

POSITIONING NAMIBIA'S OIL & GAS ENDOWMENTS: Avoiding the *"Dutch Disease"*

GOVERNOR J. !GAWAXAB 3 April 2024



PRESENTATION OUTLINE



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PURPOSE

How to position Namibia's oil and gas endowments and manage the inherent Dutch Disease risk that comes with natural resource development.

Key New Developments



OIL, GAS & GREEN HYDROGEN DISCOVERIES IN NAMIBIA

Significant developments on oil and gas discoveries confirmed in 2022

- · Appraisal activities underway
- Namibia expected to be among top 15 oil producers by 2035

Namibia positioning itself to be a major player in green hydrogen

• HYPHEN Tsau Khaeb pilot project

Overview of Key Developments: Oil & Gas

OIL AND GAS - N\$33.4 BILLION FDI BETWEEN 2021 - 2023

6 Oil Discoveries in the Orange Basin – with an estimated 11bn barrels

In 2022 Shell announced oil discovery in Graff-1. Since then, Shell has made 4 discoveries , Jonker-1, La Rona-1, and Lesedi-1 Currently conducting appraisal work on PEL-39 to determine the commercial viability of the hydrocarbon.

Final Investment Decision (FID) is around 2026.

- Total Energies has made two discoveries; Venus-1 and Mangeti-1
- FID on Venus well is expected between Q1 or Q2 2025 and first oil should be around 2030.
- Recently, Jan 2024, Galp Energy announced a discovery Mopane-1.
- The oil reserves for the Orange Basin is estimated at 11 billion barrels.

Most Onshore Activity to be Concentrated in Lüderitz

• Total Energy committed 50% of its 2023 exploration budget to appraise its Venus discovery, located 350km from Lüderitz.

Gas Sector

G • т

Oranjemund

• The Kudu Gas Field is earmarked to feed a 420MW power plant south of Lüderitz.

Estimated that only about 10% of exploration expenditure goes to local firms, while remainder is spent externally.

La Rona

Kudu

100 km

Venus -1

Yonker -1 Graff -1

OVERVIEW OF KEY DEVELOPMENTS: GREEN HYDROGEN

GREEN HYDROGEN – U\$ 10 BILLION INITIATIVE

Global demand for hydrogen is expected to increase from 140mtpa in 2030 to 660mtpa in 2050. With its world-class renewable energy sources, Namibia is poised to help meet global demand.

In 2021, Hyphen Hydrogen Energy was announced as the preferred **bidder** for the country's first green hydrogen project following a competitive bidding process.

Government is set to acquire 24% stake in the project.

The Project aims to develop three hydrogen valleys in the southern region, the central region and the northern region.

Lüderitz is expected to be the base of the large-scale infrastructure project.

WHAT DO THE DISCOVERIES MEAN FOR NAMIBIA?



POTENTIAL DOUBLING OF GDP

Exploration activities has so far contributed positively to economic growth -

- Estimated at an average of 0.4 percentage point between 2021 2023
- On sectoral basis 17.7% average contribution to mining & quarrying sector
- Contribution expected to keep rising as explorations intensify and development of oil & gas and green hydrogen takes place.

Could potentially also have implications for monetary policy going forward

- Through increasing natural resource exports that can result in currency appreciation,
- That can encourage imports, and
- Can discourage exports in other sectors as they become less competitive.
- It could also affect the current account (CA) of the BOP [e.g. in 2023, Namibia's (CA) deficit deteriorated as exploration and appraisal activities intensified - CA deficit worsened to 15% in 2023 from 12.% in 2022, expected to recover to 12.6% in 2024, deteriorate to 14.0% in 2025]

These issues, if left unchecked could potentially culminate into resource curse risks for Namibia or what is referred to as the Dutch Disease.

What is the Resource Curse or Dutch Disease?



The resource curse, also known as the paradox of plenty, refers to the paradox that countries with an abundance of natural resources (like fossil fuels and certain minerals) tend to have less economic growth, less democracy and worse development outcomes than countries with fewer natural resources.

THIS IS NORMALLY CAUSED BY:

- Uneven growth across sectors due to the discovery of natural resources, especially large oil reserves.
- Mismanagement of the natural resources corruption.

THE ORIGIN OF THE TERM

- In the 1960s, the Netherlands discovered gas reserves in the North Sea.
- Non-oil sectors became less competitive
- Unemployment rose from 1.1% to 5.1%

Symptoms of the Dutch Disease



SUMMARY OF THE ECONOMIC EFFECTS OF THE DUTCH DISEASE SYNDROME / RESOURCE CURSE

- Structural change and a booming sector
- Movement of labour from the traditional or manufacturing export to booming sector
- Decreasing profit for traditional or manufacturing sector
- Decreasing traditional or manufacturing exports
- Exportation of oil & gas on large scale
- Increased government revenues through increased inflows in foreign exchange

- Increased incomes for factors of production and non-traded output
- Inflation
- Appreciation of the real exchange rate
- Structural unemployment
- Increased imports
- Corruption and rent seeking activities
- Low economic growth



The Dutch Disease Examples: Venezuela

01

BEFORE OIL DISCOVERY

Economy primarily agriculture (coffee & cocoa). Until the 20th century, it was the poorest economy in Latin America



AFTER OIL DISCOVERY:

- By 1970, after first commercial oil of 1917, it became the richest country in the region, and one of the 20 richest countries in the world.
- It was home to the world's largest oil reserves.
- Between 1978 and 2001 Venezuela's economy went sharply in reverse – non-oil GDP declined by 19%, oil GDP declined by 65%
- Poor governance and corruption resulted in political and economic instability









THE DUTCH DISEASE EXAMPLES: GHANA

01 GHANA'S RISE AND FALL

- Discovered oil in 2007 commercial production commenced in 2010
- Achieved high economic growth after periods of low and negative growths before discovery - (highest in 2011 – 14% GDP)
- Currently exhibiting signs of the Dutch Disease with decreasing economic growth, high deficit and public debt
- Neglected the agriculture sector, with its contribution to GDP declining from 29.8% in 2010 to 18.2% in 2020





THE DUTCH DISEASE: NIGERIA





BEFORE OIL

Mainly an agrarian economy Agriculture contributing 72% of GDP in 1950

AFTER OIL

- Agriculture's contribution to GDP
 dwindled to 21% in 2021
- Manufacturing output averaged less than 10% of GDP between 2005 to 2022
- Manufacturing exports was 6.4% of total exports in 2021



The Dutch Disease Examples: Angola

OIL DISCOVERY

- Oil discovery:
- Oil first exploited onshore in the 1950s, but in the late 1960s, major offshore discoveries attracted multinational investment.
- Second-largest African supplier of oil to China and is a top-10 global producer of vented and flared natural gas.
- In 2013 more than 98% of exports were oil and oil derivatives.
- Overall economic growth has been trending down after peaking in the 2000 after achieving political stability.

02

AFTER OIL PRICE CRUSH:

- The Oil Price crash of 2016 caused a currency depreciation of 51% from 105 Kwanza per US\$, to 159 Kwanza per US\$.
- Struggled to import due to a fall in oil revenue causing food rationing
- Economic growth ground to a halt as a result in 2016 at 0.2%
- Lack of diversification oil & gas products make up more than 90% of its exports.



Economic Growth Comparisons – African Oil Producing Countries

30.0 20.0 10.0 (10.0)

NIGERIA



Ghana



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(20.0)



SUCCESS STORIES: NORWAY

THE NORWEGIAN EXPERIENCE

• Norway represents one of the most effective nations worldwide regarding petroleum resources management.

02

WHAT DID THEY DO DIFFERENTLY?

- Avoided the increase in domestic import consumption that might harm the existing national economy industries – through directing expenditure to domestic goods & services.
- Sharing oil revenues with future generations Establishment of Government Pension Fund Global (GPFG).
- The GPFP under the auspices of Ministry of Finance has succeeded in separating the oil revenue.
- Cleverly negotiated contracts and operating terms set by the Norwegian government ensured that all citizens benefit.
- Domestic consumption consequently protected the national economy from the oil curse.





SUCCESS STORIES: UAE

01

THE CASE OF UAE

- One of the key drivers of the United Arab Emirates' (UAE's) economic growth has been its concerted efforts to diversify the economy away from oil.
- It has emerged as a global economic powerhouse and a hub for trade, finance and tourism in the Middle East

02

WHAT DID THEY DIVERSIFY INTO?

- Tourism and Hospitality
- Financial Services
- Trade and Logistics
- Technology and Innovation



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Lessons From Other Oil Producing Economies

THERE IS AN INHERENT RESOURCE CURSE RISK IN THE EXPLOITATION AND DEVELOPMENT OF NATURAL RESOURCES

DELIBERATE ACTION IS REQUIRED TO AVOID THE CURSE:

Long-term planning

- Building strong, competent institutions transparent and free of corruption
- Appropriate legislative and regulatory framework

Stabilisation funds

- Planning for future generations
- Welwitschia Fund

Diversification

 Understanding that oil is a resource that is very volatile (prices) and depletes over time – thus need to diversify into other economic activities

Local content

· Participation in the value chain of the industry

Appropriate Monetary and Fiscal Policy Frameworks

· Supportive of macroeconomic stability



ECONOMIC DIVERSIFICATION OPTIONS FOR NAMIBIA



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Can Lüderitz Leverage the Opportunities of the Discoveries?



ADVANCING THE MANUFACTURING SECTOR



- Current manufacturing projects in Luderitz are centered around fishing and fish processing.
- Current projects and upcoming projects give opportunity to advance the manufacturing sector in the town:
- Local production of towers and blades
- Producing the tanks needed to transport ammonia



LEVERAGING THE PORT



- The Port of Lüderitz, located 254 nautical miles south of the Port of Walvis Bay along Namibia's coastline, caters for the southern part of the country, and provides access to markets in the Northern Cape of South Africa.
- The Port of Lüderitz offers excellent logistical services and links to other towns in Namibia and South Africa. It serves as an important base for the fishing industry and the offshore diamond and mining industries.

Bank of Namibia

WIND TURBINE TECHNOLOGY



- Lüderitz is one of the best wind sites in Africa, where the wind blows at between 6 and 7 metres and up to 12 metres per second.
- Lüderitz is already the pioneer in Namibia of utilising natural energy generation via wind turbine technology. With only three wind turbines, 80 percent of the town's electricity needs are satisfied.
- An additional 100-300 turbines would generate enough energy to power not only Lüderitz but //Kharas Region and other parts of Namibia.
- Luderitz is key to Namibia achieving energy self reliance - Lüderitz can be Namibia's primary central provider.



Mapping the Future of Luderitz





The Oil & Gas Discoveries and the anticipated Green Hydrogen Industries are expected to change the socioeconomic landscape of the town of Lüderitz and drive the need for the Town Council to avail large sections of land for industrial and residential purposes.

Is Lüderitz prepared for the Green Hydrogen and Oil & Gas Developments?

WHAT IS COMING?

DELIBERATE ACTION REQUIRED TO AVOID THE CURSE

1 Migration to Lüderitz in search of opportunities

2 Increasing demand for:

- * Land (Residential Housing & Business)
- * Education
- * Health
- * Financial Services
- * Food
- * Energy
- * Water

Potential rise in informality and crime

Oil & Gas

- CAPEX U\$10 billion [+/-N\$180 billion]
 - Most activities to be concentrated around Luderitz

Hyphen Wind & Solar Energy Generation

- CAPEX U\$10 billion [+/-N\$180 billion]
- 5GW of renewable capacity
 - 2GW to be commissioned by Jan 2027 & Balance before end of the decade
- 15 000 full-time construction employees 4 year construction phase
 - 3000 permanent jobs
 - 90% to be filled by Namibians
- > 30% SMEs and local companies
- 20% Youth participation
- > N\$152 000 annual average wages

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TOWN EXPANSION

- As a positive and important first step, the Town Council has developed a plan to expand the townland area of Lüderitz.
- However, a number of challenges will need to be addressed including:
- Mining Licenses preventing urban expansion
- Challenging topography
- Funding limitations
- Water availability





Opportunities for Luderitz & //Kharas Region

The highlighted challenges represent opportunities for Lüderitz

Revival of the Lüderitz economy

It represents an improving revenue base for the Town Council

Lüderitz must think //Kharas in its quest to meet these demands

Opportunities for local procuring for the various industries

Addressing the town's expansion challenges

Infrastructure development – port and rail – logistics hub

Improving the service sector – health, education, schools, banking and financial services

Improving the Town Council's management and administration capacity



IMPROVING THE SERVICES SECTOR

Build and improve hospitals

2

2

11

Expand provision banking and financial services

Opportunity to build an oil and gas training facility in the country.



Opportunities for the //Kharas Region





The Neckartal Dam, Namibia's largest dam is situated in the Karas region.

The abundance of water and land presents numerous opportunities such as:

- Irrigation green schemes:
- Hydroponic green feed and fodder as well as small stock feedlots.
- Aquaculture Fishing
- Recreational activities:
- Tourism and accommodation
- Appropriate planning must ensure that these resources are integrated into the development plans of the region.



HOW SHOULD LUDERITZ & THE //KHARAS REGION GET ALL THIS DONE?



- Sourcing Government & Development Funding
- Monitoring of Existing Mining Licenses & EPL allocations
- Key Stakeholder Buy-in
- Identify Priorities within Expansion Plan
- Develop Regional Integration Plan
- Plan for Rail, Road, Air and Port facilities Upgrade



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WHAT IS BON DOING?

Research

2

3

Potential implications for the macroeconomy

Potential implications for exchange rate & monetary policy

Management of the Welwitschia Sovereign Wealth Fund



CONCLUSION

Lüderitz has a unique opportunity to be a leading economic hub in Namibia and an example of prudent natural resources management that benefits the people.

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THANK YOU

Contact us:

71 Robert Mugabe Ave Windhoek, Namibia.

Particular de la face

+264 (61) **283 5111**

info@bon.com.na www.bon.com.na