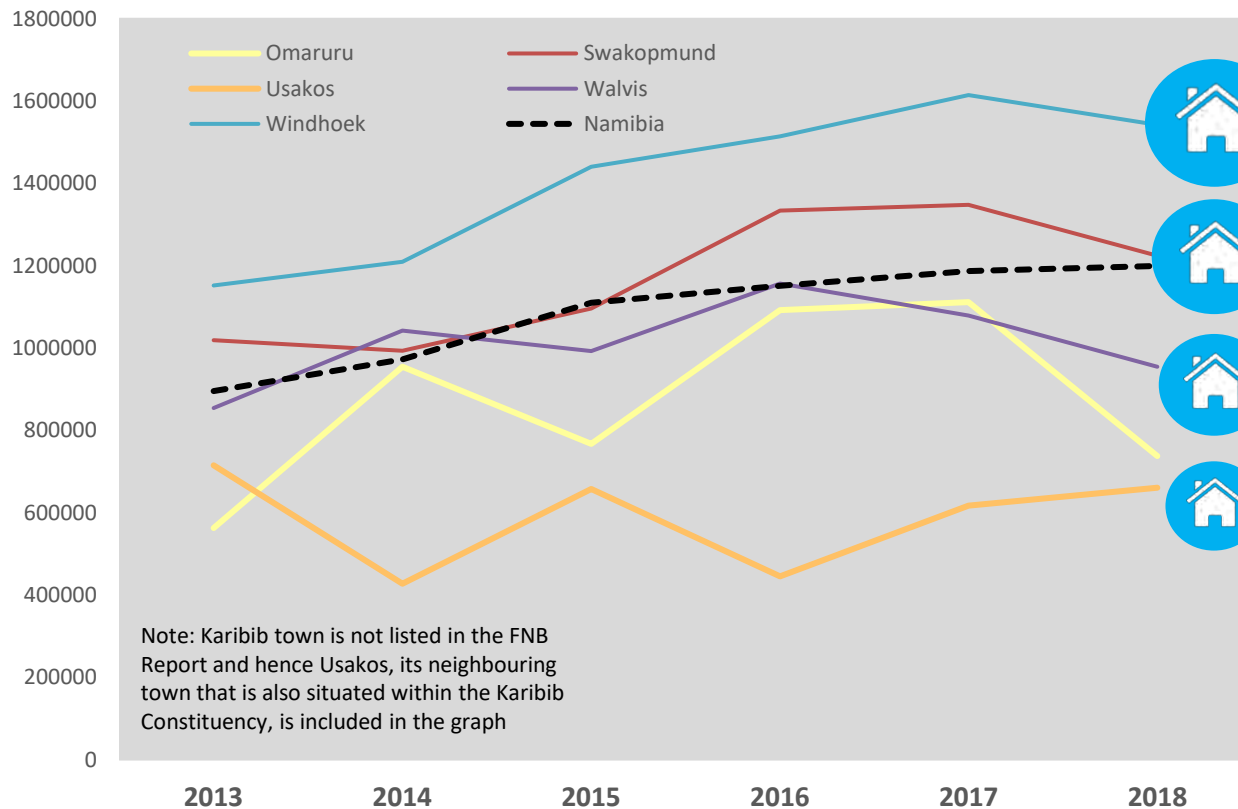




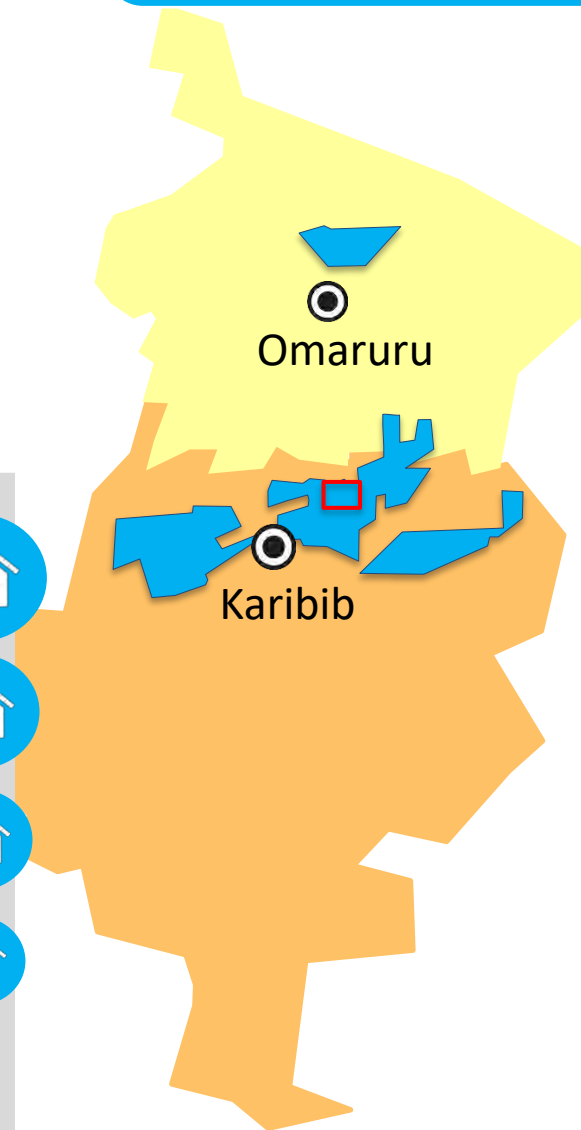
Headlines:

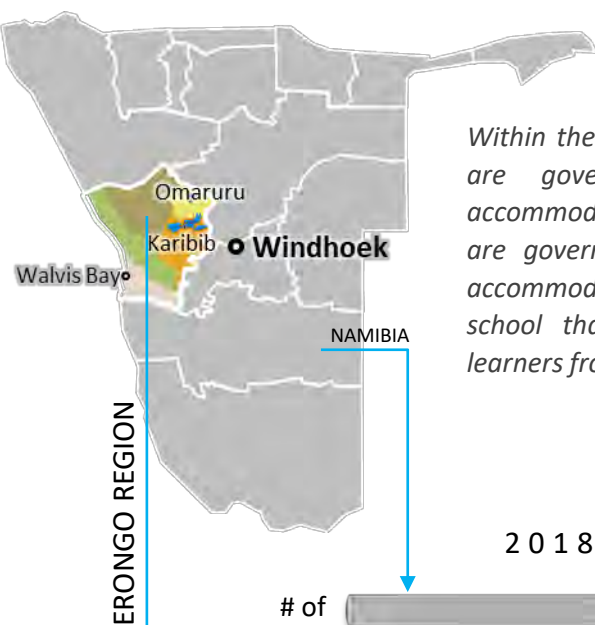
- Windhoek average house prices, over 6 years, are x1.7 than that of Omaruru. x1.3 when compared to the Namibian average.
- Higher house price volatility in the more rural Omaruru and Karibib constituencies compared to the more urban areas.

Annual median house prices for the major towns in Namibia over the past 6 years



Housing market





Within the Omaruru town there are six schools of which two are government boarding secondary schools, which accommodates learners enrolling for grade 8 to 12, while three are government primary schools with no hostel and they accommodate learners from grade 1 to 7. There is one private school that offers primary education and accommodates learners from pre-primary to grade 7 and it has no hostel.

2018 Data

of schools 1885

75

% State Schools 90%

69%

% State Schools Primary 88%

70%

% State Schools Combined 91%

27%

% State Schools Secondary 94%

94%

of learners in schools 736 836

43 213

% growth in Private & State Schools (2012-2018) 9%

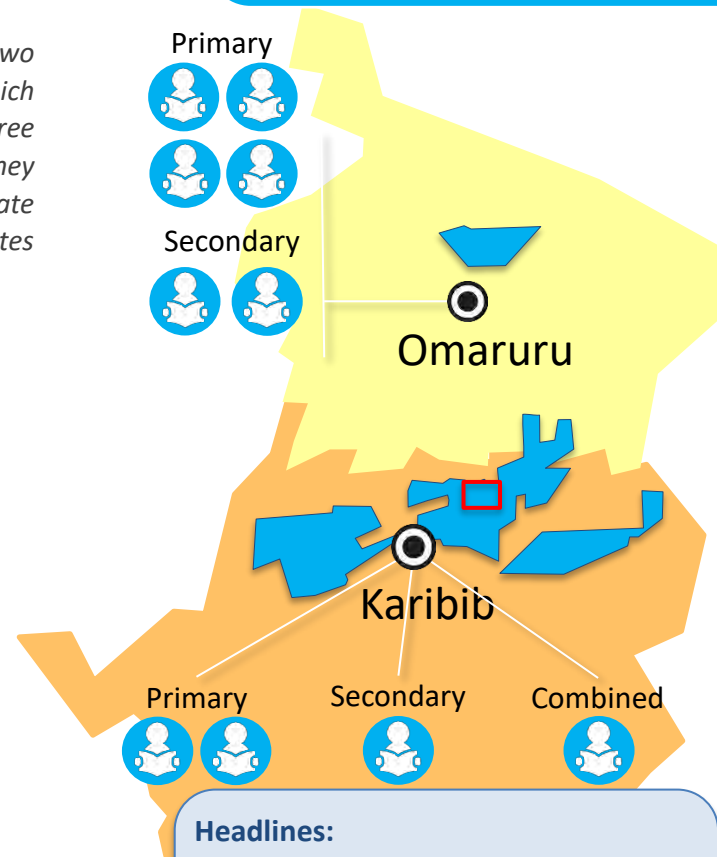
14%

% increase in enrolment rate (2012-2018) 19%

35%

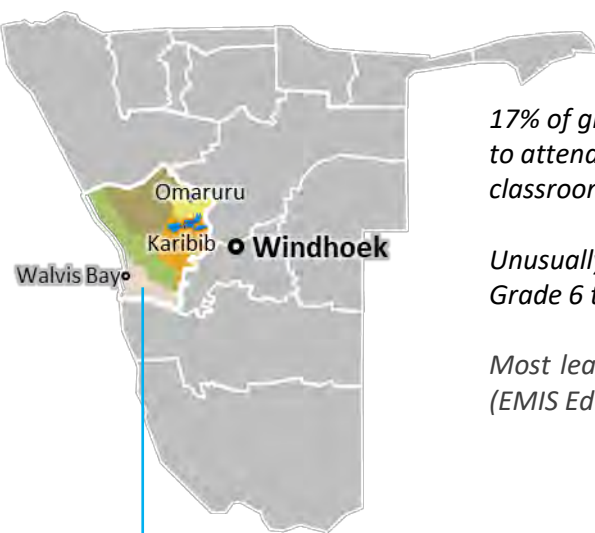
	Namibia	Erongo	
	Avg # of classrooms per school		
	14	19	
	64%	97%	
	89%	100%	
	64%	32%	% schools with laboratories
	44%	73%	20 schools have no resource room
	82%	99%	

Education Infrastructure



Headlines:

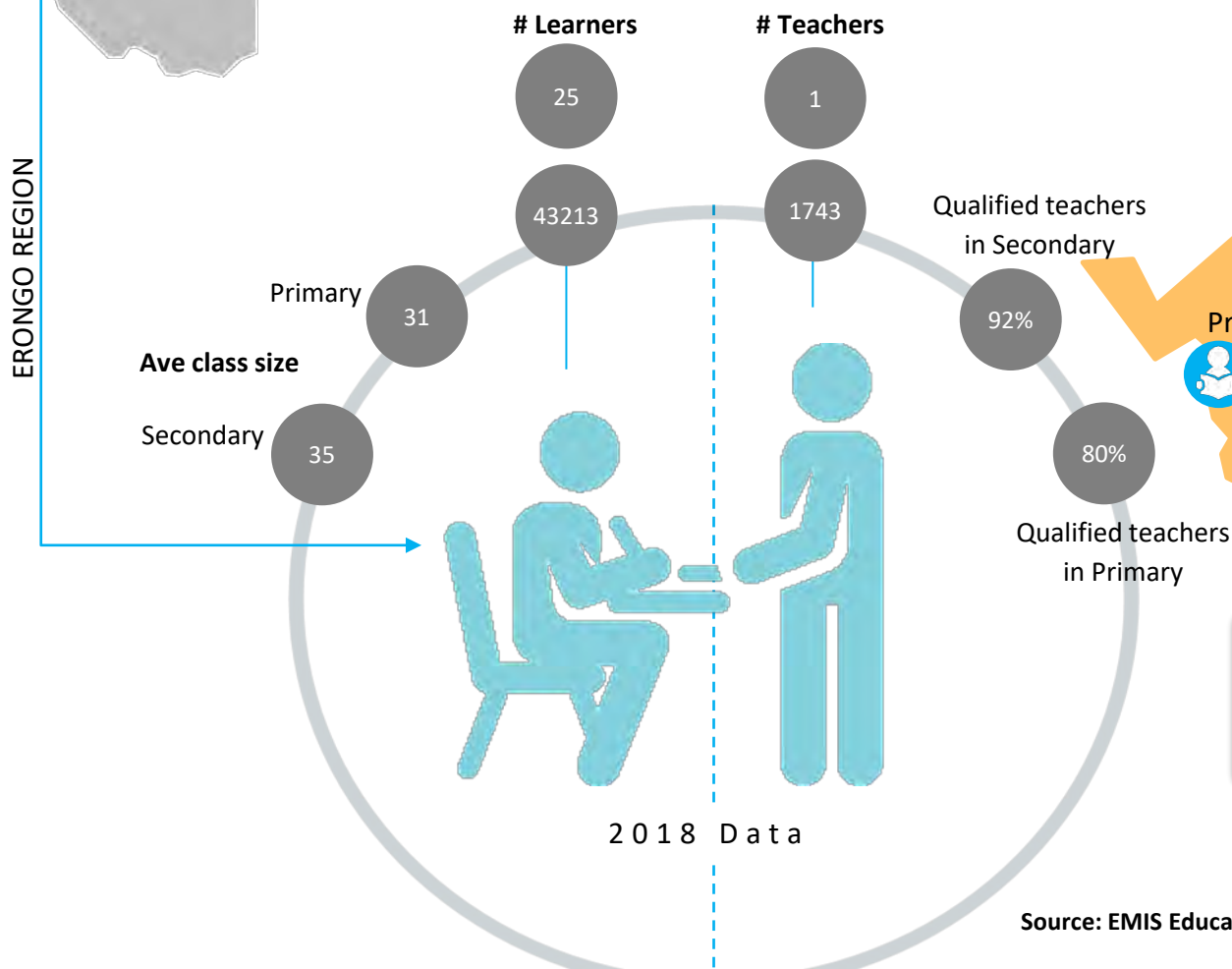
- When comparing Region with National it is clear that Erongo leads on classrooms per school, sanitation, access to water and electricity but maintenance is an issue.
- However, Omaruru circuit school inspector says some school ablution facilities and hostels are in urgent need repair.



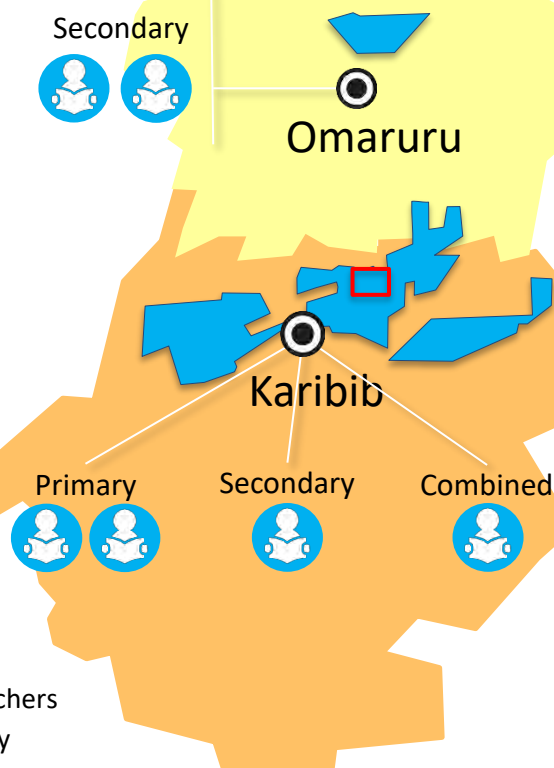
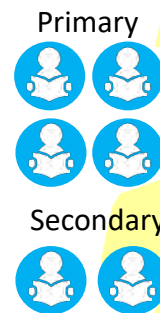
17% of grade 2s and 11% of grade 3 children in Erongo had to attend school in the afternoon because of shortage of classrooms. (nationally the figures are 3.5% and 2.6%).

Unusually, more girls consistently remain in school from Grade 6 to Grade 12 than boys, nationally (EMIS 2018 p43)

Most learners entered pre-primary school at 6 years of age (EMIS Education Statistics 2018)

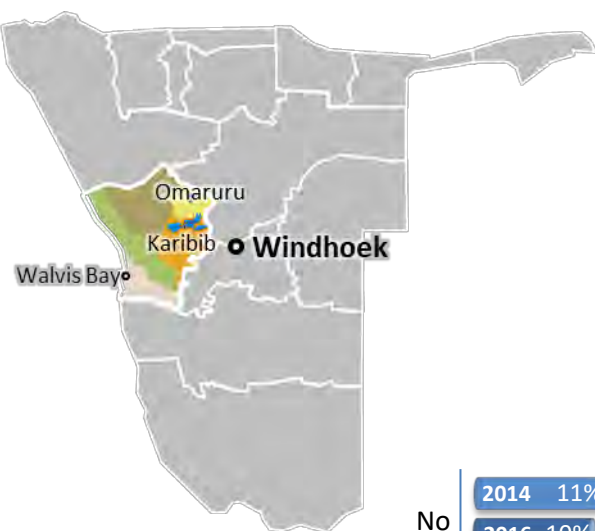


Learners & Teachers



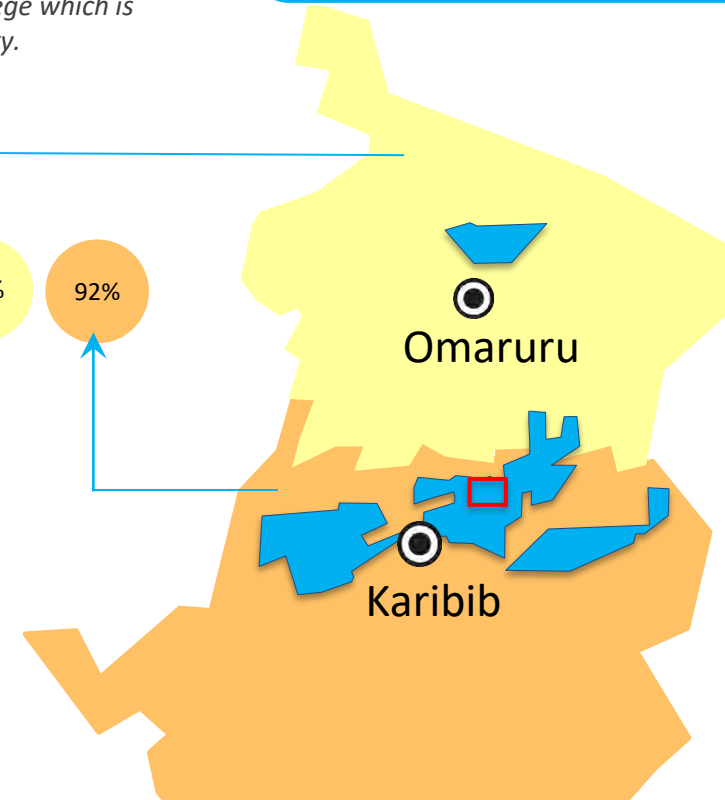
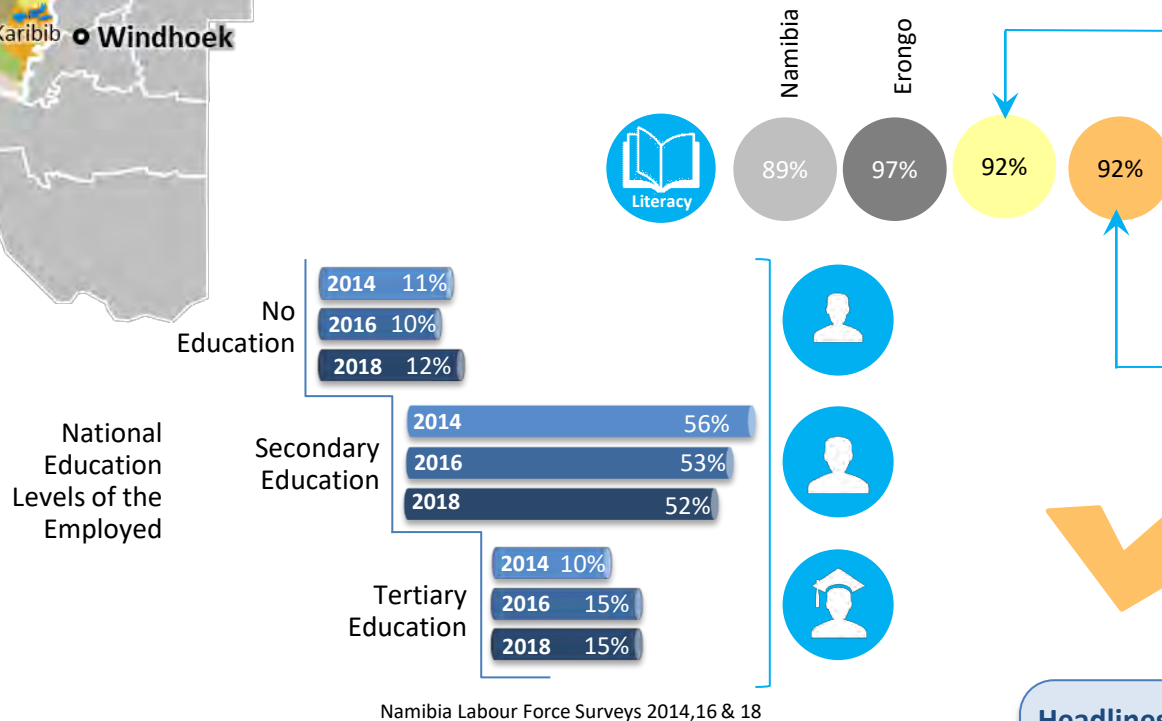
Headlines:

Erongo has the highest net attendance rates of all regions at 96% in primary school.



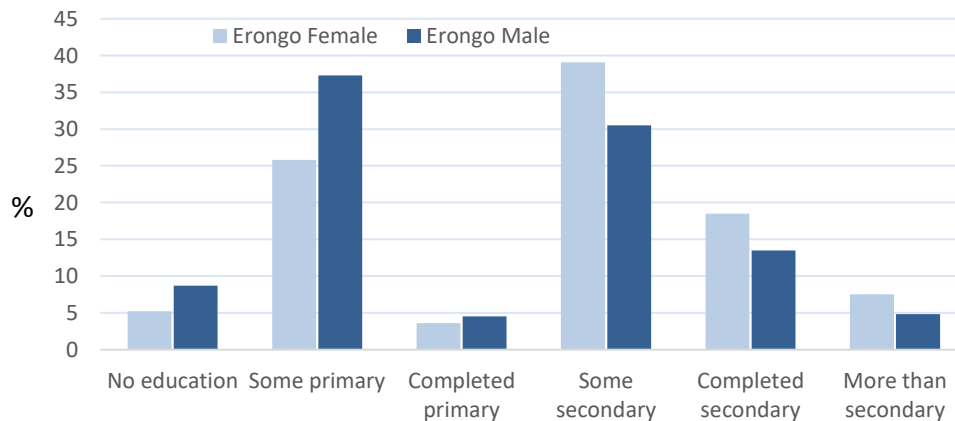
Omaruru town has only one tertiary educational institution, the Mahtook Correctional Service Training College which is used to train prison staff throughout the country.

Skills

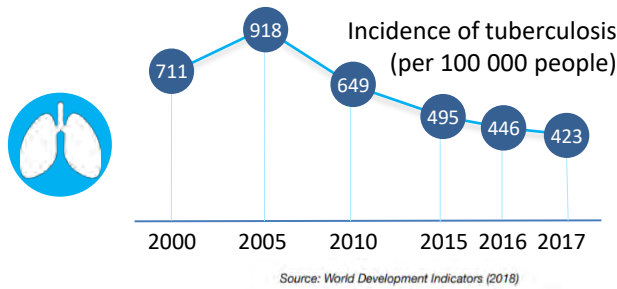
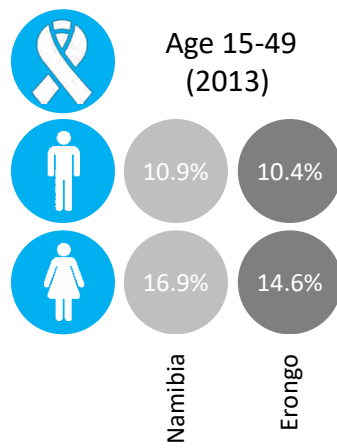
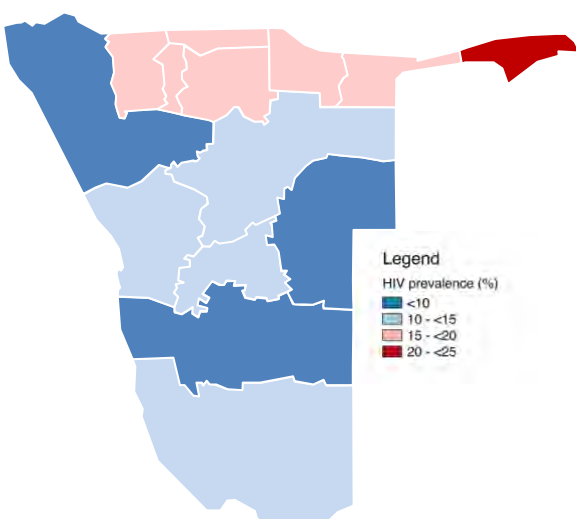


Headlines:

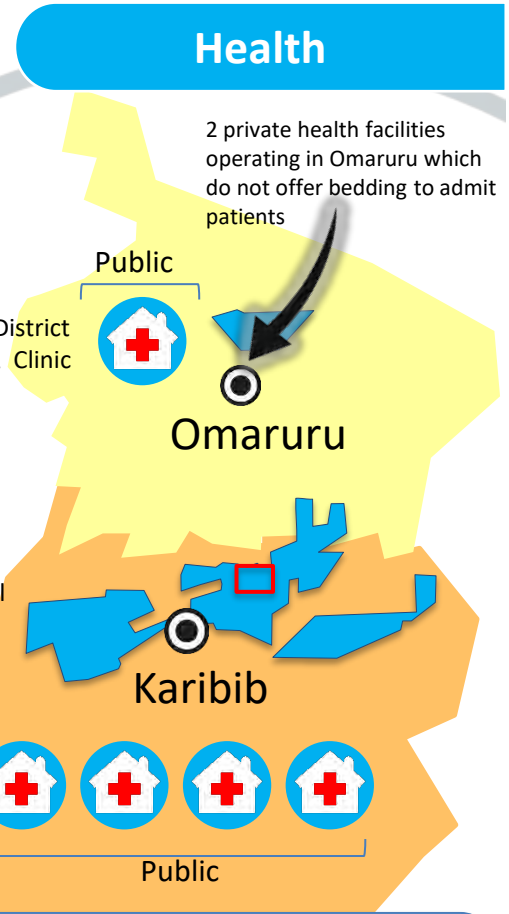
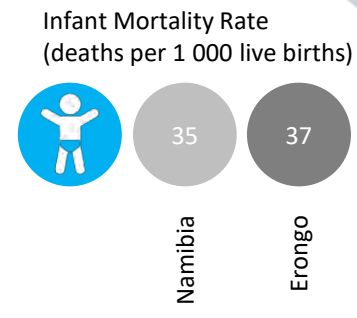
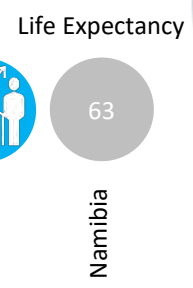
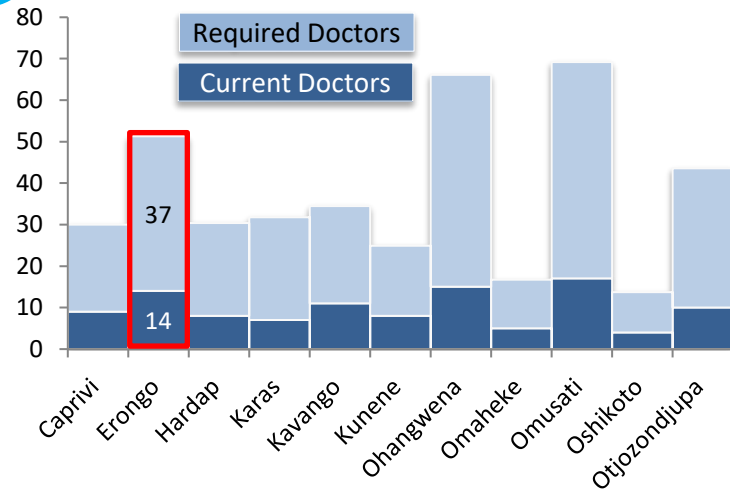
- Persons without formal education in Namibia (2018) constitutes 12% while those who completed tertiary education 15% of the total employed population.
- Literacy rates in Erongo significantly higher than National levels.
- Insufficient data at constituency level to understand strength of skills pipeline.



Sources: Namibia Demographic and Health Survey 2013, Ministry of Education, Arts and Culture, 2019

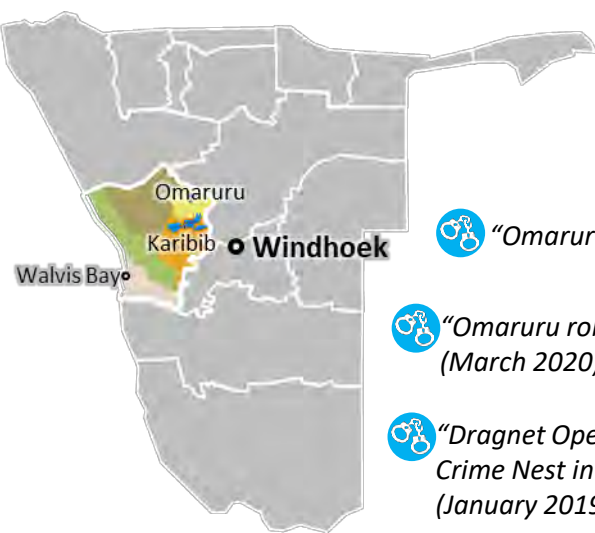


Actual doctors versus required doctors per Region for District Hospitals (2015)



Headlines:

- Namibia has one of the world's highest HIV prevalence rates with an estimated 12.1 percent of adults aged 15-49 living with HIV, according to the latest UNAIDS figures
- Namibia has one of the highest global incidences of TB. Although declining, TB is the fifth leading cause of death in Namibia.



"The town of Omaruru has a police station with 41 police officers stationed at that police station. Compared to other towns, the town is classified to have below average rate of crime." (Economy Profile of Omaruru Town, 2018)

"Omaruru-Stock Theft" (January 2020)

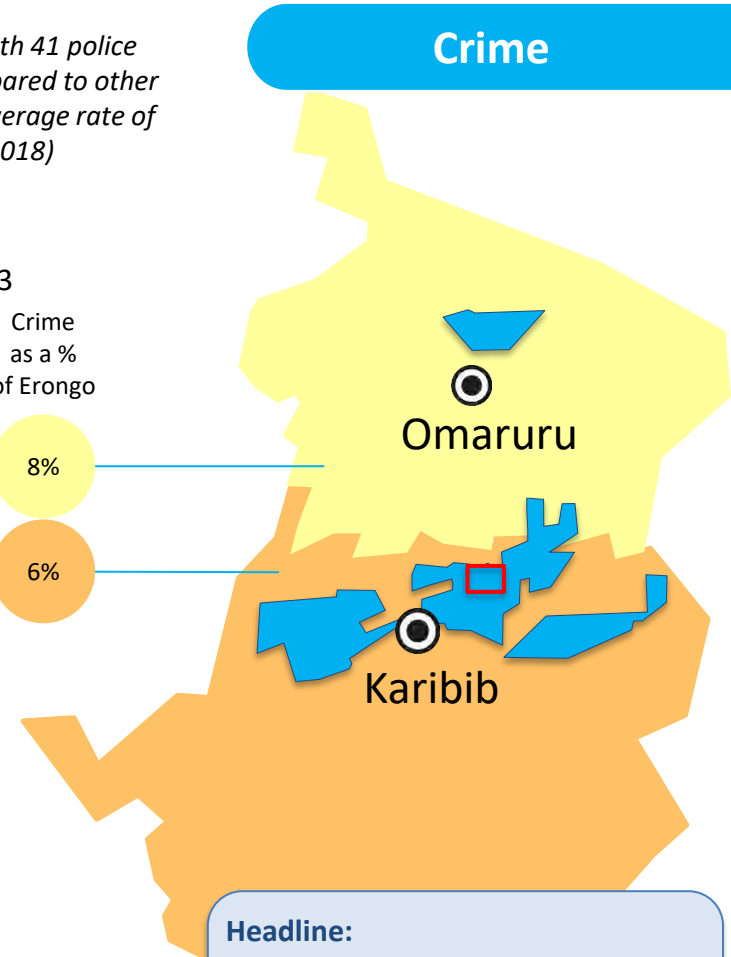
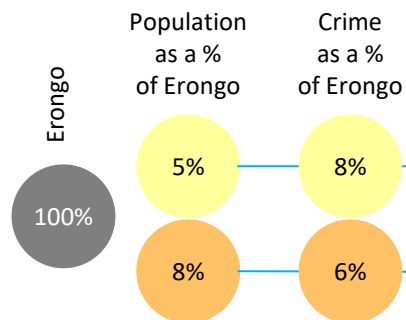
"Omaruru robbers strike again" (March 2020)

"Dragnet Operation Uncovers Crime Nest in Omaruru" (January 2019)

"Karibib - Illegal hunting" (March 2020)

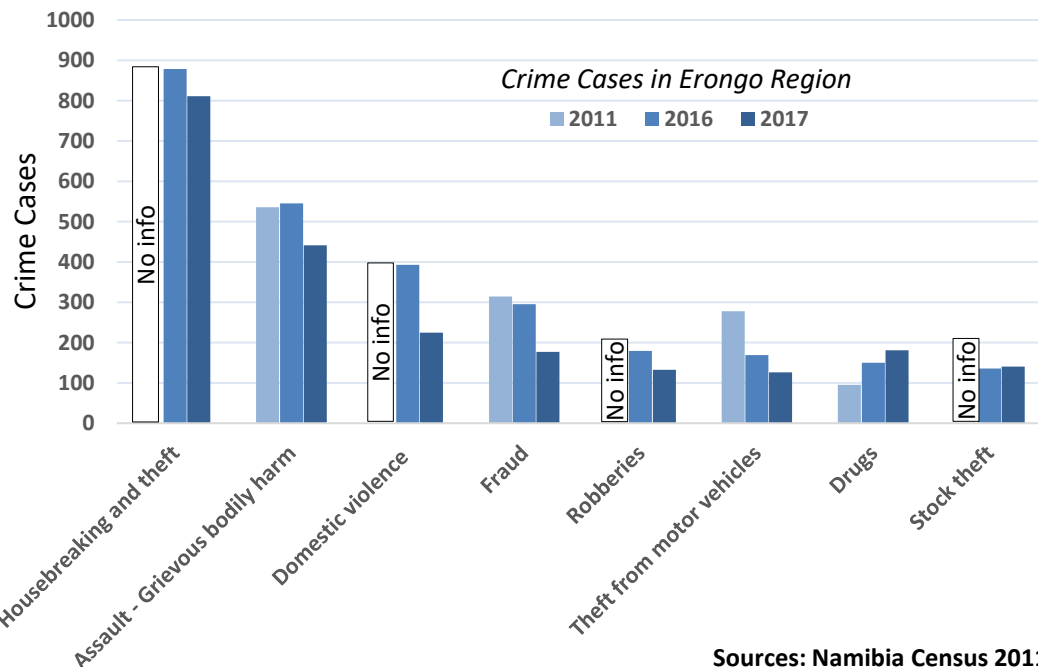
"Karibib - Possession of Cannabis and Mandrel" (January 2020)

2012/13



Headline:

- Crime on the decline in general across Erongo since 2011 apart from drug related crimes.
- Omaruru crime levels higher than Karibib in 2012/13 and more recent news articles paint a picture of rising crime levels in Omaruru.





Limited to zero sport facilities at Schools



Sport activities in towns:

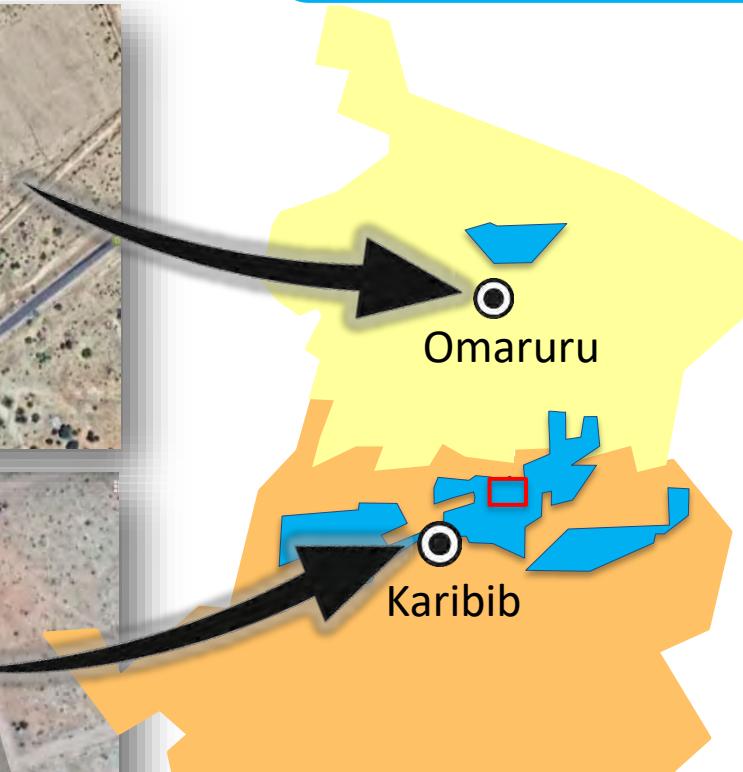


Annual sporting and arts events:

- Omaruru Street Mile
- Omaruru Spar Cycle Race
- Omaruru Arts Festival
- Orono & Engen 1Stop Usakos' Sports Festival

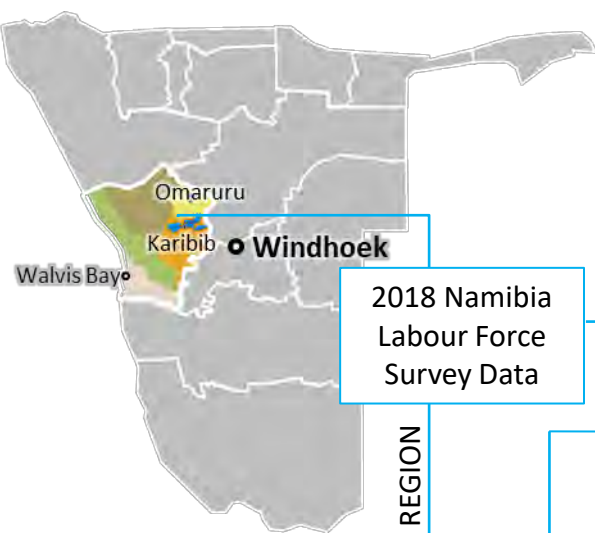
“The Omaruru municipality has availed land valued at N\$ 9 393 500 to the Namibia National Olympic Committee (NNOC) to construct an Olympic sports field at the town.” (www.thevillager.com.na)

Sport



Headlines:

- No information available of sport facilities and the quality thereof at local schools. Google Earth images show no evidence of soccer, rugby, hockey, cricket, athletics or tennis fields and courts, apart from public facilities used by clubs.
- Omaruru seems to be a popular sporting destination for cycling and running.



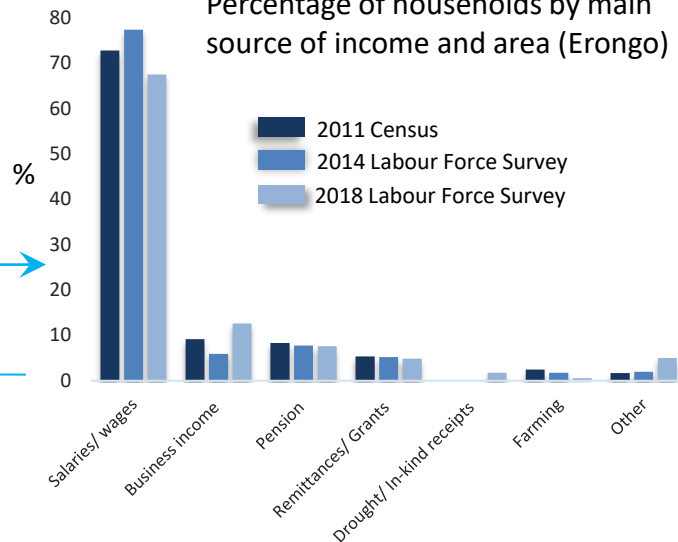
2018 Namibia Labour Force Survey Data

ERONGO REGION

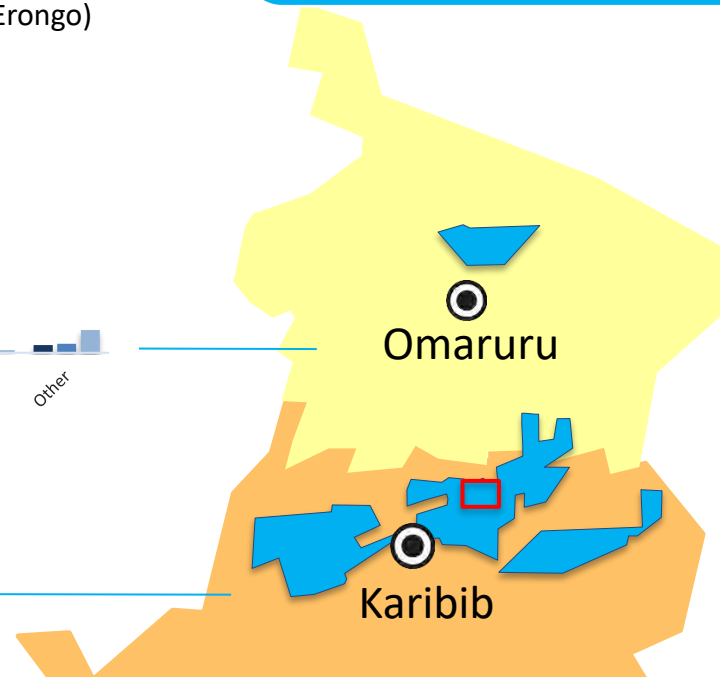
Adjusted Data

Adjusted Data

Percentage of households by main source of income and area (Erongo)



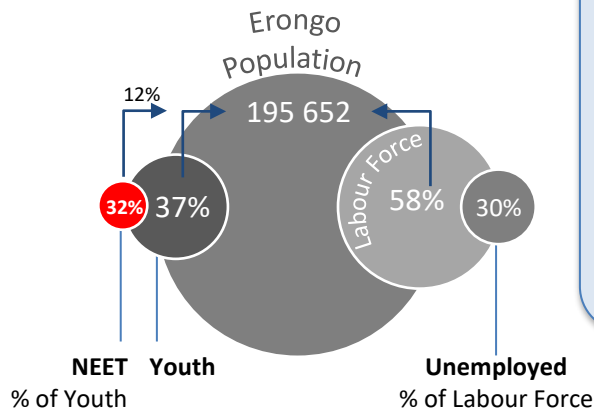
Employment



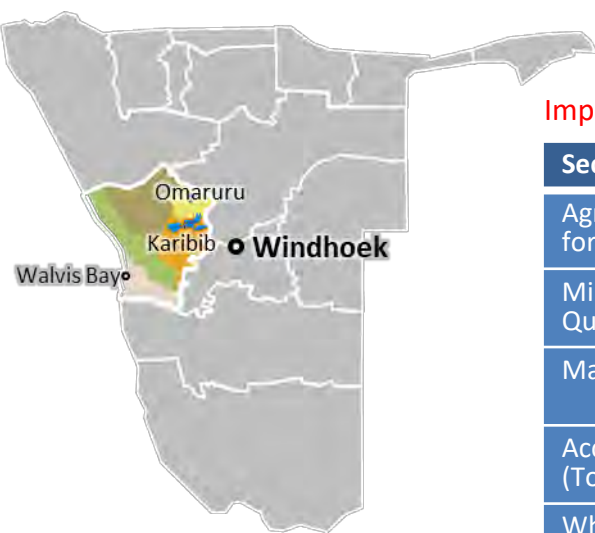
Headlines:

- High unemployment rates for both constituencies.
- Almost a third of the youth population in Erongo are classified as 'NEET' (not in education and not in employment or training).
- 2018 labour force data shows an increase in households earning an income from business and a decrease in households earning wages / salaries.

Youth aged 15-34 years not in education and not in employment or training (**NEET**)



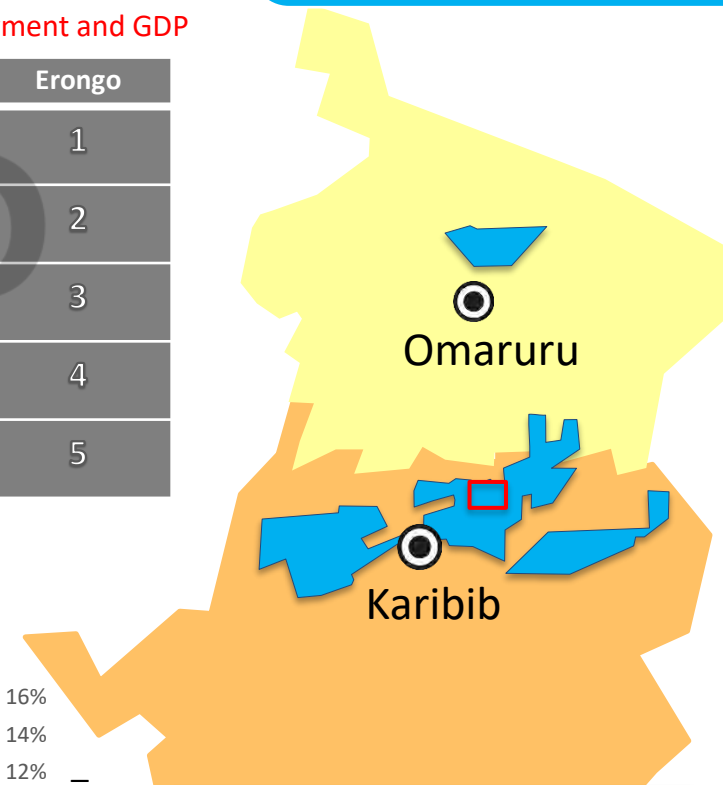
Total population		195k	10.1k	15.2k
Population growth rate p.a.		4.3%	2.6%	2.0%
Labour force		113k	5.1k	8.1k
Labour force participation rate		81%	74%	76%
Unemployment Rate		30%	32%	32%



Importance ranking per industry for both employment and GDP

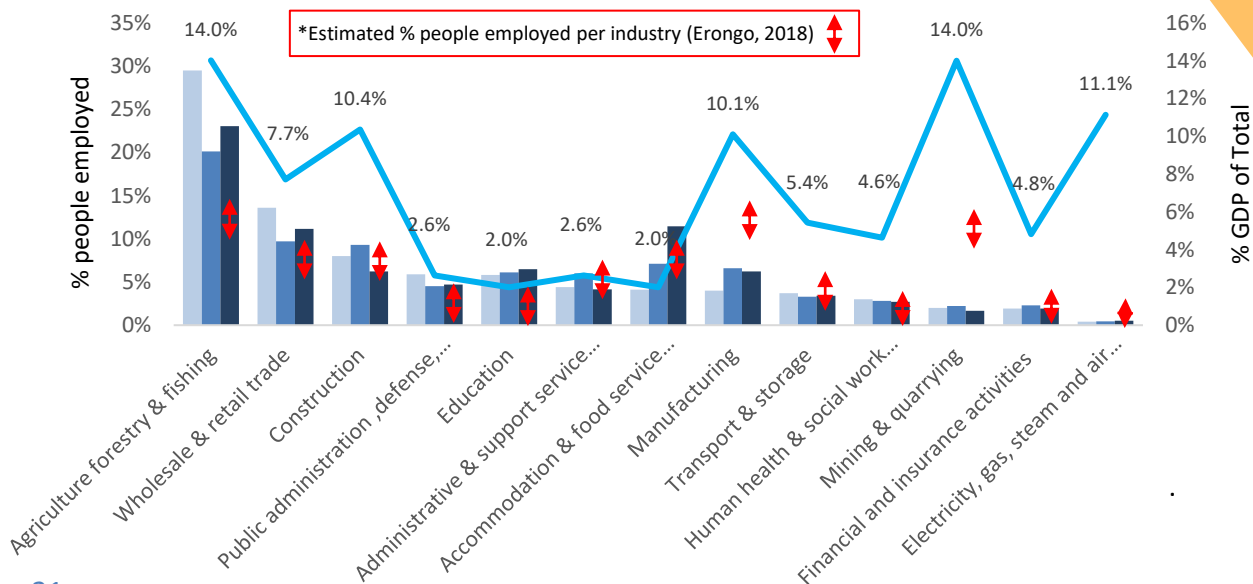
Sector	Omaruru	Karibib	Erongo
Agriculture, forestry & fishing	1	3	1
Mining & Quarrying	5	1	2
Manufacturing	3	5	3
Accommodation (Tourism)	2	4	4
Wholesale & retail trade	4	2	5

Local Economy



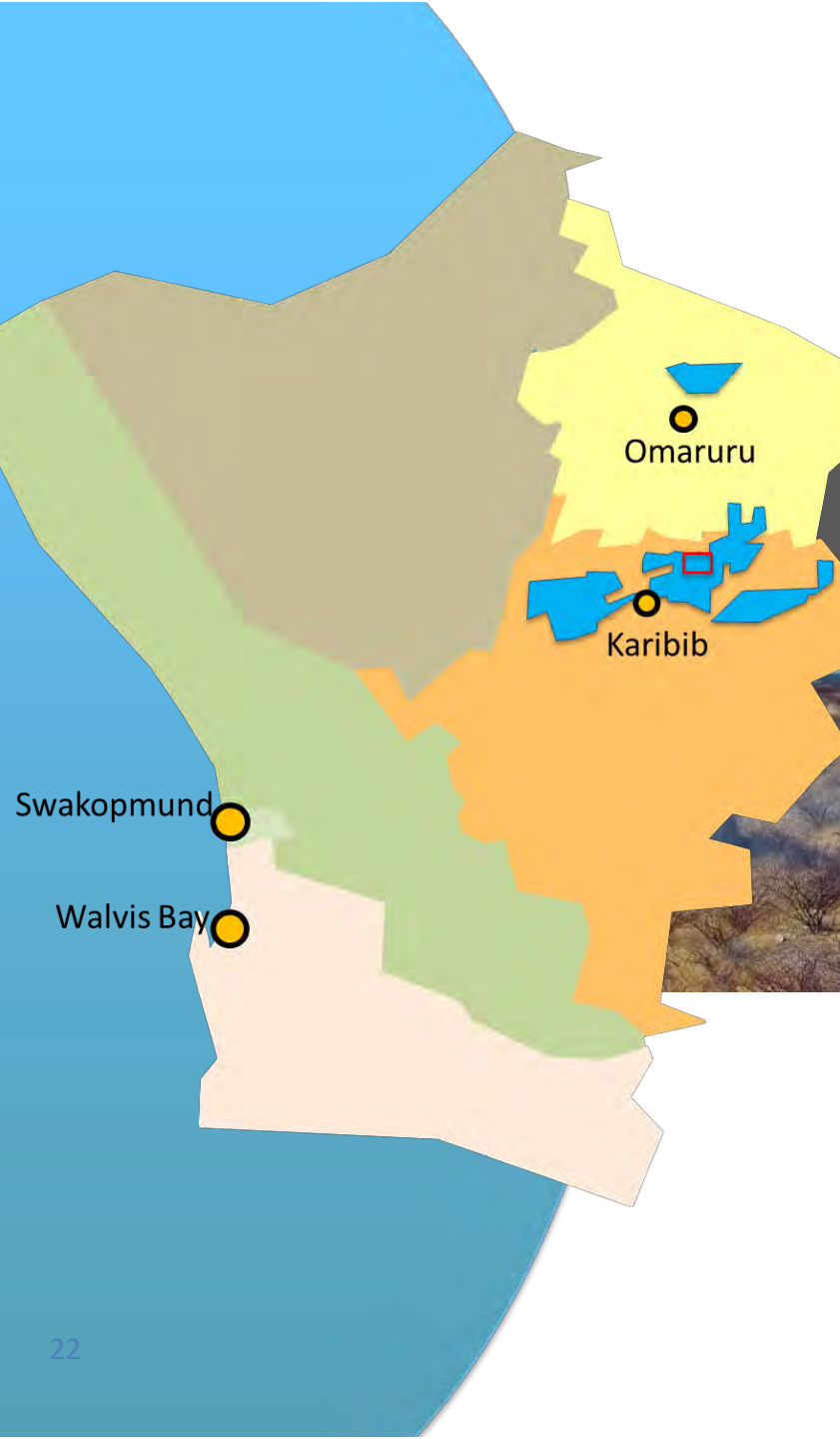
% people employed per industry (Namibia)

2014 2016 2018 GDP (2018)



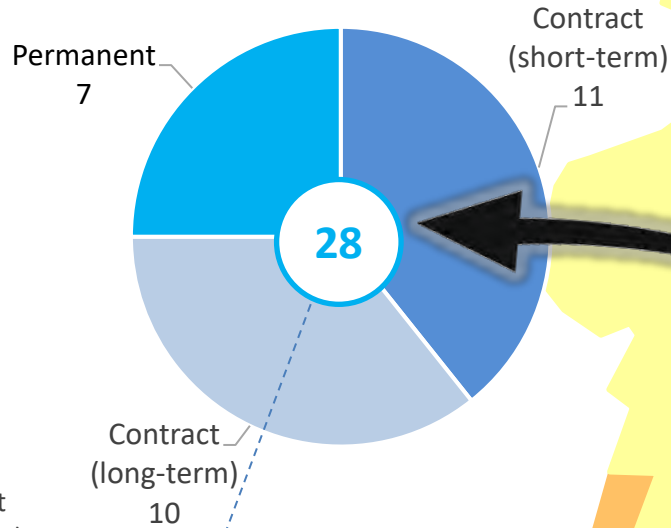
Headlines:

- The agricultural sector remains one of the major sectors in Namibia, employing almost a third of the total workforce.
- Mining employs around 2% of the workforce in Namibia but contributes around 14% to GDP. Mining in Erongo has a more significant contribution to employment.

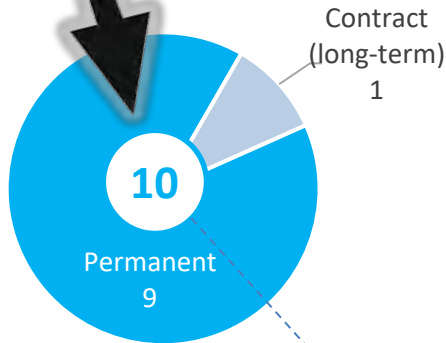


Socio-economic Impact of Osino Resources





Omaruru



Usakos
Karibib



Total Employment

38

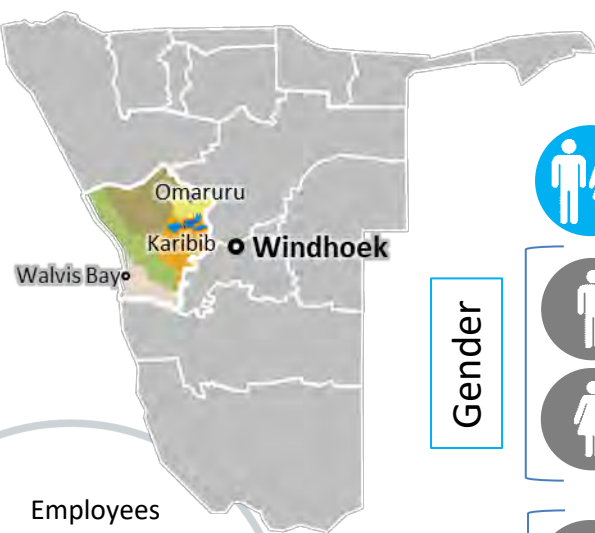
Geologists (6)

Field Technicians (26)

Admin, cooking & cleaning (6)

Headlines:

- Osino employs on average 38 workers per annum, which include permanent and contract workers.
- 74% of employees have been recruited from Omaruru. Almost 60% of these employees consider Omaruru as their home base.



Employees below age 30 who do not have Grade 12

10

Average dependents per employee

1.3

Gender



38 Total Employment



Highest Education

Post Grade 12



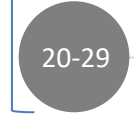
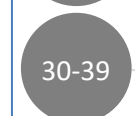
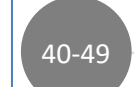
Grade 12



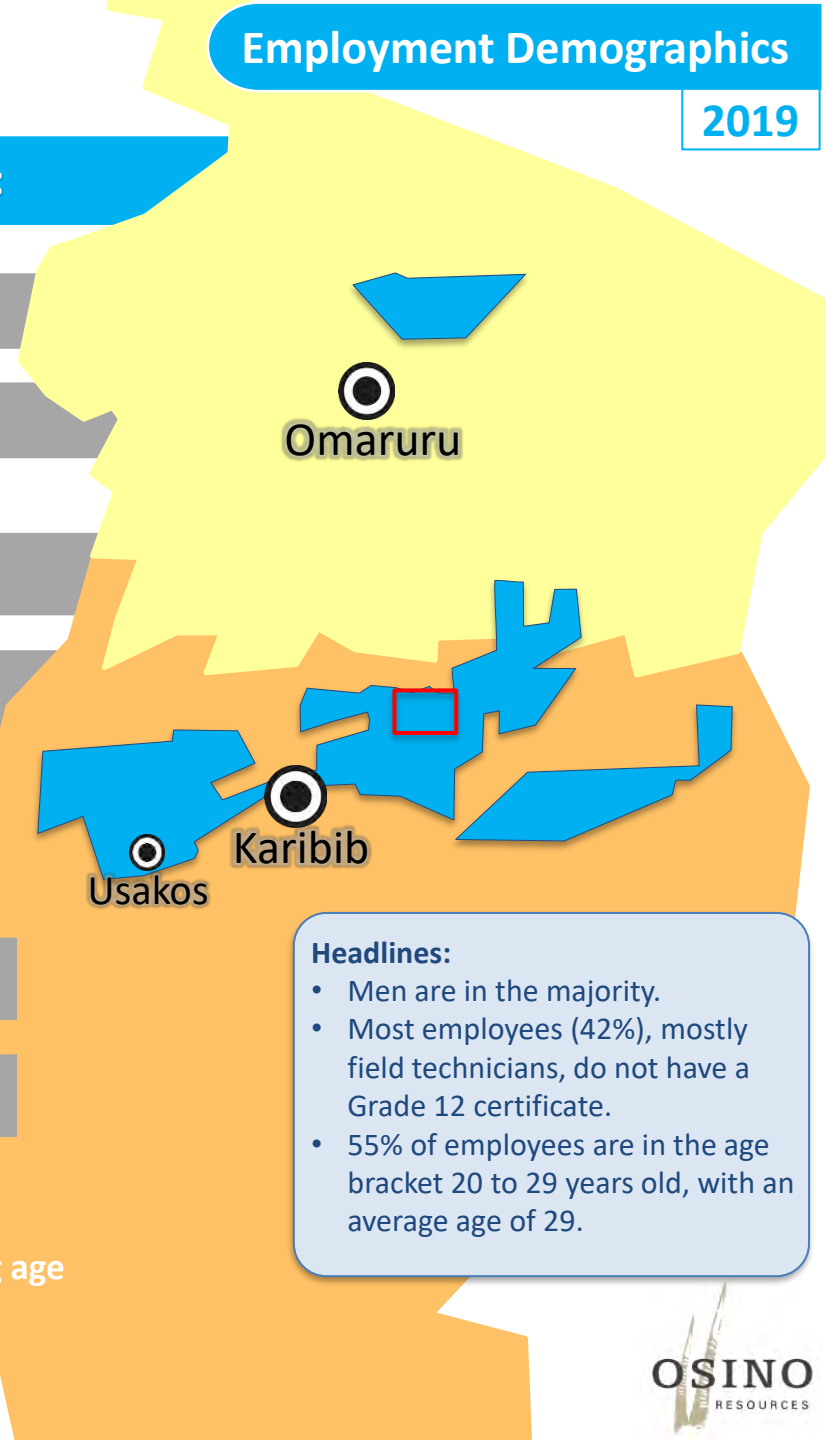
Below Grade 12



Age Category

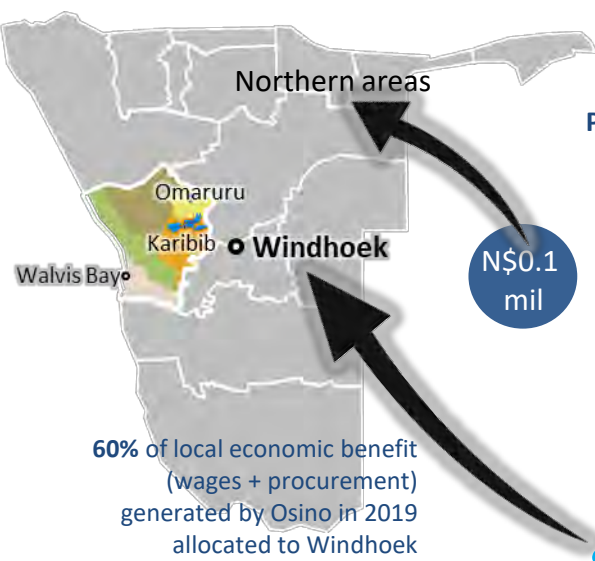


29 Avg age



Headlines:

- Men are in the majority.
- Most employees (42%), mostly field technicians, do not have a Grade 12 certificate.
- 55% of employees are in the age bracket 20 to 29 years old, with an average age of 29.



60% of local economic benefit (wages + procurement) generated by Osino in 2019 allocated to Windhoek

Total local economic benefit generated by Osino in 2019

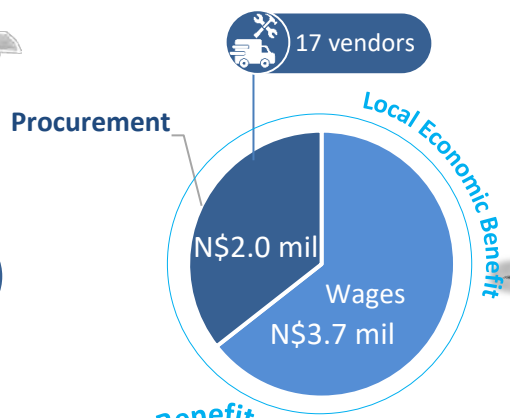
Local Benefit N\$31.8 mil

N\$5.4 mil

N\$26.4 mil

Osino Vendors

- Accommodation
- Company events
- Courier service
- Diamond drilling
- RC drilling
- Laboratory services
- Field supplies, hardware etc.
- Food and general supplies
- Fuel
- Security services
- Vehicle maintenance and servicing



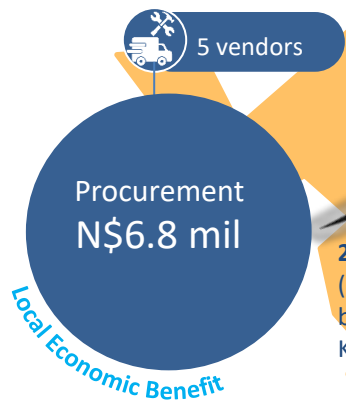
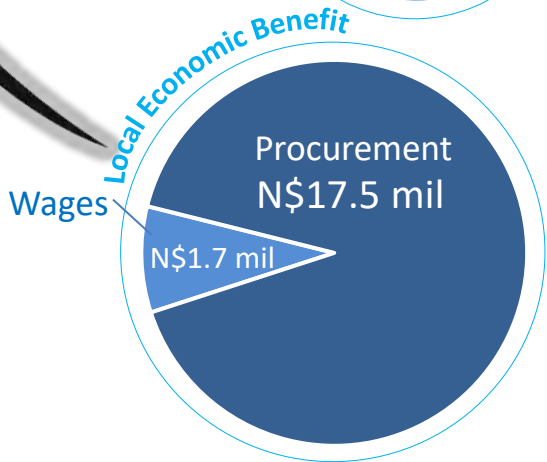
18% of total local economic benefit (wages + procurement) generated by Osino in 2019 allocated to Omaruru

Local Economic Benefit

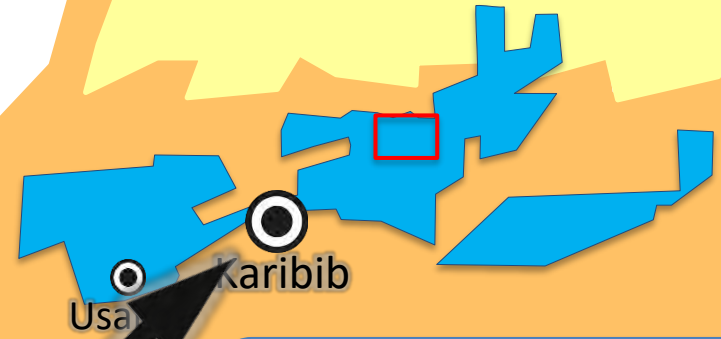
Local Wages (2019)

Local Procurement (2019)

Omaruru



21% of local economic benefit (procurement only) generated by Osino in 2019 allocated to Karibib



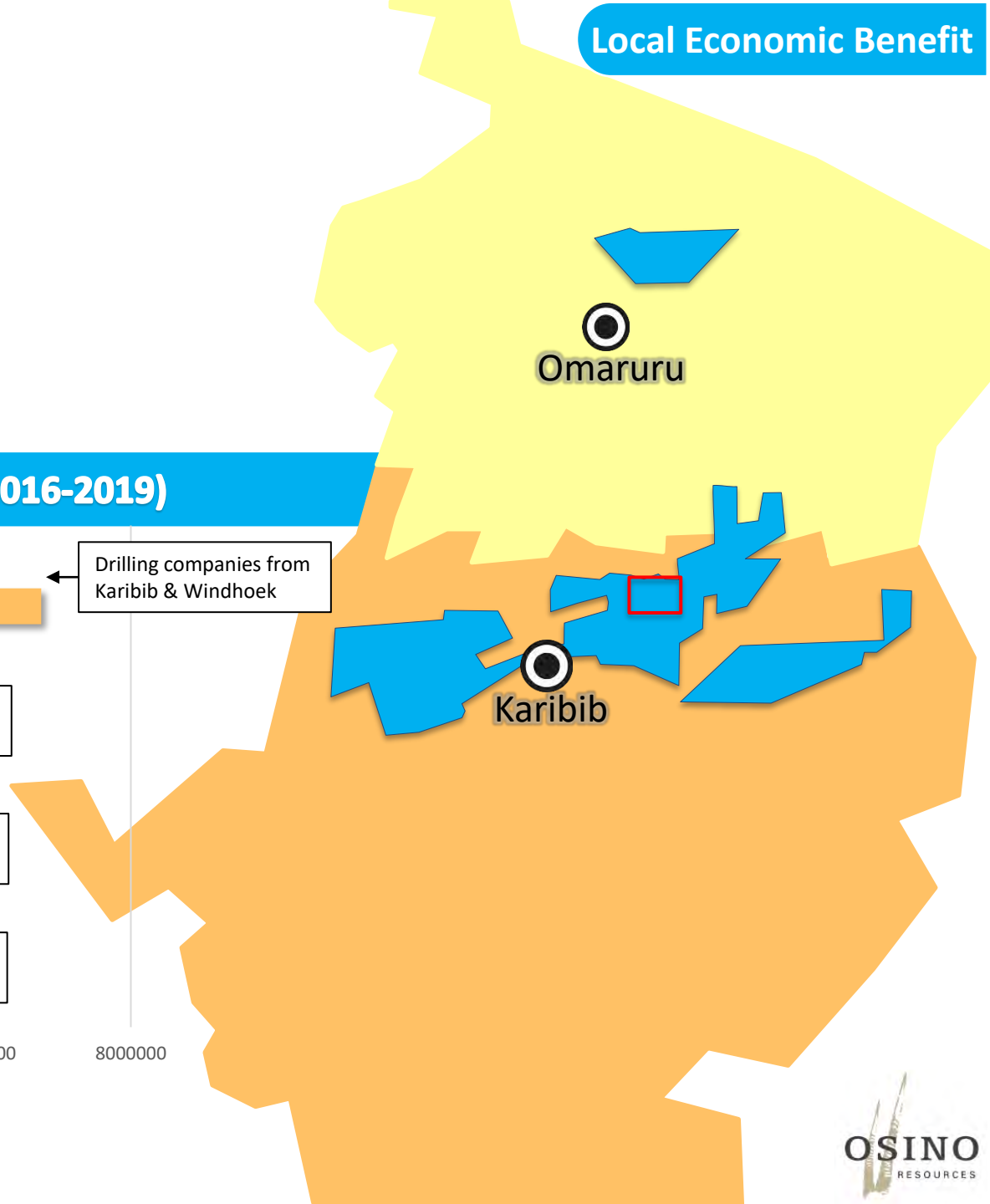
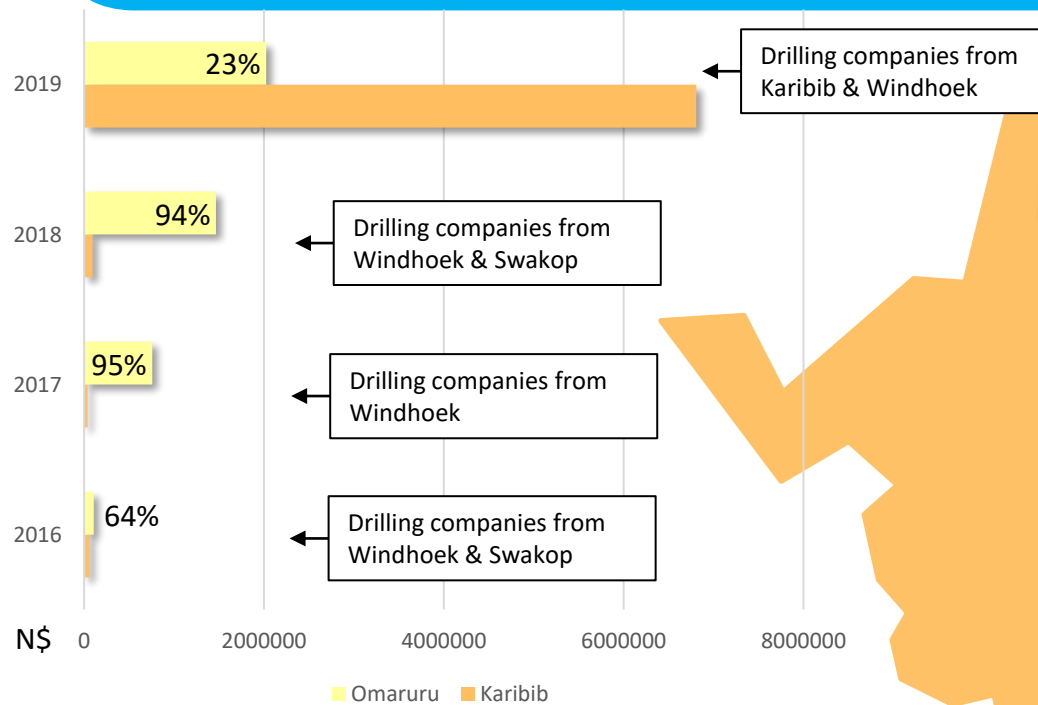
Headlines:

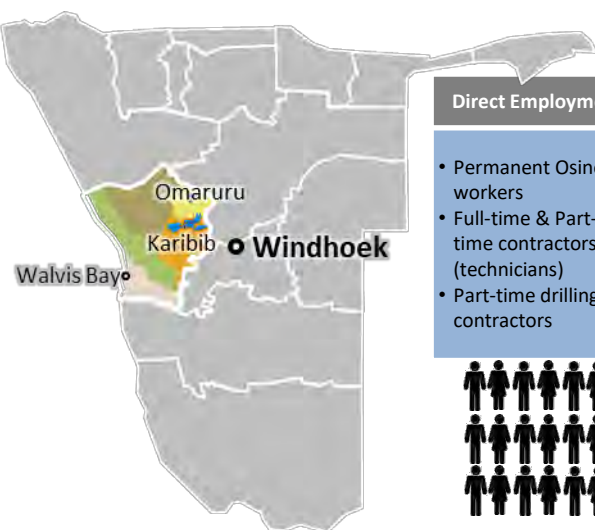
- Whereas most of the procurement spend is allocated to Windhoek, most of employees' wages are allocated to Omaruru.
- Procurement spend in Karibib is mainly on drilling services.
- N\$ 2 million procurement spend in Omaruru from 17 local vendors.

Local Economic Benefit



Local Procurement Spend (2016-2019)





Direct Employment

- Permanent Osino workers
- Full-time & Part-time contractors (technicians)
- Part-time drilling contractors



Indirect Employment

- Off-site contractor employees working for Osino;
- Suppliers and service providers whose employment is attributable to business generated by Osino.



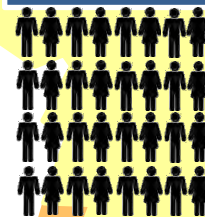
Induced Employment

- Generated by the consumption spending of direct and indirect employees.



Total Employment

Direct + Indirect + Induced



Omaruru
64%

Employment (N\$ Million)	Direct	Indirect	Induced	Total
Employment (#)	45*	12	43	100
Wages and salaries (Gross)	\$5 374 167	\$1 137 911	\$3 745 817	\$10 257 895
Wages and salaries (Net)	\$4 406 448	\$1 002 325	\$3 486 911	\$8 895 684
Average Wage (Gross) – N\$	\$119 426	\$91 821	\$87 213	\$102 228

*Osino employs 16 permanent workers and 22 contractors (field technicians) directly. The drilling contractor employs on average 7 people and these workers are onsite for most of the year. While contractors could be considered either direct or indirect employees, for the purpose of this assessment they were considered direct employees.

A total multiplier effect of 2.2 on direct employment has been used for the employment multiplier calculations. This is based on a recent study at Rössing Uranium, which used 3.5. For Osino the 3.5 multiplier has been reduced by 50% to take into account the difference between an operating mine's vendor spend versus that of an exploration project.

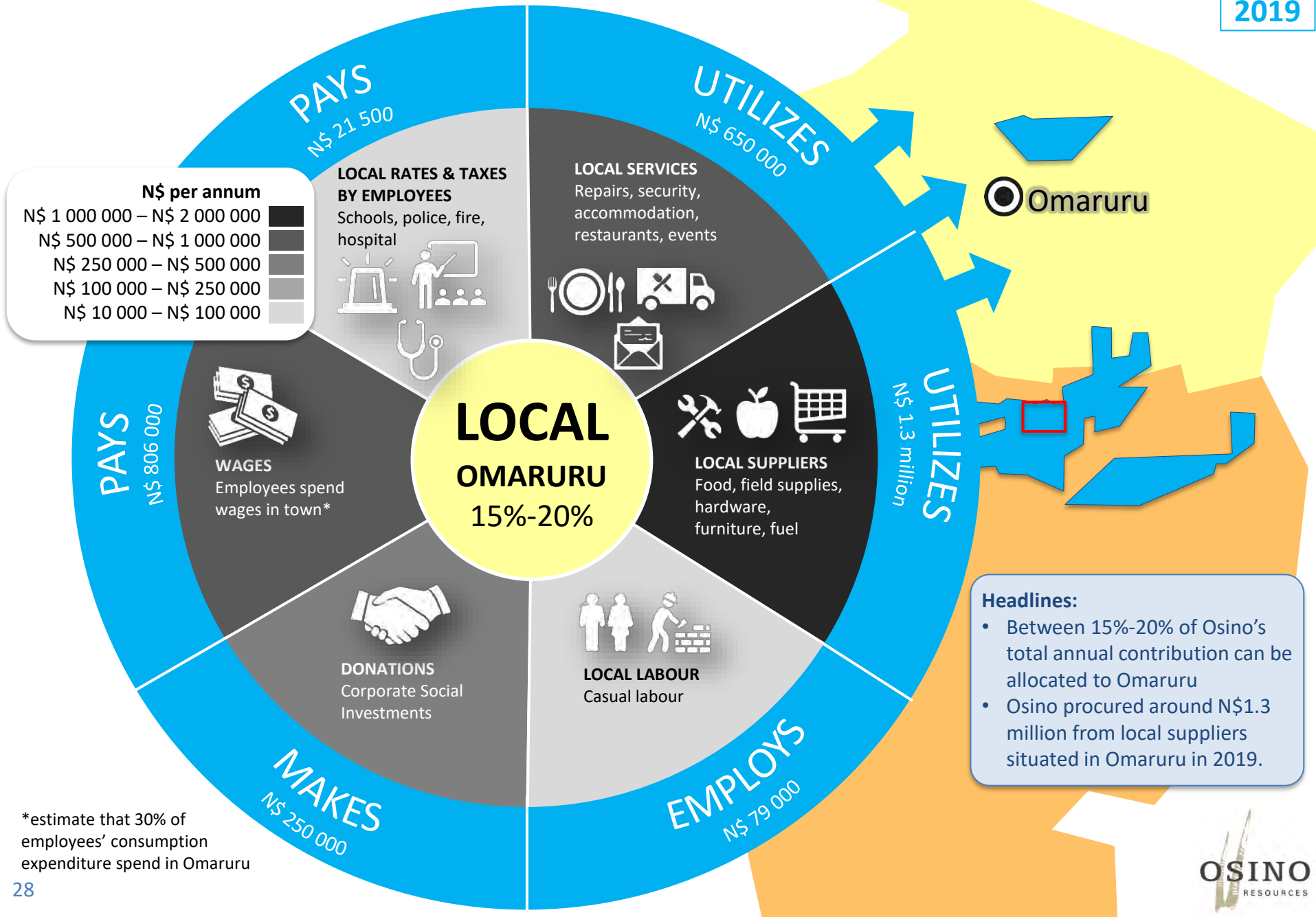
Headlines:

- The total employment impact for Osino (including direct, indirect, and induced jobs) could reach 100.
- 64% of the employment multiplier effect could benefit Omaruru.

Breakdown of Osino's annual direct and indirect contribution (wages, procurement & CSI) in the Omaruru Constituency

Local Expenditure

2019



*estimate that 30% of employees' consumption expenditure spend in Omaruru