

Country Profile for **MOZAMBIQUE**



TABLE OF CONTENTS

TABLE OF CONTENTS	2
LIST OF TABLES	5
LIST OF FIGURES	6
COUNTRY FACT SHEET	7
LIST OF ACRONYMS	8
EXECUTIVE SUMMARY	10
1. INTRODUCTION AND BACKGROUND	13
1.1 Introduction	13
1.2 Background	13
1.1. Objectives of the Report	13
1.2. Focus of the Report	14
1.3. Methodology	14
1.4. Structure of the Report	14
2. OVERVIEW OF MOZAMBIQUE	16
2.1 Historical and Political Context	16
2.2 Geography	17
2.2.1 Land and Location	17
2.2.2 Climate	18
2.3 Demographics	18
2.3.1 Language	18
2.3.2 Ethnic Groups	19
2.3.3 Religion	19
2.3.4 Urbanisation	20
2.3.5 Health	21
2.3.6 Education	22
2.4 Conclusion	23
3. ECONOMIC OUTLOOK	24
3.1 Introduction	24
3.2 Economic Overview	24
3. Economic Structure and Indicators	25
3.3.1 Economic Structure / System	25
3.3.2 Economic Indicators	25
3.3.3 GDP Contribution per Economic Sector	27
3.4 Credit Rating	28
3.5 Monetary Policy	30
3.6 Trade Environment	31
3.6.1 Main Export and Import Destinations	31
3.6.2 Mozambique World Exports and Imports	33
3.6.2 Mozambique: Nature and Volume of Trade with South Africa	34
3.6.3 Mozambique: Intra-Africa Trade Profile	35
3.7 Business Environment	37
3.7.1 Economic Freedom Index	37
3.7.2 Ease of Doing Business Index	38
3.7.3 Global Competitiveness Index	42
3.7.4 Corruption Perceptions Index	43
3.8 Conclusion	44
4.1 Introduction	45

4.2	Mozambique Road network	45
4.2.1	Classification of Roads and Road Conditions	46
4.2.2	Road Density	48
4.2.3	Bridges	49
4.2.4	Distance matrix.....	49
4.2.5	Travel time matrix.....	50
4.2.6	Road safety and security.....	51
4.2.7	Weighbridges and axle load limits	51
4.2.8	Fuel prices.....	52
4.3	Mozambique's Global Performance.....	53
4.5	Road Transport Corridors linking Mozambique	54
4.6	Cross-border road transport.....	56
4.6.2	Information on Border Posts	56
4.6.3	Cross-Border Charges	57
4.7	Road Transport Sector Institutional / Regulatory Environment.....	58
4.7.1	Institutional Arrangements	58
4.7.2	Regulatory Frameworks.....	59
4.8	Conclusion.....	59
5.	RAIL TRANSPORT	60
5.1	Introduction.....	60
5.2	Railway Networks and Railway Gauge.....	60
5.2.1	Strategic Railway Lines.....	60
5.2.2	Railway Gauge	61
5.3	Rail Transport Services.....	62
5.3.1	Rail Freight Services.....	62
5.3.2	Rail Passenger Services	64
5.3.4	Rail transport Developments.....	64
5.4	Cross-border rail transport	66
5.5	Rail transport Constraints and Opportunities.....	66
5.5.1	Constraints.....	66
5.5.1	Rail Opportunities.....	67
5.6	Rail Transport Regulatory Environment	67
5.7	Conclusion.....	67
6.	AIR TRANSPORT	69
6.1	Introduction / Background	69
6.2	Airports in Mozambique	69
6.3	Airline Operators	70
6.3.1	Linhas Aéreas de Moçambique (LAM).....	71
6.3.2	Mozambique Expresso.....	71
6.3.3	TAP Air Portugal.....	71
6.4	Airstrips and Unpaved Runways.....	71
6.5	Key Regulators / Main Stakeholders in the Aviation Industry	71
6.5.1	Mozambique Civil Aviation Authority	71
6.5.2	Aeroportos de Mozambique (ADM).....	71
6.5.3	Ministry of Transport and Communications.....	72
6.6	Key Developments	72
6.7	Conclusion.....	72
7.	MARITIME TRANSPORT	73
7.1	Introduction.....	73
7.2	Mozambique Seaports	73

7.2.1	Principal Seaport	73
7.3	Operational Challenges Experienced at Mozambique Seaports	76
7.5	Regulatory Framework for Maritime Transport.....	77
7.6	Conclusion.....	78
8.	CHALLENGES AND OPPORTUNITIES IN MOZAMBIQUE	79
8.1	Challenges.....	79
8.1.1	Political Instability	79
8.1.4	Poor State of Transport Infrastructure.....	80
8.1.5	Poor Access to Health Care.....	81
8.1.6	Education and Training	81
8.2	Opportunities	81
8.2.1	Agribusiness Development.....	81
8.2.2	Energy.....	82
8.2.3	Tourism	83
8.2.4	Industrialise Mozambique	84
8.25	Improve transport infrastructure and logistics	85
8.3	Conclusion.....	86
	REFERENCES	87
	ELECTRONIC SOURCES.....	88

LIST OF TABLES

Table 1: Economic Indicators for Mozambique	26
Table 2: GDP Contribution per Economic Sector	27
Table 3: Mozambique's Credit Rating: 2015-2019.....	28
Table 4: South African Exports to Mozambique.....	34
Table 5: South African Imports from Mozambique.....	35
Table 6: Doing Business 2020 Indicators.....	39
Table 7: Mozambique's Overall Performance	39
Table 8: Global Competitiveness Index – Performance of SADC Countries	43
Table 9: Mozambique Corruption Perceptions Index.....	43
Table 10: Mozambique Road Network	47
Table 11: Major Bridges – Mozambique.....	49
Table 12: Distance between Mozambique cities (km)	50
Table 13: Travel Time from Maputo to Major Cities and Towns.....	50
Table 14: Axle Load Limits	52
Table 15: Gasoline Price in Mozambique	52
Table 16: Diesel Price in Mozambique.....	53
Table 17: Performance Overview: Mozambique	54
Table 18: Mozambique Border Posts and Operating Hours.....	56
Table 19: 2021/22 Tol Tariffs.....	57
Table 20: Cross-border taxi permits issued between South Africa and Mozambique	58
Table 21: Cross-border bus permits issued between South Africa and Mozambique	58
Table 22: Cross-border freight permits issued between South Africa and Mozambique	58
Table 23: Rail Freight Services on the Southern Line	62
Table 24: Rail Freight Services on the Centre Line	63
Table 25: Rail Freight Services on the Northern Line	63
Table 26: Rail Passenger Services in Mozambique	64
Table 27: Ten Largest Airports in Mozambique	70

LIST OF FIGURES

Figure 1: Map of Mozambique Provinces.....	17
Figure 2: Religious Affiliations in Mozambique	20
Figure 3: Level of Urbanisation in Mozambique.....	20
Figure 4: Mozambique: Inflation Rate: 2015 - 2020.....	30
Figure 5: Mozambique Export Destination – 2019.....	32
Figure 6: Mozambique Import Destination - 2019.....	32
Figure 7: Top 10 Product Exports - 2019	33
Figure 8: Top 10 Product Imports - 2019	34
Figure 9: Mozambique Export Destinations	36
Figure 10: Mozambique Top Export Products to African Countries	36
Figure 11: Intra-Africa Imports.....	37
Figure 12: Mozambique Economic Freedom Index	38
Figure 13 – Starting a Business in Mozambique	40
Figure 14: Trading across borders	41
Figure 15: Trading across Borders: Mozambique and Comparator Economies	42
Figure 16: Mozambique Road Network.....	48
Figure 17: Corridor Expansion - Mozambique	65

COUNTRY FACT SHEET

COUNTRY	MOZAMBIQUE
Capital City	Maputo
Language	Portuguese
Ethnic Groups	Makua, Sena, Shona, Shangaan, Makonde, other
Religion	Roman Catholic, Muslim, Zionist Christian, other
Location	Located on the south-eastern seaboard on the African continent, Mozambique shares borders with six SADC countries
Surface Area	799 380 square kilometre (2018 statistics)
Climate	Mozambique lies largely within the tropics, and much of the coastline is subject to the regular seasonal influence of the Indian Ocean monsoon rains
Natural resources	Coal, Aluminium, natural gas, iron ore, tantalite, titanium, copper, gold
Currency	Mozambican metical
Population	32,534,863 (December 2021. Figure based on Worldometer elaboration of the latest United Nations data).
Population density	
President	Filipe Nyusi
Regions	10 provinces
Gross domestic Product	14,30 USD (Dec 2021 est.)
Real GDP growth rate	-1,2% (2020 World Bank data)
GDP per capita	574,19 USD (Dec 2021 World Bank)
Gross National Income per Capita	494 USD (2019 World Bank Data)
Main Exports	Coal Briquettes, Raw Aluminium, petroleum gas
Main export partners	South Africa, India, China
Main Imports	Refined petroleum, chromium, iron ore
Main Import partners	South Africa, India, China
Ease of Doing Business	138 out of 190 countries (World Bank Group. 2020)
Global competitiveness	137 th out of 141 countries (Global Competitiveness Report, 2019)
Road network	32 500 km (2008 figures) <ul style="list-style-type: none"> ➤ Primary road network = 5 000 km ➤ Secondary road network = 5 000 km ➤ Tertiary road network = 12,700 km ➤ Urban road network = 3 300 km ➤ Unclassified road network 6 700 km
Road Density	2,9 km per 100 square km of land
Speed Limit	120 km/h hour for light vehicles and motorcycles driving out of town 100 km/h for vehicles towing outside towns 80km/h for heavy vehicles, including buses and trucks

LIST OF ACRONYMS

Abbreviation	Meaning
ADM	Aeroportos de Mozambique
AfCFTA	African Continental Free Trade Area
ANE	National Roads Administration
BOOT	Build-Own-Operate-Transfer
C	Celsius
C-BRTA	Cross-Border Road Transport Agency
CDN	Corridor do Norte / Northern Development Corridor
CEAR	Central East African Railway
CFM	Caminos de Ferro de Moçambique
CIA	Central Intelligence Agency
CPSD	Country Private Sector Diagnostic
CSIR	Council for Scientific and Industrial Research
DBOOT	Design-Build-Own-Operate-Transfer
EN	National Road
EUR	Euro
FDI	Foreign Direct Investment
FRELIMO	Front for the Liberation of Mozambique
GCI	Global Competitiveness Index
GDP	Gross Domestic Product
GVM	Gross Vehicle Mass
HDI	Human Development Index
HIV	Human Immunodeficiency Virus
IACM	Mozambique Civil Aviation Authority
IATA	International Air Transport Association
ICVL	International Coal Ventures Private Limited
IMF	International Monetary Fund
IRCON	India Railway Construction Limited
KG	Kilogram
KLM	Koninklijke Luchtvaartmaatschappij NV
KM	Kilometre
LAM	Linhas Aéreas de Moçambique
M	Meter
MDM	Mozambique Democratic Movement
MM	Millimeter
MPDC	Maputo Port Development Company
MPM	Maputo International Airport
MS	Member States
MZN	Mozambique Metical
NRZ	National Railways Zimbabwe
N	National Road
NTB	Non-Tariff Barrier
PPP	Public-Private Partnership
OEC	Obseratory of Economic Complexity
R	Regional Road
RENAMO	Mozambican National Resistance
RF	Road Fund
RITES	Rail India Technical and Economic Services
ROOT	Rehabilitate-Operate-Own-Transfer
SAA	South African Airlines
SADC	Southern African Development Community
SDI	Special Development Initiative
S&P	Standard and Poor
SOE	State-Owned Enterprise
TAAG	Transportes Aéreos de Angola

TAT	Turn-around Time
TEU	Twenty-foot equivalent unit
UN	United Nations
USD	United States Dollar
USAID	United States Agency for International Development
WEF	World Economic Forum
WTO	World Trade Organisation

EXECUTIVE SUMMARY

Mozambique is one of Africa's most resource-rich countries. The country's massive potential is underpinned by its vast natural resources, including coal, iron ore and natural gas reserves. Despite its richness in raw materials, Mozambique is ranked among the poorest countries in the world, with low socio-economic indicators. Over half of the population remains below the poverty line and relies on subsistence agriculture.

Strong economic growth between the period 2000-2015 has not initiated a structural transformation and industrialisation of the economy. As a result, the agriculture sector still forms the backbone of the economy, employing around 75 percent of the population. Despite its importance, this sector is characterised by low productivity and profits and remain vulnerable to weather shocks and related epidemics. In 2020, while still recovering from the passage of two tropical cyclones, the global COVID-19 pandemic has taken a heavy toll on the Mozambique's economy as it was attempting to recover from the slowdown triggered by sovereign debt crisis that broke out in 2016.

Although Mozambique has unquestionable potential to expand its economy, it faces considerable challenges including, a shortage of qualified workers; limited economic diversification, high dependence on imports; limited export market(s), increasing debt levels, a narrow tax base and vulnerability to weather shocks.

Additionally, Mozambique's trade with regional and international markets are hindered by several regulatory constraints. The findings of the Doing Business 2020 report, ranks Mozambique 138 among 190 participants in terms of the ease of doing business, making it one of the most difficult countries to do business in the SADC. The poor ranking is attributable to many factors, which include difficulty in starting a business and enforcing contracts, as well as trading across borders. Further to regulatory challenges, transport infrastructure does not support sustainable growth and development and requires massive investments to connect mining and agricultural clusters in Mozambique and neighbouring countries to exit ports.

Mozambique is divided into three development corridors that link countries in the interior with Mozambican seaports. All corridors comprise of basic road and rail networks, and are known as:

- Nacala Corridor (also referred to as the Northern Corridor);
- Beira Corridor (also known as the Central Corridor); and
- Maputo Development Corridor (also known as the Southern Corridor).

Except for major arteries (east-to-west road networks) the greater portion of the road network is underdeveloped and unpaved. Mozambique's road coverage is among the lowest in Africa, both per capita, and by land area. Rural accessibility is particularly challenging since only 33% of the rural population lives within 2 kilometres of an all-season road. (African Development Bank Group. 2018: 19). The railway network comprises of east-west routes running from Zimbabwe to the port of Beira, and from Zambia/Malawi to the port of Nacala. By contrast, there are virtually no rail lines running from North to South.

Mozambique's international trade is entirely dependent on the country's seaports. In terms of performance indicators, truck processing times at Nacala, Beira and Maputo compare well with other seaports in the Southern African Development Community (SADC) although container dwell time is very high.

The air transport industry does not adequately serve the country's needs. Airports have received limited investments over the years and the quality of airports remain low by global standards. Furthermore, excessive domestic fares and the monopoly of the national airline are holding back the development of this sector.

Infrastructure inefficiencies in all transport sub-sectors (road, rail, air and maritime) impedes inter and intra-regional trade and are a major cause for Mozambique's poor performance in the global arena. The Global Competitiveness Report of 2019 ranks Mozambique 137 out of 141 countries, indicating that Mozambique fails to provide high levels of prosperity to its people.

The government of Mozambique has made infrastructure development one of its key priorities and has taken a holistic view to infrastructure development with specific attention being paid to the development of multi-modal development corridors that link productive areas and vicinities from where resources originate, with ports and foreign markets.

To this end, government's development plan (2020-2024) has the goal of developing transport as a means of building social cohesion in the country. The good positioning of the country's primary seaports supports government's ambitious plans to position Mozambique as a strategic regional hub and an important supplier to land-locked countries in the region.

Diversifying the economy is a critical step to ensuring sustainable growth. However, success in transforming the economy depends on the country's ability to maintain political stability. Government and business is inextricably linked, and although greater political stability has been achieved in recent years, incidents of violence in the northern parts of the country, together with bribery and corruption is still prevalent throughout the Mozambique society, particularly in the civil service.

Other key hurdles include the challenge to diversify the economy, a lack of investment in human capital and the need to upgrade infrastructure to meet rising demand. Most infrastructure programmes require major investment, emphasising the importance of government entering partnerships with traditional donors or the private sector to bring infrastructure projects to implementation.

Given the availability of land and water resources and considering low skills levels of the greater part of the population, agri-business development is targeted at the centre of Mozambique's economic diversification drive. Since secure power is a pre-requisite to industrialise the country, the government has shifted its focus towards the development of new and renewable energies. Mozambique's hydro-electric potential is one of the largest in the SADC and renewable energy in Mozambique remains a largely untapped area that offers numerous growth opportunities for the exploitation of new markets.

The country's unspoiled coastline, which comprises abundant stretches of pristine beaches, coral reefs and rich marine biodiversity provides ample opportunities for developing nature-based tourism while the discovery of natural gas reserves off the Mozambique coast near Pemba firmly positions Mozambique as an exciting investment destination.

It is imperative that interest groups closely monitor new developments in Mozambique. The successful implementation of government reforms depends on the ability of government to improve the business environment, establish strong institutions, create integrated transport infrastructure and entering into partnerships with the private sector to procure and implement public infrastructure using the resources of the private sector without incurring any borrowings

for project implementation. Once impediments have been addressed, interest groups can exploit business opportunities in the following industries:

- Agri-business;
- Energy;
- Tourism;
- Industrial (extractive industries); and
- Transport and Logistics.

Although the agriculture, energy, tourism, industrial and transport and logistics sectors are expected to all benefit from a scaling-up of public investment programmes, it is important to recognise that it will take some time until the benefits spread through the whole economy. For this reason, diversifying Mozambique's highly agriculture-dependent economy will be accomplished in the long-term only.

1. INTRODUCTION AND BACKGROUND

1.1 Introduction

The Cross-Border Road Transport Agency (C-BRTA or Agency) compiles Country Profile reports on an annual basis with a view to provide consolidated information on the economic competitiveness of a selected country, regulatory and institutional environment(s), and condition of transport infrastructure in prioritised countries in the Southern African Development Community (SADC). This information is useful to key stakeholders in the cross-border environment, particularly cross-border road transport operators, regulatory authorities and trading parties.

At a strategic level, this country profile report seeks to enhance the unimpeded flow of cross-border road transport, reduce the cost of doing business, enhance trade and business opportunities for transport operators and enhance corridor efficiency which are all key objectives of the National Development Plan, the White Paper on Transport Policy of 1996, the SADC Protocol on Transport, Communications and Meteorology of 1996 and bilateral agreements ratified by South Africa and Mozambique.

This Country Profile report focuses on Mozambique, a coastal country located on the Southeast coast of Africa that shares borders with Tanzania, Malawi, Zambia, Zimbabwe, South Africa, and Eswatini. Four of the countries it borders are landlocked and rely on Mozambique for conducting trade. Mozambique's strong ties with South Africa, underscore the importance of its economic, political and social development to foster sustainable growth and development in the Southern African region. (<https://www.worldbank.org/en/country/mozambique/overview>).

1.2 Background

This report provides up to date information about the regulatory environment that prevail in Mozambique, condition of transport infrastructure, requirements for undertaking cross-border road transport, corridor developments that (may) have an impact on cross-border operations, transport programmes currently unfolding in Mozambique and the business environment, with specific focus on the ease of doing business.

The Country Profile report is aligned to the mandate of the Agency that focuses on improving the unimpeded movement of cross-border traffic (people and goods) between South Africa and neighbouring countries in the region (SADC) in support of improved regional trade and sustainable economic development.

It is envisaged that through disseminating the information articulated in this report with relevant role-players, the C-BRTA fulfils its strategic objective(s) of enhancing cross-border road transport system efficiency and expanding regional markets through identifying feasible business opportunities for interest groups, particularly cross-border road transport operators. All these actions support the Continental aspiration of establishing an African Continental Free Trade Area (AfCFTA) in coming years.

1.1. Objectives of the Report

The objectives of the report are to:

- Provide relevant information that can be used by cross-border road transport operators in conducting their business, towards improving operations and resolving challenges that they may encounter along transport corridors in the country under review;

- Provide information that can be used by other stakeholders in the cross-border value chain (e.g., traders and investors) to make informed decisions;
- Help transport operators to understand better the countries that they do business in;
- Assist relevant stakeholders with know-how to better understand the requirements of doing cross-border road transport business in Mozambique;
- Assess the cost of doing business in the focus area;
- Provide relevant information with respect to regulatory environment in the focus area to guide decision-making; and
- Identify feasible / suitable business opportunities that can be explored by relevant parties (e.g., cross-border road transport operators, investors) areas and opportunities to strengthen trade.

1.2. Focus of the Report

This Country Profile report focuses on Mozambique, a country in the SADC that shares with 6 SADC Member States (MS). This report provides a detailed synopsis of Mozambique's political and economic environment(s), condition of transport infrastructure, on-going institutional and transport reforms and business opportunities that can be explored by interest groups to strengthen trade between South Africa and Mozambique.

1.3. Methodology

This report was compiled through information obtained from qualitative and quantitative research methods. A literature review of available materials (obtained through desktop study) was complemented with quantitative trade and transport data, as well as engagements with selected industry experts and practitioners.

The C-BRTA constantly participates in technical discussions and strategic regional and national committees and structures (composed of industry experts) that continuously seek to find long-lasting solutions to on-going trade and transport challenges facing the region. These platforms provided invaluable information which was used in compiling this Report.

1.4. Structure of the Report

The report is structured as follows:

- Chapter 1: Introduction and background outlining the purpose, focus and scope of the report;
- Chapter 2: Overview of Mozambique, with specific focus on the country's historical and political context, geography and demographics;
- Chapter 3: Economic outlook of Mozambique, with reference to its economic structure, key economic sectors, selected economic indicators, extent of intra-African trade, Mozambique's trade with South Africa, current business environment, ease of doing business and regional integration index;
- Chapter 4: Discussion of Mozambique's road transport sector, concentrating on the road transport network, transport corridors that traverse the country, regulatory environment and status of cross-border road transport;
- Chapter 5: High-level overview of rail transport with reference to railway length and gauge, rail transport developments and cross-border rail transport operations;
- Chapter 6: Synopsis of the air transport industry, focusing on airline operations, operating airdromes and developments unfolding in Mozambique's aviation industry;

- Chapter 7: Overview of the maritime industry, highlighting Mozambique's principal and secondary seaports, through-put handled at seaports, and on-going maritime developments; and
Chapter 8: Discussion on key challenges that prevail in Mozambique and business opportunities that can be exploited by interest groups (e.g. private sector) who wish to conduct business for reward in Mozambique.

2. OVERVIEW OF MOZAMBIQUE

2.1 Historical and Political Context

Located in South-eastern Africa, Mozambique's long Indian Ocean coastline is spread with many coral reefs and tropical beaches. In addition, its historical and cultural heritage, spectacular landscapes, and rich architecture makes Mozambique one of the most attractive tourist destinations in the SADC. Further to its tourism appeal, Mozambique possesses a variety of natural resources, including iron ore, copper, gold, and some of the world's largest untapped coal deposits.

Despite its tourism appeal and richness in natural resources, Mozambique is one of the few countries in Africa that was ravaged by war in the past. Portugal fought a long counter-insurgency conflict in its three primary African colonies – Angola, Mozambique and Guinea-Bissau between the 1960s to the mid-1970s. In Mozambique, the armed struggle against colonial rule was spearheaded by the Front for the Liberation of Mozambique (Frelimo), which was initially formed in exile, but later succeeded in taking control of larger sections of the country from the Portuguese.

Mozambique gained independence from Portugal in 1975. Soon after liberation, a civil war broke out between Mozambique's Marxist ruling party, Frelimo, the anti-communist insurgent forces of the Mozambican National Resistance (Renamo) and several other smaller factions. This war ended in 1992, following the collapse of Soviet and South African support for Frelimo that resulted in Renamo signing a peace accord.

The period after the signing of a peace accord was followed by regular organised presidential, parliamentary and provincial elections, as well as elections in the independent municipalities. However, violent clashes, infringements on the right of assembly for all parties and continuously unlevel playing field have become characteristics of the country's electoral processes. Today almost three decades after the end of the civil war, Mozambique still suffers from the after effects of the devastating war. According to Domingues (2010:8) around one hundred thousand Mozambicans were killed directly by the war while nearly one million people were affected by its indirect consequences, notably, starvation, lack or disruption of health services and the enrolment of child soldiers.

Since the end of the civil war, Mozambique has registered flare-ups of armed confrontations and violence and corruption is a major concern that threatens political stability. Frelimo and Renamo remains the country's main political forces, followed by the Mozambique Democratic Movement (MDM).

Frelimo won the 2019 presidential and legislative elections and secured a majority in all 10 provinces, after which governors were elected in each province. A new peace accord was reached in August 2019 after the Mozambican government signed a peace agreement with the opposition party (Renamo) to put an end to armed violence and ensuring lasting peace and prosperity.

The new Renamo leader, Ussufo Momade, who took over the reins of the party following the passing of Mr Afonso Dhakama, has shown determination in pursuing the peace deal that was violated several times by a Renamo breakaway military faction known as Military Junta. The August peace deal, which is currently being implemented aims to achieve greater reconciliation of the country by integrating Renamo residual fighters into the national army and pull apart Renamo military bases sprayed around the country.

Although greater political stability has been maintained since signing the peace deal, Mozambique is struggling with a so-called Islamic insurgency in parts of the gas-rich province of Cabo-Delgado. By mid-February 2021, more than three years after the start of the insurgency, 798 incidents of conflict have been recorded in Cabo Delgado, with around 4 000 fatalities and 600 000 refugees. Today, approximately three million people are facing high levels of food insecurity across the country due to the combined effects of the conflict in the North, weather shocks and COVID-19 mitigation measures which have restricted economic activity. (<https://www.worldbank.org/en/country/mozambique/overview>).

2.2 Geography

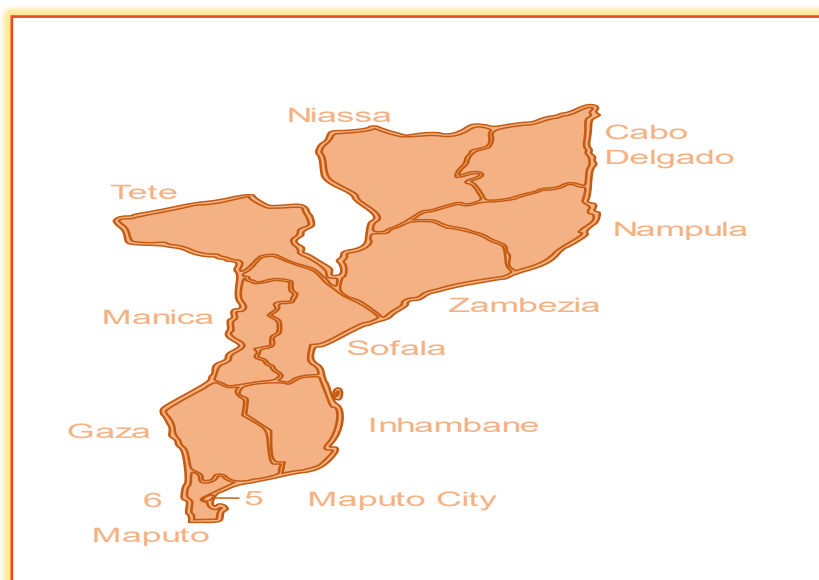
2.2.1 Land and Location

Located on the south-eastern seaboard on the African continent, Mozambique shares borders with six SADC countries. The beautiful Mozambique shoreline meets with the warm Indian ocean with mile upon mile of beautiful beaches and coves. This large country covers an area of more than 800,000 square kilometres, equating to three times the size of Great Britain. (http://www.mozambique.co.za/About_Mozambique-travel/mozambique-facts.html).

Mozambique is cut in two by the Zambezi River (the largest of the country's 25 rivers) which flows through the central areas to the Indian Ocean. The Zambezi appears to be the dividing line between the narrow coastal belt and highlands of the north of the country. The western parts cover almost half of the country's land area.

Mozambique is divided into ten (10) provinces, and one capital city – Maputo - that enjoys provincial status and is acknowledged as the most populous city. (https://en.wikipedia.org/wiki/Provinces_of_Mozambique). Figure 1 depicts the provinces graphically.

Figure 1: Map of Mozambique Provinces



Source: <https://www.google.co.za/search?q=Map+of+Mozambique+provinces>

2.2.2 Climate

Mozambique lies largely within the tropics, and much of the coastline is subjected to the regular seasonal influence of the Indian Ocean monsoon rains. The monsoon influence is strongest in the northeast but is modified somewhat in the south by the island barriers of Madagascar, the Comoros, and the Seychelles.

Like the rest of tropical Africa, Mozambique experiences distinct, alternating rainy and dry seasons. The dry season lasts from April to September. In the south the hot, humid rainy season is from December to March, farther north this period lengthens by a few weeks. Coastal northern Mozambique climate is occasionally affected by tropical cyclones. (http://www.mozambique.co.za/About_Mozambique-travel/mozambique-facts.html).

Daily temperatures throughout the country average in the lower to mid-20s Celsius (C), with the highest temperatures occurring between October and February and the lowest in June and July. Uncomfortably warm average daily temperatures in the low 30s °C are normally experienced only in the upper Zambezi valley and along the north-eastern coast, while cool temperatures (around 10s °C) occur year-round only in the mountainous areas on the western borders. (<https://www.britannica.com/place/Mozambique/Climate>).

2.3 Demographics

The demographics of Mozambique describes the condition and overview of Mozambique's inhabitants. For the purposes of this discussion focus is paid on:

- Language;
- Ethnic groups;
- Religion;
- Level of urbanisation;
- Health; and
- Education.

2.3.1 Language

Mozambique is a multilingual state, with more than forty (40) languages spoken by its inhabitants. Due to the country's colonial past, Portuguese is the official and most widely spoken language of the nation, spoken by more than 50 percent of the population. (<https://translatorswithoutborders.org/language-data-for-mozambique>). Most Mozambicans are fluent in more than a single language. The use of English is becoming more popular, especially amongst people connected with tourism and big business.

The indigenous languages of Mozambique vary greatly in their groupings, and in some cases are poorly appreciated and documented. Examples of the most spoken native languages include:

- Makhuwa;
- Changana;
- Nyanja;
- Ndau;
- Sena;
- Chwabo; and
- Tswa.

Arabs, Chinese, and Indians primarily speak Portuguese and some Hindi. Indians from Portuguese India speak any of the Portuguese Creoles of their origin aside from Portuguese as their second language. (<https://en.wikipedia.org/wiki/Mozambique#Languages>)

2.3.2 Ethnic Groups

Mozambique is home to a large diversity of ethnic groups. All groups encompass various sub-groups with diverse languages, dialects, cultures and histories. The main ethnic groups include:

- **Makua** - the largest group that reside mostly in the northern part of the country;
- **Sena** and **Shona** groups – prominently found in the Zambezi valley; and
- **Shangaan** (Tsonga) – dominate in Southern Mozambique.

Examples of secondary ethnic groups include:

- Makonde;
- Yao;
- Swahili;
- Tonga;
- Chopi; and
- Nguni.

Mozambique is also home to a growing number of white residents, most with Portuguese ancestry. During colonial rule, European residents hailed from every Mozambican province, and at the time of independence the total population was projected at around 360,000. Most residents left the country after independence in 1975 and emigrated to Portugal as Portuguese settlers (retornados) who was forced to return to Portugal from Africa after the decolonialisation process. (https://en.wikipedia.org/wiki/Demographics_of_Mozambique#Ethnic_groups)

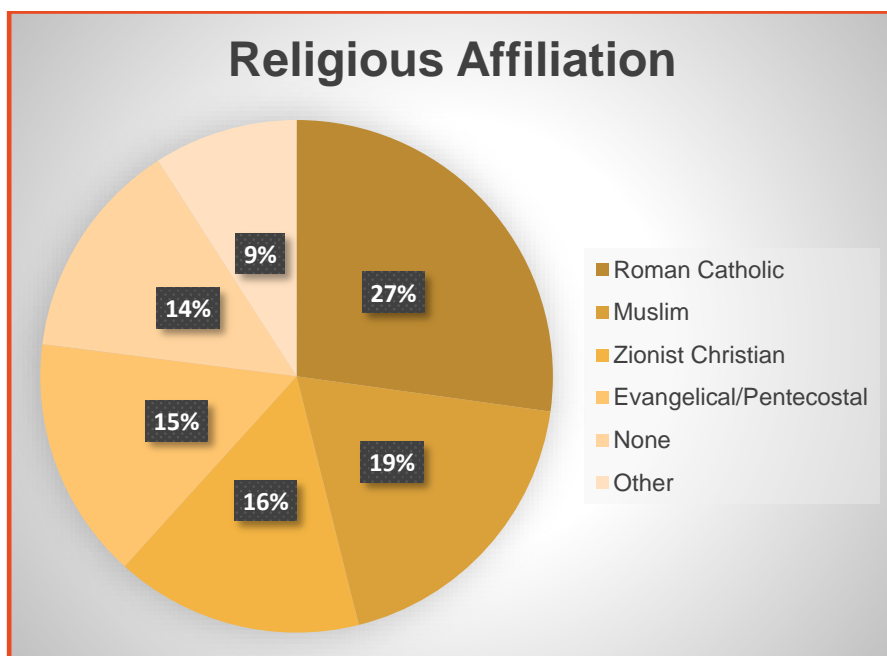
Further to the above, a larger mestiço minority (people of mixed racial ancestry, mostly African and Portuguese heritage) also reside in Mozambique. The remaining non-Blacks in Mozambique are primarily Indian Asiatics, who have arrived from Pakistan, Portuguese India, and numerous Arab countries. (https://en.wikipedia.org/wiki/Demographics_of_Mozambique#Ethnic_groups)

2.3.3 Religion

The reigning political party (Frelimo) adheres to a policy of open and free religious affiliation. Several religious organisations are found in Mozambique. Approximately one-half of the population adheres to some form of Christianity, while less than one-fifth are Muslims. Although Islamic communities are found in most of Mozambique's cities, Muslims constitute the majority in only the northern coastal region between the Lúrio and Rovuma rivers. Almost one-fifth of the population claims no religious affiliation.

Figure 2 illustrates religious affiliations found in Mozambique. The data is for the year 2017.

Figure 2: Religious Affiliations in Mozambique



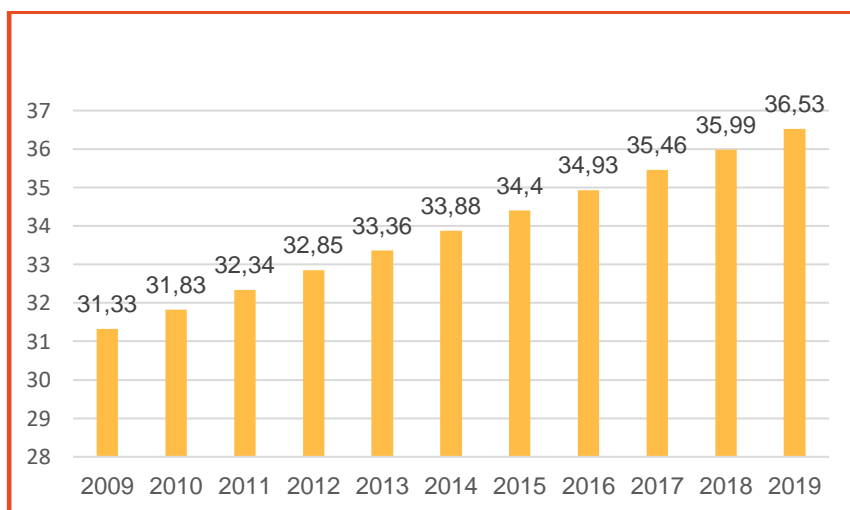
Source: Britannica, as adapted (<https://www.britannica.com/place/Mozambique/Religion>)

It is evident from figure 2 that Roman Catholic is the biggest religious affiliation in Mozambique (27%), followed by the Muslim (19%) and Evangelical/ Pentecostal affiliations (15%).

2.3.4 Urbanisation

Mozambique is predominantly a country of emigration, although internal rural-urban migration has begun to grow. Urbanisation refers to the share of the urban population in the total population of a country. In 2019, 35,53 percent of Mozambique’s total population lived in urban areas and cities, as illustrated in figure 3.

Figure 3: Level of Urbanisation in Mozambique



Source: StatsSA (<https://www.statista.com/statistics/455889/urbanization-in-mozambique/>)

Statistics released by the Central Intelligence Agency (CIA) in the United States in December 2020 shows that the level of urbanisation increased marginally between 2019 and 2020. In 2020 37.1 percent of the total population lived in urban areas. (<https://www.cia.gov/the-world-factbook/static/ffbb4e315f5f849b429310dace43b578/MZ-summary.pdf>).

The level of urbanisation in Mozambique is slightly lower than the average for Africa that stood at 40 percent in 2015 and which is expected to increase to around 60 percent by the year 2050. (Teye, J. 2018:2). The lower average can partly be attributed to a great number of Mozambicans (mostly from the country's Southern region) who fled the country during the civil war. Between 1970 and 1992 around 1, 7 million Mozambicans fled to Malawi, South Africa, and neighbouring countries in the SADC. (https://www.indexmundi.com/mozambique/demographics_profile.html)

2.3.5 Health

More than half of the population in Mozambique live in absolute poverty and do not have access to adequate healthcare. According to statistics released by the United States Agency for International Development (USAID), around 30 percent of the population cannot access health services, while only 50 percent of the population have access to an “acceptable” level of healthcare. The disparities between people with coverage in rural and urban areas are huge. There are only 3 doctors per 100 000 people and the systems for tracking, motivating, and retaining staff are weak. (<https://www.humanium.org/en/health-system-in-mozambique/>).

Health care in the country has been severely disrupted by the civil war and conflict that continued after the war ended. Political turmoil has affected the country's health status and the ability to provide health services to all its people. As a result, the public healthcare system basic, limited and insufficient. Expatriates do not qualify for public healthcare and are reliant on a few private healthcare facilities of which more are found in the capital (Maputo). Many refugees, as well as the wealthier local people prefer to travel to South Africa for elective procedures.

Due to poor access to quality healthcare, Mozambique faces multiple health challenges today, including infectious and chronic diseases. The most common diseases in the country include:

- Perinatal disorders;
- Human Immunodeficiency Virus (HIV);
- Tuberculosis;
- Diarrheal diseases, and
- Malaria.

The above diseases are aggravated by poor access to quality food and water. Malnutrition is widespread, especially amongst children and infants. The situation is worse in rural areas, where the rural population must walk long distances to find healthcare facilities. With support of local and international organisations (e.g. World Health Organisation and the European Union) Mozambique has initiated several programmes aimed at minimising current risk factors (e.g. malnutrition) to improve the health and wellbeing of the population.

2.3.6 Education

The education system is organised into three levels; i.e. primary, secondary and higher education. (<http://www.sacmeq.org/?q=sacmeq-members/mozambique/education-fact-sheet>)

➤ Primary education

Primary education is free and compulsory. The official age of entry into the school system is six years. After completing primary education, learners have the choice of enrolling for general secondary education, lower primary teacher training colleges, basic technical and vocational schools or secondary education for adults.

➤ Secondary education

General secondary education is divided into two stages: junior secondary and senior secondary. The last phase concludes when learners complete grade 12.

➤ Higher education

Public and private universities, higher institutes, and schools of higher education and academies provide higher education to those who have completed Grade 12. Due to extreme competition for limited places at this level, all pupils must write an entry examination to gain access to higher education.

Mozambique's education system is plagued by several inefficiencies. According to an article published in the Borgen magazine, the following issues are cited as main causes for the country's broken education system: (<https://www.borgenmagazine.com/education-in-mozambique/>):

- *High drop-out rate* - Less than half of the population finishes primary school. Of those who finish, only 8 percent advance to secondary school;
- *Culture of cheating* – cheating is accepted and perpetuated by many teachers;
- *Childhood pregnancy* – around 14 percent of all girls has had a child before the age of 15 and 57% before the age of 18. Child marriages are the 10th highest in the world and takes many young girls out of school;
- *Poor teaching structure* – around two-thirds of school children leave primary school without basic literacy and writing skills. Furthermore only a few number of schools are utilised due to many structural constraints and absent teachers.

All the above issues with education in Mozambique can be tied back to the country's widespread *poverty*. More than 50% of Mozambicans live below the poverty line, thus resulting in children being forced to drop out of school to support their families or start their own. (<https://www.borgenmagazine.com/education-in-mozambique/>).

Against this background it is not surprising that Mozambique's Human Development Index (HDI) is low. The HDI is a United Nations (UN) metric used to measure the well-being of a country and its people through a combination of expectancy and economic growth. Mozambique's HDI rating for 2019 is 0.456, which puts the country in the low human development category and positioning Mozambique at 181 of 189 countries and territories. (http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/MOZ.pdf)

Although Mozambique struggles with an unstable education system, the country is making steady improvements, witnessed in a stable increase in school-going learners in recent years. On-going reforms include:

- Improving school readiness through expanding access to early childhood development programmes;
- Enhancing the learning environment through the implementation of curriculum reforms and additional teacher training;
- Enhancing local management and governance through increased supervision by districts and enhancing the capacity of school councils.

2.4 Conclusion

Mozambique is a unique African destination that offers beautiful pristine beaches, wild game reserves, culture and heritage and incredible scuba diving sites. The country's strong ties with South Africa underscore the importance of its economic, political and social development to the stability and growth of the Southern African region.

Despite its beauty and richness in natural resources, Mozambique is ranked among the poorest countries in the world. The devastation of the prolonged civil war, limited access to healthcare and lack of quality education for all are cited as primary causes of poverty in Mozambique. The next chapter sheds more light on the country's economic outlook. Specific attention will be paid to Mozambique's economic structure, trade and business environment(s) and level of intra-regional trade.

3. ECONOMIC OUTLOOK

3.1 Introduction

Chapter 3 outlines the recent economic performance and developments in Mozambique in terms of Gross Domestic Product (GDP) growth, trade environment and analysis of imports and exports into and from Mozambique. The business environment will also be examined through determining the cost of doing business in this country. The information presented in this chapter will pave the way for the identification of business opportunities that cross-border role players can explore if they wish to expand their regional footprint to Mozambique.

3.2 Economic Overview

Mozambique is endowed with abundant arable land, water, energy, as well as mineral and gas resources, three, deep seaports; and a relatively large potential pool of labour. The country is also strategically located. Four of the six member countries it borders are landlocked, and therefore dependent on Mozambique as an outlet to global markets (<https://www.worldbank.org/en/country/mozambique/overview>)

Agriculture is the backbone of the economy and employs around 80 percent of the population. Potential in this sector is high, particularly in the fertile northern regions, which accounts for the bulk of the country's agricultural surplus. Additionally, Mozambique possesses plentiful mineral reserves of coal, graphite, rare earths and rubies. Given the country's richness in mineral resources and its unique tourist attractions (pristine beaches and diverse wildlife) the Government has earmarked the mining sector and tourism sectors as a priority growth sectors.

Further to agricultural and mineral resources, the discovery of large natural gas reserves in the Rovuma Basin has positioned Mozambique as an exciting investment opportunity in Africa and is expected to draw foreign direct investment (FDI) to the country.

Mozambique's real GDP growth between 2000 to 2015 period averaged 7.4% per annum. This rapid growth has been the trademark of the country's macroeconomic profile over the last two-and-a-half decades. As one of the fastest-growing economies on the continent, Mozambique outperformed both regional and global growth averages. (Deloitte. 2017: 3).

Since 2015, real economic growth declined steadily to 2,28% in 2019. (<https://www.statista.com/statistics/507314/gross-domestic-product-gdp-growth-rate-in-mozambique/>). In 2016, three state-owned defence and security companies received \$2 billion in loans without parliamentary approval. The discovery of these illicit loans resulted in the withdrawal of major donor funding to the state budget. (<https://www.trade.gov/country-commercial-guides/mozambique-market-overview>)

The situation worsened further in 2020 when real GDP contracted by an estimated 0,5%. (<https://www.afdb.org/en/countries/southern-africa/mozambique/mozambique-economic-outlook>). The outbreak of the COVID-19 pandemic, slowdown in construction, tourism and transport, decreased demand for commodity exports and escalating conflict in the northern province of Cabo Delgado are cited as the main drivers of the deceleration.

Regardless of the country's impressive economic growth performance over 15 years, Mozambique remains a low-income economy. Notwithstanding huge potential for agriculture, most of the land in the country remains largely untapped. Furthermore, great distance from export markets, war, disease and natural disasters (e.g. floods and droughts) are contributing to low economic growth that worsens poverty. Over half of the population remains below the poverty line and relies on subsistence agriculture. In this regard, Mozambique is categorised as one of the world's 10 poorest countries (<https://www.heritage.org/index/country/mozambique>)

3. Economic Structure and Indicators

3.3.1 Economic Structure / System

Despite strong economic growth over 15 years, growth has not initiated a structural transformation and industrialisation of Mozambique's economy. The country remains dependent on the exploration of natural resources and the agricultural sector. Around two-thirds of the population are subsistence farmers, cultivating small plots using hand tools. Due to its subsistence character, agriculture is one of the least productive sectors. The agriculture sector remains extremely vulnerable to weather shocks experienced by Mozambique. Furthermore, Mozambique is severely affected by cyclones, droughts, floods and related epidemics.

Although Mozambique has a mixed economy that combines both traditional and market economic systems, agriculture remains the mainstay of the economy. However, there is a variety of private freedom combined with centralised economic planning and government regulation. (<https://globaledge.msu.edu/countries/mozambique>).

3.3.2 Economic Indicators

Economic indicators are published to provide an overview of the overall health of a country's economy. Further to analysing current economic activities, it also provides a basis for predicting future performance. Table 1 presents key economic indicators for Mozambique.

Table 1: Economic Indicators for Mozambique

Main Indicator	2015	2016	2017	2018	2019	2020
GDP (billions USD)	16.2	12.0	13.3	14.7	15.0	
GDP per capita (USD)	579	417	449	484	483	
Economic Growth (GDP, annual variation in %)	6.7	3.8	3.7	3.4	2.2	0,5(e)
Investment (annual variation in %)	-16.8	-9.4	-5.8	12.4	-	-
Public Debt (% of GDP)	94.2	130	101	99.8	-	-
Inflation Rate (annual variation in %)	3.6	19.9	15.1	3.9	2.8	-
Current Account Balance (USD billion)	-6.0	-3.8	-2.6	-4.5	-3.0	
Current Account (in % of GDP)	-36.9	-32.1	-19.5	-30.6	-20.1	-
Trade Balance (USD billion)	-4.2	-1.4	-0.5	-1.0	-2.1	-
Exports (USD billion)	3.4	3.3	4.7	5.2	4.7	
Imports (USD billion)	7.6	4.7	5.2	6.2	6.8	
International Reserves	2.6	2.1	3.4	3.1	3.9	
External Debt (% of GDP)	85.6	116	115	104	-	

Source: <https://www.focus-economics.com/countries/mozambique>

From the data presented in Table 1 the following findings are derived:

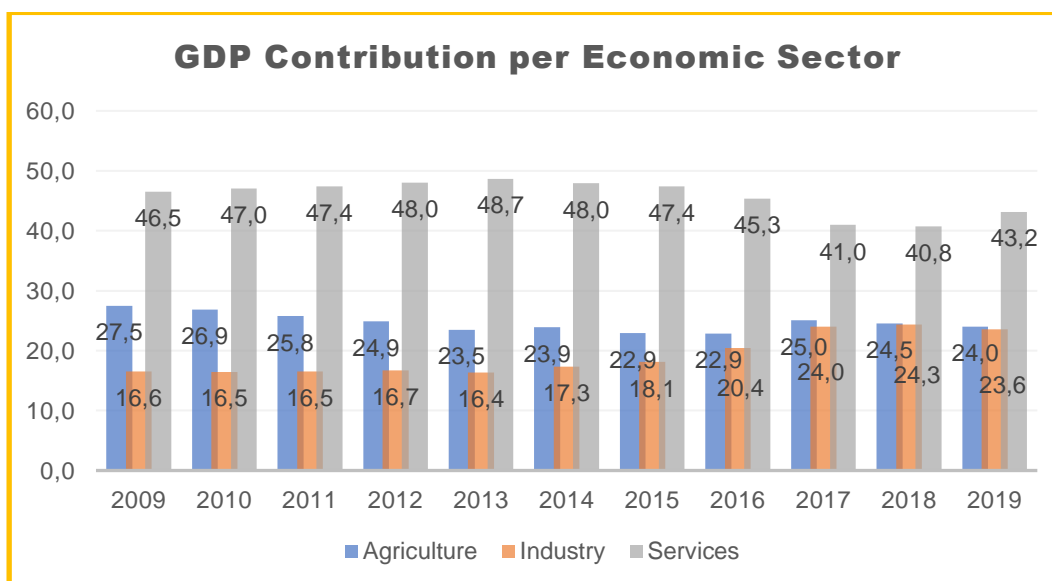
- GDP declined slightly over the period under review from USD6,2 billion in 2015 to USD15,0 billion in 2019, causing a corresponding decrease in GDP per capita over the same period;
- Economic growth dropped quite significantly from 6,7% in 2019 to 2,2% in 2019. The situation worsened in 2020 when real GDP contracted by an estimated 0,5%;
- Lower economic growth impacted negatively on public debt (expressed as a percentage of GDP) that increased from 94,2% in 2015 to a staggering 99,8% in 2019;
- Increases in exports, coupled with decreases in imports lowered the trade balance from USD 4,2 billion in 2015 to USD 2,1 billion in 2019. The negative trade balance reveals that the value of exports exceeds the value of imports;
- International reserves increased from USD 2,6 billion in 2015 to USD 3,9 billion in 2019.

The economy recovered during 2020 and 2021, with growth rates of 2% and 3,4% registered during quarters 2 and 3 of 2021. The economy is expected to grow at a quicker rate in 2022, as the fading impact of the pandemic supports investment, while easing restrictions release restrained demand and strengthen household spending. That said, political instability stemming from the conflict in the Cabo Delgado pose key downside risks. (<https://www.focus-economics.com/countries/mozambique>).

3.3.3 GDP Contribution per Economic Sector

Table 2 below summarises the GDP contribution per economic sector.

Table 2: GDP Contribution per Economic Sector



Source: <https://www.statista.com>

The statistics in table 2 shows the distribution of the GDP across economic sectors in Mozambique from 2009 to 2019. In 2019, agriculture contributed around 23,6% to the GDP, while 23,59% came from the industry and 43,17% from the services sector.

➤ Agriculture

Despite being the key economic sector, agriculture's value add to GDP is the lowest of all 3 sectors. Most agricultural production comes from family farms. The agriculture sector is particularly vulnerable to natural disasters such as droughts and floods and agriculture productivity is low.

Since agriculture employs around 80% of the population, the Mozambican government has prioritised agriculture as a priority sector and recently injected a \$500 million loan from the World Bank called the "Sustenta Initiative" to transform small holder farmers into sustainable producers. (<https://www.trade.gov/country-commercial-guides/mozambique-market-overview>)

➤ Industry

The industrial sector includes the manufacturing sector that is still weak and relatively under-developed. The manufacturing sector is dominated by the production of the Mozal aluminium smelter. Most manufacturing takes place in the major urban areas of Maputo, Beira and Nampula. Mozambique has several advantages that gives the industry sector a favourable outlook, such as:

- Existence of adequate transport linkages to South Africa (the Maputo Corridor), Malawi and Zambia (the Nacala Corridor), Zimbabwe, Malawi, Zambia and the DRC (the Beira Corridor);
- Competitively priced supply of labour and a wealth of natural resources that present opportunities for processing;

- Little domestic competition in most manufacturing sub-sectors;
- Proximity to higher income African countries (e.g. South Africa and Tanzania); and
- Opportunities posed by the future development of the gas and other extractives industries.

The industry sector comprises mostly of micro companies (small and medium sized firms) that are involved with low technology intensity. Large firms are mostly dominated by foreign companies and are generally more capital intensive.

Like the agriculture sector, manufacturing faces several challenges, including competition with South African imports, unreliable electricity and a costly and bureaucratic business environment. Much of the production in the sector involves imports, or require imported complementary goods such as packaging. Products processed domestically are often more expensive than imports.

➤ Services

The services (tertiary) sector with its GDP contribution of 43, 2% in 2019 is the most valuable area of economic activity in the Mozambican economy. Tourism is the main industry, although it is still performing well below its potential. In addition to expanding financial services, the services sector has a growing number of micro-scale retail businesses. The services sector was hard hit by the COVID-19 pandemic. In this regard, restrictions on the movement of people has had a severe impact on the tourism industry.

3.4 Credit Rating

Credit ratings is generally used by sovereign wealth funds, pension funds and other investors to gauge the credit worthiness of a country. As such the credit rating of a country has a huge impact on a country's borrowing costs.

Table 3 illustrates Mozambique's credit rating history between 2015 – 2019 by the top three global rating agencies - Standard and Poor (S&P), Fitch and Moody's. Credit assessment is done regularly, with credit rating agencies assigning letter grades to indicate ratings. S&P for instance uses a credit rating scale ranging from AAA (excellent) to C and D. A debt instrument with a rating below BB is acknowledges as speculating grade or a junk bond, which means is it more likely to default on loans.

Table 3: Mozambique's Credit Rating: 2015-2019

Rating Agency	Date	Previous Rating	Previous Outlook	New Rating	New Outlook
S&P	Nov 22, 2019	SD	N/A	CCC+	Stable
Fitch	Nov 7, 2019	RD	N/A	CCC	N/A
Moody's	Sep 20, 2019	Caa3	Stable	Caa2	Stable
Moody's	Feb 15, 2019	Caa3	Negative	Caa3	Stable
Fitch	Oct 27, 2017	CC	N/A	RD	N/A
S&P	Jan 18, 2017	CC	Negative	SD	N/A
S&P	Nov 4, 2016	CCC	Negative	CC	Negative
S&P	Aug 5, 2016	CCC	Negative Watch	CCC	Negative

Rating Agency	Date	Previous Rating	Previous Outlook	New Rating	New Outlook
Moody's	Jul 8, 2016	Caa1	Negative Watch	Caa3	Negative
S&P	May 27, 2016	B-	Stable	CCC	Negative Watch
Fitch	May 23, 2016	CCC	N/A	CC	N/A
Moody's	May 20, 2016	Caa1	Stable	Caa1	Negative Watch
Fitch	May 2, 2016	B	Negative	CCC	N/A
Moody's	Apr 15, 2016	B3	Negative	Caa1	Stable
S&P	Apr 15, 2016	SD	N/A	B-	Stable
S&P	Apr 1, 2016	CC	Negative	SD	N/A
Moody's	Mar 15, 2016	B2	Negative Watch	B3	Negative
S&P	Mar 15, 2016	B-	Negative	CC	Negative
Fitch	Mar 11, 2016	B	Stable	B	Negative
Moody's	Dec 17, 2015	B2	Negative	B2	Negative Watch

Source: <https://www.fxempire.com/macro/credit-ratings/mozambique>

In November 2019 S&P's credit rating for Mozambique stood at CCC+ with stable outlook, while Fitch credit rating over the same period stood at CCC. Moody's credit rating for Mozambique was set at Caa2 in September 2019. The stable outlook of Moody's reflects that the government's access to funding will remain highly constrained, but it is not expected to deteriorate significantly.

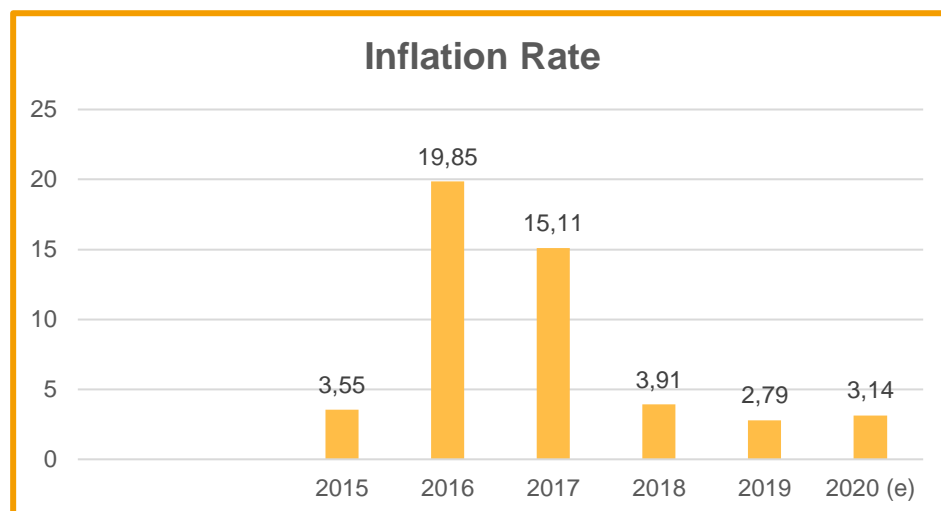
The credit profile of Mozambique suggests very high government indebtedness and elevated liquidity risk that stems from the country's constrained access to foreign currency funding, natural disasters and the COVID-19 pandemic which has hard hit the Mozambique economy. Since the outbreak of the pandemic, the government has put in place emergency measures, including increased health spending, strengthening social protection to the most vulnerable, and supporting micro, small, and medium-sized businesses. Due to decreasing revenues and increasing expenditures, public debt, increased from 103,4% of GDP in 2019 to 122.2% of GDP in 2020, with further increases expected in the short-term. (<https://international.groupecreditagricole.com/en/international-support/mozambique/economic-overview>).

Further to high public debt, there are other credit challenges that require urgent intervention, notably Mozambique's weak institutional framework and governance, reflected in the government's non-reporting of debts related to state-owned enterprises (SOEs) that resulted in withdrawal of international budgetary support, as well as significant shortcomings in its data reporting. (https://www.moody's.com/research/Moodys-Mozambiques-credit-profile-reflects-very-high-government-debt-and--PBC_1246163).

3.5 Monetary Policy

The fallout from the external debt scandal in 2016 contributed heavily to pressure on Mozambique's inflation environment and, subsequently, monetary policy. The withdrawal of budgetary aid added to the country's weak export performance since the international debt scandal and exposed vulnerabilities in Mozambique's financial system. Weaknesses include, but are not limited to, a large share of bank assets and liabilities denominated in foreign currency and weak prudential and crisis management framework: Figure 4 depicts Mozambique's inflation rate between 2015 – 2020.

Figure 4: Mozambique: Inflation Rate: 2015 - 2020



Source: <https://www.statista.com/statistics/507333/inflation-rate-in-mozambique/>

Inflation reached an all-time high of 19,85% in 2016, following the external debt scandal. The inflation rate lowered to 15,11% in 2017 from where it decreased year-on-year to 2,79% in 2019. The picture worsened during the first six months of 2021 and rose to 5,52 % in June 2021. Main upward pressure came from prices of food & non-alcoholic beverages, amid severe food shortages while the on-going conflict in the northern region of the country continues to disrupt agriculture output and most typical livelihood activities.

Between 2017 - 2020, the Central Bank increased the minimum capital levels from 10% to 14% of risk-weighted assets, which are important buffers during periods of economic and financial stress. This measure assisted domestic credit growth that was maintained in 2020. However, pre-existing vulnerabilities and risks, including high interest rates and several structural issues (e.g. lack of credit information, limited availability of collateral and limited competition in providing credit services to the private sector), guided the Mozambican government to implement the following measures to support the financial sector during a period of economic uncertainty:

- Cut in the policy interest rate from 12.75 to 10.25 percent;
- Reduction of the reserve requirement for local currency from 13% to 11.5 % and for foreign currency loans from 36 to 34.5 percent;
- USD 500 million forex credit line to commercial banks;
- Removal of specific provisioning requirements for forex lending to importers;
- Reduced fees and commissions for digital payments; and

- Restructuring of credits for Covid-19 affected firms if needed, before payments become due.

The above measures contributed to high liquidity levels in domestic currency, which explains credit growth. Furthermore, digital transactions saw a significant increase in the volume and number of electronic transactions, particularly on mobile platforms.

3.6 Trade Environment

Mozambique shares many of the problems of resource-rich countries, with a fragile development model excessively focused on extractives and major projects. It has undoubted potential but faces considerable challenges: a lack of qualified workers; a limited internal market; infrastructure inefficiencies; a costly business environment; limited economic diversification; a high dependency on imports; increasing debt levels; a narrow tax base; and limited capacity for domestic resource mobilisation.

Mozambique is open to foreign trade, which represented around 117% of the country's GDP in 2019. It is a member of the World Trade Organisation (WTO) and of the South African Development Community (SADC), and has signed trade agreements with Malawi and Zimbabwe. The country also signed the African Continental Free Trade Agreement (AfCFTA). <https://international.groupecreditagricole.com/en/international-support/mozambique/economic-overview>

Mozambique's export basket is rather limited, reflecting the narrow scope of the economy: In 2019, 4 items (coal briquettes, raw aluminium, petroleum gas and raw tobacco) accounted for 53% of all exports. During the same year the top 3 import items were refined petroleum, chromium ore and aluminium ore. (refer to figures 7 and 8).

The government seeks to reform its trade regulations to improve its business climate and encourage exports. In this regard, several measures have been implemented in recent years to facilitate trade, including:

- Launch of a single window system for customs clearance and other functions;
- Launch of an authorised economic operator scheme;
- Implementation of liberalised transit regulations; and
- Creation of a one-stop border post with South Africa.

Despite the above attempts to improve the trade environment several Non-tariff barriers (NTB) persist that are regarded as a main cause for Mozambique's poor rating (138th out of 190 countries) in the World Banks Doing Business Report (2020 version).

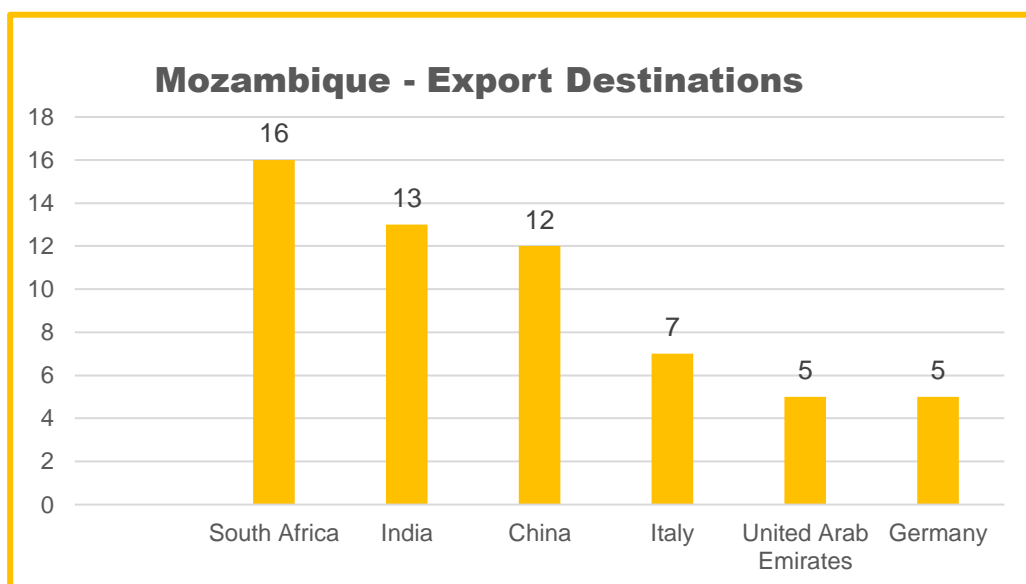
Bureaucratic and infrastructure challenges, including difficulty in accessing electricity and water and high customs duties, are examples of NTBs that increase the cost of doing business. Access to credit also remains a major obstacle for companies to operate competitively. More information on the business environment of Mozambique is presented in section 3.7.

3.6.1 Main Export and Import Destinations

Trade statistics have been extracted from the Observatory of Economic Complexity (OEC) website during July 2021. The base year is 2019. The reader is advised to visit the OEC website (<https://oec.world/en/profile/country/moz>) for an update on key export and import destinations.

Figures 5 and 6 reveal the top export and import destinations for Mozambique products/ commodities for 2019.

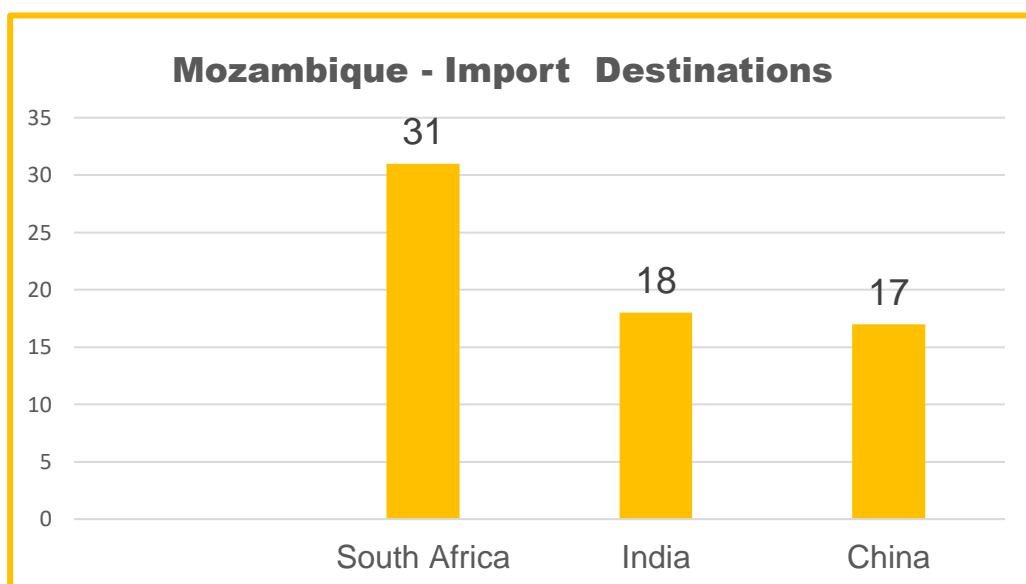
Figure 5: Mozambique Export Destination – 2019



Source: <https://oec.world/en/profile/country/moz>

In 2019, South Africa was the most important export partner of Mozambique, followed by India and China.

Figure 6: Mozambique Import Destination - 2019



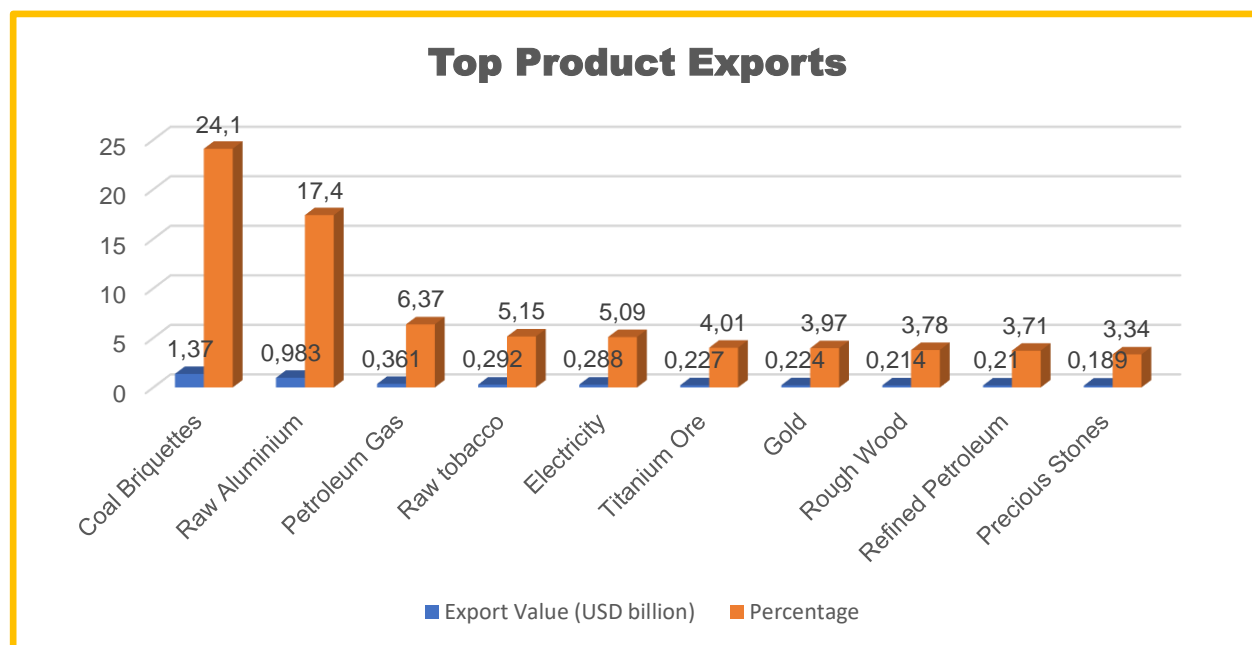
Source: <https://oec.world/en/profile/country/moz>

As is the case with exports, South Africa, with was the main trading partner for Mozambique in 2019. India and China took the second and third positions.

3.6.2 Mozambique World Exports and Imports

Figure 7 illustrates Mozambique's 10 top exports for 2019. Trade statistics have been extracted from the OEC website. This online data visualisation and distribution platform focuses on geography and dynamics of economic activities. The reader is advised to visit the OEC website <https://oec.world/en/profile/country/moz> for updated trade statistics for Mozambique.

Figure 7: Top 10 Product Exports - 2019

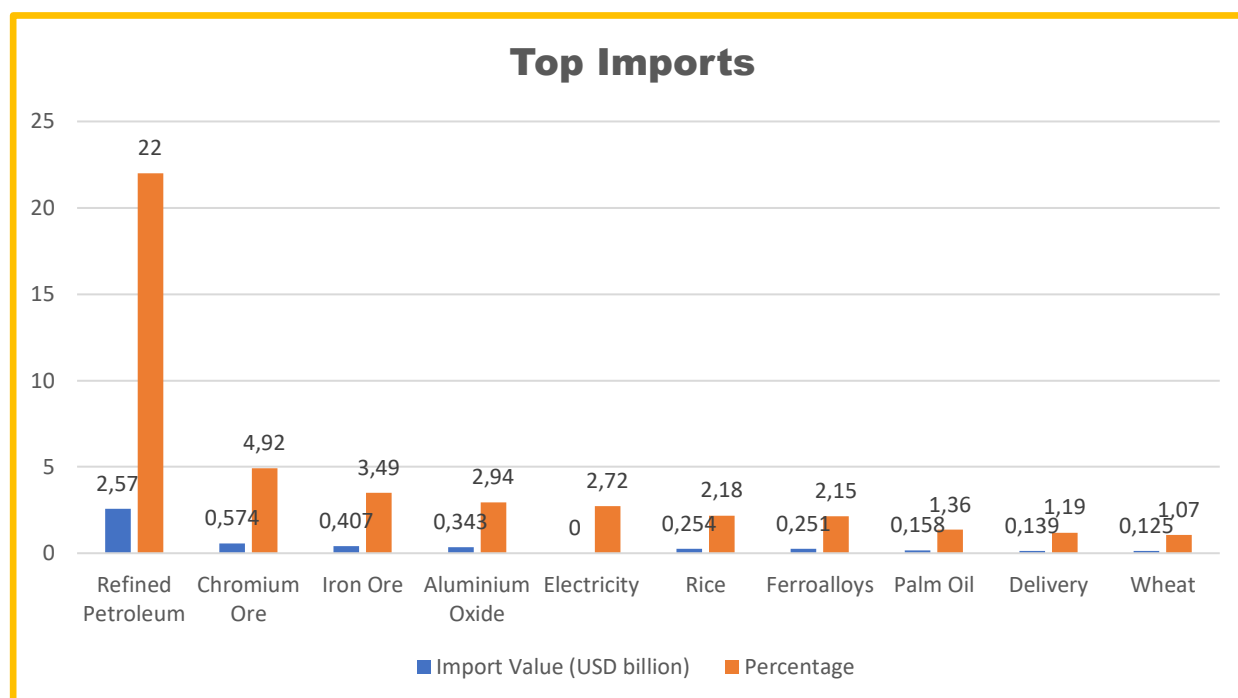


Source: <https://oec.world/en/profile/country/moz>

In 2019, Mozambique's product exports totalled USD 5,66 billion, making it the number 111 exporter out of 225 selected countries in the world. Exports were led by coal briquettes, with an export value of USD 1,37 billion, followed by raw aluminium (export value of USD 983 million) and petroleum gas (export value of USD 361 million). (<https://oec.world/en/profile/country/moz>). The most common destinations for exports are South Africa, India and China (see figure 5).

Since Mozambique is home to the third largest gas reserve in Africa, the country strives to become one of the largest exporters of natural gas in the world. The planned construction of natural gas power plants as well as the construction of a new dam will enable Mozambique to increase its exports of electricity to neighbouring countries in future. Export infrastructure (e.g. railways, deep water ports, liquefied natural gas plants) is also under construction, and will support exports of natural gas and coal to Asia. (<https://www.trade.gov/country-commercial-guides/mozambique-market-overview>). Amidst on-going developments, the contribution of petroleum gas to total exports will most likely increase in future. Figure 8 highlights top product imports for Mozambique for 2019.

Figure 8: Top 10 Product Imports - 2019



Source: <https://oec.world/en/profile/country/moz>

In 2019, Mozambique’s product imports totalled USD 11,7 billion, positioning Mozambique in 92th position (out of 225 selected countries) in terms of total imports. Refined petroleum, with a percentage share of 22% was Mozambique’s top import product totalling USD 2,57 billion to position Mozambique as the 57th largest importer of refined petroleum in the world. Chromium Ore and Iron Ore came in second and third position with import values of USD 574 and \$407 million respectively. (<https://oec.world/en/profile/country/moz>). Mozambique gets most of its imports from South Africa, India and China (refer to figure 6).

Since imports exceeds exports, the country faces a negative trade balance (trade deficit). In 2019, imports amounted to USD 11,7 billion, while exports stood at USD 5,66 billion. The trade balance is expected to improve once exports of coal and gas to Asia develop.

3.6.2 Mozambique: Nature and Volume of Trade with South Africa

3.6.2.1 South African Exports

Table 4 illustrates the top 10 South African export products to Mozambique during 2020.

Table 4: South African Exports to Mozambique

Product	Value (\$million)
Ores slag and ash	974,11
Mineral fuels, oils, distillation products	323,17
Machinery, nuclear reactors, boilers	262,63
Iron and steel	166,20
Vehicles other than railway, tramway	129,45
Electrical, electronic equipment	85,21

Product	Value (\$million)
Articles of iron or steel	78,94
Miscellaneous edible preparations	74,56
Plastics	67,83
Cereals	51,56
TOTAL EXPORTS	3 083,33

Source: <https://tradingeconomics.com/south-africa/exports/mozambique>, adapted for study.

South African exports to Mozambique totalled around USD 3.09 billion in 2020. Ores slash and ash (minerals used in the metallurgical industry) was the top export commodity, totalling USD 974,11 million. Mineral fuels, oils and distillation products came in second at USD 323,170 million, while machinery, nuclear reactors and boilers was the top 3 South African export at USD 262,630 million.

3.6.2.2 South African Imports

Table 5 illustrates the top 10 South African import products from Mozambique for 2020.

Table 5: South African Imports from Mozambique

Product	Value (\$ million)
Mineral fuels, oils, distillation products	509,92
Edible fruits, nuts, peel of citrus fruit, melons	43,39
Bird skin, feathers, artificial flowers, human hair	38,53
Aluminum	11,31
Residues, wastes of food industry, animal fodder	10,10
Articles of iron or steel	6,73
Sugars and sugar confectionery	5,95
Cotton	5,03
Articles of apparel, not knit or crocheted	4,60
Tobacco and manufactures tobacco substitutes	3,41
TOTAL IMPORTS	666,52

Source: <https://tradingeconomics.com/south-africa/imports/mozambique>, as adapted.

Mineral fuels, oils and distillation products was the top South African import from Mozambique, totalling USD 509,92 million. South African exports to Mozambique outperforms South African imports by far. This shows that South Africa has an exceptionally healthy trade balance (surplus) with Mozambique.

3.6.3 Mozambique: Intra-Africa Trade Profile

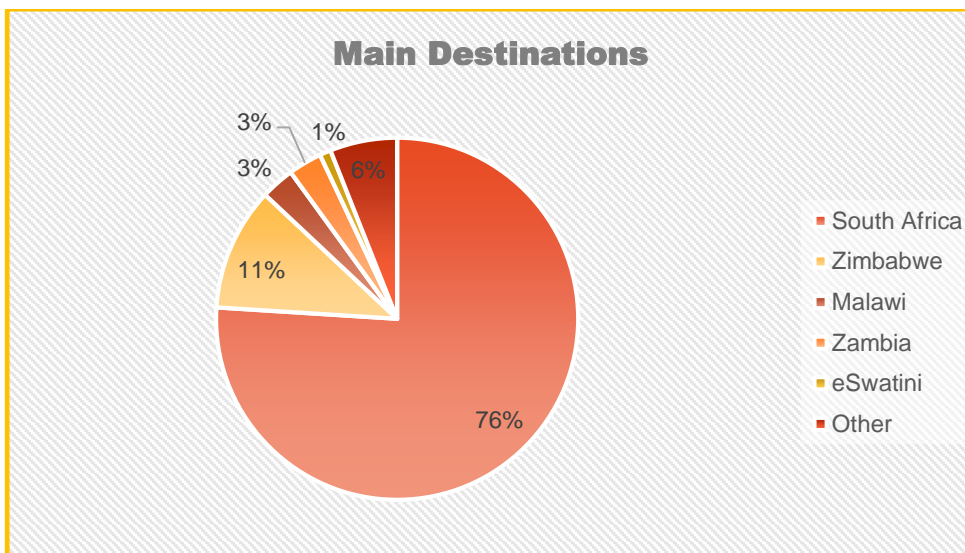
Mozambique is a member of the SADC and has signed the SADC Free Trade Area (FTA) and the AfCFTA. The latter entered into force on 30 May 2019. Mozambique is yet to ratify the AfCFTA.

3.6.3.1 Intra-Africa Exports

In 2020, around 28% of Mozambique’s world exports were to and from the rest of Africa. Between 2019 and 2020, Mozambique’s intra-Africa exports declined by 14%. During the same year, Mozambique’s intra-Africa exports amounted to USD 960.27 million. (<https://www.tralac.org/resources/infographic/14449-mozambique-intra-africa-trade-and-tariff-profile.html>).

Mozambique’s main African trading partners are fellow SADC countries, as depicted by figure 9.

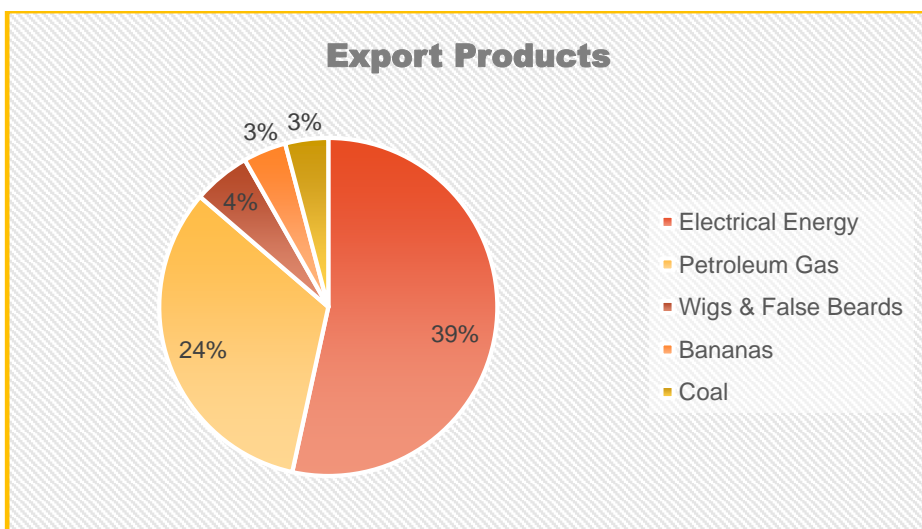
Figure 9: Mozambique Export Destinations



Source: <https://www.tralac.org/resources/infographic/14449-mozambique-intra-africa-trade-and-tariff-profile.html>

Figure 10 highlights the top 5 export products to SADC countries.

Figure 10: Mozambique Top Export Products to African Countries



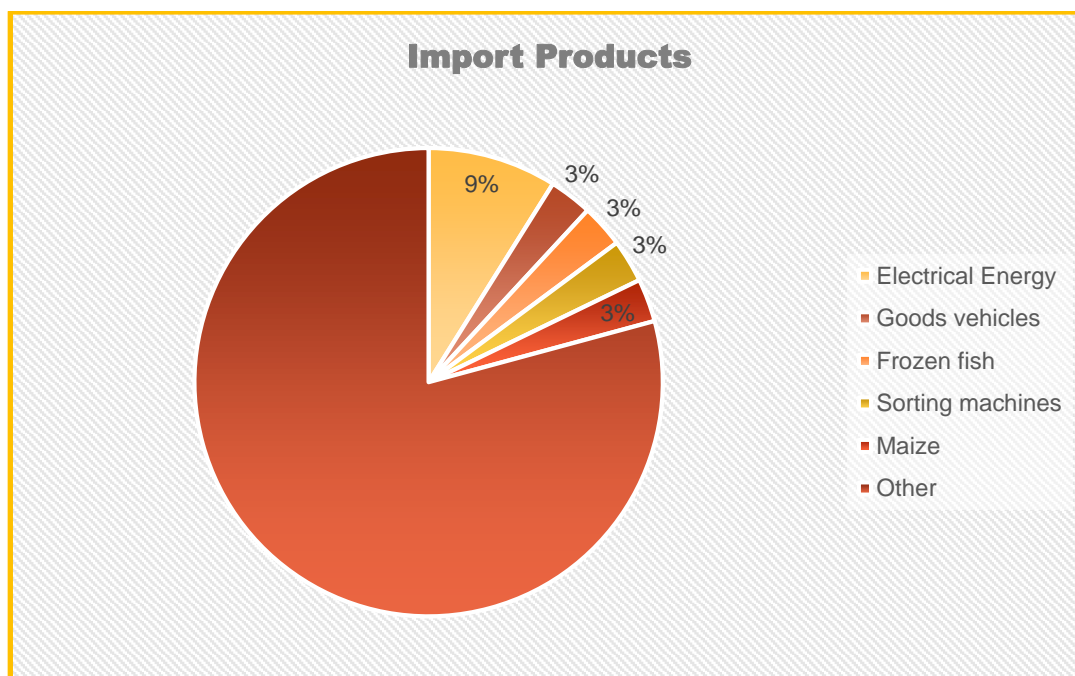
Source: <https://www.tralac.org/resources/infographic/14449-mozambique-intra-africa-trade-and-tariff-profile.html>

Figure 10 shows that the top export products to African countries are electric energy, and petroleum gas.

3.6.3.2 Intra-Africa Imports

In 2020, 33% of world imports were to and from the rest of Africa. Between 2019 and 2020, Mozambique's intra-Africa imports declined by 13%. Mozambique's intra-Africa imports amounted USD 2.1 billion in 2020. Electrical energy is the main import product, amounting to 9% for Mozambique's intra-Africa imports, as depicted in figure 11.

Figure 11: Intra-Africa Imports



Source: <https://www.tralac.org/resources/infographic/14449-mozambique-intra-africa-trade-and-tariff-profile.html>

3.7 Business Environment

The business environment refers to internal and external factors that affect a business ability to conduct business and to build and maintain successful customer relationships. For the purposes of this discussion, emphasis is placed on the following focus areas that provides an indication of the business environment that prevail in Mozambique:

- Economic Freedom Index;
- Ease of Doing Business;
- Global competitiveness index; and
- Corruption perceptions index.

3.7.1 Economic Freedom Index

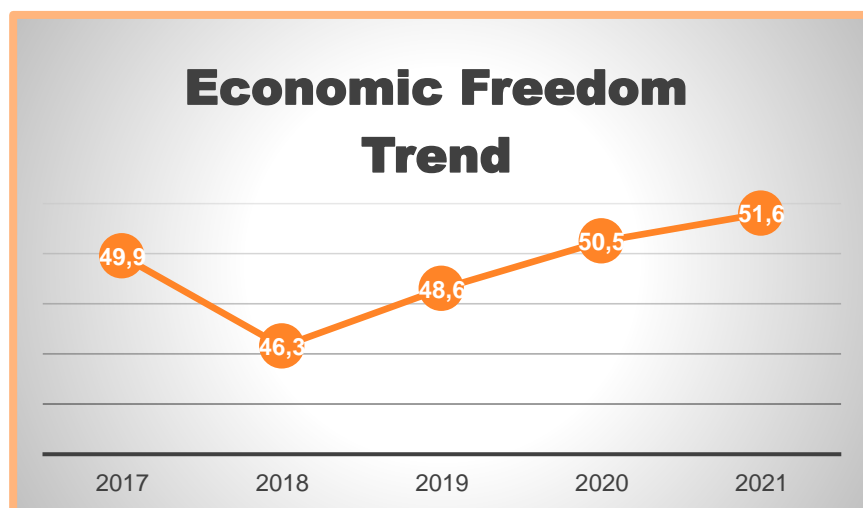
Economic freedom is the fundamental right of every human to control his or her own labour and property. In an economically free society, individuals are free to work, produce, consume, and invest in any way they please, with that freedom both protected by and unconstrained by the government. In economically free societies, governments allow labour, capital and goods to move freely, and refrain from coercion or constraint of liberty beyond the extent necessary to protect and maintain liberty itself.

Range and level of freedom is categorised as follows:

- 80 – 100: means a country is economically free;
- 70 – 79,9: means a country is mostly free;
- 60 – 69,9: means a country is moderately free;
- 50 – 59,9: means a country is mostly unfree; and
- 0 – 49,9: means a country is repressed.

Figure 12 illustrates Mozambique's economic freedom index for the period 2017 – 2021.

Figure 12: Mozambique Economic Freedom Index



Source: <https://www.heritage.org/index/country/mozambique>

Between 2017 and 2021 Mozambique's economic freedom score improved slightly from 49,9 to 51,6. However, Mozambique's economy remained near the bottom of the mostly unfree category in 2021. Mozambique is one of the world's 10 poorest countries, and greater economic freedom is just a dream for most of its residents. Listed below are the main reasons for the country's poor economic freedom score:

- Weak rule of law, which reflects inadequate protection of property rights;
- A non-transparent judicial system; and
- Failure to fight corruption.

These shortcomings pose severe challenges to development. Mozambique is ranked 36th among 47 countries in the Sub-Saharan Africa region, and its overall score is below the regional and world averages. (<https://www.heritage.org/index/country/mozambique>).

3.7.2 Ease of Doing Business Index

The World Bank Group conducts a Doing Business study on a yearly basis. This project provides objective measures of business regulations and their enforcement across several economies and selected cities at the sub-national and regional level. Doing business captures 11 areas of business regulation. One area, employing workers are not included in the ease of doing business score and ranking. For this reason, rankings are determined by sorting the aggregate scores on 10 areas, each consisting of several indicators, giving equal weight to each topic.

The most recent round of data collection for the project was completed in May 2019. The doing business indicators are presented in table 6.

Table 6: Doing Business 2020 Indicators

Indicator	Description
1	Starting a Business Procedures, time, cost and paid-in minimum capital to start a limited liability company.
2	Dealing with construction permits Procedures, time and cost to complete all formalities to build a warehouse and the quality control and safety mechanisms in the construction permitting system.
3	Getting electricity Procedures, time and cost to get connected to the electrical grid, and the reliability of the electricity supply and the transparency of tariffs.
4	Registering a property Procedures, time and cost to transfer a property and the quality of the land administration system.
5	Getting credit Movable collateral laws and credit information systems.
6	Protecting minority investors Minority shareholders' rights in related-party transactions and in corporate governance.
7	Paying taxes Payments, time, total tax and contribution rate for a firm to comply with all tax regulations as well as post filing processes.
8	Trading across borders Time and cost to export a product of comparative advantage and import auto parts.
9	Enforcing contracts Time and cost to resolve a commercial dispute and the quality of judicial processes.
10	Resolving insolvency Time, cost, outcome and recovery rate for a commercial insolvency and the strength of the legal framework for insolvency.
11	Employing workers Flexibility in employment regulation and redundancy cost.

Source: World Bank Group. 2020

Table 7 highlights Mozambique's performance for 10 indicators, compared to its overall rank out of 190 participants. Rank 1 indicates the best performance, while rank 190 indicates the worse performance. Data was extracted from the Economic Profile Mozambique – Doing Business 2020 report. (World Bank Group. 2020:4).

Table 7: Mozambique's Overall Performance

Indicator	Mozambique Score	Mozambique's Overall Rank	
1	Starting a Business	69,3	176
2	Dealing with construction permits	73,2	61
3	Getting electricity	71,1	103
4	Registering a property	53,4	136
5	Getting credit	25,0	165

Indicator	Mozambique Score	Mozambique's Overall Rank
6 Protecting minority investors	32,0	147
7 Paying taxes	64,0	127
8 Trading across borders	73,8	94
9 Enforcing contracts	39,8	168
10 Resolving insolvency	47,8	86
11 Employing workers	-	-
Overall Score / Rank	55,0	138

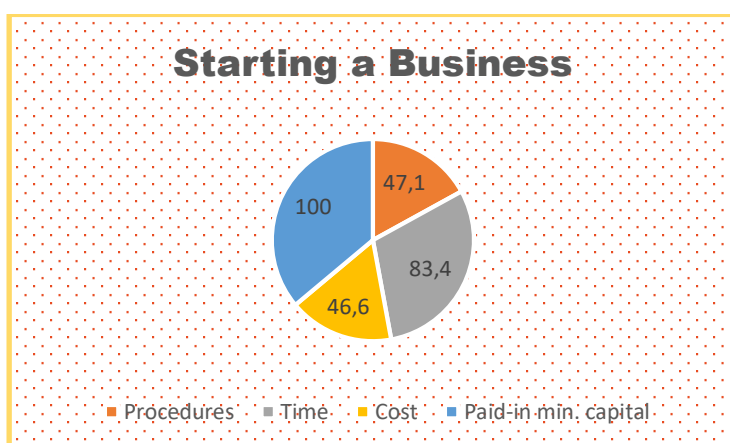
Source: World Bank Group. 2020

Note: No rankings are presented for indicator 11 (employing workers). Therefore, this indicator has been excluded from the aggregate ease of doing business score and ranking on the ease of doing business

Mozambique performed worse in the areas of starting a business (rank 176), enforcing contracts (rank 168) and getting credit (rank 165). Its best performance was for indicator 2, dealing with construction permits (rank 61). Mozambique's overall rank is 138 out of 190 participants. Mozambique's poor performance in most areas, clearly shows that the existing regulatory environment in the country is not conducive and does not favour the establishment of new businesses.

Figure 13 gives a breakdown of scores for indicator 1: Starting a Business.

Figure 13 – Starting a Business in Mozambique



Source: World Bank Group. 2020

Figure 13 depicts that Starting a Business is measured according to 4 indicators. The ranking of economies on the ease of starting a business is determined by sorting their scores for starting a business. These scores are the simple average of the scores for each of the component indicators.

Mozambique's score for each indicator looks as follows:

- Number of procedures: 47,1
- Time (men days) – 83,4
- Cost (numbers) - 46,6

- Paid-in minimum capital requirement – 100 (Mozambique does not enforce a paid-in minimum capital requirement)

Based on the average score of the above component indicators, Mozambique’s score for starting a business is 69,3 days.

Figure 14 provides a breakdown of scores for indicator 8: Trading across Borders. This indicator measures the *time* and *cost* associated with the logistical process of exporting and importing goods. As such it measures the time (expressed in hours) and cost (expressed in USD) associated with different procedures, including documentary compliance and border compliance with the overall process of exporting or importing a shipment of goods. The most recent round of data collection for the project was completed in May 2019.

Figure 14: Trading across borders

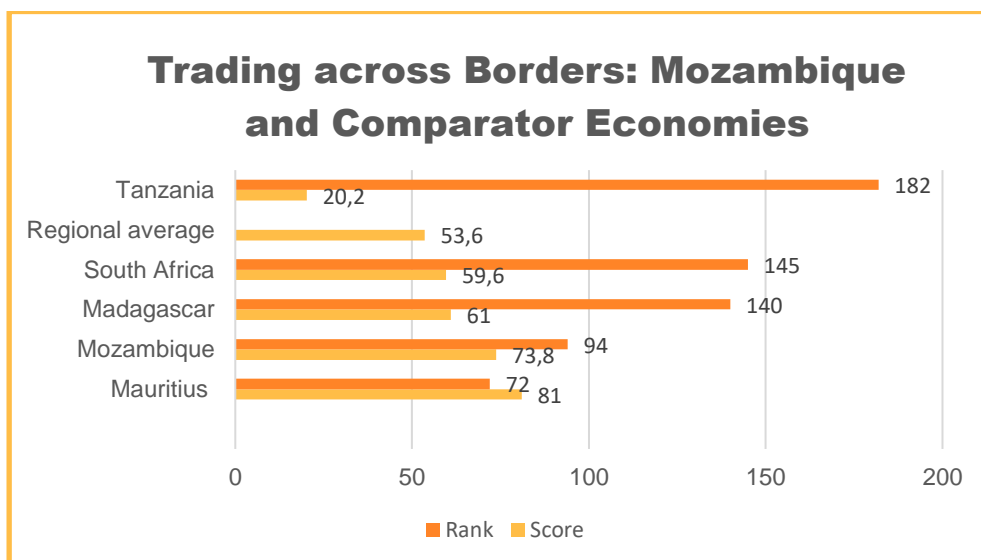


Source: World Bank Group. 2020

The above figure reveals that the time and cost associated with imports is much higher than the time and cost associated with exports. Mozambique’s average score for the 8 indicators is 73,8, and its ranking is 94 (out of 190 participants).

Figure 15 gives a comparative analysis to show how Mozambique performs against comparator economies. The ranking of economies on the ease of trading across borders is determined by sorting their scores for trading across borders. These scores are the simple average of the scores for the time and cost for documentary compliance and border compliance to export and import. Mozambique’s average score for the 8 indicators is 73,8 (see figure 15 below)

Figure 15: Trading across Borders: Mozambique and Comparator Economies



Source: World Bank Group. 2020

In terms of scores, only one country (Tanzania) came in below the regional average of 53,6. However, Mozambique’s overall ranking is only 94 (out of 190 economies) for trading across borders.

3.7.3 Global Competitiveness Index

The Global Competitiveness Index (GCI) is an internationally respected index that assesses the competitiveness of economies and market performance in a very detailed manner. The 2019 edition of the GCI assesses 141 economies, which accounts for 99% of the world’s GDP. (Schwab, K. 2019:vii). The GCI comprises of 103 indicators that are organised into twelve pillars, and these pillars are:

- 1) Institutions;
- 2) Infrastructure;
- 3) ICT adoption;
- 4) Macro-economic stability;
- 5) Health;
- 6) Skills;
- 7) Product market;
- 8) Labour market;
- 9) Financial system;
- 10) Market size;
- 11) Business dynamism; and
- 12) Innovation capability.

According to the 2019 findings, Mozambique ranks in 137th position (out of 141 countries) in the global competitiveness ranking, indicating that the country fails to provide high levels of prosperity to its citizens. Singapore obtained the highest score, while Chad ended in last position. Table 8

illustrates the performance of 15 SADC countries, excluding the Comoros. The scales are from 1 – 100, while the rank indicates the rank differences with the 2018 index.

Table 8: Global Competitiveness Index – Performance of SADC Countries

Country	Score	Rank
Mauritius	64,3	-3
South Africa	62,4	+7
Seychelles	59,6	-2
Botswana	55,5	-1
Namibia	54,5	+6
Tanzania	48,2	-1
Zambia	46,5	-2
Eswatini	46,4	-1
Zimbabwe	44,2	+1
Malawi	43,7	+1
Lesotho	42,9	-1
Madagascar	42,9	N.A.
Angola	38,1	+1
Mozambique	38,1	-4
DRC	36,1	-4

Source: Schwab, K. 2019

Table 8 shows that Mozambique was the second-worst performer in the SADC in 2019. With 38,1 points, Mozambique lost four positions from the previous ranking and has the same number of points than Angola, although Angola raised its position by one position. At regional (SADC) level, Mauritius leads with 64,3 points (52nd position in the world ranking), followed by South Africa with 62,4 points (60th position) and Seychelles with 59,6 points (76th place).

3.7.4 Corruption Perceptions Index

The Corruption Perceptions Index ranks countries and territories on how corrupt their public-sector is perceived to be by business people and country analysts. The index ranges between 100 (highly clean) and 0 (highly corrupt). The 2020 Corruption Perceptions Index scores 180 countries across the world by their perceived levels of public sector corruption between May 2019 and May 2020. Table 9 illustrates Mozambique's score and rank between 2015 – 2020.

Table 9: Mozambique Corruption Perceptions Index

Mozambique Corruption Perceptions Index		
Year	Score	Rank
2015	31	111
2016	27	142
2017	25	153
2018	23	158
2019	26	146
2020	25	149

Source: <https://www.transparency.org/en/cpi/2020/index/nzl>

Table 9 shows that Mozambique's corruption perceptions rank fluctuated between the period under review. The country's score of 25 points in 2020 is below the global average of 44 points. (https://www.theglobaleconomy.com/Mozambique/transparency_corruption), indicating that Mozambique faces a serious problem with corruption.

In recent years, Mozambique has made progress in the fight against corruption. Since February 2019, more than 20 politically connected officials were arrested for their role in the debt scandal of 2016 and in August 2019, the country adopted a 27-point plan to fight corruption. (<https://www.globalsecurity.org/military/world/africa/mz-corruption.htm>).

3.8 Conclusion

Mozambique is a country that is richly endowed with natural resources. Agriculture forms the backbone of the economy, while abundant mineral resources, unique tourist attractions and the discovery or large natural gas reserves in the northern parts of the country firmly position Mozambique as an exciting investment destination.

Despite strong economic growth between 2000-2015, growth has not initiated a structural transformation and industrialisation of the economy. Hence, Mozambique is still categorised as a low-income country that remains dependent on the agricultural sector that provides employment for 75 percent of the population that make their living out of subsistence farming.

Mozambique's main trading partners are South Africa, India and China. Given its excellent geographic location and sought after scarce natural resources that are not only demanded by African countries, but also by emerging markets (e.g. China and India), Mozambique has undoubted potential to grow its economy, especially in the oil and gas sectors.

Despite its development potential, the country faces several institutional and regulatory barriers that impact negatively on the Ease of Doing Business in the country. According to the 2020 findings of the Doing Business study, Mozambique ranks 138 among 190 economies. The poor ranking obtained for most indicators implies that the regulatory environment in the country is not conducive to business operations and does not favour the establishment of new businesses. Moving forward, it is imperative that government implements regulatory and institutional reforms to improve the business environment. The success of most public-sector reforms however, will only be visible over the medium to long term.

4. ROAD TRANSPORT

4.1 Introduction

This chapter provides a high-level overview of the status of the road transport sector in Mozambique. Previous chapters of this report alluded to the fact that Mozambique's main economic activity is agriculture, which relies on efficient road transport networks to access national and regional markets. Since Mozambique is a large country, road transport plays an indispensable role in the development of the country. Key discussion topics is set out in bullet format below:

- Discussion of the Mozambique road network, with attention paid to the classification of roads, distance and travel time matrix and road safety and security;
- Overview of regional road transport corridors that traverse Mozambique;
- Analysis of cross-border road transport movements between Mozambique and South Africa;
- Analysis of cross-border charges that are levied on cross-border operators who transport goods through Mozambique;
- High-level overview of border posts (e.g. border operating times and procedures) that provide access between South Africa and Mozambique; and
- Review of the institutional and regulatory environment(s);

4.2 Mozambique Road network

Mozambique's transport sector reflects the country's historical development in relation to its neighbours. The national road, railway, and port sectors were originally developed by the government and chartered companies to service the trade and transport needs of Mozambique's neighbours, notably South Africa, Zimbabwe and Malawi. Because of this, the country has well-developed east-to-west road networks that connects its seaports with the key industrial and mining regions of these countries. By contrast, there are only a few hard-surfaced roads running north-to south. (<https://www.britannica.com/place/Mozambique/Transportation-and-telecommunications>).

National roads in the centre and north of the country have been vulnerable to armed attacks by Guerilla groups (in central Mozambique) and Islamic insurgents (in the north). The occupation of Mocimboa da Praia town and port in Cabo Delgado Province by violent extremists since August 2020 has blocked the main north-south paved road to Palma district and led to widespread transportation disruption in the northern parts of the province. There is one major road, the EN1, linking the north and south of the country (<https://www.trade.gov/country-commercial-guides/mozambique-transportations> that cover the entire country)

Due to a prolonged civil war that severely disrupted transport infrastructure and systems, Mozambique has one of the least developed road transport infrastructures in the SADC. Except for major arteries (east-to-west road networks) overall road conditions in Mozambique are generally poor, with the greater portion of the road network being underdeveloped and unpaved. Road conditions are a significant bottleneck in developing trade in the region and in utilising the country's port assets to move goods to SADC MS. The road network also requires expansion to keep pace with the high population growth rate.

In recent years, the road network has seen some improvement in investment and rehabilitation and a second-generation road fund has been established. However, overloading and insufficient maintenance and repair remain major problems that undermine the efficiency of road transport operations.

4.2.1 Classification of Roads and Road Conditions

Mozambique's inter-city roads are classified as:

- National (or primary) roads;
- Regional (or secondary) roads; and
- Tertiary roads

National roads are given the prefix "N" or "EN" followed by a one- or two-digit number. The numbers generally increase from the south of the country to the north, while regional roads are given the prefix "R", followed by a three-digit number. The national highway includes, fourteen routes (https://en.wikipedia.org/wiki/Transport_in_Mozambique#Roads_and_highways), named:

- N1 (EN1);
- N2 (EN2);
- N3 (EN3);
- N4 (EN4);
- N5 (EN5);
- N6 (EN6);
- N7 (EN7);
- N8 (EN8);
- N9 (EN9);
- N10 (EN10);
- N11 (EN11);
- N12 (EN 12);
- N13 (EN13); and
- N14 (EN14)

The national transport network primarily connects natural resources, agricultural clusters and land-locked countries to the west to Indian ocean ports in the east (Maputo, Beira and Nacala) through six east-west corridors. Connectivity between the Southern and Northern provinces is low, with the national highway, N1, which extend north to south, providing the only link connecting the six east-west corridors. Disruption, which occurs regularly on the EN1 has a disproportionate impact on regional mobility.

The EN1 remains the only road connected to the country's capital, Maputo, to the north and south. The rest of the country remains largely disconnected, with little to no mode of transport available to the outer regions. (<https://borgenproject.org/infrastructure-in-mozambique/>). An exception is the EN6 that has undergone reconstruction and extension works in recent years. Tolls are levied on the NE6 road that crosses the country from east to west, linking the city of Beira in Sofala province to the Zimbabwean border at Machipanda in Manica province

Updated information pertaining to the road network length is not readily available. According to literature sources at hand, Mozambique’s road network length amounted to less than 33 000 kilometres in 2008. National and secondary roads comprised less than 5, 000 kilometre each, while the tertiary network amounted to 12,700 kilometres. The unclassified road network was estimated at around 6,700 kilometres, while the urban network totalled 3,300 kilometres. (Dominguez-Torres, C & Briceño-Garmendia, C. 2011).

Table 10: Mozambique Road Network

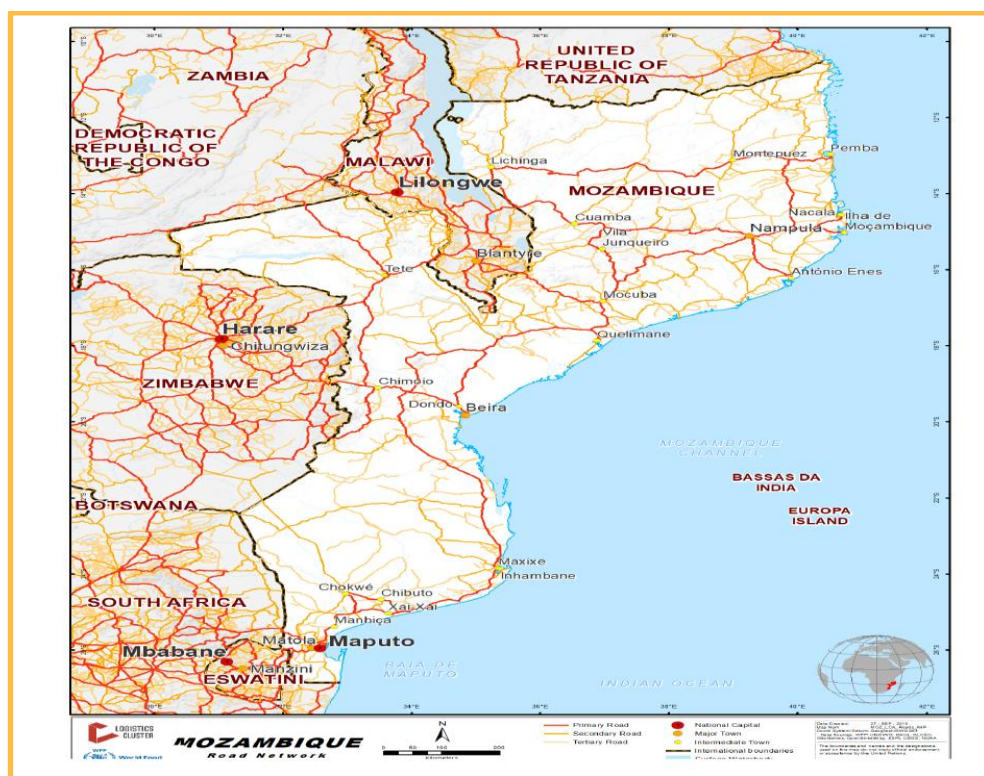
Road Network	Length
Primary	5,000*
Secondary	5,000*
Tertiary	12,700
Unclassified	6,700
Urban	3,300
TOTAL	32 700

*Note: *reflects approximate road length*

Source: Dominguez-Torres, C & Briceño-Garmendia, C. 2011

Figure 16 depicts the location of primary, secondary and tertiary roads in Mozambique graphically.

Figure 16: Mozambique Road Network



Source: <https://dlca.logcluster.org/display/public/DLCA/2.3+Mozambique+Road+Assessment>

Except for a few major arteries, overall road conditions in Mozambique are generally poor and this inhibits access to domestic and regional markets. Rural accessibility is particularly challenging. Only 33% of the rural population lives within 2 kilometres of an all-season road. This statistic is challenging in a country where 70 percent of its population lives in rural areas. The rural network is in a poor condition and connectivity to road networks is severely disrupted during severe weather conditions (flooding) when some communities are isolated and access to markets and essential services is hindered. (African Development Bank Group. 2018:19)

4.2.2 Road Density

Road density refers to the ratio of the length of the country's total road network to the country's land area. Although roads are the main mode of transport in Mozambique, accounting for almost fifty percent of freight traffic and 98 percent of passenger traffic, road density in the country is low.

The country's road network totals around 32 000 kilometres (2008 figures) and only 24% of the classified road network is paved. According to statistics published by Knoema, road density stood at 3.8 kilometre per 100 square kilometres in 2009. (<https://knoema.com/atlas/Mozambique/Road-density>).

Connectivity among urban and economic clusters are limited – transport corridors link urban and economic centres to ports, but not to each other. In contrast to the north-south national road network, the country has very limited connection among the several parallel west-east corridors. Developing integrated road transport networks would require enormous investments over the long term. (Dominguez-Torres, C & Briceño-Garmendia, C. 2011: 12).

4.2.3 Bridges

Table 11 provides information on the location of major bridges in Mozambique.

Table 11: Major Bridges – Mozambique

Name	Description	Type	Location	Location / Province
Maputo-Katembe bridge	Connects Maputo on the northern bank, with its suburb Katembe on the southern bank. This bridge is the longest suspension bridge in Africa, with a main span of 680 meters and stretches over a distance of 3 kilometres	Suspension	Maputo	Maputo province
Samora Machel bridge	Crosses the Zambezi river and links the capital of Tete province, to Moatize, while also connecting to Zimbabwe and Malawi	Suspension	Tete	Tete province
Armando Emilio Guebuza bridge	Crosses the Zambezi river to connect to the provinces of Sofala and Zambezia	Box girder	Caia - Chimuara	Sofala province Zambezia province
Kassuende bridge	Crosses the Zambezi river, providing access to Malawi and Zimbabwe	Box girder	Tete	Tete province
Donna Ana bridge	Spans the lower Zambezi river between the towns of Vila de Sena and Mutarara, thereby linking the two halves of the country	Truss / steel	Mutara – Vila de Sena	Tete province Sofala province

Source: https://en.wikipedia.org/wiki/List_of_bridges_in_Mozambique

The Maputo / Katembe bridge, the longest suspension bridge in Africa, holds strategic importance to cross-border trade and travel as travel time between Maputo and Kozi Bay (on the KwaZulu Natal border) in South Africa has reduced from six hours to around 90 minutes since the opening of the bridge in 2018. The new suspension bridge is also expected to stimulate the economies of South Africa and Mozambique with increases in trade flows (imports and exports) between both countries in coming years. (Njoli, K. 2018).

4.2.4 Distance matrix

Mozambique is a large country with an extended coastline. The road network that connects provincial capitals is in fair condition but can be plagued with potholes and other obstacles. Table 12 outlines the distances between Mozambique cities.

Table 12: Distance between Mozambique cities (km)

Key Centre's	Maputo	Beira	Nampula	Chimoio	Nacala	Quelimane	Tete	Xai-Xai
Maputo	-	1213	2033	1139	2271	1606	1532	2631
Beira	1213	-	961	201	1154	489	586	1366
Nampula	2033	961	-	1059	195	549	1049	407
Chimoio	1139	201	1059	-	1252	587	386	1572
Nacala	2271	1154	195	1252	-	742	1362	425
Quelimane	1606	489	549	587	742	-	972	1104
Tete	1532	586	1049	386	1362	972	-	1605
Xai-Xai	525	1003	1820	930	2015	1350	1315	4422
Pemba	2631	1366	407	1572	425	1104	1605	-
Lichinga	2454	1138	797	938	990	814	554	1310
Cuamba	2042	930	497	937	692	515	531	694

Source: <https://mileagemath.com/distance/mozambique>

Table 12 clearly illustrates the long distances between key centres in Mozambique. Travel by road from Maputo to Nampula, Nacala and Xai-Xai, exceed 2000 kilometres. Apart from long distances by road, total travel time is compromised by other factors (e.g. potholes, stray animals) that are discussed in greater detail below.

4.2.5 Travel time matrix

Further to long distances between key centres, table 13 depicts lengthy travel time between the capital (Maputo) and major towns, as well as between key centres in Mozambique.

Table 13: Travel Time from Maputo to Major Cities and Towns

Key Centre's	Maputo	Beira	Nampula	Chimoio	Nacala	Quelimane	Tete	Xai-Xai
Maputo		17h30m	30 h	16h20m	32 h	24h	21h30m	3h40m
Beira	17h30m	14 h	14 h	3h30m	16h20m	8h30m	8h40m	13h50m
Nampula	30 h	14 h		15h10m	2h30m	6h30m	16 h	26 h
Chimoio	16h20m	3h30m	15h10m		17h30m	9h40m	5h20m	12h40m
Nacala	32 h	16h20m	2h30m	17h30m		8h50m	18h20m	28 h
Quelimane	24 h	8h30m	6h30	9h40m	8h50		10h30m	20h40m
Tete	21h30m	8h40m	16h00m	5h20m	18h20m	10h30m		17h50m
Xai-Xai	3h40m	13h50m	3h30m	12h40m	28h00m	20h40m	17h50m	
Pemba	35h00m	19h25m	5h30m	20h30m	5h30m	11h50m	21h10m	31 h
Lichinga	38 h	22 h	11h20m	31h10m	13h30m	14h30m	24 h	34 h
Lichinga (via Malawi)	32 h	19 h		15h50m			11 h	28 h

Source: <https://dlca.logcluster.org/display/public/DLCA/2.3+Mozambique+Road+Assessment>

Lengthy travel times between key centres in Mozambique increase the cost of doing business and impede intra-regional trade and travel. The main causes of lengthy travel times include poor quality of road networks and poorly maintained road vehicles that compromise road safety and security.

4.2.6 Road safety and security

Safety is a big issue on Mozambique roads. Serious traffic accidents occur frequently throughout the country. The main cause(s) of road accidents can be attributed to sub-standard road conditions (e.g. potholes), inadequate maintenance of vehicles (e.g. no headlights or rear lights), poor driving conditions and safety standards, livestock grazing on roadsides and pedestrians. Accidents involving pedestrians are common. Foot-travelers often walk in the road and are not always visible to motorists, especially at night. Low-lying areas around major rivers flood regularly during the rainy season (November - April) that make many roads impassable and which pose a threat to road safety.

The EN4 toll road between Maputo and South Africa is well-maintained. Travel outside Maputo often requires a four-wheel drive vehicle, which creates an additional security risk since these vehicles are high-theft items. The main north-south road network is passable north of Maputo until the city of Caia (Sofala province), where vehicle passengers must disembark and cross the Zambezi river by ferryboat. On the north side of the river, the road continues to the northern provinces.

Since Frelimo's victory in the October 2019 general election, there have been several armed attacks on civilian vehicles and security forces. Most attacks were orchestrated by a splinter group, known as Renamo Military Junta. Rebellious attacks re-surfaced during the early months of 2021, with conflict mostly confined to the north-eastern corner of Cabo Delgado. Reported incidents exist of armed attacks on vehicles on the EN1 road between Inchope and the town of Gorongosa and the EN6 road between Tica and Inchope, in Sofala province. (Cornwell, S. 2021).

Drivers should obey police signals to stop at checkpoints, which are common throughout Mozambique. Foreigners visiting Mozambique for more than 90 days are required to have an International Driver's License, or to obtain a Mozambican driver's license. Cross-border road transport operators traversing Mozambique should also obtain third-party insurance cover, which is compulsory, and which can be purchased at most border posts.

4.2.7 Weighbridges and axle load limits

4.2.7.1 Weighbridges

While Mozambique does not have a formal vehicle load management strategy, they actively enforce vehicle load limits in accordance with a procedures manual. There are 16 weighbridges in Mozambique, of which three are in Maputo. Three of the 16 weighbridges are operated by a private company. Weighbridges are equipped with electronic weighing systems, although they are not interconnected or connected to the vehicle or driver registers. (TTTFP. 2017: 3)

The systems installed at the weighbridges are from the South African Council of Scientific and Industrial Research (CSIR), as well as from European countries. The operator is prosecuted for overload offences in Mozambique. Overload offences are not yet decriminalised. Mozambique regulates mass limits only in relation to vehicles with a Gross Vehicle Mass (GVM) exceeding 5000 kilograms. Passenger vehicles, with exception of bus-trains from South Africa are not weighed.

4.2.7.2 Axle Load Limits

Table 14 depicts axle load limits that apply in Mozambique.

Table 14: Axle Load Limits

Axle Load Limits in Mozambique	
Truck with 2 axles	16 tons
Truck with 3 axles	22 tons
Trucks with 4 axles	22 tons
Semi-trailer with 3 axles	26 tons
Semi-trailer with 4 axles	32 tons
Semi-trailer with 5 axles	38 tons
Semi-trailer with 6 axles	38 tons
Truck & drawbar trailer with 4 axles	32 tons
Truck & drawbar trailer with 5 axles	38 tons
Truck & drawbar trailer with 6 axles	38 tons
Truck & drawbar trailer with 7 axles	38 tons

Source: <https://dlca.logcluster.org/display/public/DLCA/2.3+Mozambique+Road+Assessment>

4.2.8 Fuel prices

Table 15 and 16 illustrates the price of gasoline (refined petroleum) and diesel in Mozambique for 17 January 2022.

Table 15: Gasoline Price in Mozambique

Date	Gasoline Price – Different currencies	Litre	US Gallon
17 Jan 2022	MZN	62,500	261,345
	USD	1,081	4,094
	EUR	0,948	3.589

Source: https://www.globalpetrolprices.com/gasoline_prices/ (information accessed on 25 January 2022)

Table 15 shows that there are substantial differences in prices among countries. Generally, richer countries have higher prices while poorer countries and the countries that produce and export oil have significantly lower prices. One notable exception is the United States which is an economically advanced country but has low gas prices. The differences in prices across countries are due to the various taxes and subsidies for gasoline. The value for Mozambique on 17 January 2022 was 62,5 Mozambique Metical, that equals approximately R15,04.

Table 16 reflects the price of diesel in Mozambique over the same period.

Table 16: Diesel Price in Mozambique

Date	Gasoline Price – Different currencies	Litre	Gallon
17 Jan 2022	MZN	61,710	233,598
	USD	0,967	3,659
	EUR	0,847	3,208

Source: https://www.globalpetrolprices.com/diesel_prices/ (information accessed on 25 January 2022)

Table 16 reflects that the average price of diesel for Mozambique was 61,71 Mozambique Metical per litre on 17 January 2022. This amounts to around R17,95. For comparison, the average price of diesel in the world is 72,33 Mozambique Metical per litre. This shows that diesel in Mozambique is cheaper than the global price.

4.3 Mozambique’s Global Performance

This section provides a high-level overview of Mozambique’s performance in the global arena. Input data was extracted from the Global Competitiveness Index report, published by the World Economic Forum (WEF) in 2019 that analysed the performance of 141 countries.

The Global Competitiveness Index report compares the performance of prioritised countries (141 during the 2019 study) against the Global Competitiveness Index. This index is used as an annual yardstick by policy-makers and assist them in identifying relevant policies and practices. Country progress is assessed according to performance in the following twelve areas / pillars:

- 1) Institutions;
- 2) Infrastructure;
- 3) ICT adoption;
- 4) Macroeconomic stability;
- 5) Health;
- 6) Skills;
- 7) Product market;
- 8) Labour market;
- 9) Financial system;
- 10) Market size;
- 11) Business dynamism; and
- 12) Innovation capability.

Table 17: Performance Overview: Mozambique

	Pillar	Score	Rank	Best Performer
1	<i>Institutions</i>	39,3	133	Finland
2	<i>Infrastructure</i>	35,2	133	Singapore
3	<i>ICT adoption</i>	23,1	135	Korea Republic
4	<i>Macro-economic stability</i>	42,3	136	Multiple (33)
5	<i>Health</i>	33,1	140	Multiple (4)
6	<i>Skills</i>	30,3	139	Switzerland
7	<i>Product market</i>	46,7	121	Hong Kong
8	<i>Labour market</i>	43,2	138	Singapore
9	<i>Financial system</i>	48,4	119	Hong Kong
10	<i>Market size</i>	41,1	105	China
11	<i>Business dynamism</i>	46,8	125	United States
12	<i>Innovation capability</i>	27,4	125	Germany
	<i>Mozambique's overall score rank</i>	38	137	

Source: World Economic Forum. 2019, as adapted

Note: Scores are on a 0 to 100 scale where 100 represents the optimal situation.

Table 17 reveals Mozambique's overall performance against other benchmarking candidates for 2019. Although not shown in table 17, transport infrastructure consists of eight (8) dimensions of which two relate to road transport; i.e. road connectivity and quality of road infrastructure. Mozambique's overall score for road connectivity is 68, placing the country in the 90th position, while the score for quality of road infrastructure is 23,4.

Regarding the other indicators, Mozambique performs poorly against the other benchmarking candidates. Mozambique obtained the worse scores in the areas of health, skills and labour market where it ranked in the bottom 5 countries in terms of performance. Mozambique's overall score is 38 out of 100, positioning the country in the 137th position out of 141 benchmarking candidates.

4.5 Road Transport Corridors linking Mozambique

Eighteen transport corridors bind the SADC region together. These corridors are all strategic since they facilitate trade and transport movements between countries in the region. In terms of transport, the areas around Beira, Zambezi valley, Nacala and Limpopo (which are all served by rail lines) perceive their economic potential to be powered by complementarities with the economies of land-locked countries (Zimbabwe, Zambia and Malawi) which closest and natural ports are Beira and Maputo, and to a lesser extent, Nacala. (AICD. 2011: 5)

Mozambique is divided into three development corridors that link the country's ports to the interior and neighbouring countries. All three corridors include multiple transport sub-sectors and industrial developments and are known as:

➤ **Maputo Development Corridor (also referred to as the Southern Corridor)**

The Maputo development corridor links the port of Maputo to the north-eastern part of South Africa, Swaziland and Zimbabwe.

➤ **Beira Corridor (also known as the Central Corridor)**

The Beira Corridor extends from the port of Beira to Zimbabwe, and marginally to Malawi and Zambia.

➤ **Nacala Corridor (also known as the Northern Corridor)**

The Nacala Corridor extends from the port of Nacala to Malawi and Zambia.

Although the above corridors are multi-modal transport corridors that attracted private sector investors for their management and expansion over the years, they do not connect to each other. Each corridor links to one of Mozambique's major seaports and run parallel, without any connections between them.

The ports of Maputo and Beira (southern and central corridor) have railway lines that depart from the ports from where it connects with a network of primary and secondary roads along the Southern and Central corridors, extending to Malawi, Zimbabwe and South Africa. It is through the existing rail network that MS access Mozambique seaports to export products, particularly raw materials.

As far as road infrastructure is concerned, the level of vertical contiguity is low. Only one north-to-south transport network (the EN 1 or national highway 1) connects the capital of Maputo to central and northern Mozambique. A 545- kilometre road connects Maputo with the Gauteng province in South Africa. This road network, which extends along the Southern corridor (also known as the Maputo Development Corridor) can be covered in five to six hours, while the non-stop road network from Maputo to the northern port of Pemba takes around 26 hours. (Scholvin, s & Plagemann, J. 2014: 8).

The Maputo Development Corridor is regarded by African policy makers one of the most successful stories in Africa in terms of improved cross-country trading. At the western end of the corridor are Johannesburg and Pretoria, and moving east toward Mozambique, the corridor passes through the areas of aluminium production close to Map.

Although much of the rail infrastructure is in a poor condition, several rehabilitation and development projects have been approved and are currently being implemented to enable the exportation of coal by rail. These project, which also entail increasing the capacity of terminals and seaports (Maputo, Beira and Nacala) are executed through partnership with traditional donors or private partners.

Further to the above-mentioned regional corridors, Mozambique is also part of one major Trans-African Highway (TAH) corridor that runs from East to West, linking Beira in Mozambique, with Lobito in Angola. This corridor is of strategic importance because existing transport infrastructure is developed transversally, west-east and connect the mining and agricultural clusters in Mozambique and neighbouring countries to exit ports.

4.6 Cross-border road transport

4.6.1 Requirements for Undertaking Cross-Border Road Transportation

There are certain requirements that South African passenger and freight operators must comply with when conducting business for reward between South Africa and Mozambique. These requirements include:

- A valid passport of the driver (no visa is required for South African residents);
- A valid driver's license – international and South African driver licenses are recognised;
- A certified copy of the vehicle registration papers in the name of the driver, and if the vehicle is not owned by the driver, a letter of authorisation from the registered owner;
- A letter of authority from the bank, if the vehicle is still being financed (must include the dates of travel), together with the vehicle license papers;
- A compulsory temporary import permit for the vehicle (DA341), which are available at the border post;
- A compulsory third-party insurance and road tax for foreign registered vehicles;
- Comprehensive vehicle insurance that is valid in Mozambique and that covers cross-border travel;
- Immigration fees;
- Declaration form for the vehicle;
- If towing a trailer, two towing stickers – yellow warning triangle on a blue background – one in the front of the vehicle (on the bumper) and one on the rear of the trailer; and
- A “ZA” sticker.

4.6.2 Information on Border Posts

South African cross-border road transport operators can enter Mozambique through 4 border posts. Three inland borders are located along the northern segment, while one border is in the southern segment. Table 18 displays more information on Mozambique border posts.

Table 18: Mozambique Border Posts and Operating Hours

Mozambique	South Africa	Operating Hours	Distance
Pafuri	Pafuri	08:00 – 16:00	532 km from Johannesburg
Giriyondo	Giriyondo	08:00 – 16:00	595 km from Johannesburg
		Only open for 4x4 vehicles, not open to commercial traffic	
Ressano Garcia	Lebombo	06:00 – 24:00 (passengers) 06:00 – 22:00 – commercial	461 km from Johannesburg
Ponta do Quro	Kosi Bay	08:00 – 17:00	630 km from Johannesburg 460 km from Durban

Source: C-BRTA. *Statistics on Trade Volumes and Value flowing through South African Commercial Border Posts and Destination Countries. 2021*

The main border crossing is at the Ressano Garcia/ Lebombo border post. Given its strategic importance (in terms of location and traffic flows), this border has been prioritised at regional level as a One Stop Border Post (OSBP) candidate. To date, OSBP facilities have been build. Outstanding action(s) include the signage of legal frameworks by the governments of Mozambique and South Africa, where-after the Ressano Garcia/Lebombo border post will be transformed into a functioning OSBP.

4.6.3 Cross-Border Charges

The Maputo corridor stretches over a distance of five hundred and ninety kilometres from Johannesburg/ Tshwane in South Africa to Maputo in Mozambique. The main road on the South African side is the N4, a two- to four lane national toll road. In Mozambique, the N4 becomes the EN4 and leads to Maputo. The EN4 is connected to the port of Maputo by a special access road. The entire network is built to carry 56-ton trucks and are used by commercial cross-border road transport operators for the conveyance of heavy commodities, destined for international markets from the main Mozambique seaports

There are six Trans Africa Concessions (TRAC) N4 toll road plazas between Tshwane and Maputo. Four are on the South African side, while two are on the Mozambican side. The tariffs for tolls are presented in table 19 below. Information was extracted from the TRAC website (<https://tracn4.co.za/#/liveroute>) on 03 March 2022.

Table 19: 2021/22 Tol Tariffs

South African Tolls in Rand						
Class	Diamond Hills	Middelburg	Machadodorp	Nkomazi	Moamba	Maputo
Class 1	42	70	104	79	210	40
Class 2	58	151	289	160	530	130
Class 3	110	229	421	232	1150	375
Class 4	182	301	601	334	1600	550

Source: <https://tracn4.co.za/#/plazafees>

4.6.4 Cross-Border Road Transport Statistics

Mozambique is a popular destination for South African cross-border commuters. Many commuters are Mozambique citizens that work in South Africa and return home during school holidays and long weekends. Given the strong economic ties between South Africa and Mozambique, the demand for cross-border travel between the two countries has increased steadily in recent years. Unfortunately, the Covid-19 pandemic has had a devastating effect on cross-border commute between the two countries as illustrated in the tables below.

Table 20: Cross-border taxi permits issued between South Africa and Mozambique

Country	2019/20	20120/21	% Movement
Mozambique	9 172	3 365	(63,3)

Source: Table created for study

Table 21: Cross-border bus permits issued between South Africa and Mozambique

Country	2019/20	20120/21	% Movement
Mozambique	257	82	(68,1)

Source: Table created for study

Table 22: Cross-border freight permits issued between South Africa and Mozambique

Country	2019/20	20120/21	% Movement
Mozambique	9 514	8 166	(14,1)

Source: Table created for study

The number of cross-border taxi and bus permits decreased drastically between the period under review as evident in a 63,3% and 68,1% decline for in cross-border taxi and bus permits issued by the C-BRTA. The number of cross-border freight transport permits declined marginally (by 14,1%) from 9 514 permits during FY 2019/20 to 8 166 permits in 2020/21.

The drop in the number of cross-border permits issued clearly shows that the effects of the Covid-19 pandemic has not spared the SADC region. Countries in the region suffered from various measures (imposed at regional and national levels) that aimed to contain the spread of the virus. These restrictions did not only inhibit trade facilitation, but also passenger movements in the region.

4.7 Road Transport Sector Institutional / Regulatory Environment

4.7.1 Institutional Arrangements

The following bodies, collectively manage all classified roads in Mozambique:

- National Road Administration (ANE, from the Portuguese Administração Nacional de Estradas) and
- Road Fund (Fundo de Estradas, RF).

The ANE is responsible for the execution of works, including procurement, safeguards and engineering of the primary network whereas provincial governments manage secondary and tertiary road networks with support from the ANE provincial delegations. The RF is primarily responsible for

strategy and planning, monitoring and financial management in the sector. Districts manage their portion of unclassified roads.

Over the years, ANE has stepped up its efforts to improve the nation's road infrastructure. This autonomous public company was responsible for the development of the N4 Toll road that created a Southern Corridor that connects Mozambique with South Africa. Traffic over the N4 corridor grew steadily over the years, and today the N4 corridor (also known as the Maputo Development Corridor) is widely acknowledged as one of the best performing trade development corridors in the SADC.

4.7.2 Regulatory Frameworks

Cross-border road transport regulation in the SADC region is currently conducted through bilateral and multilateral cross-border road transport agreements concluded by and between the different SADC MS. Each country has its own regulatory mechanism that determines market access and operating requirements that must be adhered to by cross-border road transport operators.

To date, Mozambique has entered into bilateral road transport agreements with several countries in the region, including South Africa. The purpose of these agreements is to promote and facilitate cross-border road freight and passenger movements, simplify existing administrative requirements and ensure compliance to regulations.

4.8 Conclusion

Overall, Mozambique's transport infrastructure and road transport links remain in disarray three decades after the civil war ended. The country has one of the least developed road transport infrastructures in the SADC. Except for major arteries (east-to-west road networks) overall road conditions in Mozambique are generally poor, with the greater portion of the road network being underdeveloped and unpaved. Only 24 percent of the classified road network is paved while national roads, especially those in the central and northern parts of the country remain vulnerable to armed attacks and Islamic insurgents. Low

The condition of transport infrastructure affects inter and intra-regional trade. Due to low road densities and the poor condition of road networks, especially regional and rural roads, the potential for agriculture is not fully exploited. Most of the land in the country remains largely untapped. Further to inadequate transport infrastructure, war, disease and natural disasters (e.g. regular floods and droughts) contribute to low economic growth. Over half of the population remains below the poverty line and relies on subsistence agriculture and Mozambique remains a low-income country.

According to the findings of the 2019 Global Competitiveness Report, Mozambique's combined score for all 12 pillars places the country in 137th position out of 141 countries assessed. As far as the quality of infrastructure is concerned, Mozambique ranks in 133th position, which clearly shows that transport infrastructure does not support intra-regional and global trade and development.

The discovery of large natural gas reserves in the Rovuma Basin has positioned Mozambique as an exciting investment opportunity in Africa. Although natural resource discoveries are attracting major investment, it also demands a qualified (skilled) workforce that the country does not have. Moving forward, it is imperative that government implement reforms in several areas (e.g. institutional, regulatory and transport) to enable the country to fully exploit its natural resources, bearing in mind that the development of the gas industry can change the fortunes of the entire population. The next chapter sheds for more light on the state of rail transport in Mozambique.

5. RAIL TRANSPORT

5.1 Introduction

In terms of geography, Mozambique enjoys a privileged and strategic location as the natural exit to most of its landlocked neighbours. As far as the rail sector is concerned, rail lines were developed by government and chartered companies primarily to service the trade and transport needs of Mozambique's Western and Southern neighbours, namely South Africa, Zimbabwe, and Malawi. Because of this, the country has well-developed east-to-west rail and road systems that link its ports with the key industrial and mining regions of these countries.

The rail network in Mozambique comprises of 2 east-west routes running along the 3-key development corridor from Zimbabwe to the port of Beira and from Malawi to the port of Nacala. By contrast to the well-developed east-to-west road and rail networks, there are only a few hard-surfaced roads and virtually no rail lines oriented north-south, connecting South Africa to the port of Maputo.

The railways in Mozambique were severely targeted by acts of war after the independence of Mozambique in 1975, first by Rhodesian forces prior to Zimbabwe's independence in 1980, and then during the civil war in Mozambique which lasted until the nineties. These acts of war inflicted major damages on railway lines and bridges, and on locomotives and wagons that consequently disrupted traffic. Extensive infrastructure rehabilitation and locomotive and rolling stock renewal programmes undertaken across all three networks, combined with some strategic management concessions, have brought railways back to adequate operational conditions.

Chapter 5 provides a bird's eye view of the rail transport sector in Mozambique, with specific emphasis place on the following key areas:

- Railway networks and railway gauge;
- Rail transport services;
- Rail transport developments;
- Cross-border rail services; and
- Rail transport constraints and opportunities.

5.2 Railway Networks and Railway Gauge

5.2.1 Strategic Railway Lines

The rail system developed over more than a century from three different ports at the Indian Ocean that serve as terminals for separate lines to land-locked countries. Mozambique's railway network stretches over 3,130 kilometres and comprises of *three disconnected rail networks* located in the Northern, Central and Southern parts of the country. Each rail line has its own development corridor.

The three rail networks / corridors in Mozambique are known as the:

- Nacala corridor;
- Beira corridor; and
- Maputo corridor.

5.2.1.1 Nacala Corridor

The Nacala transport corridor was initially developed to serve the Northern Mozambique agricultural sector with a railway link from Lichinga to the port of Nacala, where the rail line connects with Malawi's Central East African Railways (CEAR). Nacala is the deepest natural port on the East coast of Africa.

The Nacala transport corridor comprises of the:

- Nacala port;
- Road network in northern Mozambique; and
- Nacala railroad that connects the Nacala port to CEAR.

To improve transport infrastructure, the governments of Mozambique and Malawi decided to concession both railway systems and the port of Nacala to a private sector operator. Currently the railway system is operated by *Northern Development Corridor*. Vale, an international mining company, brought a stake in the operator in 2010. Since then a new rail link, stretching from Moatize (where Vale has coal mines) in an easterly direction to the Nkaya Junction, has been constructed where it connects to the existing rail line to the port of Nacala. This development also includes the building of a coal export terminal and a coal storage yard at the port of Nacala.

5.2.1.2 Beira Corridor

The Beira corridor comprises of the:

- Port of Beira;
- Machipanda rail line that stretches from Beira to Harare in Zimbabwe; and
- Sena Line connecting the Beira port with the coal fields of Moatize.

The Machipanda rail line is crucial for transporting cotton from Malawi and agricultural and mineral products from Zimbabwe. The rehabilitation of the Sena line increased capacity over this line and resulted in higher volumes (e.g. coal and general cargo) transported over this line. The entire corridor was given in concession to a consortium formed by Rail India Technical and Economic Services (RITES) Ltd. and IRCON International in December 2004.

5.2.1.3 Maputo Corridor

The Maputo Development Corridor is widely acknowledged as one of the most successful Spatial Development Initiatives (SDIs) in Africa. This corridor comprises of:

- Port of Maputo;
- Ressano Garcia rail line connecting Maputo to South Africa;
- Limpopo line running from Maputo Port to Zimbabwe;
- Goba line connecting Maputo to Swazi Rail.

5.2.2 Railway Gauge

Most railways in the SADC run on the Cape gauge, according to which the spacing of the rails on the railway track is 1,067 mm. The case is no different for Mozambique where all main railway lines

(Nacala, Beira and Maputo) are Cape gauge and distributed along the three development corridors, each with 1,067 mm gauge that is compatible with rail system of neighbouring countries. As already mentioned, these railway lines do not connect with each other.

Further to the three primary networks, there is another rail line, the Gaza Railway that operates in southern Mozambique from Xai-Xai to Chocomo and Mauela. Since this railway is narrow gauge (762mm), it cannot connect to the other main railway lines. (https://en.wikipedia.org/wiki/Gaza_Railway).

5.3 Rail Transport Services

The railway system was designed mainly for goods transportation. For this reason, there are little passenger rail services in the country. Although there is no direct rail connection between the three railway systems inside Mozambique territory, connections are available via neighbouring countries.

Portos e Caminhos de Ferro de Moçambique (abbreviated CFM in English) is the parastatal authority that oversees the railway system of Mozambique and its connected ports. The management of railways has been largely outsourced.

5.3.1 Rail Freight Services

Caminos de Ferro de Moçambique (CFM), a public holding, is responsible for the country's ports and railway network. CFM took over operation of the 3 development corridors after the Ressano Garcia Railway concession was terminated in 2006. In recent years, CFM has opened its doors to private investment (in the form of concessions) to attract bigger investments in infrastructure and to widen its investors base.

5.3.1.1 Southern Network

Table 23 depicts the rail lines on the Southern network. These lines are managed by the CFM.

Table 23: Rail Freight Services on the Southern Line

Name	Destination	Distance	Transit time
Goba line	Swaziland border	71 km	Maputo – Goba = 3 hours
Limpopo line	Zimbabwe border	522 km	Maputo – Chicualacuala = 13 hours
Ressano Garcia line	South Africa border	88km	Maputo – Ressano Garcia = 4 hours

Source: <https://dlca.logcluster.org/display/public/DLCA/2.4+Mozambique+Railway+Assessment>

The above table reveals that the transit time to the borders of neighbouring countries are relatively long. The longest journey is between Maputo and Chicualacuala in Zimbabwe which takes around 13 hours to cover a journey of 522 kilometres. On the Ressano Garcia line a partial concession is in place with Transnet for the transportation of iron ore.

a) **New Maputo Rail Freight Service to Zimbabwe**

In July 2021, Unitrans Africa, in partnership with the National Railways in Zimbabwe (NRZ), CFM and Traxtion launched a new dedicated rail freight service that links Maputo port with three major Zimbabwean trade hubs. Traxtion is providing Stadler Afro4000 diesel locomotives for the train than runs from the Maputo port to hubs in Harare, Bulawayo and Gweru.

The aim of the new rail service is to offer an enhanced connection for importers and exporters to use Maputo’s multi-purpose deep-water port to connect customers with global trade partners and vice-versa. Further to promoting new trade opportunities for clients in Zimbabwe and Maputo, the new dedicated rail service seeks to reduce transit times, cut costs and offer a more reliable service. (<https://www.railjournal.com/africa/new-maputo-port-freight-service-to-zimbabwe/>).

5.3.1.2 Central Network

The main lines on the Central network is managed by CFM. Table 24 depicts rail freight services on the central line.

Table 24: Rail Freight Services on the Centre Line

Name	Destination	Distance	Transit time
Machipanda line	Zimbabwe border	318 km	Beira – Machipanda = 11 hours
Sena line	Malawi border Moatize	335 km	Dondo to Malawi border (Nsanje) – transit time not available Dondo – Moatize (Tete province) transit time not available

Source: <https://dlca.logcluster.org/display/public/DLCA/2.4+Mozambique+Railway+Assessment>

As indicated in the table above, the transit time to the Zimbabwe border is long (11 hours) to cover a distance of 318 kilometres.

5.3.1.3 Northern Network

Table 25 depicts the rail lines on the Northern network.

Table 25: Rail Freight Services on the Northern Line

Name	Destination	Distance	Transit time
Nacala line	Malawi border, via Cuamba	610 km	Nacala to Malawi border: Not available
Branch line: Cuamba	Lichinga	262 km	Cuamba to Lichinga: Not available

Source: <https://dlca.logcluster.org/display/public/DLCA/2.4+Mozambique+Railway+Assessment>

The information presented in table 25 shows that the Nacal line stretches over around 600 kilometres to the Malawi border. A branch line run from Cuamba to Lichinga.

5.3.2 Rail Passenger Services

Rail passenger services are limited to sub-urban areas with very limited long-distance journeys taking place. Table 26 illustrates long-distance rail passenger services in Mozambique.

Table 26: Rail Passenger Services in Mozambique

Rail Link	Journey Time
<i>Nacala to Nampula</i>	8 hours
<i>Nampula to Cuamba</i>	15 hours
<i>Nampula to Lichinga</i>	20 hours
<i>Beira to Chimoio</i>	7 hours

Source: <https://dlca.logcluster.org/display/public/DLCA/2.4+Mozambique+Railway+Assessment>

5.3.4 Rail transport Developments

Government reforms support the development of the transport sector to stimulate growth and development in Mozambique. The discussion below provides information on existing rail transport initiatives in Mozambique.

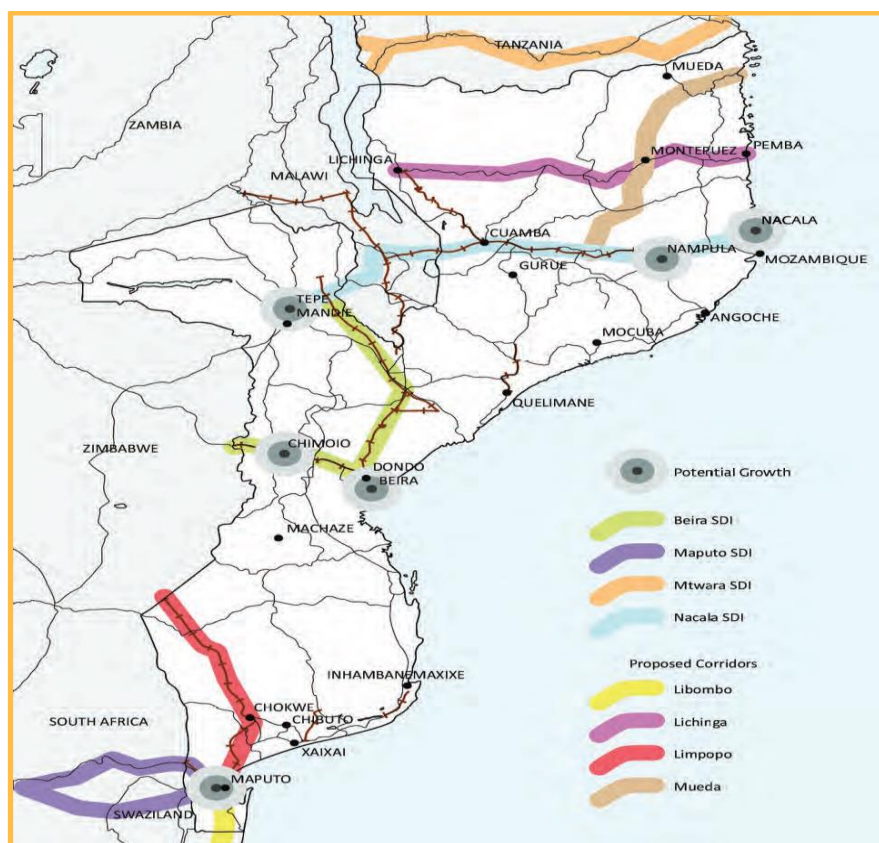
5.3.4.1 Hard Infrastructure Reforms: Corridor Development

Previous discussions indicated that Mozambique's three main transport corridors - Maputo, Beira, and Nacala - can connect with rail systems of neighbouring countries, but not with each other. The Mozambique government's five-year plan (2020–24) has the goal of developing transport as a means of building social cohesion in the country. In this regard, Mozambique's development strategy proposes the development/ expansion of the following multi-modal corridors:

- *Libombo* – following the new road and bridge connecting Maputo to the Ponta do Ouro border with South Africa;
- *Limpopo* - to connect Maputo with Harare in Zimbabwe;
- *Pemba-Lichinga*; and
- *Mueda* to leverage opportunities in Cabo Delgado province.

Another corridor, Macuze (located north of Quelimane) has also been prioritised to support the development of the pulp and paper industry. This initiative has yet to be operationalised. Figure 17 depicts corridor expansion in Mozambique.

Figure 17: Corridor Expansion - Mozambique



Source: World Bank Group. June 2021

5.3.4.2 Soft Infrastructure Reforms

Further to the direct costs associated with operating cross-border transport operations, there are many indirect costs associated with the use of regional transport corridors. According to information sources at hand, the competitiveness of transport and logistics in Mozambique is being influenced by several factors, including outdated policy framework(s); political economy factors (e.g. concessions awarded without competitive tenders) infrastructure gaps; inadequate trade facilitation; and limited market size.

To respond to the endemic problems in the sector, the findings of a Country Private Sector Diagnostic (CPSD) focusing on creating markets in Mozambique (World Bank 2021:25) recommends that several “soft reforms” be implemented to improve the efficiency of road and rail transport operations in Mozambique. Of specific importance are the following:

- Updating of transport policy and strategy to identify priority investments under a limited resource perspective;
- Improve concession regulations, including criteria for award of concessions;
- Improve access to finance, including leasing;
- Address corruption by imposing weighbridge calibration, dissemination of rules of transporters and auditing;
- Establish platforms to facilitate transport, including the full expansion of the single electronic window system;

- Harmonisation of standards within the region through revitalisation of agreements with neighbouring countries and agreeing on terms of access to the Zimbabwe rail network, and vice versa;
- Linking Mozambique to regional platforms that can match transporters looking for backhauls with return loads;
- Support key value chains in Mozambique and neighbouring countries to create critical mass for exports by rail;
- Improving border posts through harmonising rules and procedures and developing One-Stop Border Posts; and
- Establishing corridor authorities;

5.4 Cross-border rail transport

Mozambique's three main transport corridors offers cross-border rail freight services to neighbouring countries. Earlier discussion alluded that transport infrastructure was developed transversally west-east to connect mining and agricultural clusters in Mozambique and in neighbouring countries to Mozambican seaports.

On the west-east axis, the rail lines along the Beira corridor traverse through the central parts of the country, where it links with rail lines of Zimbabwe and Malawi at the Machipanda and Moatize border posts. The Nacala rail line transport primary commodities (mostly mining commodities) through the northern parts of the country to the Lichinga border that links Mozambique with Malawi.

The Maputo corridor is the only corridor where rail lines run north to south to connect with the national railways of eSwatini and South Africa at the Lebombo /Ressano Garcia border post. Domestic rail passenger services are offered between urban areas.

5.5 Rail transport Constraints and Opportunities

5.5.1 Constraints

Mozambique's rail system faces critical infrastructure challenges. While the 3 primary corridors are mostly functional in providing regional connectivity and in connecting mining and key production centres to sea ports, Mozambique's connectivity among urban and economic clusters is rather limited, lacking linkages that connect parallel corridors to each other.

Except for the north-south national road (N1), the 3 primary rail systems do not connect with each other. The rural population's access to domestic and regional markets remains an on-going challenge. Most of the rural population is not located within a two-kilometre radius of all seasoned roads, let alone rail lines and therefore cannot move their agricultural produce to markets. This explains why subsistence farming is still the norm in rural communities.

Further to poor connectivity, the rail sector also faces challenges in meeting increasing demand. This is mainly due to growing trade with neighbouring countries (e.g. a significant increase in domestic coal production) but also deterioration of rolling stock due to insufficient maintenance. As a result, Mozambican railways faces on-going pressure to improve wagon capacity to respond more effectively to growing demand from the hinterland. The status quo emphasises the need for balancing the demands of maintaining existing infrastructure, while also expanding infrastructure to improve inter and intra-regional connectivity.

As is the case in most African countries, rail passenger services are highly unprofitable in Mozambique. Almost all the costs associated with rail passenger transport are being subsidised by CFM.

CFM is also under pressure to modernize rail lines to improve safety and cargo capacity, but it is struggling to meet this demand due to a lack of financing capacity and technological know-how. Although government has tied hands with the private sector to modernise rail systems and improve the operational performance of railways, concessioning agreements have only been partially successful. In some cases, the CFM had to finance the rehabilitation of assets under concession. The Sena line serves as an example of a concession that did not yield the expected results. The development of passenger traffic along the Sena line is still limited, as reflected by the small number of stations. Additional stations that had to be added under the concession agreement has not been built.

5.5.1 Rail Opportunities

Mozambique's strategic location as the maritime link to land-locked countries and its richness in natural resources underpins the need for efficient transport infrastructure and systems to support sustainable economic growth and development in the country. Mozambique's development strategy prioritises the development of transport networks to improve connectivity.

Given the plans of government to construct new rail lines to improve connectivity and trade, the importance of involving the private sector in financing and managing rail infrastructure and operations in Mozambique cannot be over-emphasised. Apart from linking the 3 main corridors (Nacala, Beira and Maputo) opportunities exist to improve and expand rail passenger services, particularly for commuter trains/ metro lines in Maputo.

5.6 Rail Transport Regulatory Environment

CFM is the parastatal authority that oversees the railway system of Mozambique and its connected ports. The management of railways has been largely outsourced. Although the private sector has funded several rail programmes in the past not all rail concessions was successful. This is mostly due to regulatory constraints.

To bring about improvement, regulatory inefficiencies should be attended to in an urgent fashion. Policy makers should focus on modernising business management practices and developing a regulatory framework that creates a conducive environment that entices the private sector to invest in infrastructure development programmes in the country.

5.7 Conclusion

Mozambique's main rail lines run through the Northern, Central and Southern parts of the country. Each rail line has its own development corridor that connects road and rail networks with Mozambican sea ports. Although the three main rail systems are compatible with rail systems of MS, they do not connect with each other.

The main challenges in the rail sector are meeting the increasing demand due to growing trade with neighbouring countries. To address this constraint, government has approved the execution of several rail programmes. Given the capital-intensive nature of rail infrastructure reforms, it is

imperative that government involve the private sector from the early stages (e.g. project planning) to reach agreement on the allocation of risk and to reach agreement on appropriate risk-adjusted returns. Regulatory reforms should focus on improving the business climate to entice the private sector to fund railway programmes and to provide technical expertise throughout project execution.

6. AIR TRANSPORT

6.1 Introduction / Background

Air transport acts as an important enabler to economic growth and development. Airports serve as gateways to national, regional and global travel and therefore facilitates integration into the global economy. At the same token, airports provide vital connectivity on a national, regional, and international scale.

The aviation sector of Mozambique holds large growth potential as the country aspires to become a major tourist destination. Government considers tourism as a priority sector and its five-year (2020-2024) plan acknowledges the importance of growing the tourism sector to support economic growth and development. The aviation sector fulfils a strategic role in attracting regional and international tourist movements to Mozambique. Furthermore, the oil, gas and mining sectors act as important drivers for private charter airlines services to convey interest groups (e.g. business and investors) to economic growth points in the country.

Despite the potential to growth the aviation sector, the Mozambique air transport market is monopolistic in nature and faces limited competition. The national carrier, Linhas Aéreas de Moçambique (LAM) held a monopoly on domestic flights for decades until 2017. The market has since been liberalised, with new airlines entering the market, though with high barriers to entry. Apart from high entry barriers, the air transport sector face major challenges, including:

- Limited competition in the market;
- Financial hardships experienced by LAM;
- Poor performance at the Maputo and Nacala airports; and
- Poor compliance with safety standards.

The discussions of this chapter shed more light on these constraints, while also outlining action programmes to close the gaps.

6.2 Airports in Mozambique

Although air travel has shown strong growth in recent years, Mozambique airports have seen limited investment. In general, aside from Maputo International Airport, airports mainly service either tourist or economic destinations, such as mining hubs. Flights within the country are limited. The biggest airport is Maputo International Airport (MPM) that is located approximately 3 kilometres northwest of the centre of Maputo. MPM serves as a hub for LAM Mozambique Airlines.

Most of the destinations served by Mozambique airports are in Africa (e.g. Kenya, South Africa, Angola and Ethiopia), but a few inter-continental services are also offered from MPM to selected European countries (e.g. Turkey and Portugal). Table 27 depicts information on the ten largest airports in Mozambique.

Table 27: Ten Largest Airports in Mozambique

Name	IATA Code	City	Airlines	Destinations
<i>Beira Airport</i>	BEW	Beira	2	6
<i>Chimoio Airport</i>	VPV	Chimoio	1	1
<i>Inhambane Airport</i>	INH	Inhambane	1	3
<i>Lichinga Airport</i>	VXC	Lichinga	1	2
<i>Maputo Airport</i>	MPM	Maputo	6	15
<i>Nacala Airport</i>	MNC	Nacala	-	-
<i>Nampula Airport</i>	APL	Nampula	3	7
<i>Pemba Airport</i>	POL	Pemba	3	6
<i>Quelimane Airport</i>	UEL	Quelimane	1	3
<i>Domestic</i>				
<i>Chingozi</i>	TET	Tete	2	6
<i>Vilankulo</i>	VNX	Vilankulo	2	3

Source: <https://www.worlddata.info/africa/mozambique/airports.php>

MPM and Nacala (MNC) are recognised as the main airports in Mozambique. MPM acts as a hub for the national carrier (LAM), servicing regular flights within Africa. International services are offered from Maputo International Airport to Doha (Qatar airways), Lisbon (TAP Air Portugal) and Turkey (Istanbul). (https://en.wikipedia.org/wiki/Maputo_International_Airport). Air France has also commenced lights between Maputo and Paris, France in m December 2021. (<https://clubofmozambique.com/news/air-france-to-begin-paris-maputo-flights-in-december-aim-200834/>).

Nacala airport, located in the North of Mozambique, has two runways. The longer runway is 3 100 metres and can accommodate larger aircraft (Boeing 747-400). The northern regions of the country are richly endowed with gas reserves and therefore offer substantial growth potential. Given its excellent geographic location (proximity to Tanzania, Zambia, Malawi and Zimbabwe) Nacala announced it plans to position itself as strategic hub for Southern Africa with its deep-water port and international airport.

6.3 Airline Operators

Scheduled air passenger services are offered by domestic, regional and international airlines from Mozambique's biggest airports. Prominent airline operators include:

- LAM (national carrier);
- Mozambique Expresso; and
- TAP Air Portugal.

6.3.1 Linhas Aéreas de Moçambique (LAM)

LAM, the national carrier, is based at MPM. LAM has a small fleet of aircraft and focuses on domestic and regional routes. Examples of domestic routes served by LAM include Tete, Pemba, Nacala, while LAM also fly to several African destinations, including Johannesburg, Dar es Salaam, Lusaka, Harare and Manzini.

LAM offers limited flights to selected European destinations (Lisbon, Madrid, Turkey) and the middle East (Doha). According to available literature, the airline also has code-share agreements with Transportes Aéreos de Angola (TAAG), South African Airways (SAA), Ethiopian Airlines and Kenya airlines. LAM also signed an interline agreement with Air France /KLM to offer international services from Paris and Amsterdam in Europe to Maputo. (<https://clubofmozambique.com/news/mozambiques-lam-will-lease-a-plane-to-reinforce-fleet-after-quelimane-incident-185659/>).

6.3.2 Mozambique Expresso

Established in 1995, Mozambique Expresso is an independent airline, offering scheduled and charter flights to several domestic and regional destinations. This airline is wholly owned by LAM, and its main base is the MPM. Mozambique Expresso offers services to several destinations, including: Beira, Chimoio, Inhambane, Lichinga, Maputo, Nacala, Nampula, Pemba, Quelimante, Tete and Vilankulo.

6.3.3 TAP Air Portugal

TAP Air Portugal is the state-owned flag carrier of Portugal, offering scheduled passenger services between Lisbon and Maputo. In addition to the airlines listed above, a few other regional and international airlines – SAA, Ethiopian Airways, Kenya Airways, Turkish Airlines and Qatar - also offer scheduled passenger services to Mozambique through MPM and some of the smaller international airports.

6.4 Airstrips and Unpaved Runways

Information pertaining to the number and condition of airstrips and unpaved runways in Mozambique is not readily available. According to available statistics, Mozambique had seventy-seven (77) unpaved runways (grass, dirt, sand and gravel surfaces) in 2013. (<https://www.indexmundi.com/g/g.aspx?c=mz&v=123>).

6.5 Key Regulators / Main Stakeholders in the Aviation Industry

6.5.1 Mozambique Civil Aviation Authority

The Mozambique Civil Aviation Authority (IACM) is responsible for regulating safety and civil aviation operations. This body provides oversight and regulates aviation in Mozambique, including airports, aircraft, and pilots.

6.5.2 Aeroportos de Moçambique (ADM)

Aeroportos de Moçambique (ADM) operates national and international airports in Mozambique. The survival of ADM is threatened as the company faces a severe financial crisis, brought on by substantial investments in the past that have not yielded the desired results. Different options are

being investigated to bring about improvement, including re-capitalising the company, leasing out airports and diversifying the business of ADM.

6.5.3 Ministry of Transport and Communications

The Ministry of Transport is responsible for the development of policy and regulation for the four transport sectors, including air transport. The Minister of Transport responsibilities extend to all matters relating to transport, as well as the administration of pipeline and port facilities, and communications.

6.6 Key Developments

Given the priority attached to airport development, government continuously increases its budgetary allocation for the infrastructure sector. Although approved airport programmes focus mostly on upgrade and extension, the construction of additional airport hubs at Pemba and Tete is foreseen to stimulate trade with SADC neighbours, and to promote tourist flows to Mozambique.

In 2018, the Mozambique government launched an international public tender, whereby it invited interested parties to express their interest to enter into partnerships for the development and operation of hotels and leisure activities, business and entertainment centres, and renewable energy sources at the Maputo, Beira and Nacala airports.

The construction of a shopping centre, petrol station and business apartments are planned at MPM while in Beira, government is looking for an investor to build and operate a three-star hotel and a petrol station. Planned developments at Nacala airport includes a hotel, shopping centre and a renewable energy plant. (<https://www.tourismupdate.co.za/article/mozambique-announces-airport-development-opportunities>)

6.7 Conclusion

The air transport industry in Mozambique does not adequately serve the country's needs. Airports have seen limited investment over the years with the quality of airports remain relatively low by global standards. Aside from Maputo International Airport, airports either serve tourist or economic destinations (mining hubs). As a result, flights within the country are limited.

Although the air transport industry was liberalised from 2017 onwards, barriers to entry for new airlines remains high. As a result, there is a lack of competitiveness and the national flag carrier, LAM, continue to dominate the airline sector. Moving forward, it is imperative that regulatory reforms be initiated to entice the private sector to join hands with government in bringing airport programmes to completion and to create a level playing field for new players who wish to join the market.

7. MARITIME TRANSPORT

7.1 Introduction

Seaports act as important interfaces in the supply chain between sea and land transportation. This is especially the case in Africa where maritime transport is the primary form of access to international markets. Mozambique's location as the maritime link to several land-locked MS underpins the strategic importance of seaports in supporting economic activities in the hinterland. All major ports are connected by railway lines and road networks to neighbouring countries and mining regions. Malawi, Eswatini, South Africa, Zambia and Zimbabwe all rely on Mozambican ports for part of their exports and imports.

The discussions of this chapter shed more light on the operational efficiency and throughput at Mozambique's principal seaports. It also dwells on operational challenges experienced at seaports and reforms approved by government to address port inefficiencies and boost trade through the country's seaports.

7.2 Mozambique Seaports

Mozambique has seven seaports. The key ports are the ports of Maputo, Beira and Nacala. All three principal seaports have functional rail linkages to the hinterland and neighbouring countries via existing road and rail networks. The other smaller ports are the ports of Xai-Xai, Inhambane, Quelimane and Pemba. Most seaports are operating with the involvement of the private sector, that positions Mozambique as a country with a relatively high level of private sector involvement in the port system.

7.2.1 Principal Seaport

7.2.1.1 Maputo Port

The port of Maputo is the largest and most developed port in Mozambique. This port is operated by the Maputo Port Development Company (Port Maputo), a national private company, which results from the partnership between the Mozambican Railway Company (CFM), Grindrod and DP World. Port Maputo holds the rights to finance, rehabilitate, construct, operate, manage, maintain, develop and optimise the entire concession area. The company also holds the powers of a Port Authority, being responsible for maritime operations, piloting towing (tugboats), stevedoring, terminal and warehouse operations, as well as port planning development.

a) Terminals

The port of Maputo has two main components:

- Maputo Cargo Terminal; and;
- Matola Bulk Terminal.

The cargo terminal includes the container, bulk minerals, citrus, sugar and molasses terminals, whereas the Matola bulk terminal (located 6 kilometres further upriver) has four deep-water berths for handling coal, fuel and lubricants, aluminium and grains.

b) Cargo Volumes

Traffic volumes handled by the port of Maputo decreased by 13% in 2020 in comparison to 2019, handling 18.3 million tons compared to the 21 million tons of throughput registered in 2019. The decline is mainly related to the COVID-19 pandemic and the measures taken to prevent the spread of the virus that led to the closure of several commercial border posts between March and April 2020 and restricted border operating hours for the greater part of 2020. (<https://www.portmaputo.com/port-of-maputo-2020-results>).

Financial contingency measures were implemented to off-set the decline in traffic volumes. Despite tough conditions, port investment programmes retained momentum during 2020. Examples of port programmes include the berth rehabilitation project, expansion of bulk minerals slabs and the investment in rail capacity.

7.2.1.2 Beira Port

The port of Beira is strategically located in the centre of the country and links directly by road or rail to main markets in the interior, notably, Zimbabwe, Botswana, Malawi, Zambia and the DRC. Due to its strategic location, Beira has positioned itself as the second largest seaport in Mozambique. This port is operated and managed by a Dutch company named Cornelder.

a) Terminals

The following terminals are operational at the port of Beira:

- Container terminal;
- General cargo terminal, and;
- Beira grain terminal.

The container terminal is one of the most modern terminals in the SADC. The facilities include a 645-metre-long quay with a depth of 12 metres. The terminal has 4 container gantry-cranes, two of which have the capacity to carry 65 tonnes. Furthermore, the container terminal has 148 electricity connection points for refrigerated containers. At present, the container terminal can accommodate 300,00 TEU's a year. (<https://www.cornelder.co.mz/>)

The general cargo terminal covers 4 quays with a length of 670 metres and a depth of 9.5 metres. This multi-purpose terminal can handle a variety of bulk cargoes. The cargo terminal consists of five covered warehouses, with a total capacity of 15 000 square meters, in addition to 12 000 square meters of open paved space for storing ferro-chrome, granite, steel and other bulk cargoes. There are rail connections to all the warehouses (<https://www.cornelder.co.mz/>)

Although the Beira grain terminal is not within the limits of the concession area, it allows the loading and unloading of bulk grain in a more effective and efficient manner, with a productivity of around 4,000 - 5,000 tonnes per day. The storage capacity of the grain terminal has been increased to 50,000 tonnes. Wheat and maize are the products most commonly handled at the Beira grain terminal. (<https://www.cornelder.co.mz/>).

b) Cargo Volumes

Despite the challenges dictated by the Covid-19 pandemic and its negative impact on the global economy, the container and general cargo terminals at the Beira port registered encouraging results in 2020, as indicated in the statistics below.

➤ **Container Terminal**

The container terminal recorded a total of 255,459 TEU handled in 2020, while 259,938 TEU were handled in 2019. This represents a slight decrease of 1,7%. (<https://harbourmaster.org/News/beira-port-cargo-achievements-2020>)

➤ **General Cargo Terminal**

In 2020, the general cargo terminal handled a record volume of 3,13 million tons. In 2019, the port handled 2,1 million tons, resulting in an impressive growth of 46% for 2020. (<https://harbourmaster.org/News/beira-port-cargo-achievements-2020>).

According to Cornelder, the port concessionaire, the sharp growth in traffic volumes at the general cargo terminal is mainly the result of an increase in fertiliser imports. Mozambique's overseas purchases of clinker, a raw material used in cement production, also boosted the port's results in 2020. (<https://clubofmozambique.com/news/mozambique-port-of-beira-with-46-increase-in-cargo-handled-in-2020-183294/>).

7.2.1.3 Nacala Port

The port of Nacala is located on the south side of Baía de Bengo, a large and sheltered bay with waters up to 60 meters deep and an entrance that is 800 meters wide. Nacala Bay is recognised as one of the finest natural deep-water harbours in Africa. Nacala consists of four natural bays. The wider of these is Bay of Fernao Veloso, which has a water depth of 99 meters. The other three inner bays – Bengo, Namelala and Muananculo – have depths of up to 60 meters. The port and town is situated on Bengo Bay. The coal terminal is located at Nacala-a-Velha on the opposite side of the bay to the town and commercial port.

Nacala consists of four natural bays. The wider of these is Bay of Fernao Veloso which has a water depth reaching 99 metres. The other 3 bays - Bengo, Namelala and Muananculo – are inner bays, that have depths of up to 60 metres. The port and town is situated on Bengo Bay. General cargo handled at the port of Nacala includes cement, petrol, grains, containers, as well as various construction materials for the railway and new port development.

a) Terminals

The following terminals are in use at the Nacala port:

- General cargo terminal;
- Liquid bulk terminal;
- Container terminal;
- Several warehouses;

Nacala has a 675-metre long general cargo quay, divided into four general berths. General cargo handled at this port includes cement, petrol, grains, containers, as well as various construction materials. The port also has a liquid bulk terminal, connected to fuel tanks through a pipeline.

The container terminal has two berths with a total length of 375 metres and a depth alongside of 15 metres. The terminal has a stacking capacity of 5 722 TEUs and a total annual handling capacity of 100,000 TEUs. Eight warehouses are found in a covered area of 21 000 square metre and open area of 800,000 square metre. (<https://africaports.co.za/nacala/>)

A recent development is witnessed in the opening of a coal and minerals terminal across the bay from the general port at Nacala-a-Velha, from where coal, mined near Moatize, is shipped. The largest of dry bulk vessels can load from here.

b) Cargo Volumes

The Northern Development Corridor (CDN), the concessionaire company of the port of Nacala, handled more than 2.2 million tonnes of general cargo in 2019, which represents an annual increase of 16% above the previous year (2018) when 1,9 million tonnes were handled at the port. According to CDN, the increase is the result of the company's investments in human and technical resources, as well as the acquisition of equipment. (<https://www.ipim.gov.mo/en/portuguese-speaking-countries-news/2020-01-10-port-of-nacala-mozambique-increases-cargo-handled-in-2019/>)

7.2.1.4 Pemba Port

Pemba is the capital of the province Cabo Delgado. The port of Pemba, which shares borders with Tanzania and lies on a peninsula in Pemba Bay, is a small deep-water port, mainly used for cabotage shipping. Pemba port is prioritised as a potential site for a deep-water port and is expected to become a key servicing and logistics port for the oil and gas industries, and the mining and agricultural areas in Cabo Delgado and Niassa provinces. Caminhos de Ferro de Moçambique (CFM) manages the port.

The Port of Pemba and the fuel terminals in all ports of the country are managed directly by CFM.

a) Terminals and Cargo Volumes

The following terminals are operational at Pemba port:

- Container terminal; and
- General cargo (breakbulk).

According to information sources at hand 411 vessels called at the port of Pemba in 2020. During the same year, 5006 TEUs were handled, while break-bulk cargo amounted to 551 823 million tons. (<https://dlca.logcluster.org/spaces/flyingpdf/pdfpageexport.action?pageId=15139711>).

Given its strategic importance in servicing the oil and gas industries, infrastructure programmes have been approved to increase the number of berths, as well as to expand the storage area.

7.3 Operational Challenges Experienced at Mozambique Seaports

Mozambique has significantly increased the use of its ports capacity in recent years to keep up with increases in port demand. In terms of performance indicators, Maputo, Beira, and Nacala's truck-processing times compare well with other Southern African ports. While these ports also have above-average crane productivity, container dwell time in Mozambican ports is very high.

Lengthy container dwell time impacts negatively on the average turn-around time (TAT) of ships that cause severe congestion. This tendency is not unique to Mozambique seaports, but is experienced at many African seaports. According to available literature, the average TAT of ships entering most African ports exceeds five days, while the TAT in the best ports in Asia is less than a day, and in congested ports in Asia, it is two days. (C-BRTA. 2018. Linking Africa Plan)

Intermodal interchange infrastructure at all seven seaports enable the off-loading, consolidation and transportation of goods via rail linkages and road networks to several MS in the region. Despite the existence of intermodal interchange infrastructure, the efficiency of seaports is undermined by several infrastructure and superstructure impediments that aggravates congestion in Mozambique seaports. Examples include:

- Shallow access channels;
- Outdated handling equipment; and
- Short berth lengths.

7.4 Port Developments

The execution of several infrastructure programmes in recent years has materialised in increased port capacity to cope with increases in demand. In terms of performance indicators, Maputo, Beira, and Nacala's truck-processing times compare well with other ports in the SADC region. However, container dwell time in Mozambican ports is high that aggravates congestion.

Although new port programmes are directed towards increasing capacity at Mozambican seaports, these programmes are capital-intensive and require major infrastructure investments to prepare them for bankability. Moving forward, the government of Mozambique should continue to explore innovative funding solutions that combine international, public and private sources of funding for infrastructure development. Partnering with the private sector will not only relief government from the burden of funding infrastructure projects on its balance sheet but will also infuse private sector expertise and skills transfer.

The Nacala corridor rail and port project serves as an example on an ongoing development that is widely acknowledged as one of Africa's largest infrastructure projects. This project is led by the African Development Bank that provides a financial injection of US300 million from its Private Sector Window. The Nacala rail and port project seeks to provide a 912-kilometre rail line from the Tete province in Western Mozambique to the Nacala port on the eastern coast of the country, through Malawi. It also includes the construction of a deep-sea port and associated terminal infrastructure at Nacala. (<https://www.afdb.org/en/news-and-events/new-mozambican-rail-port-project-to-open-new-markets-for-farm-produce-boost-regional-integration-17704>).

7.5 Regulatory Framework for Maritime Transport

In the past, the management of seaports was undertaken by the state-owned company CFM until port concessions was launched by government at the country's principal ports and the newly appointed port concessionaires took over the role of port regulator.

Nowadays the landlord model, which is based on Public-Private Partnerships (PPP) under a concession regime, is the principal port model in Mozambique. (<https://www.lexology.com/library/detail.aspx?g=8d3833b4-c4d9-44d6-8a95-9fcbf0d4560e>). The most used PPP models for ports and terminals in Mozambique, agreed under the concession contract(s) are:

- Rehabilitate-Operate-Own-Transfer (ROOT);
- Build-Own-Operate-Transfer (BOOT); and
- Design-Build-Own-Operate-Transfer (DBOOT).

Under PPP agreements, the port operator are commercial companies that perform several activities, including; pilotage, towing, mooring and unblocking, stowage on board ships and at berth, handling of cargo, storage, fuelling, water and electricity supply to ships. The port authority may, unless the concession contract allocates those services to the private port operator, provide the following services: safety of the port area, inspection of vessels, goods and equipment in the port area and creation of public interest easements.

Except for Maputo port, where the Maputo Port Development Company acts as port authority and port operator, the Ministry of Transport and Communications is the single regulatory authority for all other seaports in Mozambique. Port operations at the Beira and Nacala ports have been concessioned and is currently performed by Cornelder and the NDC.

7.6 Conclusion

As a country richly endowed with natural resources, Mozambique has massive development potential. The Mozambique government acknowledges that the country's seaports lie at the heart of the logistics supply chain and that the country's seven seaports can position Mozambique as a strategic regional hub and important supplier to land-locked counties in the region.

Despite their strategic importance, the optimal performance of seaports is constrained by lengthy container dwell time that materialise in costly port operations and long ship turn-around times. Although new infrastructure projects have been prioritised by government to expand port capacity many of them are still in the project concept phase, awaiting funding, while others are currently being implemented. Given the capital-intensive nature of port reforms, private sector involvement in port financing and operations have become popular across the globe. The case is no different in Mozambique where seaports are characterised by a high level of private sector involvement in the port system.

8. CHALLENGES AND OPPORTUNITIES IN MOZAMBIQUE

Chapter 8 briefly summarises key challenges and business opportunities that exist in Mozambique. A discussion of key challenges seeks to equip interested parties (e.g. cross-border road transport operators, traders and investors) with relevant/ accurate info to assist them in making informed decisions regarding undertaking business for reward and pursuing business opportunities in Mozambique.

8.1 Challenges

This section briefly summarises key challenges that prevail in Mozambique. It is important that these constraints be examined by all interest groups who wish to conduct business in Mozambique. For purposes of discussion, challenges are categorised into six main categories that are discussed in greater detail below.

8.1.1 Political Instability

Soon after Mozambique gained independence from Portugal in 1975, the country descended into an intense civil war that lasted from 1977 to 1992. Although the civil war ended in 1992 with the signing of a peace accord, political stability is still undermined by armed confrontations and violent clashes that occur from time to time. Tension is particularly severe in the gas-rich northern parts of the country (Cabo-Delgado province) that has seen a sharp increase in terrorist attacks in recent years. The outbreak of the rebellion led to more than 600 000 people internally displaced in Cabo Delgado, Niassa and Nampula provinces.

Corruption is widely regarded as a key driver of political instability. Mozambique's corruption perceptions rank of 25 points in 2020 is below the global average of 44 points, indicating that the reigning government needs to intensify its effort in fighting corruption that is aggravated by the absence of an independent legislature and judiciary, free press and a strong civil society sector.

A new peace accord was reached in August 2019 after the Mozambican government signed a peace agreement with Renamo to put an end to armed violence to ensure lasting peace and prosperity for the country's people. The August peace deal that is currently being implemented aims to achieve greater reconciliation of the country by integrating Renamo residual fighters into the national army and tearing apart Renamo military bases sprayed around the country.

8.1.2 Volatile Economy

Mozambique is richly endowed with natural resources. Agriculture forms the backbone of the economy, while the country also possesses plentiful mineral resources, unique tourist attractions and large natural gas reserves in the northern provinces.

Regardless of impressive growth between 2000-2015, economic growth has been volatile. This volatility reflects the structural fragilities of its productive basis, the concentration on subsistence farming or agriculture-based industries, and a geographical location that makes the country vulnerable to natural disasters.

Another major challenge to Mozambique's growth prospects is the absolute poverty of most of the population, usually without any links to markets and dependent on subsistence agriculture. Sustainable growth and development depends on the ability of government to address the

challenges of limited economic diversification, strong dependence on the exploration of natural resources, high dependency on imports and limited export markets.

8.1.3 Poor Ease of Doing Business

Mozambique faces high costs associated with doing business and ranks 137 out of 190 countries in the World Bank 2020 Doing Business Study that ranks countries against each other based on the extent to which their regulatory environment is conducive to business operations.

Mozambique performed worse in the areas of starting a business (176 out of 190 participants) and enforcing contracts (rank 168). Furthermore, trading across borders is complicated through high costs and lengthy delays associated with logistical processes to import and export goods. Mozambique ranks 94 out of 190 countries in the trading across borders indicator.

According to the findings of the 2020 Doing Business study, Mozambique was the second worst performer in the SADC, beaten by the DRC only. The country's poor ranking for most indicators reveals that business regulations are neither simple or friendly. Therefore, the regulatory environment does not support business operations. The status quo calls for urgent intervention by government to expedite business and regulatory reforms to create a conducive environment that supports business and industrial growth.

8.1.4 Poor State of Transport Infrastructure

Mozambique's transport infrastructure remains in disarray more than two decades after the civil war has ended. The country has one of the least developed road transport infrastructures in the SADC. Except for major arteries (east-to-west road networks), overall road conditions in Mozambique are generally poor, with the greater portion of the road network being underdeveloped and unpaved.

According to available literature, only 24 percent of the classified road network is paved, while national roads, especially those in the central and northern parts of the country remain vulnerable to armed attacks and Islamic insurgents. Low road density and poor quality of road networks often prevents the big farming population to move agricultural produce to markets. Furthermore, connectivity among urban and economic clusters are limited.

Rail infrastructure and systems have also been damaged by the civil war and has not been subjected to regular maintenance. Deteriorating rolling stock and a shortage of locomotives/ wagons impede the seamless movement of mining commodities to Mozambique's principal seaports. Although main rail lines connect with road networks at the country's principal seaports in Nacala, Beira and Maputo, the main rail lines do not connect with each other.

Given its excellent geographic location and richness in natural resources (e.g. mining, agriculture and gas) Mozambique is already attracting interest among private investors. However, the current state of transport infrastructure does not support inter and intra-regional trade. Moving forward, it is imperative that government expedite the timeous delivery of strategic transport programmes and create a conducive business environment that will entice the private sector to fund, build and manage transport infrastructure and operations.

8.1.5 Poor Access to Health Care

More than half of the population in Mozambique live in absolute poverty and do not have access to adequate healthcare. The public healthcare system in the country is basic, limited and insufficient. Public hospitals are subject to frequent staff and supply shortages, and most have exceptionally long waiting times for even basic care.

Due to poor access to quality healthcare, Mozambique faces multiple health challenges today, including infectious and chronic diseases (e.g. tuberculosis, diarrheal diseases and malaria) that are aggravated by poor access to quality food and water. Malnutrition is wide-spread, especially amongst children and infants. The situation is worse in rural areas, where the rural population must walk long distances to find healthcare facilities.

8.1.6 Education and Training

The education system in Mozambique is plagued by several inefficiencies, including a high drop-out rate and a poor teaching structure. Access to education is low and less than half of the population finishes primary school. In addition, amongst those children who are at school, levels of cognitive development are quite low because of poor quality of education. The literacy rate is 47%, while the HDI, measured at 0,456, positions Mozambique in the low human development category.

As in many other very poor countries, the challenges experienced with education in Mozambique can be tied back to widespread poverty where more than half of the population lives below the poverty line. As a result, the country's labour market is highly segmented, with most members of the labour force working in subsistence agriculture and informal activities, which generates low earnings. People employed in the primary sector are unable to provide sufficient earnings to lift themselves and their families out of poverty.

For workers to access better earning opportunities, policy efforts to facilitate the creation of more and better jobs, and to improve the quality of labour, are critical. There is a demonstrated need for sound macro-economic and fiscal policies conducive to private-sector job creation, and education and training policies to improve the skill levels of workers.

8.2 Opportunities

Mozambique has many assets for development, including important mining, agricultural, hydroelectric and gas resources that can position the country as one of the largest producers in the world in future. Mozambique's excellent geographical location is also an important asset for development and integration, giving its proximity to South Africa and lengthy coastline that offers access to regional and international markets.

Against this background, several opportunities can be considered for exploitation by interest groups (e.g. private sector, cross-border operators) in Mozambique. More information on prospects are presented in bullet format below.

8.2.1 Agribusiness Development

Agriculture is tremendously important to the Mozambique economy, but is largely at the subsistence level. Although the country has large areas of arable land and abundant water resources, Mozambique's development challenge is to utilise the agricultural potential to transform the subsistence industry into productive, competitive and sustainable agriculture.

Agribusiness is targeted at the centre of Mozambique's diversification drive. Essentially agribusiness involves all agricultural activities from production to consumption, including the supply of agricultural inputs, as well as the processing and distribution of agricultural products. Given the high level of poverty, and low skills base of the population, agribusiness can act as one of the main generators of employment and income.

The Mozambique government has prioritised that investment be directed to the following agricultural development corridors that all display strong potential to create value, especially when linked to agro-industries - Maputo, Limpopo, Zambesi, Nacala and Pemba-Lichinga.

Currently the following challenges undermine the growth of agribusiness:

- Significant skills gaps;
- Limited access to finance, including working capital;
- Lack of access to power generation;
- High costs associated with connecting farms to accomplish critical mass;
- Lack of investment in maintenance and poor use of existing storage facilities;
- Poor quality roads;
- Insufficient cold-chain facilities; and
- Poor institutional support.

Considering the above impediments, the following recommendations (reforms) are proposed to stimulate agribusiness development in Mozambique:

- Award contracts for the management of warehouses to the private sector;
- Upskill emerging farmers through vocational training programmes;
- Improve access to finance for emerging farmers;
- Develop and expand research programmes for introducing and deploying improved seeds and equipment for farming.
- Improve access to markets through creating linkages between agribusiness and large corporates (e.g. those in extractives industries) and building quality, integrated transport infrastructure (main roads and feeder roads);
- Direct investment programmes to the prioritised agricultural development corridors;
- Strengthen institutional capacity through developing programmes that display a medium-long term focus that will last beyond project and government cycles; and
- Encourage public-private dialogue and instruments to support coordination between initiatives to drive reforms in targeted value-chains towards implementation.

8.2.2 Energy

Mozambique's energy potential is among the highest on the African continent. The country is home to the third largest gas reserve in Africa and aims to position itself as one of the largest exporters of natural gas in the world. (<https://www.eia.gov/international/analysis/country/MOZ>).

Currently, Mozambique produces almost three times as much electricity as it consumes. Despite its surplus, almost 70 percent of the population are not connected to the electricity grid. To reverse the status quo, the government of Mozambique has made access to electricity one of its development priorities, setting a target of achieving 100 percent access to electricity by 2030.

To reach its ambitious target, the country must unlock its huge renewable energy potential by combining conventional on-grid energy extension with off-grid technology, with the latter not only being cheaper, but also useful for supplying electricity in rural areas.

Government supports the development of renewable sources of energy. In this regard, the Strategy for the Development of New and Renewable Energies for 2011 – 2025 sets out specific measures to develop the mapping of hydro, wind, solar, biomass, geothermal and wave potential.

The construction of a hydro-electric plant on the Zambezi river (60 kilometres downstream from the existing dam at Cahora Bassa) is an example of renewed focus on renewable energy generation that will enable Mozambique to export electricity to neighbouring countries, upon implementation. According to planning estimates, the new dam could start generating electricity in 2030.

Moving forward, it is imperative that sufficient investment be directed to off-grid solutions to bring electricity to isolated areas. This will enable subsistence farmers and small agricultural holdings to access electricity, mechanise farming operations and increase agricultural output. Investments in Mozambique's energy sector are also a positive complement to other large-scale developments (e.g. transport infrastructure and agriculture).

The focus on electricity generation offers opportunities for development through the creation of new markets that can be explored by relevant interest groups (e.g. private sector and investors). Given the capital-intensive nature of energy reforms, it is imperative that government join hands with other players and bring the private sector on board with financing and operating new power generation projects.

8.2.3 Tourism

Mozambique has undeniably strong tourism potential. The country's greatest tourism asset lies in its Indian Ocean coastline, which contains abundant stretches of pristine beaches, coral reefs and rich marine biodiversity. Many coastal areas remain relatively unexploited, and as such nature-based tourism holds promise. In parallel, the country's extensive network of conservation areas protects valuable ecosystems and tourism hot-spots and is increasingly open to tourism investment.

Against this background, the government of Mozambique considers tourism a priority sector and recognises its importance in stimulating economic growth, productivity and job creation in both urban and rural communities. The Strategic Plan for the Development of Tourism in Mozambique highlights the need to focus resources/ investments in identified priority areas (e.g. Ponta do Ouro) that is worth pursuing by interest groups.

Despite the country's enormous tourism potential, various constraints (on both tourism supply and demand) limit tourism investment and growth. Impediments include a weak business environment, limited institutional capacity, inadequate infrastructure, high cost of travel, issues associated with obtaining visas and inadequate attention and resources directed to marketing and promotion. It is envisioned that the short and medium-term performance of the tourism sector will be heavily affected by the on-going COVID-19 pandemic that has affected all businesses along the tourism value chain.

The following recommendations should be considered by the government of Mozambique to address constraints that impede the growth of the tourism sector:

- Consider visa waivers for key markets that do not pose significant security threats;
- Allow cheaper, shorter stay visas to encourage multi-destination regional travel;
- Implement an e-visa system;
- Improve air connectivity to and within Mozambique;
- Remove barriers that prevent the entry of new airline operators, and/or routes;
- Boost domestic tourism by offering reduced air tariffs during off-peak seasons, or as part of low-cost packages;
- Establish a virtual one-stop shop to provide relevant information to potential tourists and disseminate messages in response to crises or negative media coverage;
- Improve the link between the hospitality industry and local producers to increase their integration into the tourism value-chain;
- Address skills gaps by developing training programmes for people employed in the tourism sector; and
- Address conflict/ violence in the northern parts of the country.

8.2.4 Industrialise Mozambique

The industrial sector in Mozambique comprise of mostly extractive industries (e.g. Mozal aluminium smelter) which accounts for around 40% of the country's industrial production. Natural gas exploration, coal extraction and heavy sand exploitation complete the extractive industries that represent 60% of the country's exports.

Although the industrial sector is of strategic importance in transforming the economy it currently plays a minor role in the economy, especially in terms of job creation and therefore creates little added value. This leads the country to export mainly unprocessed products, which are then processed in other countries.

The planned exploration of world-class gas reserves provides opportunities to diversify the economy through exploring industrial opportunities. However, the growth of the industrial sector depends on government's ability to improve the business climate that is characterised by limited access to finance, high levels of corruption, inadequate infrastructure, unskilled labour force, inadequate trade facilitation and weak regulation.

The government of Mozambique should consider/ implement the following recommendations to encourage investors and the private sector to invest in mega projects that are directed towards transforming the economy through industrialisation.

- Implement regulatory reforms;
- Support the development of small industries to stimulate job creation;
- Develop integrated transport infrastructure;
- Improve access to electricity for the business community;
- Provide entrepreneurship and training;
- Adopt a zero-tolerance approach to fraud and corruption;
- Improve access to finance;
- Improve governance in the public sector; and
- Involve the private sector in financing and managing strategic projects/ programmes.

8.25 Improve transport infrastructure and logistics

Transport plays a critical role as enabler to other sectors, especially agriculture, manufacturing and extractives. With its 2 700-kilometre coastline, Mozambique offers access to the Indian ocean and global markets for several land-locked member states.

The country's main transport corridors – Maputo, Beira and Nacala – are all linked to the natural ports with the same names. However, there are no direct interconnecting rail services between the three corridors and most road networks are unreliable. Government's five-year plan (2020-24) sets out the goal of developing transport as a means of building social cohesion in the country, and the country's development strategy includes the expansion of further corridors. This opens the opportunity for the creation of new markets within the transport and logistics sector.

Existing infrastructure programmes (in all transport sub-sectors) are geared towards increasing capacity to stimulate the flow of export commodities along the country's main corridors, as well as expanding the capacity of terminals and ports. If the country develops the transport infrastructure it needs, it should be able to increase trade with fellow African countries and global markets. However, this aim will only be accomplished if the following constraints, that impede the competitiveness of the transport and logistics sector are addressed:

- Existence of Non-Tariff Barriers along all transport corridors;
- Outdated policy frameworks;
- Political instability in parts of the country;
- Significant skills gaps in the transport and logistics sector;
- Upgrading of existing rail and road networks and construction;
- Construction of missing road and rail links to create integrated transport infrastructure;
- Capacity constraints at Mozambique seaports;
- Border post constraints;
- Limited market size;

Against this background, it is imperative that the government of Mozambique join hands with other corridor role-players to:

- Implement regulatory reforms;
- Deliver on priority infrastructure programmes;
- Operationalise trade facilitation reforms (e.g. single-window systems at border posts);
- Implement mechanisms that focus on reducing corruption and rent-seeking behaviour;
- Improve access to innovative finance solutions for transporters and other players in the logistics chain;
- Complete on-going strategic infrastructure programmes, aimed at linking rural areas to local and regional markets and improving connectivity between urban and economic clusters;
- Strengthen regional linkages by increasing interconnectivity of power systems and developing integrated transport corridors;
- Address skills gaps in the transport and logistics sector; and
- Establish a dedicated Corridor Management Institution.

8.3 Conclusion

Mozambique is one of the richest countries in the SADC and has massive potential underpinned by its vast natural resources. The economy is highly dependent on natural resources, mainly coal, gas and other minerals. Although the economic potential arising from exploiting natural resources is extremely high, sustainable growth and development that benefits the whole economy will only be realised if the Mozambique government prioritise investments in other sectors to diversify the economy and industrialise the country.

Opportunities that exist in the agri-business, manufacturing, energy, tourism and transport and logistics sector deserve further investigation to determine the feasibility of such business opportunities. Furthermore, strengthening the key drivers of inclusion, notably improved quality of education and health service delivery, could in turn, improve social indicators.

Since transport infrastructure act as enabler to other sectors, it is imperative that government fast-track the delivery of prioritised transport programme to improve connectivity and access. Massive investments in infrastructure is required to catch up with sharp increases in growing transport volumes (mainly coal from the hinterland) to the country's primary seaports. Given the large-scale and capital-intensive nature of infrastructure programmes, private sector participation in financing and delivery of such programmes is critical.

On-going challenges that increase the cost of doing business in the country (e.g. poor access to finance and grid-based power and inadequate transport infrastructure) pinpoints the need for structural reforms to support the private sector and to make Mozambique more attractive to foreign direct investment that is needed to diversify the economy. Although Mozambique is still in the early phases of industrialisation, political will exist to transform the economy.

It is imperative that investors and the private sector closely monitor the execution of strategic reforms in key areas, notably regulatory, institutional and infrastructure. Government and business are inextricably linked, and Mozambique is currently one of the bottom performers regarding the ease of doing business in Africa. Moving forward, it is imperative that the government continue to make concerted efforts to improve the business environment and to implement policies aimed at restoring macro-economic stability and improving the weak regulatory environment.

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