



COUNTRY PRIVATE SECTOR DIAGNOSTIC

# CREATING MARKETS IN MOZAMBIQUE

A study conducted by the World Bank Group  
in partnership with SIDA

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The team included Ruben Barreto, Mario Brataj, Amy Jane Chamberlain, Adriana Conconi, Rachita Daga, Philippe De Bonneval, Jakob Engel, Guilherme Falco, Elena Gaffurini, Federico Guido Lavallo, Luciana Harrington, Ulla Heher, Ianifa Imbate, Simeão Lopes, Zeferino Martins, Ana Ruth Menezes, Sneha Mehta, João Moura, Vasco Nunes, Ivan Remane, Federica Ricaldi, Natsuko Toba, Bradley Weiss, Eva Clemente Miranda, Celine Jialing Lim, and Anne Ytreland. Administrative support was provided by Adelia Chebeia and Brigida Tchamo.

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# ABBREVIATIONS

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ADIN	Development Agency for the North (Agência do Desenvolvimento Integrado do Norte)
ADVZ	Zambezi Valley Development Agency (Agência de Desenvolvimento do Vale do Zambeze)
ANAC	National Administration of Conservation Areas (Administração Nacional das Áreas de Conservação);
ANE	National Roads Administration (Administração Nacional de Estradas);
APIEX	Investment and Exports Promotion Agency (Agência de Promoção de Investimento e Exportações)
ASWJ	Al Sunna wa Jamma'ah (Cabo Delgado)
BIT	bilateral investment treaty
Btu	British thermal unit
CA	conservation area
CAHF	Centre for Affordable Housing Finance in Africa
CFM	Mozambique Railway Company (Caminhos de Ferro de Moçambique)
CPSD	Country Private Sector Diagnostic
CSA	Agriculture Services Centers (Centros de Serviços Agrários)
CTT	Central Térmica de Temane
EDM	Electricity Utility (Electricidade de Moçambique)
EPC	engineering, procurement, and construction
ESHS	environmental, security, and health and safety
FDI	federal direct investment
FFH	Housing Promotion Fund (Fundo para o Fomento de Habitação)
FID	final investment decision
fintech	financial technology
GDP	gross domestic product
ICT	information and communication technology
ILO	International Labour Organization
IMF	International Monetary Fund



INATUR	National Tourism Institute (Instituto Nacional do Turismo)
INNOQ	National Institute of Standardization and Quality (Instituto Nacional de Normalização e Qualidade)
IPEME	Institute for Promotion of Small and Medium Enterprises (Instituto para a Promoção das Pequenas e Médias Empresas)
IPP	independent power producer
KPI	key performance indicator
LCR	local content requirement
LNG	liquefied natural gas
MADER	Ministry of Agriculture and Rural Development (Ministério da Agricultura e Desenvolvimento Rural)
MCTESEP	Ministry of Science and Technology, Higher, Technical and Professional Education (Ministério da Ciência e Tecnologia, Ensino Superior e Técnico Profissional)
MEF	Ministry of Economy and Finance (Ministério da Economia e Finanças)
MIC	Ministry of Industry and Commerce (Ministério da Indústria e Comércio)
MICE	meetings, incentives, conferences, and exhibitions
MICULTUR	Ministry of Culture and Tourism (Ministério da Cultura e Turismo)
MINT	Ministry of Interior (Ministério do Interior)
MINEC	Ministry of Foreign Affairs and Cooperation (Ministério dos Negócios Estrangeiros e Cooperação)
MIREME	Ministry of Mineral Resources and Energy (Ministério dos Recursos Minerais e Energia)
MISAU	Ministry of Health (Ministério da Saúde)
MITA	Ministry of Land and Environment (Ministério da Terra e Ambiente)
MJCR	Ministry of Justice, Constitutional and Religious Affairs (Ministério da Justiça, Assuntos Constitucionais e Religiosos)
MOPHRH	Ministry of Public Works, Housing and Water Resources (Ministério de Obras Públicas, Habitação e Recursos Hídricos)
MTC	Ministry of Transport and Communication (Ministério dos Transportes e Comunicações)
PPA	power purchase agreement
PPP	public-private partnership

SADC	Southern Africa Development Community
SEJE	Secretary of State for Youth and Employment (Secretaria de Estado da Juventude e Emprego)
SEZ	special economic zone
SME	small and medium enterprise
SOE	state-owned enterprise
SPS	sanitary and phytosanitary
TEEN	Special Export Terminal of Nacala
TEU	20-foot-equivalent unit
TVET	technical and vocational education and training
USAID	United States Agency for International Development
WEF	World Economic Forum
ZIT	tourism interest zone

# EXECUTIVE SUMMARY

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**Mozambique is a low-income country of 29.6 million people located in Eastern and Southern Africa.** Mozambique has a gross domestic product (GDP) of approximately US\$12 billion and a GDP per capita of US\$417, which is among the lowest in the world. Poverty is high, at 48.4 percent in 2015, albeit lower than the 2009 rate of 58.7 percent (World Bank 2017b). Even under declining poverty rates, the total number of people living in poverty grew as population growth outpaced GDP growth. Mozambique has one of the highest total fertility rates in Sub-Saharan Africa, and the population is expected to grow to 50 million people by 2050. Given this scenario, the country needs rapid solutions for more and better jobs.

**Mozambique's private sector mostly comprises informal, small-scale enterprises.** Given the country's vastness, the population is scattered, with very limited agglomeration centers beyond the capital city and two other major cities. The informal sector represents about 90 percent of the enterprises in Mozambique<sup>1</sup> but only 31 percent of GDP (Medina and Schneider 2018). The number of formal sector firms has been increasing, albeit at a slow pace, and there are currently fewer than 50,000 companies. Three-quarters of these formal firms are microenterprises, employing fewer than five people, while only 2 percent of firms employ over 100 workers. Firms in the formal sector are also relatively new, with 50 percent of the microenterprises in business six years or less.

**Historically, the country's growth model has been one of dependence on megaprojects, but this has not delivered the required number of productive jobs to meet the needs of a growing population.** Despite the large investments in megaprojects flowing into the country over the past 20 years, other sectors remain largely underdeveloped. The economy is dominated by the agricultural sector, which employs over 70 percent of the labor force but accounts for only 25 percent of Mozambique's GDP. Services had a marked growth in importance over this period, representing approximately 55 percent of GDP. Manufacturing and extractives split the remaining 20 percent equally.

**At present, it is envisaged that the country will experience unprecedented investments.** Gas projects are expected to reach over US\$60 billion in investments and have the capacity to generate revenues of approximately US\$300 billion for the accumulated duration of the projects until 2050. Although the large oil and gas investments can create opportunities for links to the local economy and can have a remarkable development impact in the country, these investments are not expected in themselves to generate enough direct employment opportunities. Hence, effectively using the resources generated by the gas investments and providing further linkages upstream, downstream, and through consumption will be critical.

**The gas investments can create 35,000 direct jobs in the peak third year of construction, but that is only a fraction of what is required given the current growth rate of the labor force.** An estimated 500,000 young people are expected to join the labor force every year in Mozambique over the period 2018 to 2050. The working-age population will grow at a rate of 3.9 percent per year, which is greater than the average of 3.0 percent per year for Sub-Saharan Africa as a whole. This raises the question as to whether spillovers to other sectors or new sectors can absorb the growing labor force needs (Lachler and Walker 2018). Another important question to ask is how the resources generated from gas can best be used.

**Realizing the full potential of these large oil and gas investments will require a shift in Mozambique's development strategy to date.** The likely windfall from natural gas and mineral resources presents both an opportunity and a challenge. While expectations are high, there is fear of replicating a noninclusive model of economic growth, with enclave development of industrial investments, while the rest of the economy remains underdeveloped. Economic and social unrest are evident in some parts of the country, and without a concerted effort to create jobs and develop the economy as a whole, there is a high potential for escalation.

**The country's pace of GDP growth has been falling.** The average economic growth of 3.3 percent between 2016 and 2019 was down from an average of 7.9 percent over the preceding 15 years. The impact of lower commodity prices and a decline in foreign direct investment and donor support preceded disastrous events for the country.

**In 2016, there was a significant loss of confidence following the sovereign debt default.** Following the discovery of US\$1.4 billion in previously undisclosed public debt, Mozambique faced dramatic consequences in the macroeconomic and fiscal environments. The hidden debt crisis compounded the previous challenges and precipitated a fall in private demand, especially for services, which was a key driver of growth in prior years. This triggered further fiscal constraints and apprehension from development partners.

**Since 2017, the Cabo Delgado Province has suffered violence, linked to Islamic-inspired extremist ideology.** The first attack happened in October 2017, when the insurgent group hit several police stations, government officials, and residents in the town of Mocímboa da Praia. Such attacks, during which entire villages have been burned, are becoming more frequent and visible, resulting in the displacement of thousands of people and in hundreds of casualties, including members of the security forces.



**In 2019, two devastating cyclones hit the country, destroying physical infrastructure, disrupting economic activities, and taking a toll on human lives.** Around 1.7 million people were affected by Tropical Cyclone Idai in Sofala, Manica, and Zambezia, especially the poor. Cyclone Kenneth affected around 250,000 people in Cabo Delgado. Idai was the deadliest storm to have reached the country in the past 30 years.<sup>2</sup> Both events destroyed and damaged houses, businesses, and core infrastructure, with losses amounting to US\$3 billion.

**The evolving COVID-19 crisis in 2020 is expected to have a catastrophic impact on the economy as well.** Mozambique, along with the rest of the world, is now facing another emergency situation with the coronavirus outbreak. The immediate economic impacts include the postponement of the investment decision for one the most important gas projects (likely for one year), cancellation of all tourism bookings, closing of restaurants, shortages in the supply of food items for informal markets (with the closing of borders), and disruptions in export-oriented sectors such as agribusiness, fisheries, and coal, with lower demand and declining commodity prices. Other sectors that are suffering include personal services, financial services, construction, transport, and real estate, among others.

**The Mozambique Country Private Sector Diagnostic (CPSD) is therefore timely as the country explores opportunities for increasing diversification, building a broader base for growth, and creating employment.** In a context of fragility, Mozambique must adjust its growth model to reduce poverty and prioritize private sector investment and development. The CPSD provides answers to key questions such as which traded sectors, beyond liquefied natural gas, have the most potential to drive growth and productive employment and what reforms are needed to support this change. Jointly with other analytical pieces, the CPSD is a critical strategic document to guide the private sector development agenda in the country and provide policy recommendations over the medium term. These recommendations can form the basis for a joint World Bank-International Finance Corporation implementation plan.

## COUNTRY PRIVATE SECTOR DIAGNOSTIC

The CPSD analyzes a set of (a) sectors and (b) cross-cutting constraints to provide an in-depth understanding of what is needed to promote private sector development and economic impact. The criteria for selecting these sectors and constraints included their potential for affecting poverty, jobs, and growth and for achieving reforms within a reasonable time frame.<sup>3</sup> The team used sector indicators, complemented with additional information on reform potential, to score sectors and constraints on a set of metrics.<sup>4</sup> This quantitative analysis was combined with qualitative assessments based on discussions with World Bank Group experts and the public and private sectors of Mozambique.<sup>5</sup> Appendix D describes the CPSD methodology used. The results indicate that Mozambique should pursue the following:

- Immediate opportunities in upstream linkages to extractive enterprises, agribusiness, niches of tourism (for post-COVID-19), and housing construction
- Medium-term opportunities in transport and logistics and in energy
- Long-term opportunities in downstream linkages to extractives, financial sector, forestry, and fisheries

The CPSD highlighted the need for Mozambique to address key cross-cutting constraints to better position itself to capitalize on these opportunities, as outlined in table ES.1.

**TABLES 1 SECTORS AND CROSS-CUTTING ISSUES ANALYZED IN THE MOZAMBIQUE CPSD**

SECTORS	CROSS-CUTTING ISSUES
1 - Upstream linkages to megaprojects	1- Skills
2 – Agribusiness	2- Investment policy and promotion
3 – Tourism	3- Market and competition policy
4 – Housing construction	Other cross-cutting issues: regulatory environment and trade policy, governance, labor regulations, access to finance and to land, the macrofiscal scenario, and infrastructure.
5 – Connectivity: Transport and logistics	
6 – Energy	
Other sectors with potential: downstream linkages to extractives, the financial sector, forestry, and fisheries	

**One of the government's key priorities in its five-year program (Plano Quinquenal do Governo, 2020–24) is to support economic growth, increased productivity, and employment creation.** The government of Mozambique would like to develop a more diversified and competitive economy, intensifying the productive sectors with the potential to increase income generation and create more job opportunities, especially for youth. The critical sectors focused on by the five-year program include agribusiness, fisheries, tourism, infrastructure-related sectors, and extractives, including linkages to these opportunities. This significant alignment of timing between the CPSD and the government plan presents an excellent opportunity to develop an effective agenda of reforms and programs.

**The sector and cross-cutting constraint analyses for the CPSD provide a rich agenda of recommendations.** Generally, the study suggests (a) exploring growing markets (including linkages to extractives, agribusiness, tourism, and housing construction) and (b) leveraging the country's rich natural resources (sustaining forestry, fisheries, and nature-based tourism), while (c) developing further the enabling transport, energy, and financial sectors.

### Linkages to Megaprojects

**A critical path to Mozambique's economic development is generally understood to involve increasing the local capture of upstream linkages to megaprojects.** Opportunities for the private sector to serve these markets could be as high as US\$8 billion. The main opportunities are in food supply, including agro-industries such as horticultures, poultry and cattle, and catering services; construction services such as site preparation, basic electrical work, and concrete work; and support services, including security services, cleaning services, waste management services, transport services, storage services, and utilities.

**The CPSD studies the main issues in developing within the sectors opportunities for upstream linkages and puts forward various recommendations.** The constraints include the weaknesses in managerial and worker skills, the lack of depth in delivery capacity, gaps in quality standards, information gaps, challenges in mining and gas investments that can lead to further delays, instability in Cabo Delgado, and the uncertainty in regulations. In addition, these potential suppliers also face the broad cross-cutting constraints in the country, including issues regarding access to finance, regulatory environment, land, and infrastructure.

**To address the constraints in upstream linkages, the CPSD presents recommendations in four areas: (a) conflict and fragility; (b) institutional and regulatory factors; (c) access to skills, quality, and finance; and (d) access to markets.** In the first area, the CPSD points out the importance of tackling the security situation in Cabo Delgado. In the second area, the CPSD recommends developing a shared vision for local content among key stakeholders, and strengthening investment policy and investment promotion. In the area of access to skills, quality, and finance, the CPSD recommends capacity-building efforts with the involvement of the megaproject companies, partnerships with foreign investments for transferring knowledge, measures to improve the quality of Mozambique's infrastructure, and trade finance solutions. Finally, to expand access to markets, the CPSD recommends coordinated efforts for a database of local contractors, a small and medium enterprise support platform that draws on the lessons from the Mozlink experience, and other opportunities for local markets, including in public procurement.

Although the main focus of media and civil society attention is in upstream linkages, Mozambique has already identified opportunities for downstream linkages to extractive enterprises. Within the gas sector in Cabo Delgado, the government has established memorandums of understanding for gas to liquids production, fertilizer production, and a power plant in Nacala. Although the opportunities are vast and in multiple industrial areas, several bottlenecks put at risk the likelihood that these investments will materialize. The most important bottleneck is the large uncertainty in gas and fuel prices, making those downstream projects with limited buffers unlikely to happen. Additionally, the price agreement between gas concessionaires, aggregators (ENH), and downstream operators seems hard to reach. The insurgency in Cabo Delgado also makes it difficult to implement new downstream projects. Mozambique needs to prepare and implement a new gas master plan.

### Agribusiness

Agriculture is the most important sector for Mozambique from an employment and social development perspective, representing 25 percent of the GDP. It also has strong potential to create value when linked to agro-industries. Currently, agricultural production is largely rain-fed and has one of the lowest yields in cereals in southern Africa. Smallholder production accounts for about 98 percent of the area under production and produces almost all the food crops, such as maize, cassava, rice, and beans. It is characterized by small areas (1.8 hectares on average), low inputs, inadequate equipment, and low yields and returns. Still, there exists a small group of emergent commercial farmers who use some agricultural inputs, hire out-of-household labor, and sell their products in local markets.

The challenges in agribusiness have been identified in several analyses. In response to these challenges, Mozambique has welcomed various strategies. Most notably, the government, international donors, and various organizations have recently followed three multidimensional approaches, with pockets of success but also problems in implementation. These approaches include (a) expanding the infrastructure, chiefly the warehousing capacity and management; (b) supporting emerging farmers through mechanization and extension services; and (c) developing contract farming.

The extensive review of approaches and constraints in the agribusiness sector found that the following issues needed to be addressed. These include (a) emerging farmers face agronomic and managerial gaps that hamper their ability to run the businesses, aggravated by limited access to finance, including working capital; (b) commercial farming operations are still small in number, and operations typically move slower than business plans; (c) skill gaps are comprehensive and of various degrees; (d) lack of access to power and the high costs of connecting farms are limiting the development of irrigation, on-farm agro-processing, and storage; (e) there are limitations in government-owned and -managed storage facilities; (f) the poor quality of roads and lack of existing cold-chain facilities severely limit access to inputs and markets; and, finally, (g) the institutional support and the organization of programs are not well coordinated and oriented toward addressing the underlying factors of underperformance.



**The CPSD highlights the importance of promoting the expansion of contract farming and inclusive business models.** Promising value chains include grain and poultry in the Nacala and Beira corridors, fruits and vegetables in Manica and Maputo, and sugar across the country. Cashew nuts and pulses are also export crops with the potential for further production and export. There is a potential to promote several infrastructure projects, including silos, maize mills, rice mills, and irrigation schemes, but transparent processes for awarding contracts are needed. Access to land is a recurring issue for new entrants, especially for emerging farmers needing access to finance. Solutions to expanding knowledge and finance options can include using combined financial technology (fintech) solutions. The CPSD recommends supporting Mozambique's Agriculture Service Centers to increase their use and sustainability and contribute to reducing logistics costs in fresh products. Mozambique needs to develop programs that are sustainable in government budgeting and that can have a medium to long-term horizon. Coordination across sector actors is key to achieving success.

## Tourism

**Mozambique has a high potential in tourism.** Mozambique's 2,700-kilometer-long coastline, the fourth-longest in Africa, has some of the most spectacular and pristine beaches, tropical islands, and coral reefs in the world. Mozambique's outstanding biodiversity, including more than 10,000 species, contributes to the country's notable World Economic Forum ranking of 36th out of 140 for its "total number of known species" (WEF 2019b). Maputo city is demonstrating potential for meetings, incentives, conferences, and exhibitions (MICE) tourism. The government has identified six priority investment nodes to expand leisure and business tourism. Although trends in the number of arrivals in 2018 had provided hope for a positive cycle, the sector was severely affected by the COVID-19 pandemic, with almost no bookings in 2020.

**Constraints in both tourism supply and demand are limiting tourism investment and growth.** These include business environment constraints, limited institutional capacity, lack of infrastructure, high cost of travel, weaknesses in service provision, issues with visa facilitation, gaps in skills, and poor marketing and promotion.

**The CPSD urges the sector actors to improve planning, promote investment, and stimulate demand in the following ways.** Steps include (a) evaluating progress in the country's tourism strategy and its continued relevance; (b) promoting investment opportunities in specific sites; (c) strengthening investment promotion capacity and ensuring effective cross-sectoral coordination; (d) enhancing training opportunities; (e) reducing air access costs; (f) enhancing access to reliable information, including visa requirements; and (g) facilitating and promoting local procurement and strengthening local value chains.

## Housing Construction

**Formal house prices are still out of reach for most Mozambicans.** Using the ratio of house prices to income, availability of affordable formal housing is limited for most Mozambicans. Therefore, most of the population in Mozambique lives in informal types of housing, which people typically build themselves using materials they gather from the surrounding areas.

**The costs of construction are driving the higher costs of housing in Mozambique.** Breaking the overall cost of housing into subcomponents shows that the main differences from other African countries are in the costs of construction, regulatory compliance, and other associated costs, such as financing. Within construction costs, the largest contributors are materials costs. Other costs such as financing costs are also significantly higher for Mozambique than for regional peers. In addition, land rights are complex to obtain.

**Although the housing market in Mozambique faces difficulties, the existing housing deficit presents a great opportunity for the private sector.** An estimated 13.5 million additional housing units are needed by 2050 to accommodate population growth, replace inadequate units, and reduce overcrowding. The growing demand for housing means an equally growing demand for construction materials, with a significant opportunity for private investment in manufacturing of secondary materials. Considering the availability of raw materials near consumption places, and the fact that technology is easily accessible, the space for growing the market is substantial.

**To capitalize on these opportunities, Mozambique must tackle the underlying issues driving the high cost of construction, compliance, and financing.** The CPSD recommends tackling the land titling and registration systems, legislation related to permits and building codes, coordination between the institutions that govern and promote housing in Mozambique, assessment of opportunities for public-private partnerships (PPPs), skills development programs, and targeting of interventions on growth segments such as processed materials.

## Transport and Logistics

**Transport and logistics play a critical role in enabling other sectors, including agriculture, food manufacturing, extractives, fisheries, and forestry.** Mozambique's location as the maritime link to landlocked neighbors such as Zimbabwe, Zambia, and Malawi places the country's transport network competitiveness high on the agenda. The transport and logistics sector in Mozambique comprise a mix of state-owned firms with ownership in ports and other rail lines, concessions (ports and tolls), and local and international firms of various sizes and capacity.

**In addition to the direct costs of operating in the sector, many indirect costs are associated with the use of the various transport corridors.** Costs increase with the following conditions: unreliability of systems, port inefficiency, insecurity, harassment and corruption, border delays, requirements such as value-added processing before shipping, the need for special handling of particular goods, and the limited number of vessel calls at ports. The competitiveness of transport and logistics in Mozambique is being affected by an outdated policy framework; political economy factors, such as concessions being awarded without competitive tenders; infrastructure gaps; factors of competition; inadequate trade facilitation; and limited market size.

**To respond to the endemic problems in the transport sector, the CPSD recommends reforms in regulations, assistance to firm development, improvement in infrastructure, and investment in trade facilitation.** The CPSD proposes updating the Transport Policy and Strategy to identify priority investments under a limited resource perspective, as well as improving concession regulations. The study identifies mechanisms for reducing corruption and rent-seeking behavior. The CPSD recommends increased access to finance, including leasing, as well as platforms to facilitate transport. The sector requires significant investments not only in infrastructure but also in the completion of trade facilitation reforms, including fully expanded use of a single electronic window system, an improved trade inspection system, and easier clearance processes.

## Energy

**The government of Mozambique has a goal to achieve universal access to electricity by 2030.** In the past few years, Mozambique added 480 megawatts of capacity with five new generation plants, which represent the first substantial additions to the power generation fleet in 40 years. Four of these plants—three gas generating and one solar—were built through PPPs. As of 2019, private generation represented 40 percent of domestic consumption and 12 percent of total generation capacity, including exports.

**In spite of the progress, Mozambique faces several challenges to continue reducing the gap toward universal access.** First, it lacks a countrywide interconnected transmission system with redundancy. Because distribution is dominated by a few large consumers, with limited consumption by the rest of the population, the financial viability of expanding electricity supplies could be challenging. In addition, macroeconomic shocks worsened the state electricity utility's (EDM) already fragile financial situation, which affects even contracts with private players. To increase capacity, the state must improve efficiency. Finally, transmission and distribution subsectors have legal restrictions for private participation. These challenges are even greater because of climate change-related hazards, which substantially increase the costs of infrastructure investments.

The CPSD recommends reforming regulations to further facilitate public and private investments in the sector. The development of a realistic medium- to long-term reform road map is therefore considered a first priority. The study also provides recommendations for increasing the capacity and systems in EDM to increase electrification and fulfill the universal service obligation.

### Cross-Cutting Constraints

In addition to the sector-specific challenges, cross-cutting constraints to private investment hamper the economic development and job creation in Mozambique. The cross-cutting constraints comprise skills shortages, outdated investment policies, unfavorable competition policies, a challenging regulatory environment and trade policy, governance issues (including corruption and lack of transparency), inadequate labor regulations, difficulty of access to finance and land, macrofiscal issues, and poor infrastructure.

The CPSD covers in detail a subset of these most critical challenges, including skills, investment policy and its promotion, and market and competition policy. Some of the cross-cutting constraints analyzed, such as competition policy, are studied less in other diagnostics, so it is an opportunity to bring them to the agenda. Other issues identified and discussed in many studies—for example, business regulations—are presented in appendix B.

### Skills

Labor force participation is high in Mozambique, but most of the labor force has low levels of education. Skills gaps are similarly high across firms' age, by region, by exporters versus nonexporters, and by business ownership. Across sectors, the differences in workers' level of education are also small. Close to 40 percent of the formal enterprises in Mozambique have foreign employees as managers or professionals. When hiring, larger firms are more likely to complain about the skills of the applicants. Only 20 percent of formal enterprises have formal training programs for their permanent, full-time employees. About 55 percent of the firms that provide training only do it in-house.

During the five years of construction of the gas projects in Cabo Delgado, 63 percent of the 35,000 people hired at peak employment are going to be specialized or semispecialized technicians. Most workers will be foreign, with Mozambicans expected to be 40 percent of the workers, on average. This is the pattern in many oil and gas projects in developing countries. In response to the growing needs, Mozambique had already made significant progress in its national education system as well as in technical and vocational education and training (TVET), with the number of students in the latter system growing to almost 100,000 in 2019. The TVET system in Mozambique is well thought out and designed. However, the system still has some important gaps, especially in implementation. Between TVET and higher education graduates, Mozambique should expect over 6,000 graduates per year for the next five years to fill employment opportunities such as those in gas.



**Mozambique needs to continue to push the needle on developing more skills.** The CPSD recommends developing training centers with the megaprojects, involving additional megaprojects in the coordination of policies and programs, creating incentives for private training sector investments in TVET and in higher education centers of excellence, improving the efficiency and effectiveness of existing training centers, strengthening the role of the Labor Market Observatory in helping develop new skills or new ways of delivering the same skills, supporting programs that help drive new private sector investment with job creation potential, and planning the public investment beyond current opportunities.

### **Investment Policy and Promotion**

**Mozambique's investment climate is considered risky, with low rankings in established international indexes.** Moreover, the performance on many of the key global indicators is worsening compared with previous years, and Mozambique is losing ground in relation to its competitors in the region.

**The regulations defining the framework for investment policy have not changed significantly, even though the institutional framework and market conditions did.** The investment regime in Mozambique suffers from (a) outdated and fragmented laws that lack detail and definition, (b) the absence of implementing regulations, and (c) inconsistencies with Mozambique's international legal obligations. This leads to concerns about predictability and enforceability of investors' rights. In light of the recent gas discoveries, there were discussions of a horizontal local-content bill setting stricter targets for all economic activities. Such an approach is not recommended. Besides the risk of duplicating obligations, it may hamper the growth of sectors relying on competitiveness.

**Developing trust in the country's legal, regulatory, and institutional framework will require deep structural reforms.** Such reforms should be sponsored by a high-level reform champion with enough political clout to ensure adequate implementation. The CPSD recommends the following focus areas in the short term: (a) review the investment law, and other related legislation and align it with international investment policy commitments; (b) introduce mechanisms to help investors navigate regulations and procedures and address grievances, entailing the establishment of an investment ombudsman and functioning one-stop shops; and (c) modernize the special economic zone (SEZ) regime, including setting up an independent SEZ regulator, and promote the creation of serviced industrial land.

## Market and Competition Policy

**In Mozambique, restrictive economywide and sector-specific government interventions, combined with the unchecked anticompetitive behavior of market players, are driving the economy's perceived low level of competition.** Main constraints to competition include the presence of relevant state-owned enterprises (SOEs) in markets affected by distortive state aid; lack of competitive neutrality between firms; restrictive sector regulations that prevent entry, facilitate collusion, and discriminate among market players; excessive price controls; and the absence of an authority able to identify, sanction, and deter anticompetitive market behavior. The private sector competes against SOEs in almost all sectors of the economy.

**Even though Mozambique already has a competition law, the authority responsible for implementing the competition framework has not been established yet.** Establishing the competition authority is a paramount step toward promoting competition in the country. Despite the law, there are still some significant shortcomings in the current framework that, once an authority is established, could reduce the effectiveness of antitrust policy. There is a high degree of overlap between ownership, regulation, and management of SOEs that can lead to preferential treatment of public companies, crowding out private investments. Mozambique should implement mechanisms to promote separation between these functions of government and separate commercial and noncommercial activities of SOEs.

**Furthermore, public procurement accounts for a significant share of the economy, and the government needs to promote greater market participation and transparency.** That would allow for open and competitive selection of suppliers as well as actions to prevent bid rigging. It is important to finalize the databases and electronic systems needed to implement e-procurement.

## Priority Actions

**Addressing a good subset of the bottlenecks identified in the CPSD represents an outstanding opportunity to drive investment, economic growth, and employment.** Mozambique has the potential to create jobs with impacts throughout the country. This can lead to returning to the growth levels before 2016 and doubling the economy in 10 to 15 years. Mozambique needs to at least tackle the most important constraints to private investment. Within sectors, although specific agendas can run in parallel, more broadly it is important to target the main priorities.

**Mozambique is facing another storm with the outbreak of COVID-19, and the country needs to establish various mechanisms for addressing its impacts on the economy.** As discussed in a recent World Bank report, Mozambique would benefit from ensuring availability of inputs (seeds and fertilizers) and transport services to produce short cycle crops; reducing the energy bill; reorganizing import processes, including through a duty-free marketplace; postponing tax payments of a broader set of firms; and providing firm-level and wage support to targeted firms and sectors (Gaffurini and Campos 2020).

**Beyond addressing the COVID-19 crisis, establishing priorities is critical.** Experience in Mozambique demonstrates that the window of opportunity to push an agenda of reforms is often limited. The government already has several ongoing initiatives, including macroeconomic stabilization, crisis response, infrastructure investment, and other development programs. Hence, the CPSD recommendations need to be further integrated with what is achievable under existing and planned platforms, even if they include reformulating existing plans for reform. Finally, there are limits in the technical and implementation capacity with respect to carrying out market reforms, especially on a multisectoral agenda, so ownership and transparency are very important.

**As the government, private sector, international partners, academia, and civil society embark on this rich agenda of private sector development, it is critical to identify initial steps.** These steps include the following:

1. Coordinate activities and agenda, notably through an integrated sectoral-regional approach. This step involves working with coordination ministries, line ministries, development partners, the private sector, and agents of regional development (provincial governments and regional development agencies).
2. The government needs to identify a high-level champion for driving the agenda who at a minimum takes stock and maintains oversight of the large-scale, multisectoral, cross-cutting reforms and brings to the table the various actors. Understanding the common objectives of the strategy of development will not only help establish a clearer purpose for each reform, but also help mobilize ministries and other parties that have specific tasks.
3. Discuss with the appropriate line ministries the first set of measures that will be pursued in each sector. Typically, the agenda combines regulations, government procedures, and programs. The most successful strategies generally involve a combination of the different parts. Ministries should be held accountable for the parts that they respond to through strong oversight and disclosure of problems in implementation.
4. Set delivery times, which should be closely monitored by the coordination ministry for progress. Transparency on delivery and adjustments in implementation are very important.

**In addition, although each sector analyzed will have various recommendations, some of those are more urgent.** At this stage the recommendations given in table ES.2 are priorities within the main sectors.

TABLE ES.2 TOP RECOMMENDATIONS IN MAIN SECTORS WITH POTENTIAL

PROBLEM	RECOMMENDATIONS	MAIN RESPONSIBILITY
<b>Sector: Upstream linkages to megaprojects</b>		
<b>Area 2: Institutional and regulatory</b>		
Local content that creates high expectations but often ends up being disappointing	Develop a shared vision for local content in Mozambique by improving transparency and reducing information asymmetry. Various government, private sector, and development community partners would need to be involved in this coordination.	MEF, MIC, MADER
<b>Area 3: Access to skills, quality, and finance</b>		
Quality standards of SMEs not on par with the needs of the extractives sector	Improve Mozambique's quality standards infrastructure by strengthening the regulatory and institutional framework for quality infrastructure. Develop a national quality policy; support the development of an ICT infrastructure; provide technical assistance to firms for upgrading quality standards before certification; and provide support to requests for certification of firms in targeted sectors.	MIC, INNOQ
<b>Area 4: Access to markets</b>		
SMEs with challenges in connecting to linkage opportunities	Create an SME support platform that draws on the lessons from the Mozlink experience. An SME support platform could deliver expert support to high-potential firms. Establish expert desks.	MIC, MIREME
<b>Sector: Agribusiness</b>		
<b>Area 1: Warehousing</b>		
Lack of investment in maintenance and lack of use of existing storage facilities	Promote transparent processes to award management contracts for existing warehouse facilities.	MIC
<b>Area 3: Contract farming</b>		
Lack of equity and debt markets for medium to large agribusiness investments in targeted value chains	Use public investment alongside private sector investment to create spillovers to other investments and positive externalities on smallholders' income. Focus on sugar, poultry, fruits and vegetables, cotton, cashew nuts, sesame, and pulses.	MADER, regional agencies (ADVZ, ADIN)
Lack of access to markets	Create linkages between agribusiness and large corporates, such as those in extractive industries, building on quality infrastructure and technology upgrading programs.	MADER, regional agencies (ADVZ, ADIN), MIC, MIREME

PROBLEM	RECOMMENDATIONS	MAIN RESPONSIBILITY
<b>Sector: Tourism</b>		
<b>Area 2: Promoting investment</b>		
Lack of readily available investment opportunities	Develop an inventory of potential investments (such as hotels, resorts, and attractions), and prepare profiles for the most marketable opportunities. Prioritize opportunities for filling the gap in mid-level accommodations.	INATUR, ANAC
<b>Area 3: Stimulating demand</b>		
Lack of a coherent visa framework	Communicate destination openness by (a) introducing legal amendments to fill in key gaps and clarify procedures; (b) considering visa waivers for key markets that do not pose significant security threats, as done in a number of other SADC countries; (c) allowing cheaper, shorter-stay visas to encourage multidestination regional travel; and (d) creating an e-visa system.	MICULTUR, MINT, MINEC
<b>Area 4: Strengthening the value chain</b>		
Skill gaps and low service quality	Better identify the human resource needs of private sector operators and subsequently address them by revising curricula and increasing the coherence of standards in technical and vocational education and training (TVET) programs.	MICULTUR, INATUR, MCTESEP, SEJE, private sector
<b>Sector: Housing Construction</b>		
<b>Area 1: Weak enabling environment</b>		
Limited institutional capacity	Promote the development of PPPs for housing construction in specific locations, to address public objectives of expanding social housing but also to leverage other companies' resources in investments. It is also important to improve coordination between the institutions that govern housing, including redefining the role of the FFH.	MOPHRH, FFH
<b>Area 2: Limited skills and technical know-how</b>		
Skill gaps	Enhance the quality and quantity of the workforce. To achieve these aims, align the TVET programs with the needs of the construction and building materials industries. The strengthening of technical education institutions for the training of artisans not only will expand the availability of labor for the private sector, but also will generate job opportunities and improve quality and cost of self-construction.	MOPHRH, MCTESEP, SEJE, private sector
<b>Area 3: Development of supporting sectors with high potential</b>		
Unexplored opportunities in growth segments, through coordinated efforts	Focus on potential growth segments in which Mozambique can have competitive advantages, such as timber, tiles, bricks, and cement products (concrete blocks). The government could encourage applied research, improve skills along the value chain, and provide specific incentives for potential investors.	MOPHRH, private sector



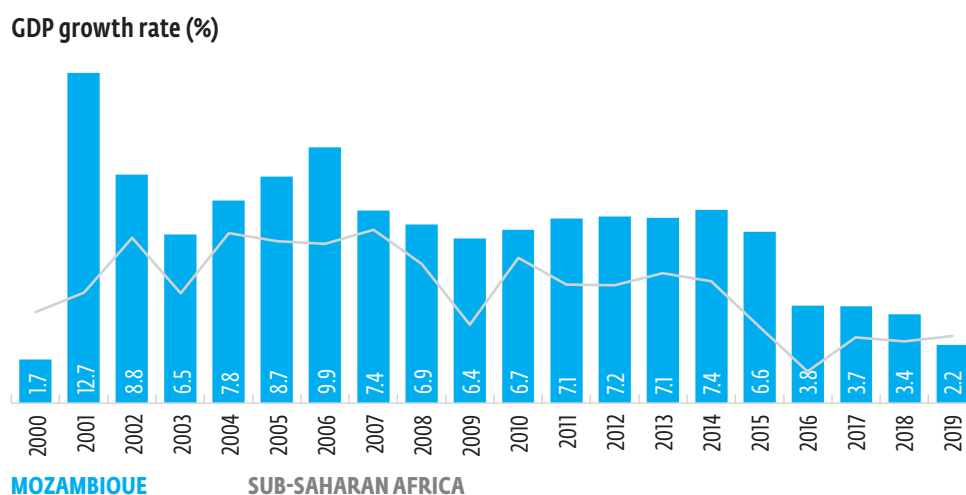
PROBLEM	RECOMMENDATIONS	MAIN RESPONSIBILITY
<b>Sector: Connectivity</b>		
<b>Area 1: Regulatory and institutional</b>		
Lack of priorities in the long list of investments	Update the Transport Policy and Strategy, including clear prioritization and criteria for choice of investment.	MTC
<b>Area 4: Trade facilitation</b>		
Limited use of the single electronic window for customs, not reducing clearance times overall	Fully populate the single electronic window system, including to integrate SPS institutions and other licensing requirements.	Tax authority/ Customs, MADER, MISAU, MIC, and so on
<b>Sector: Energy</b>		
<b>Area 1: Regulations</b>		
Lack of a high-level road map for the sector	Develop a realistic medium- to long-term reform road map under a high authority (such as the president's office) to help ensure that the road map will be implemented. It must be consistent with the existing NES and master plan to avoid overlapping and confusion.	MIREME, EDM
<b>Area 2: Financing and EDM performance</b>		
Lack of longer-term sustainable financing for the sector	Secure sustainable financing of necessary capital expenditures to allow EDM to increase electrification. Capital expenditures required to provide access to electricity (universal service obligation) are commercially unviable and need to be funded separately from EDM's commercial operations.	MIREME, EDM

Note: ADIN = Development Agency for the North (Agência do Desenvolvimento Integrado do Norte); ADVZ = Zambezi Valley Development Agency (Agência de Desenvolvimento do Vale do Zambeze); ANAC = National Administration of Conservation Areas (Administração Nacional das Áreas de Conservação); EDM = state-owned Electricidade de Moçambique; FFH = Housing Promotion Fund (Fundo para o Fomento de Habitação); INATUR = National Tourism Institute (Instituto Nacional do Turismo); INNOQ = National Institute of Standardization and Quality (Instituto Nacional de Normalização e Qualidade); MADER = Ministry of Agriculture and Rural Development (Ministério da Agricultura e Desenvolvimento Rural); MCTESEP = Ministry of Science and Technology, Higher, Technical and Professional Education (Ministério da Ciência e Tecnologia, Ensino Superior e Técnico Profissional); MEF = Ministry of Economy and Finance (Ministério da Economia e Finanças); MIC = Ministry of Industry and Commerce (Ministério da Indústria e Comércio); MICULTUR = Ministry of Culture and Tourism (Ministério da Cultura e Turismo); MINEC = Ministry of Foreign Affairs and Cooperation (Ministério dos Negócios Estrangeiros e Cooperação); MINT = Ministry of Interior (Ministério do Interior); MIREME = Ministry of Mineral Resources and Energy (Ministério dos Recursos Minerais e Energia); MISAU = Ministry of Health (Ministério da Saúde); MOPHRH = Ministry of Public Works, Housing and Water Resources (Ministério de Obras Públicas, Habitação e Recursos Hídricos); MTC = Ministry of Transport and Communication (Ministério dos Transportes e Comunicações); NES = National Electrification Strategy; PPP = public-private partnership; SEJE = Secretary of State for Youth and Employment (Secretaria de Estado da Juventude e Emprego); SPS = sanitary and phytosanitary.

# I. COUNTRY CONTEXT

Mozambique started a process of economic transformation in the 1990s through large-scale, capital-intensive investments. Mozambique's growth right after the civil war, which ended in 1992, was mostly driven by the agricultural sector, which employed over 87 percent of the workforce at that time. However, in the late 1990s, the country shifted into export-oriented growth through capital-intensive megaprojects—investments exceeding US\$500 million—that changed the growth paradigm completely (UNCTAD 2012). In the past two decades, the economy has recorded some of the highest growth rates in Sub-Saharan Africa (figure 1.1).

**FIGURE 1.1 GDP GROWTH IN MOZAMBIQUE AND SUB-SAHARAN AFRICA, 2000–19**



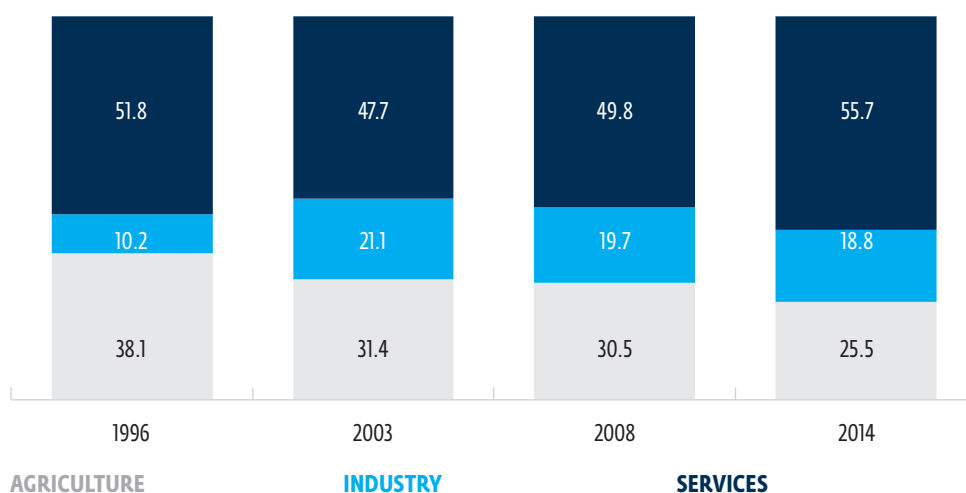
Sources: Mozambique National Institute of Statistics and World Bank data.

Note: GDP= gross domestic product.

Like most developing countries, Mozambique has exhibited a declining share of agricultural outputs, from 38 percent in 1996 to 25 percent in 2014 (figure 1.2). This decline was accompanied by an increasing output share of industry (up from 10 percent to 19 percent), mostly because of investment of US\$2.4 billion in the Mozal aluminum smelter in the late 1990s. However, the growth of industrial output has not translated into sufficient job creation.

**FIGURE 1.2 SHARE OF GDP CONTRIBUTION ACROSS SECTORS (%)**

Share of GDP contribution across sectors (%)

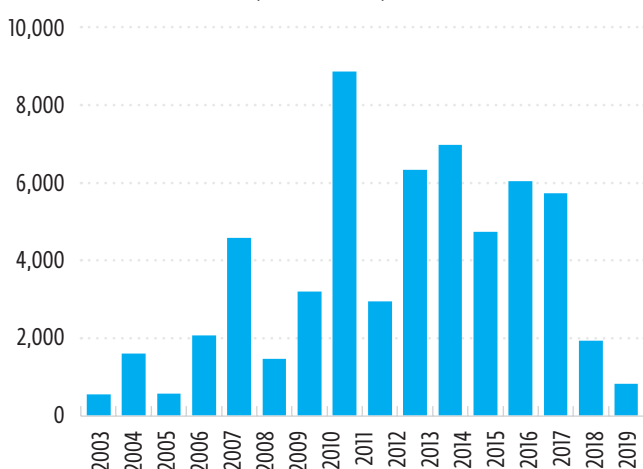


Source: Lachler and Walker 2018.  
 Note: GDP = gross domestic product.

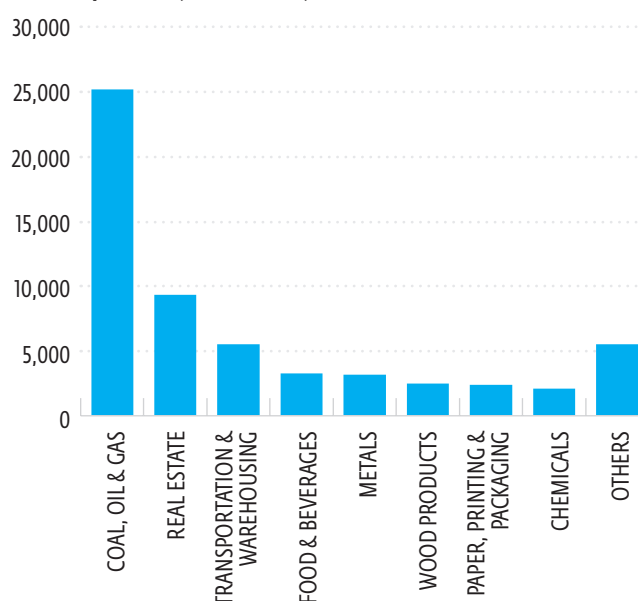
Growth was stimulated by the dynamism of the extractive sector and large-scale infrastructure projects. Foreign direct investment (FDI) was critical for supporting the development of the megaprojects, and from 2010 onward (figure 1.3), inflows into the country represented over 15 percent of all Sub-Saharan African FDI. Investments in aluminum, coal, and other minerals were important driving factors for the development of construction, infrastructure, transport, communications, financial services, manufacturing industries, and other services.

**FIGURE 1.3 FDI IN MOZAMBIQUE: TOTAL ANNOUNCED AND BY SECTOR, 2003–19**

a. FDI, total announced (US\$, million)



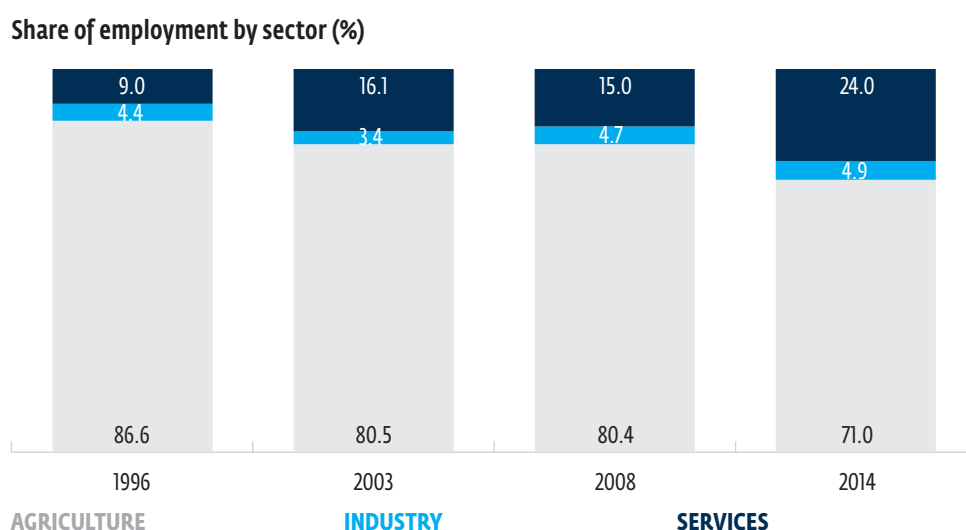
b. FDI by sector (US\$, million)



Source: World Bank using data from Financial Times.  
 Note: FDI = foreign direct investment.

Mozambique has experienced a marked increase in service jobs since 2003. With the development of more than 30 megaprojects, services expanded during this period, and the share of services in employment increased from 9 percent in 1996 to 24 percent in 2014 (figure 1.4). Nonfarm self-employment also was increasing in the informal sector in urban and rural areas.

**FIGURE 1.4 SECTOR COMPOSITION IN EMPLOYMENT, SELECTED YEARS, 1996–2014**



Source: Lachler and Walker 2018.

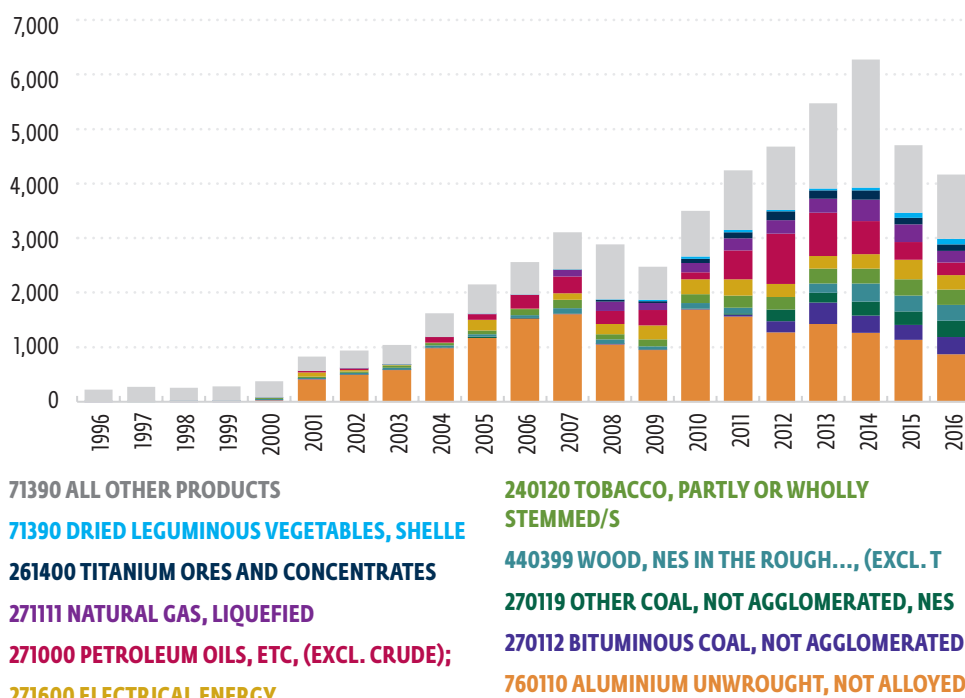
Note: GDP = gross domestic product.

**The increasing reliance on megaprojects has contributed to high export concentration in certain sectors.** With trade increasing from 50 percent to over 100 percent of the economy from 2000 to 2010, this high concentration in certain sectors and specific projects—for example, around the Mozal aluminum smelter project and the hydroelectric project in Cahora Bassa dam—has made the country vulnerable to commodity price fluctuations. The main contributors to Mozambique’s export growth are exploitable natural resources (coal, gas, and precious minerals), tobacco, and more recently wood (figure 1.5). Moving away from such concentration will require great transformational efforts.

**Furthermore, megaprojects in Mozambique have contributed little to fiscal revenues until recently.** Between 2007 and 2011, these operations accounted for only 0.5 percent of fiscal revenues. In part, this reflects the large upfront investment needs of these projects. Megaprojects benefit from special tax status, including the ability to amortize investment costs when computing profits. The SASOL onshore liquefied natural gas (LNG) project, for example, became a top corporate taxpayer only in 2015, after its 10-year cost-recovery period ended in 2014.<sup>6</sup> The limited revenue from these projects reduces the government’s fiscal space to support the wider development of the country, including private sector development.

**FIGURE 1.5 TOP 10 MOZAMBICAN MERCHANDISE EXPORTS, 1996–2016**

Export value in current US\$, million

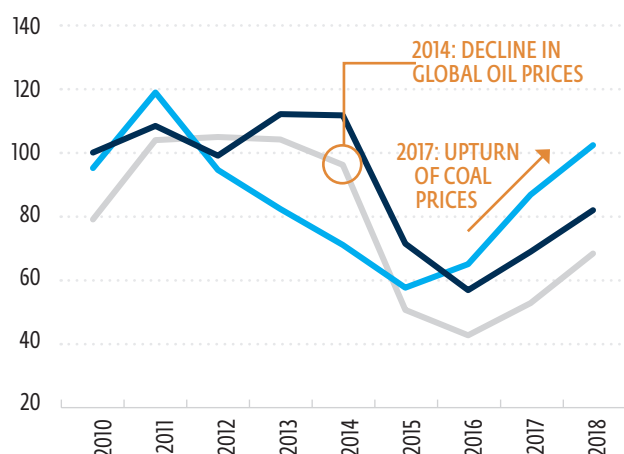


Source: World Bank, using mirror data from World Integrated Trade Solution (WITS-UN Comtrade), <https://comtrade.un.org/data/>.

Note: The products are the top 10 merchandise exports as ranked in 2016 and may not belong in the top 10 in other years of the period considered (1996–2016). The codes represent the products to the six-digit level, according to the Harmonized System, a standardized numerical method of classifying traded products.

**In more recent years, new investments reinforced the megaproject growth model.** The investments of multinationals, attracted by the important discoveries in the extractives sector over 2003–13, offered an initial glimpse of the opportunities that could have further transformed the economy. However, the absence of such transformation leaves the country's economy vulnerable to commodity price shocks, as happened in 2014 (figure 1.6). Those shocks were a critical factor behind the slowdown of FDI flows and the postponement of the final investment decision by extractive multinationals.

**In addition to falling FDI flows, aid flows started declining even before the hidden debt crisis hit Mozambique in 2016.** Mozambique has historically engaged in an intricate budget support partnership: in 2013, 40 percent of the government budget was funded directly by donors, and aid flows have amounted to almost a quarter of GDP in some previous years. After 2013, Mozambique experienced a sharp drop in aid flows, from US\$2.3 billion to US\$1.8 billion in 2015, bottoming out at US\$1.5 billion in 2016. This decrease was due mainly to the prospects of substantial revenue from gas at the end of the decade, but it was exacerbated by the hidden debt crisis in 2016. In the period 2013–17, the total decrease of FDI and aid flows averaged 17.9 percent annually. These exogenous factors affected GDP, cutting growth in half from 2016 onward.

**FIGURE 1.6 EFFECTS OF COMMODITY PRICE SHOCKS, 2010–18****a. Commodity prices (US\$)**

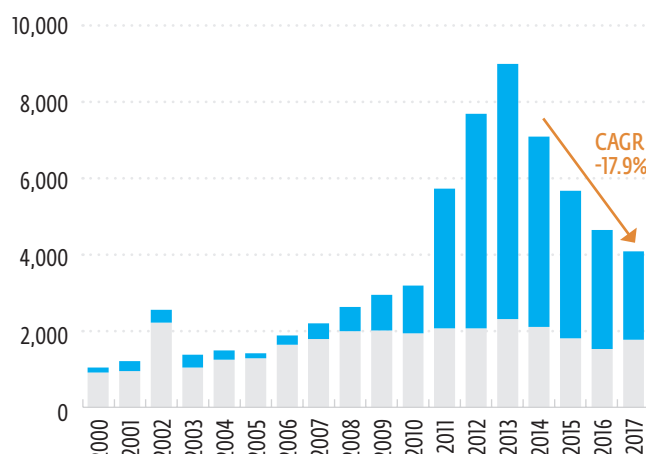
CRUDE OIL, AVERAGE (\$/BBL)

COAL (AVERAGE AUSTRALIAN &amp; SOUTH AFRICAN COAL) (\$/MT)

NATURAL GAS INDEX (2010 = 100)

Source: World Bank Commodity Prices Index, March 2019.

Note: bbl = billion barrels; mt = million tonnes.

**b. FDI flows and official aid flows, 2000–17 (US\$, million)**

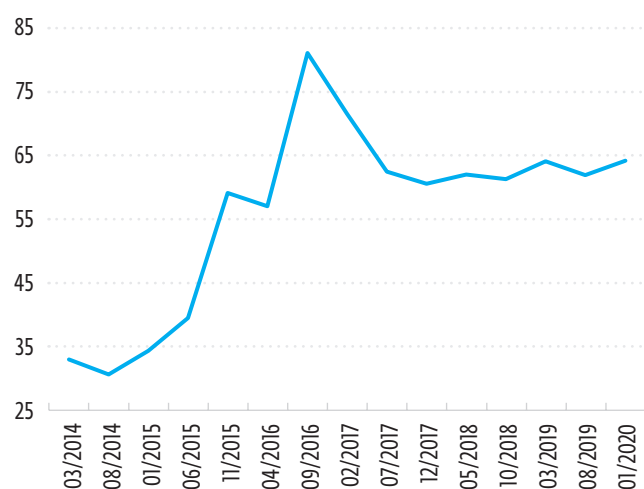
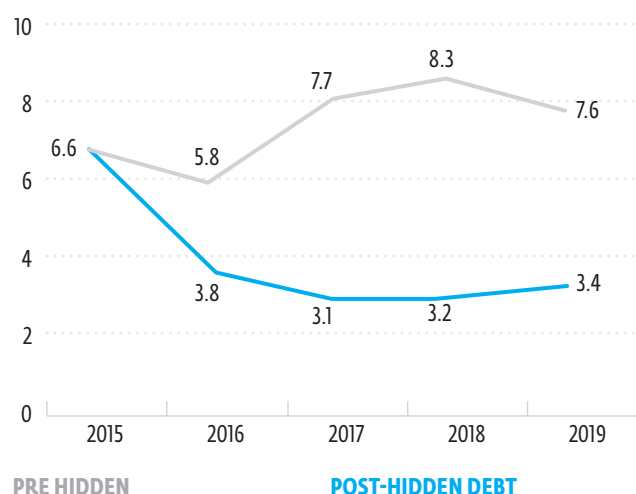
OFFICIAL DONORS (TOTAL AID FLOWS)

FDI FLOWS

Sources: World Bank data 2019; OECD Official Aid Flows 2019.

Note: CAGR = compound annual growth rate; FDI = foreign direct investment.

Mozambique went from being one of the economically virtuous countries to becoming one of the four most indebted countries in Africa—together with Cabo Verde, Eritrea, and Sudan—with a 118.7 percent debt-to-GDP ratio in 2018. The currency rate plummeted during the period 2010–16, from about Mt 31 on the US dollar to Mt 80. In the past two years the metical stabilized around Mt 60 to US\$1, with inflation coming down to 5 percent (figure 1.7).

**FIGURE 1.7 MOZAMBIQUE BEFORE AND AFTER HIDDEN DEBT CRISIS****a. Value of metical to US\$****b. GDP growth expectations (%)**

Source: Investing.com; World Bank 2017a.



Even before the economic crisis, the country's impressive growth rates had not translated into significant reductions in poverty or greater inclusiveness of economic development. The large capital-intensive public and private investment projects of the recent decades have had very limited effects on the rest of the economy. The gains from the country's natural resources have not generated investments in human and physical capital, which could be key contributors to long-term productivity growth. Finally, growth has benefited only limited social groups that are largely concentrated in the urban areas (Mahdi and others 2018). Ultimately, Mozambique has experienced an increase in inequality and a markedly uneven distribution of poverty concentrated in rural areas.

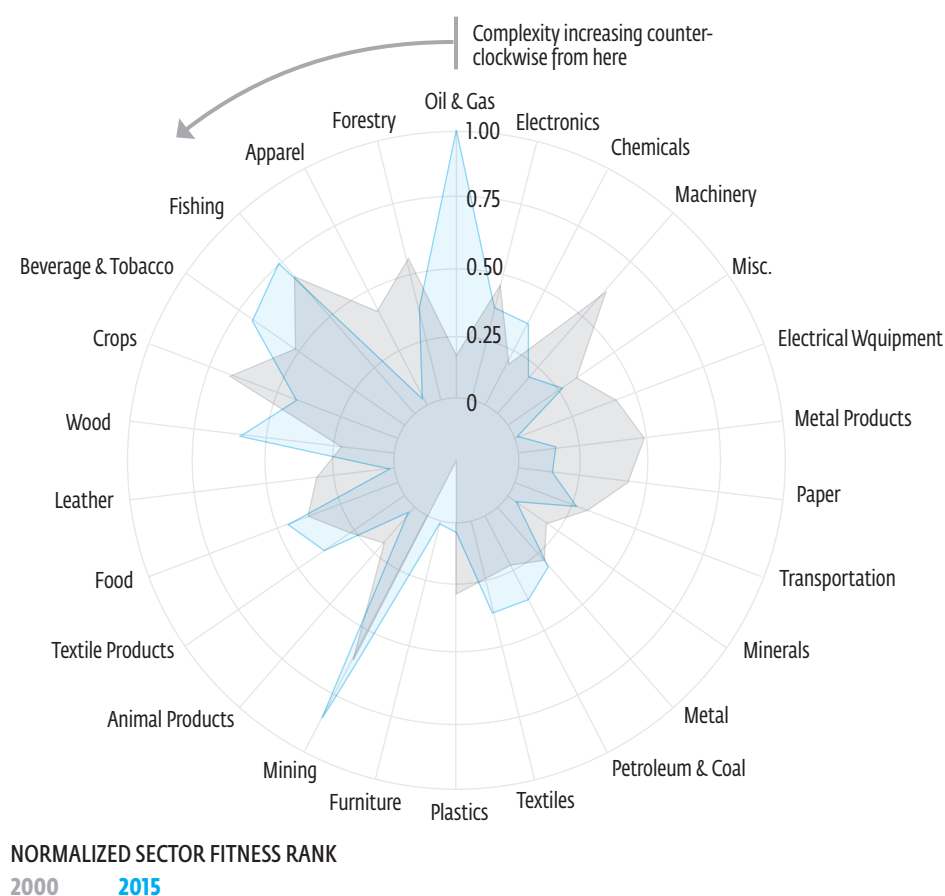
The challenge therefore is to increase and improve the diversification of the economy. This effort may require pulling away from the current concentration on large, capital-intensive projects and low-productivity subsistence farming toward a more interconnected and competitive economy. An alternative strategy is to work within the existing model but significantly increase the resources-distribution capacity to enable other sectors of the economy to flourish, including services, small-scale manufacturing, and agribusiness.

A risk for the country of Dutch disease is high, resulting from the impact of large inflows of foreign currency, eroding the competitiveness of other traded products and shifting production toward non-tradable sectors. Dutch disease would render the Mozambican economy even more dependent on extractive enterprise, which despite being highly productive, have been ineffective in generating new jobs (World Bank, forthcoming a). In Mozambique, Dutch disease effects were likely to have been contained during the past investment boom. The International Monetary Fund's (IMF) external balance assessments indicate that the real exchange rate was mostly in line with fundamentals between 2011 and 2015. During that time, FDI inflows were almost entirely offset by imports of goods and services. As a result, pressures for the real exchange rate to appreciate were limited.

Looking ahead, the large expected volume of LNG inflows could cause appreciation of the real exchange rate and declining competitiveness (World Bank, forthcoming). As LNG investment passes to the development and production stages, the risks of Dutch disease will become more pronounced. During the investment stage, the volume of FDI inflows is largely offset by imports of goods and services. Yet the demand effects from the local content share (even if less than 15 percent) can be significant in the Mozambican context. During the production phase, net inflows from export receipts could be even larger, especially if not mitigated by an adequate fiscal framework. This influx underscores the need for strong fiscal planning tools and processes. Mozambique's policy response to mitigate these effects has three main pillars: (a) establishing strong fiscal tools to moderate revenue inflows and increase investment capabilities, (b) boosting competitiveness across sectors, and (c) expanding the skills base, including through more flexible access to skilled labor to ease skills mismatches.

Therefore, Mozambique needs to take this time to expand the set of opportunities for the private sector. According to the World Bank's Economic Fitness methodology, which identifies potential sectors on the basis of the diversification and complexity of a country's competitive exports,<sup>7</sup> the following areas look most promising: oil and gas, mining, wood, fishing, and beverages (figure 1.8). Since 2000, Mozambique's economic fitness has declined in complex sectors in favor of less complex industries. For example, Mozambique's fitness rank in wood production increased between 2000 and 2015, but its capabilities in paper production declined. Similarly, the fitness rank increased sharply in mining, but the mineral and metal processing sectors experienced declines over the same period. Mozambique's economic fitness in 2015 is equivalent to that of Zambia in 1995 and Cambodia in 1998.

**FIGURE 1.8 MOZAMBIQUE'S ECONOMIC FITNESS BY SECTOR, 2000 VERSUS 2015**



Source: International Finance Corporation, Country Opportunity Spotlight.



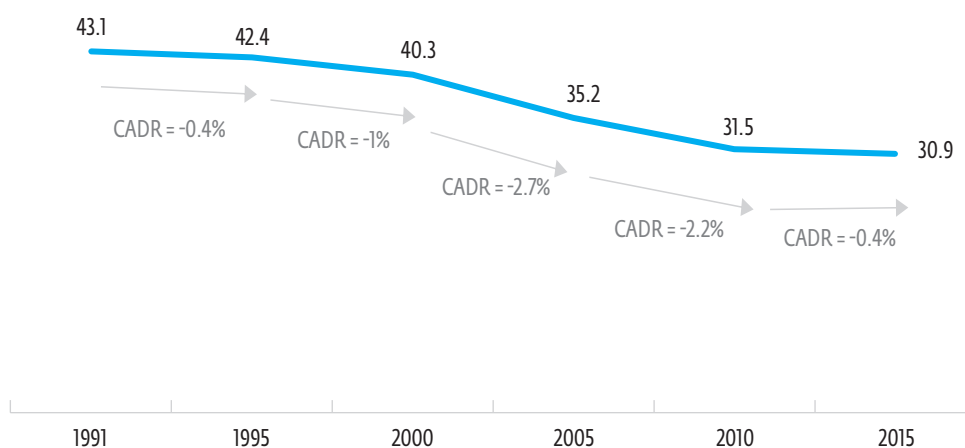


## 2. STATE OF THE PRIVATE SECTOR

The private sector in Mozambique is characterized by a high degree of informality and a large number of microenterprises. The informal sector is estimated to be 89 percent of enterprises<sup>8</sup> and 30.9 percent of gross domestic product (GDP) (Medina and Schneider 2018). This latter figure compares with 22 percent in South Africa but 39 percent in Tanzania and 33 percent in Zambia. The 2018 Enterprise Survey shows that unfair competition from informal enterprises is among the top three most commonly mentioned obstacles faced by firms in the formal sector.

The size of the informal sector in GDP has been on a downward trend since 1991. However, the pace of decline has decreased in recent years (figure 2.1). The informal sector consists mainly of smallholder farmers in the agricultural sector as well as other informal enterprises, which are mostly household enterprises in urban and rural areas. Lack of wage employment opportunities leads to informal entrepreneurship as a fallback option.

**FIGURE 2.1** DECLINE OF INFORMAL SECTOR IN MOZAMBIQUE'S GDP, 1991–2015



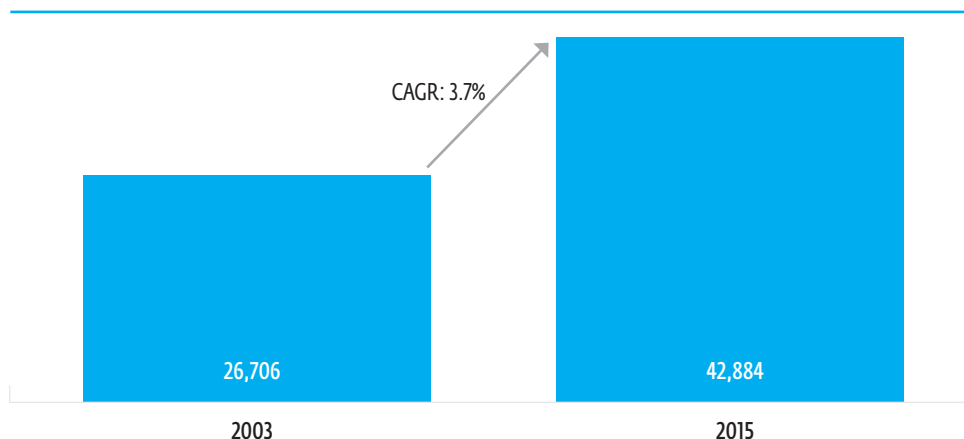
Sources: Medina and Schneider 2018; World Bank Group staff calculations.

Note: CADR= compounded annual decrease rate.

**The number of firms in the formal sector has been increasing, albeit at a slow pace.** The number of formally registered enterprises increased by 60 percent from 2003 to 2015 to a total of about 43,000 (figure 2.2). More recent data indicate that 74 percent of these formal firms are microfirms, employing fewer than five people, whereas only 2 percent of firms employ over 100 workers. Firms in the formal sector are also relatively new, with 50 percent of the microfirms operating for only six years or less. In turn, 50 percent of the larger formal firms (with five or more employees) were operating at least 12 years ago. Figure 2.3 shows the geographic distribution of formal firms: the largest proportion of formal firms is in Maputo, with the density of firms decreasing with distance from the capital, except in the north, where the extractive firms are concentrated (INE 2015).

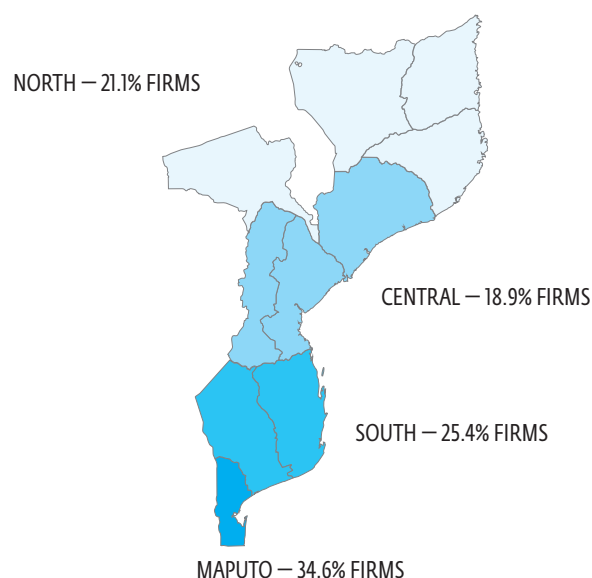
**Market concentration in terms of the share of revenue of and employment by large firms remains high, although it has decreased over time.** Young firms are increasingly contributing to total sales and employment. In 2018, large firms (firms employing over 100 workers) concentrated 52 percent of total sales and 54 percent of total employment. In turn, microfirms concentrated only 5 percent of total sales and 17 percent of total employment.<sup>9</sup> Although this comparison indicates a high degree of market concentration, the situation has improved since 2003, when the large firms represented 75 percent of the total sales (INE 2015). Young firms (firms that have been operating for less than five years) have been growing and account for almost 15 percent of all jobs. However, the growth of newer firms is much slower than in some countries in the region such as Tanzania, Uganda, and Zambia.

**FIGURE 2.2 CHANGE IN NUMBER OF FORMAL SECTOR FIRMS, 2003–15**



Source: INE 2003, 2015.

Note: CAGR = compound annual growth rate.

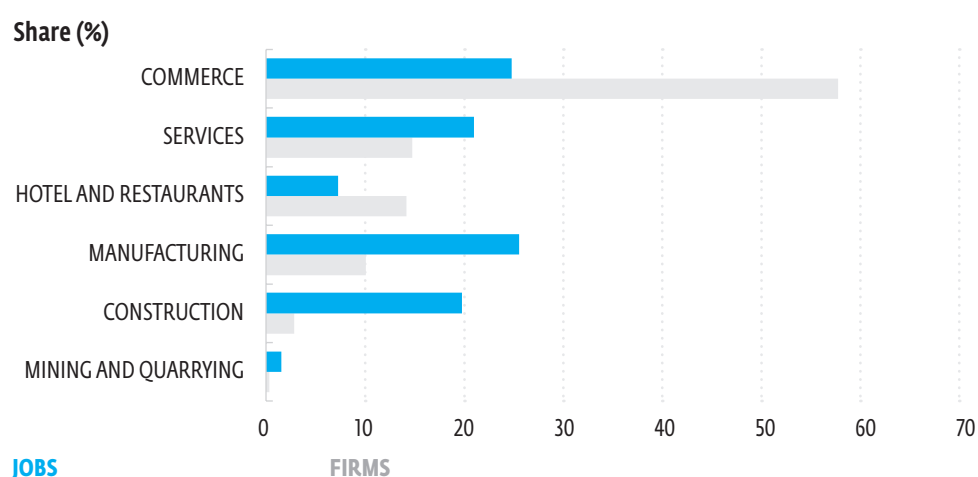
**FIGURE 2.3 FORMAL FIRMS BY REGION, 2015**

Source: INE 2015.

Commerce, hotels and restaurants, manufacturing, and other services are the largest sectors, accounting for the highest percentage of formal firms and formal sector jobs. About 58 percent of formal firms are in trading activities, including wholesale and retail, followed by hotels and restaurants, other services, and manufacturing (figure 2.4). The share of manufacturing in employment has been stable over time. However, this sector is still small and underdeveloped, consisting mostly of microbusinesses that produce basic goods and sell to private individuals in their locality or region. Food, wood, furniture, and fabricated metal products are the largest subsectors in manufacturing, followed by publishing and printing, garments, basic metals, plastic and rubber, and nonmetallic mineral products. In total, these subsectors account for over 95 percent of the manufacturing activity.

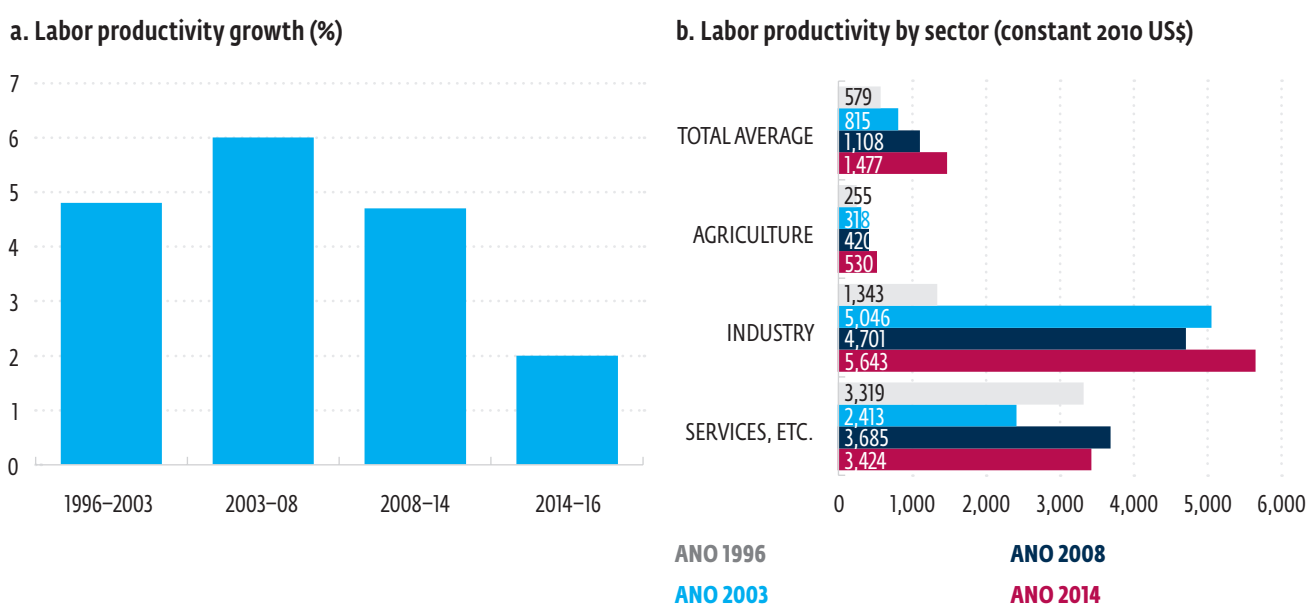
Despite the ongoing investments, the extractive sector represents a small share of employment. Half of the firms in the extractive sector are exporters, but this sector is responsible for less than 2 percent of total jobs.



**FIGURE 2.4 SHARE OF FORMAL FIRMS AND JOBS BY SECTOR, 2018**

Source: Data are from Mozambique Enterprise Survey 2018.

Labor productivity has increased across all sectors, but the pace has declined since 2008 (figure 2.5, panel a). Wide divergences among sectors persist, and growth was mainly driven by capital accumulation. The relatively small increase in the agricultural sector's labor productivity occurred because of the movement of labor to the services sector, not because of improvements in the low productivity (figure 2.5, panel b). Additionally, as long as productivity levels in services are above the national average (which is pulled down by agriculture), intersectoral shifts into the services sector will continue to raise overall productivity. As more and more labor shifted from agriculture to services without significant capital investments in the sector, intrasectoral productivity in services started to decline between 2008 and 2014.<sup>10</sup>

**FIGURE 2.5 CHANGES IN LABOR PRODUCTIVITY ACROSS SECTORS, 1996–2016**

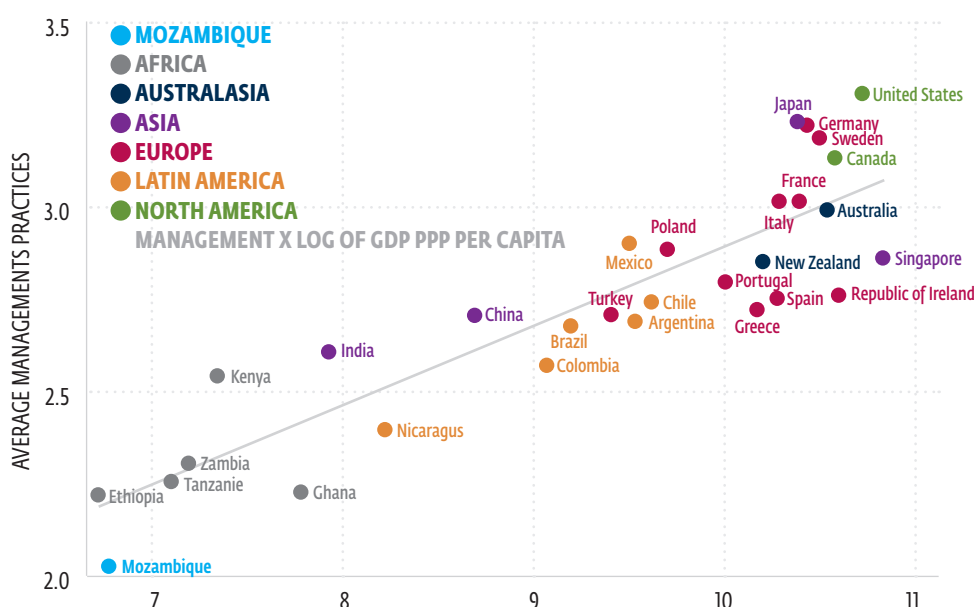
Source: World Bank data.

Source: Lachler and Walker 2018.

Firms with weak capabilities—the ability and practices needed to operate and innovate—are contributing to the low productivity growth. Mozambique is ranked 137 out of 141 in the World Economic Forum’s 2019 Global Competitiveness Index, mostly because of low scores on higher education and training and on business sophistication. It ranks 148 out of 157 in the World Bank’s 2019 Human Capital Index, which measures the relative productivity of the current generation based on their educational and health attainments. As figure 2.6 shows, in an international comparison of management practices across 34 economies, firms in Mozambique reported the lowest adoption of business management practices (Lemos and Scur 2014).

**FIGURE 2.6 MANAGEMENT PRACTICES IN RELATION TO GDP PER CAPITA, MOZAMBIQUE VERSUS SELECTED REGIONS**

Average score for management practices



Source: Lemos and Scur 2014 based on IMF World Economic Outlook indicator, April 2013.

Note: Log of 10-year average GDP is based on purchasing power parity (PPP) per capita GDP in current (2013) US\$, billion. GDP = gross domestic product.

Most of the enterprises in Mozambique perform poorly on managerial practices. In comparison with countries with a high management score—Japan, Germany, Sweden, and the United States—more than 75 percent of Mozambique’s firms scored below the worst 10 percent of firms from these countries, which shows some uniformity in limited managerial skills. Less than 1 percent of Mozambique’s firms reach the score of the top quartile of firms in these developed countries (Aga and others 2019).

**Still, some firms in Mozambique have more advanced firm capabilities.** Larger firms are more likely to have better firm capabilities (Aga and others 2019). Moreover, firm capabilities are positively correlated with the performance of enterprises in Mozambique. Concretely, a one-standard-deviation change in management practices is associated with a 63 percent increase in sales per employee. Manufacturing firms in Mozambique score particularly low when it comes to improving production processes (operations), and score at levels similar to those in Ethiopia and Ghana on people management and target setting (Lemos and Scur 2014).

**Women-owned enterprises are more likely to have lower-performing business practices.** The difference in management practices between male- and female-owned firms suggests that underlying gender constraints may be limiting the access to those practices for women-owned businesses. It is worth emphasizing that the firms analyzed are a subset of formal firms with at least five workers, where only 18 percent are majority female-owned. Considering that women are more likely to be in the informal sector, the average difference may be even larger.

**Firms that export directly (not through an intermediary), firms that use foreign inputs, and firms with a website adopt better management practices in Mozambique.** Otherwise, and perhaps surprisingly, there is no significant difference in management practices between firms in Maputo and elsewhere in Mozambique when accounting for other explanatory factors, as well as between foreign and local enterprises, or between old and young firms.

## 3. DRIVERS OF PRIVATE SECTOR-LED GROWTH

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The economic growth opportunities for Mozambique cover a range of sectors and subsectors. The following sectors were identified using a selection process, described in appendix D, that showed they have the most potential to address poverty, generate jobs, and fuel growth as well as having the potential to achieve reforms within a reasonable time frame:

1. Upstream linkages to megaprojects
2. Agribusiness
3. Tourism
4. Housing construction
5. Transport and logistics
6. Energy
7. Downstream linkages to megaprojects
8. Financial sector
9. Forestry
10. Fisheries

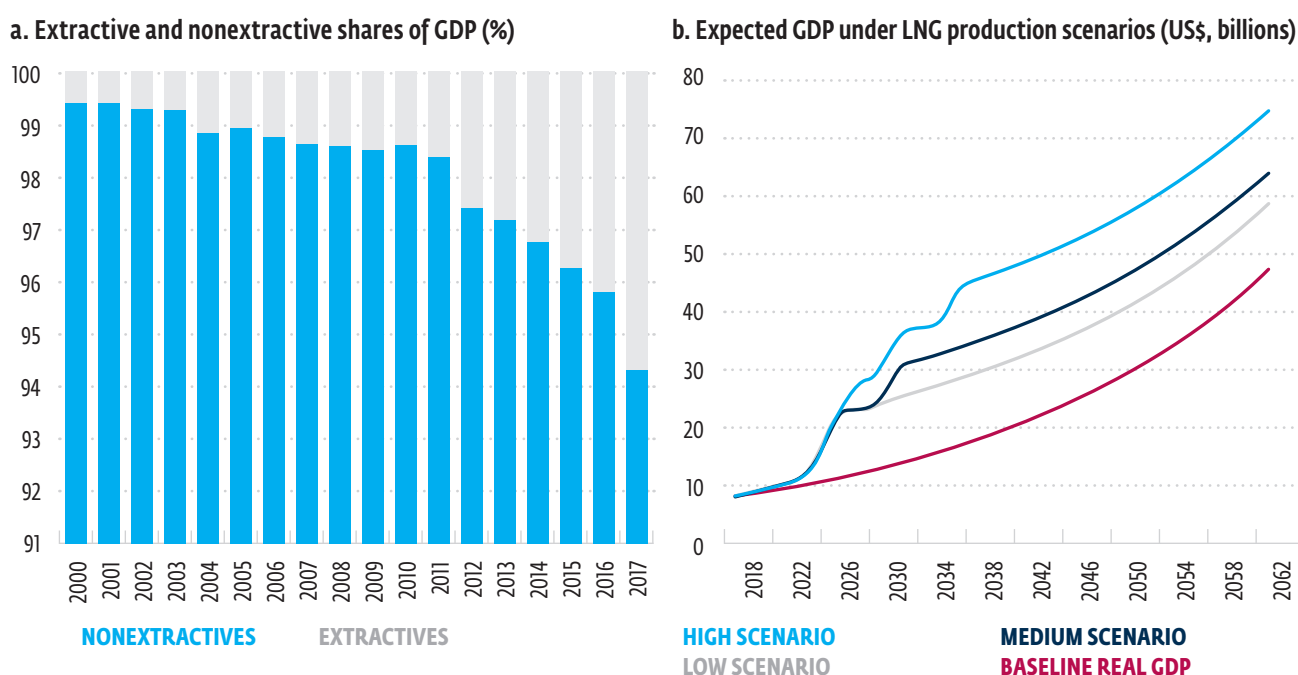
Through the analysis, downstream linkages to megaprojects, the financial sector, forestry, and fisheries were shown to have less potential for development in the shorter term. Hence, they are discussed in appendix A.

### 3.1. UPSTREAM LINKAGES TO MEGAPROJECTS

Mozambique currently has 34 identified megaprojects, representing US\$44.5 billion in actual and planned investments since 2002.<sup>11</sup> Megaprojects, defined by the United Nations Conference on Trade and Development as projects with investments exceeding US\$500 million, make up almost half of all foreign direct investment (FDI) in the country and account for 60–70 percent of total exports. In 2016 and 2017, extractive industries contributed increasingly to gross domestic product (GDP) growth, representing almost half of the GDP growth (figure 3.1). In 2018 and 2019, they were less important drivers of growth. Mozambique is a resource-rich country, with large deposits of natural gas, coal, and minerals, and investments in this sector are expected to change the economy, more than doubling GDP in the next 10 years.

Mozambique's journey in developing megaprojects started 20 years ago with the first major investment in Mozal, one of the world's largest aluminum smelting plants. Since then, the country has successfully started producing coal through an investment by Vale in the Moatize mine, as well as producing gas through an investment by SASOL in the onshore gas fields of Pande and Temane. Several other megaprojects involve the production of rubies, gold, and graphite, as well as infrastructure and power projects to support the resource boom.

**FIGURE 3.1 CONTRIBUTION OF EXTRACTIVE INDUSTRIES TO GDP GROWTH, 2000–17**



Source: World Bank.

Note: GDP = gross domestic product; LNG = liquefied natural gas.

## Extractive Industries with Planned Megaprojects in Mozambique

### Mining

The mining sector is primarily focused on coal production. The sector's growth followed the construction of the coal-specialized port in Nacala-a-Velha in 2015 and the commissioning of the Nacala 912-kilometer rail line to the mines in Moatize, in Tete Province (discussed in section 3.5). The country hosts some of the world's largest known reserves of coking coal and has high-grade coal reserves estimated to total 1.8 billion tonnes. Mozambique is well positioned geographically to export coal to Asia. Coal production increased from 8.7 million tonnes in 2016 and 13 million tonnes in 2017 to 18 million tonnes in 2018. Still, in 2019 and 2020, production has declined.

Other mining has significant potential to contribute to economic development and job creation. Most of the deposits in Mozambique are still untapped, despite the abundance of resources, including titanium ore, precious and semiprecious stones, and gold. Cabo Delgado is estimated to have among the world's largest graphite deposits, and by some accounts more high-quality graphite exists around Balama district than in the rest of the world and could be easily mined. The significant presence of heavy sands (ilmenite, rutile, zirconium, and titanium) on the coast of Nampula province is sufficient for an estimated 120 years (at 1.2 million tonnes per year). The Gaza province contains the world's largest deposit of titanium-bearing sand, but to develop it would require more than US\$500 million for the mine, smelter, and transportation facilities. Because of the iron ore in Lalaua district, in Nampula plans have been made to develop a steel plant producing 500,000 million tonnes per year. A gold processing facility was established in 2017.<sup>12</sup> If mining costs in South Africa continue to rise as expected over the coming years, Mozambique could gain a regional competitive advantage. Mozambique complies with the Extractive Industry Transparency Initiative, which is an important milestone in the economic management of its natural resources.

### Natural gas

Mozambique's natural gas reserves are estimated at a staggering 277 trillion cubic feet, of which more than 130 trillion cubic feet have already been discovered (equivalent to Norway's reserves). The discovery of large offshore natural gas deposits in the Rovuma basin, in Cabo Delgado province, has catalyzed large foreign interest. Investments were initiated from multinationals (Total, ENI, Exxon Mobil, and others) that will change the sector remarkably.

Planned investments in LNG are expected to reach US\$60 billion and have the capacity to generate revenues of approximately US\$300 billion over the life of the projects (until 2050). To put this revenue into context, Mozambique's GDP is currently US\$12 billion. Once gas production reaches its peak, Mozambique can become the third-largest LNG exporter in the world after Qatar and Australia. Mozambique could also benefit from US\$36 billion to US\$50 billion of resource and nonresource state revenues by 2032 as the result of these investments. Managed efficiently, the revenues flowing in from the gas could spur development in other sectors and contribute to the transformation of the country's economy.



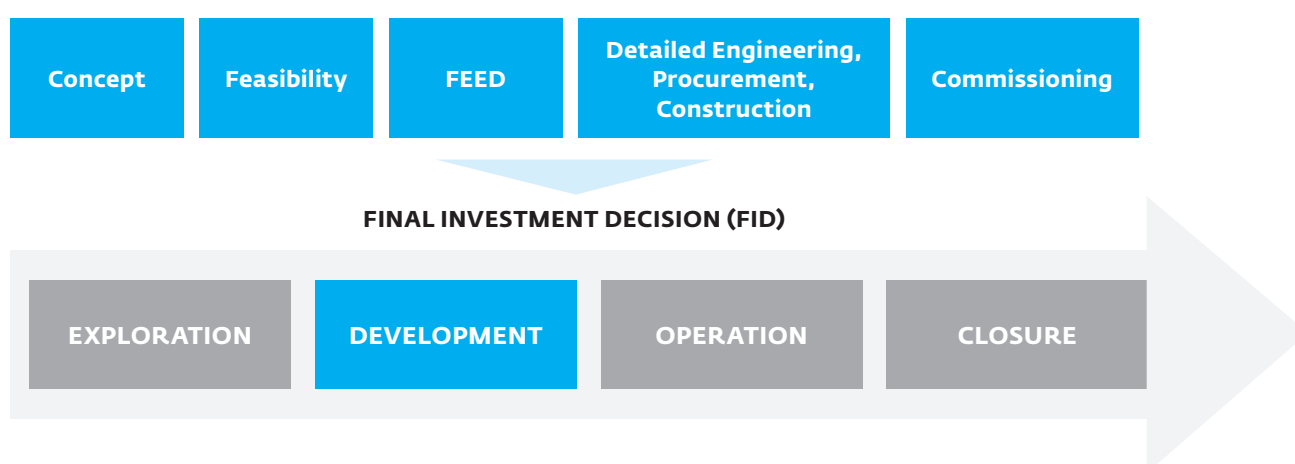
Production of LNG, expected to begin in the late-2020s, is being delayed because of the COVID-19 pandemic and the conflict situation in Cabo Delgado. Although construction of Area 1 progressed in 2020, it stopped in early 2021 due to the conflict reaching Palma district, where the investments are taking place. The Area 4 project is being delayed because of the conflict, the COVID-19 outbreak disrupting early work, and the depressed gas market that is making investors wary (Further Africa 2020).

### Realistic Supplier Development Opportunities

Mozambique has strong potential to develop upstream linkages to megaprojects. Each of the four phases in the life cycle of an oil and gas project—exploration and appraisal, development, production, and decommissioning—provides unique opportunities and challenges for using local content (figure 3.2). Typically, demand for local content is low and intermittent during exploration because this stage mainly involves off-site specialized engineering and project management services. That was the situation in the Rovuma Basin megaproject. Demand is high, but short term, during development; medium and long term during production; and limited during decommissioning.

During phase 2, construction and development, the large engineering, procurement, and construction (EPC) contractors and other major contractors are responsible for the majority of local purchasing and employment. EPC contractors tend to operate in a highly competitive market and will base procurement and employment decisions on cost, quality, and timing considerations unless they are specifically incentivized to develop local capability. A major challenge for project developers is in planning for local sourcing, given the tight timelines between a final investment decision (FID) and the start of construction.

**FIGURE 3.2 OIL AND GAS PROJECT LIFE CYCLE**



Source: Cardno 2018.

Note: FEED = Front End Engineering Design.

**In addition, there is an opportunity to build on the investments in extractives and related spatial and territorial development.** Mozambique can build on the companies' support for environmental and social development projects that integrate infrastructure, skills, and economic opportunities in the communities affected by the megaprojects.

**Most developing economies, such as Angola, Nigeria, Libya, Saudi Arabia, and Trinidad and Tobago, struggle to achieve a national content level of 25–30 percent.** That is because of the high-tech and sophisticated nature of goods and services required to develop extractives. In Tanzania's LNG projects, the estimated local capture of the total project cost was predicted to be lower, at 8–16 percent.

### Potential Sectors in Mozambique and Their Current Status

Mozambique is expected to enter the development phase of the main gas projects in Cabo Delgado, which have significant opportunities for linkages (figure 3.3). Industries that supply megaprojects typically fall into three buckets:

- Indirect services are available in Mozambique. Services are not very specialized but require some expertise. Standards need to be improved, and some investment is required. Examples are catering, security, transport, and medical services.
- Direct services are specialized services that comply with stringent safety and operation standards. Such services are not widely available in Mozambique. Examples are civil, mechanical, electrical, construction materials, and environmental services.
- Specialized services have the strictest standards for operation and safety. These are critical services in which losses can expand exponentially. Heavy investment is required for provision of these services and for research and development. Such services are not available in Mozambique. Examples are prefabricated gas turbines or LNG refrigeration and exchangers.

**Most of the potential for linkages into Mozambique's LNG projects will lie in indirect services, as well as in a few direct services.** Indirect services are readily available in Mozambique, though quality and standards still need to be improved. Direct services require significant investment and time to be developed locally at the required standard and quantities. Specialized services are likely to be given to international players that operate with global best practices in safety and have the capacity to deliver through large contracts.

FIGURE 3.3 STATUS OF MOZAMBIQUE'S LNG PROJECTS

	PROJECTS	EXPLORATION	APPRAISAL	DEVELOPMENT	PRODUCTION	DECOMMISSIONING
MOZAMBIQUE BASIN	Pande & Temane			CPF and pipeline expansion, 11 years of production, installation of 5 <sup>th</sup> train	Yes	
	Inhassoro			Plan of Development (PoD) approved in January 2016		
ROVUMA BASIN	Area 1 - Total Golfinho, US\$23bn			PoD approved in March 2018 FID approved in June 2019	Production expected in 2024	
	Area 4- ENI Coral South, US\$8bn			FID approved in June 2017 Development ongoing	Production expected in 2023	
	Area 4 - ExxonMobil Mamba, US\$25bn			PoD approved in May 2019 FID moving to December 2020	Production expected in 2025	
ANGOCHÉ, ZAMBEZI AREA		Area A5-A and A5-B, 5th Round Concession. Exploration contracts for Exxon Mobil and ENI signed in 2018				

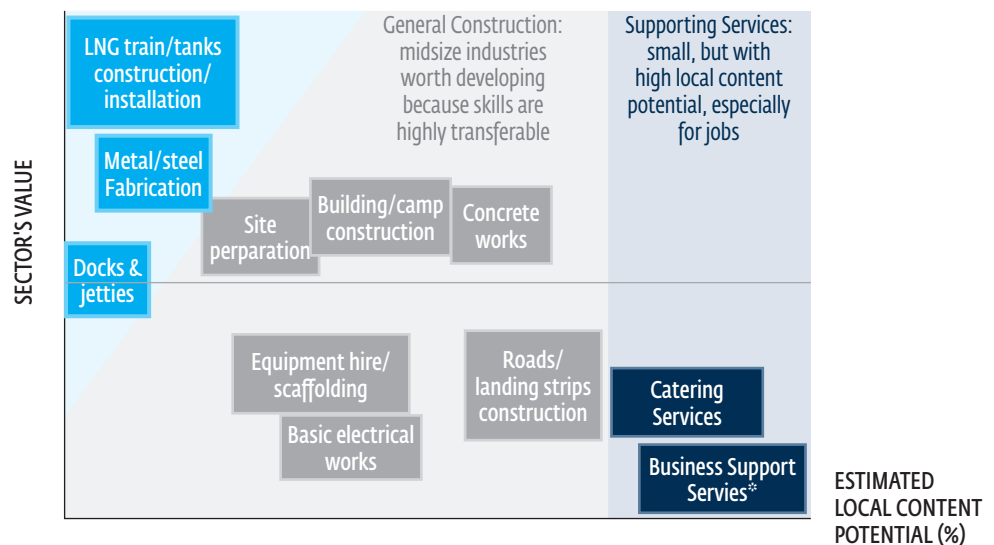
Source: Data are from companies' sources.

Note: FID = final investment decision.

**The CPSD identified demand and supply capacity.** The demand analysis for the CPSD included (a) studying which sectors had potential, drawing from sectors that benefited from LNG discovery in other countries, (b) completing interviews with key industry experts and their teams in Mozambique, and (c) studying procurement plans from major EPC companies in Mozambique. Appendix C, table C.1, summarizes the key findings of sectors chosen as having potential and the justification for these choices. Besides a sector's potential, the CPSD analysis considered the sector's value (total spent, in US\$) compared with the local content potential (percentage spent on local firms). Through market interviews, the team also considered potential for employment creation and value retention in the country. Appendix table C.2 describes the status of three sectors with potential for local content, giving an example of the type of analysis completed on the supply side. Figure 3.4 shows the sectors that, using international and past experience as well as market interviews, the CPSD analysis identified as having the greatest potential for using local content relative to the market size for creation of upstream linkages. Potential relative to other country sectors is shown in table 3.1.

**FIGURE 3.4 SECTORS WITH MOST POTENTIAL FOR LOCAL CONTENT IN RELATION TO SIZE OF MARKET**

Project-Specific Industries:  
Limited local content



Source: Adapted from World Bank Group, 2014.

Note: LNG = liquefied natural gas.

\* Includes five industries: security; cleaning; landscaping services; temporary employment agencies; and passenger transport services.

**TABLE 3.1 SECTORS WITH POTENTIAL FOR LOCAL SOURCING, COMPARED WITH OTHER COUNTRY SECTORS**

INDUSTRY	TANZANIA'S LNG PROJECT DEMAND PROFILE	INTERVIEWS WITH INDUSTRY EXPERTS FOR MOZAMBIQUE
<b>Agribusiness</b>		Agribusiness has potential for local content through selling to catering.
<b>Professional, scientific, and technical services</b>	<ul style="list-style-type: none"> <li>• Legal services</li> <li>• Accounting services</li> <li>• Research and development survey services</li> <li>• Pre-feed and feed design services</li> <li>• LNG testing, analysis, and certification</li> </ul>	Indirect services have potential for local content but small in number of people involved. Legal services are definitely local.
<b>Financial and insurance services</b>	<ul style="list-style-type: none"> <li>• Banking services</li> <li>• Insurance services</li> </ul>	Megaprojects typically use international banking and insurance services.
<b>Accommodation and food services</b>	<ul style="list-style-type: none"> <li>• Hotel services</li> <li>• Catering services</li> <li>• Restaurant services</li> </ul>	Catering is identified as a high potential sector. Expat catering may be done by an international company due to specifications.
<b>Transportation and storage services</b>	<ul style="list-style-type: none"> <li>• Passenger transport services</li> <li>• Freight services</li> <li>• Charter services</li> <li>• Warehousing and storage services</li> <li>• Cargo handling services</li> <li>• Motor vehicle services</li> <li>• Maintenance and repair services</li> </ul>	Passenger transport service also is identified as a high potential sector. Freight services will also be an opportunity.
<b>Administrative and support services</b>	<ul style="list-style-type: none"> <li>• Temporary employment agency services</li> <li>• Employment placement agencies</li> <li>• Travel agencies</li> <li>• Security services</li> <li>• Landscaping services</li> <li>• Facilities management</li> <li>• Cleaning services</li> <li>• Office administration</li> <li>• Medical services</li> </ul>	Indirect services have high potential for local content.
<b>ICT services</b>	<ul style="list-style-type: none"> <li>• Data processing services</li> <li>• Web portal and development services</li> <li>• Wired telecom services</li> <li>• Wireless telecom services</li> <li>• Computer programming services</li> </ul>	Wired and wireless telecom services would be provided locally.
<b>Construction services</b>	<ul style="list-style-type: none"> <li>• Site preparation</li> <li>• Equipment rental/scaffolding</li> <li>• Roads and landing strips</li> <li>• Utility projects construction</li> <li>• Docks and jetties</li> <li>• Building/camp construction</li> <li>• Plumbing and HVAC</li> <li>• Basic electrical works</li> <li>• Concrete works</li> <li>• LNG tank and train installation</li> </ul>	Site preparation, equipment rental/scaffolding, basic electrical work, concrete work, and building/camp construction are viewed as high potential. The outlook on dock and jetties and LNG tank and train installation is less optimistic.

INDUSTRY	TANZANIA'S LNG PROJECT DEMAND PROFILE	INTERVIEWS WITH INDUSTRY EXPERTS FOR MOZAMBIQUE
<b>Utility services</b>	<ul style="list-style-type: none"> <li>• Water supply services</li> <li>• HVAC repairs</li> <li>• Power supply operations</li> <li>• Heavy equipment maintenance</li> </ul>	All utilities and maintenance will be locally supplied.
<b>Metal fabrication</b>	<ul style="list-style-type: none"> <li>• Metal and steel fabrication</li> <li>• Metal repair and refinishing</li> <li>• Industrial machinery repair</li> <li>• Pumps, compressors, and valves manufacturing</li> </ul>	Currently EPC firms not aware of any metal/steel fabrication with capacity, although in theory this is an industry that could evolve as demand grows.
<b>LNG equipment manufacturing</b>	<ul style="list-style-type: none"> <li>• Prefabricated gas turbines</li> <li>• Prefab manufacturing of LNG refrigeration/exchangers</li> </ul>	Specialized services have no local content potential.
<b>Waste management activities</b>	<ul style="list-style-type: none"> <li>• Sanitation and sewerage services</li> <li>• Nonhazardous waste treatment and disposal services</li> <li>• Pollution control activities</li> </ul>	All services will be locally supplied.

Sources: World Bank interviews with industry experts for Mozambique. For Tanzania, adapted from World Bank Group 2014.

Note: Sectors with the highest potential appear in blue. EPC = engineering, procurement, and construction [contractors]; LNG = liquefied natural gas.

### Constraints

**In spite of the potential for involving the local private sector in the extractive value chains in Mozambique, firms face several challenges.** These include the following:

- Weak capacity of local SMEs, including low financial capacity and skill levels
- Insufficient quantity and quality of goods and services supplied by local SMEs
- Slow delivery of goods and services by local SMEs
- Lack of government policies and institutional frameworks that are conducive to enterprise and territorial development
- Inadequate physical infrastructure
- High cost of credit for SMEs

The major bottleneck to fulfilling these market opportunities seems to be the firms' lack of competitiveness. Some linkages are not viable internally because certain productive processes, mainly in areas of technological specialization, require a minimum scale of activity, and the internal market is small. Other linkages are possible, but local companies are often not ready to fulfill the market, in terms of both standard requirements and quality of delivery (that is, consistently on time over large periods).



## Skills

As discussed in the section on skills (section 4.1), firms in Mozambique lack the skills to meet standards and quantities required by megaprojects. The skills gap exists at all levels, including general managerial capacity, technical skills, and junior staff. The main challenge in promoting local content is related to an underdeveloped private sector, which is why balancing local content requirements with supply-side support is commonly advised (Krause and Kaufman 2011).

**Lack of management skills.** Senior managers at SMEs have limited financial literacy and lack the knowledge and skills to negotiate contracts or prepare bids, especially when dealing with large multinational corporations. Weak management practices mean lack of lean production mechanisms, limited development of talent, lack of planning and targeting, and limited use of documentation to capture lessons. Larger firms are more likely to employ more skilled workers and managers and to provide additional training (Lemos and Scur 2014). Even foreign-owned firms show relatively limited management practices in Mozambique (Aga and others 2019).

**Inadequate worker skills.** Gaps in worker skills are discussed in detail in chapter 4 in the section on skills. Given that the realistic opportunities in upstream linkages are mostly in service sectors, the gaps in worker skills are mostly in soft skills, work ethic, and in some technical knowledge and standards associated with the work. Although enrollment in secondary school has risen significantly in Mozambique, the quality of schools is still weak. At the university level, the quality of teaching is also poor, with a very low number of teachers having had graduate studies (Unidade de Processamento de Ideias 2016).

## Depth of capacity

**SME production capacity is often too low to meet the volume requirements of megaprojects.** Moreover, it is difficult for a business to justify an expansion in capacity for what is often a one-off opportunity that does not represent long-term recurring revenue. This reality is especially seen in the north of Mozambique, where conflict and fragility limit capacity for delivery at scale, compared with Maputo. It is also an issue across sectors. A typical example is in agriculture, where often farmers lack the production capacity or the aggregation systems to serve the needs of large corporations at scale. For example, the major food retailers in the country import most of the food products. Still, as many of the opportunities for SMEs are in sectors requiring availability of people for cleaning and maintenance, the potential to have those services at scale is higher for firms already present in the country.

### **Quality standards**

**Firms struggle to comply with quality standards required by megaprojects.** Local firms cannot afford the high costs of meeting the required standards, and affordable testing and certification services are limited. LNG investors are commonly concerned about the low certification level and lack of delivery consistency of enterprises. Such certifications can be costly (ranging from US\$7,000 to US\$20,000) and time consuming, discouraging many local SMEs from pursuing them. The ISO 9001 is one of the key certifications required to participate in tenders for companies such as ENI, Total, and Exxon Mobil and subcontractors such as SAIPEM. Other important certifications include environmental, security, and health and safety (ESHS) standards. In Mozambique, the National Institute for Standardization and Quality (INNOQ) promotes and coordinates the National Quality Policy, through the implementation of standardization, metrology, certification, and quality management activities, but it provides a limited number of certifications for now. Some specialized consulting companies are providing technical assistance to enterprises to adopt these standards.

### **Information asymmetries**

**Information flow from megaprojects to SMEs is often limited and opaque.** Several isolated efforts are being deployed for creating databases of local suppliers and contract opportunities around extractive projects. However, these platforms often lack the reach and the convening power to make them inclusive, and they do not include major extractive industry operators. For example, the lack of organized, coherent, and accessible information on the gas sector—requirements, opportunities, and how local suppliers can apply—is a barrier in many developing countries. Establishing a central repository would allow access to local businesses and stakeholders in a way that would reduce the problem of having to register on multiple sites.

**From the point of view of the extractive enterprises and their contractors, identifying which of the local firms can serve the market's needs is often challenging.** When megaprojects have to respond to tight deadlines, the cost to search, screen, and support the upgrade of suppliers is high. Multinational corporations find it hard to identify high-performing suppliers in the absence of testing of their performance.

### **Problems in the extractives sector that can limit demand for upstream linkages**

**A number of risks in the extractive sector can lead to delays and uncertainty.** Extractive industries such as coal mining and gas extraction are greatly affected by the fluctuations in commodity prices. Even SMEs with successful linkages project, the end of the linkages period may experience periods of crisis in the project when the linkage period ends. Nonrenewal of contracts is common.

Mozambique has been experiencing these risks, and projects are getting delayed, most recently because of the COVID-19 pandemic and the conflict situation. Various Exxon Mobil and other companies' executives left Mozambique following recommendations from embassies to leave during the health crisis. In addition, the gas price declined to US\$2.50 per million British thermal units (Btus) in mid-2020, which is very low compared with the project's expectations of an average gas price of US\$7 per million Btus (Reid, Rumney, and Jewkes 2020).

The mining sector experienced many difficulties in the 2013–16 period. The global commodity price downturn, combined with other factors—the high cost of production in Mozambique, the absence of reliable infrastructure, foreign exchange problems (dollarization of projects), and the high prices of fuel (due to locked-in fuel import contracts)—hampered the growth of the sector during the period. Rio Tinto abandoned its major coal project in Benga, Tete province, losing approximately US\$3 billion, after it was no longer allowed to transport coal in the Zambezi River. More recently, Vale halted operations because of low demand.

Mining is still largely run on an informal basis, leading to low opportunities for upstream linkages. Mozambique has hundreds of mines, the majority of which are small and medium scale. In gold, about 90 percent of output remains in the hands of artisanal miners rather than established firms. Those mines require, but currently lack, supervision and oversight as well as proper enforcement of regulations. Geological data remain difficult to access, and support from provincial offices is limited to simple inspection functions. High regulatory risks drag down investment interest for foreign investors.

### **Conflict in Cabo Delgado**

The gas investments are happening under growing instability. The insurgency that emerged in 2017 in Mozambique's gas-rich province of Cabo Delgado, known locally as Al Sunna wa Jamma'ah (ASWJ), has worsened over the past couple of years and is claimed as an affiliate by the Islamic State. Poverty, unemployment, and lack of education have allowed insurgent leaders to exploit feelings of bitterness and marginalization among local communities. Yet the motivations behind the attacks remain unclear. Although largely targeted at civilians, on a few occasions buses carrying oil workers have been attacked along the main roads. This lack of security affects progress on the LNG projects that are located in the same region.

### **Local content regulations**

The government can play an important role in ensuring that local industry captures some benefit in the investment boom. Prior experience of the World Bank Group suggests that policies that add domestic value tend to be successful when they promote linkages between the foreign investors and the local economy, rather than imposing specific levels of local values and processes that are difficult to meet. These processes also may not conform with international law and bilateral investment treaties (BITs). Table 3.2 includes some of the main issues of the local content bill that was discussed and abandoned by the federal government in 2019 (see chapter 4 of this document, in the section on investment policy and promotion).

**TABLE 3.2 CONCERNS WITH THE DRAFT NATIONAL CONTENT BILL (2019 DISCUSSION)**

PROBLEM	DETAIL
<b>Unclear rationale, scope, and duplication</b>	<ul style="list-style-type: none"> <li>• The draft bill duplicates and, to some extent, contradicts existing sectoral regulations.</li> <li>• Because local content requirements in extractives already exist, any new policy measure should build on the experience. If local content outcomes have not increased following the sectoral regulation, it is unlikely that additional demand-side requirements will solve the issue.</li> <li>• The scope of the bill is vague, and which large projects it applies to is not clear.</li> </ul>
<b>Introduction of new investment barriers and reduction in investment climate attractiveness</b>	<ul style="list-style-type: none"> <li>• Because of the draft bill's unclear implementation and scope, it heightens uncertainty to investors.</li> <li>• The draft bill imposes mandatory public tendering for private companies. This adds time and cost.</li> <li>• The bill creates de facto mandatory joint ventures with local companies for every large investment project, to be implemented through stock exchange, adding complications.</li> <li>• Sanctions on local content plans will be difficult to follow up on. According to the draft bill, firms will have to annually report a local content plan to the government. This may pose a substantial burden not only on investors but also on the administration that will have to review all cases.</li> <li>• Fines or other sanctions in case of noncompliance do not have clear enforcement, which creates a nontransparent situation.</li> </ul>
<b>Noncompliance with Mozambique's commitments under international law</b>	<ul style="list-style-type: none"> <li>• The local content requirements in the draft bill are inconsistent with Mozambique's World Trade Organization obligations and bilateral investment treaties (BITs). The ratified BIT with the United States, for example, imposes a limitation on local content policies (Article 6). The legality of the bill itself can be questioned under the Mozambique-US BIT.</li> <li>• Content of the draft bill increases the risk of an international investor state dispute for Mozambique.<sup>a</sup></li> </ul>

a. In 2019, two ICSID cases were decided in favor of Mozambique. See International Centre for Settlement of Investment Dispute cases ARB (AF)/14/12 and ARB/17/23. Nevertheless, legal fees still cost the government around US\$3.85 million.

**Good policy design entails a broad consultative process for the development of local content regulations.** Policy design should involve stakeholders such as international and national business affected by the policy, suppliers of goods and services, relevant government agencies, and local communities. Kenya, for example, held a series of consultations over the course of 2017–18 following the discovery of oil in the country. A broad-based dialogue also provides an important platform for all stakeholders to share their objectives and clarify questions, which ultimately helps to manage expectations regarding the potential benefits.

### **Access to finance and other cross-cutting issues**

**Access to finance for SMEs is a significant constraint.** Although firms that obtain contracts with extractive enterprises are able to secure banking finance against those future sales, they face important financing gaps in getting working capital and capital to upgrade technology when competing for contracts. The cost of debt is high. To access a bank loan in meticaïs today, SMEs pay at best around 15 percent, and without special conditions they can pay over 20 percent. Equity capital is almost nonexistent. More generically, IFC estimates that the SME financing gap in Mozambique was equivalent to 10 percent of GDP in 2017 (IFC 2017). A difficult macroeconomic environment, limited domestic resource mobilization, lack of credit information, limited availability of collateral, and limited access to credit risk-sharing facilities help explain this gap.

**In addition, firms seeking to meet the demand in the extractives sector face several constraints that also affect these opportunities.** Mozambique’s labor and land regulations are not competitive and do not support SMEs seeking formal access to the inputs they need. Mozambique’s infrastructure is very poor; its road networks, electric grids, and other supporting infrastructure increase the cost of business and reduce competitiveness.

### **Lessons from Local and International Experiences**

To understand if these opportunities for economic linkages can materialize, this analysis looks back at the experience in Mozambique, through the Mozal aluminum smelter, as well as in other countries.

#### **Mozal experience**

**Mozambique’s linkages to megaprojects and involvement of local content can be seen through the related experience of the Mozal aluminum smelter (Buur 2014).** Until recently the US\$2.4 billion megaproject was the single largest FDI investment in Mozambique, and it was the first megainvestment in the country. Mozal involved several linkage programs over the years (see box 3.1).

**BOX 3.1 ELEMENTS OF THE MOZAL EXPERIENCE**

Several programs promoted the use of local content in the Mozal aluminum smelter megaproject.

- SME Empowerment Linkages Program (SMEELP):** Small and medium enterprise (SME) development activities started during the construction phase with the help of IFC. The program offered training and mentoring for local SMEs to help them bid, win, and deliver on construction contracts. The program also offered matching grants to local firms using a vetting process of enterprises' potential to engage with Mozal. The program redesigned Mozal standard contracts and reformulated procurement guidelines so that they better fit the Mozambican business reality. Finally, when SMEs were contracted, they received mentoring. In total, 16 SMEs were trained and 28 contracts worth US\$5 million were awarded (Buur 2014).
- Mozlink I:** The success of SMEELP encouraged Mozal to offer a similar program for the operational phase in 2003. The overall objective was to develop the SMEs' capacity to a level at which the local company is competitive and qualifies to bid for work with Mozal. The program assisted with loans to SMEs by financial institutions, as well as through the provision of technical capacity. The program trained 45 SMEs. Spending with local companies increased from US\$5 million to US\$17 million from 2002 to 2007, and the number of local companies supplying Mozal increased from 40 to 250 (Mozal Aluminium and IFC 2008).
- Mozlink II:** Mozlink II expanded Mozlink I in 2006. It went from being tied to Mozal to including other foreign direct investment-driven investments, primarily in the gas (SASOL) and beverage sectors (Coca-Cola and South African Breweries). These were three-year supply-chain programs aimed at strengthening the business and technical capabilities of SMEs so that they could compete for industry contracts. According to IFC, Mozlink II has trained 75 SMEs and secured US\$20 million in revenues for SMEs, resulting in a 40 percent growth in contract development by Mozlink corporate partners and helping to create 3,000 jobs.

**The Mozlink programs are broadly viewed as successful.** They created more than 200 suppliers of inputs to Mozal in metallurgical services, transportation, auto mechanical, electrical products and services, construction, security, cleaning, catering, and laundry. A deep-dive evaluation of the project reveals several valuable lessons for future linkage programs:

- An SME development program must have at least three partners.** Participants should include the lead company (such as Mozal), a member from the development institution community (such as IFC or World Bank, which can be in partnership with government), and a regional business organization. Other critical members include a program coordinator and a steering committee that meets regularly to monitor progress.

- **The lead company should demonstrate active support for the program.** This leadership can be a long and challenging process because it often involves changing the way business is done in the company. Some examples of how this can be achieved are aligning staff incentives with the program and supporting staff who volunteer in linkage projects. An incentive could be linking a percentage of bonuses for procurement specialists to the increase in contracts for local companies. For example, in the Mozal case, some Mozal staff volunteered as technical mentors for Mozlink in addition to their regular job. They could do this only because of companywide support and recognition for their activities. At Mozal, these additional roles were seen as development opportunities for employees.
- **The lead company should have a strategy to identify the highest potential local procurement opportunities.** Preference should be given to local businesses, in cases where quality and safety are equal, even when a local company is initially slightly more expensive.
- **Selecting appropriate mentors is important because of the business and technical categories that require mentoring.** In Mozlink's case, the categories identified were technical (health, safety, environment, and community); maintenance capability; quality management; and business (management, finance, human resources, marketing, and tendering).
- **After identifying common skill gaps for all SMEs, training curricula can be created to broadly cover the main business and technical categories.** For example, in Mozlink, a one-day curriculum was developed for each of the following business categories: tendering, strategic planning, management, marketing, and financial management.
- **The team selecting local SMEs to participate in the program found that probably the most important driver was self-motivation.** The SME had to meet certain criteria, among which were being locally registered and having fewer than 200 employees. However, the willingness of the entrepreneur to change the business practices was critical to success.
- **SME managers had to be open about sharing information regarding their operations, standards (for health, safety, and quality), and finances.** In some cases, SMEs may need to be assured that the program is for their benefit and that it is in their interest to be honest and not defensive about the current state of their business.
- **The program must have a plan for transition after the program ends.** Toward the end of the program cycle, SMEs should be directed to build on progress in the following ways: (a) diversify the client base so they do not rely only on the lead company and (b) anticipate a two-year evaluation to ensure that they are maintaining standards. It is also important to plan for sustainability, such as a mentor pool after the program, an SME business network, and a program website.



Despite the potential benefits, several criticisms of the Mozlink programs are worth considering. Future linkage programs must take into account the following:

- **The majority of the beneficiaries were linked in one way or another to South African companies related to the aluminum industry.** The companies receiving grants during the first generation of Mozlink programs were often the same for the different phases, with each company providing an increased number of services. Future linkage programs must specifically focus recruitment efforts on a wide range of types of firms and subsectors.
- **The linkages model had few spillover effects to the broader economy in the form of technological capabilities and learning.** The results are limited to the creation of small niches for local firms that depend on Mozal, but the program has not contributed to the development of an industrial cluster of innovative SMEs.
- **During the initial programs, costs to companies of upgrading staff and equipment were too high for the rest of the Mozambican economy.** Some companies that pursued international standards such as ISO had made investments that were too expensive and advanced for the rest of the Mozambican economy, which had few megaprojects they could link with. However, there is no longer a problem of too few megaprojects as Mozambique has numerous megaprojects. Now, a company that provides civil, mechanical, and engineering services to an LNG project can possibly also offer services to the Nacala rail project. With the right sets of supports, they can be further linked into government procurement opportunities.

### Lessons from other countries

Analyzing project designs and lessons from other countries also provides useful insights to understand the opportunities for upstream linkages in Mozambique. The World Bank Group has significant experience with linkage programs in other countries across a variety of sectors. Projects in Angola, Ethiopia, Nigeria, and Zambia offered the following lessons:

- **Industry focus is important to ensure that interventions target specific constraints.** It is also important to have a private sector-led approach to SME support in order to focus on commercial viability. This was the process used in Ghana.
- **Having an active steering committee is seen to be a success factor for linkage programs.** A steering committee is especially needed to manage participation of the government and private sector. This was an especially strong factor in Ethiopia, which included a matching grant facility to help SMEs access skills, technology, and finance.
- **The program design should allow for flexibility to adjust to changing situations.** This was learned during the Ethiopia scheme, where a linkage development plan was determined for each participating business, but elements of that plan changed during implementation.

- **Integrating capacity building with funding in a holistic approach is extremely important for success.** SME support programs achieve better results in terms of productivity growth, investment generation, and overall firm growth when they provide intensive and custom-tailored business development support to SMEs, including introducing financing mechanisms such as grants in the context of this strategic support structure.
- **Targeted financing programs for women-owned SMEs also require an integrated approach with a suite of other activities, specifically skill building and capacity building.** Given the gender norms that often limit opportunities for women to enter typically male-dominated opportunities, exploring solutions through a gender lens is also an important step.
- **Building an appropriate monitoring and evaluation system is necessary to document whether the intervention is having the desired effects.** It is also important to have in place a clear understanding of the SMEs being targeted and a logical theory of change. This will help better align program objectives with the actual results and provide critical lessons.

### Recommendations

In its new five-year plan, the government of Mozambique defined the promotion of local content as a critical activity to attract more investments. The recommendations in table 3.3 address actions that the government, donors, and private sector can undertake to tackle constraints to inclusive development of upstream linkages.

**TABLE 3.3 RECOMMENDATIONS FOR PUBLIC AND PRIVATE ACTIONS TO DEVELOP LOCAL CONTENT LINKAGES**

PROBLEM	RECOMMENDATION	PRIORITY/ FEASIBILITY	MAIN RESPONSIBILITY
<b>Area 1: Conflict and fragility</b>			
Fragility of north and center areas, resulting in linkages that are often not inclusive	Combine interventions in infrastructure and livelihood development that can integrate communities with the opportunities for economic linkages.	High/Medium	MEF, MIC, MADER, MOPHRH
<b>Area 2: Institutional and regulatory environment</b>			
Local content that creates high expectations but often ends up being disappointing	Develop a shared vision for local content in Mozambique by improving transparency and reducing information asymmetry. Various government, private sector, and development community partners would need to be involved in this coordination.	High/Medium	MEF, MIC, MADER
Limited investment in nonextractive sectors	Strengthen investment policy, including updating investment law and investment promotion capacity.	Medium/ Medium	MIC, APIEX

PROBLEM	RECOMMENDATION	PRIORITY/ FEASIBILITY	MAIN RESPONSIBILITY
<b>Area 3: Access to skills, quality, and finance</b>			
Skill gaps affecting opportunities for economic links	Provide sector- and firm-level capacity building where the lead company demonstrates active support. Include support for changing the entrepreneurial mindset, improving processes, and strengthening the skills of the workforce. Training should be customized for women-led firms.	Medium/High	MIC, IPEME, SEJE, regional development agencies (ADVZ, ADIN)
Limited experience in supplying to the extractives sector, which has stringent quality, quantity, and delivery requirements	Facilitate and promote partnerships of local firms that have international capabilities to expand the skills and training to the local firms. Business-to-business matching systems or insourcing knowledge in firms should be pursued.	High/Medium	MIC, IPEME, SEJE, regional development agencies (ADVZ, ADIN)
Quality standards of SMEs not on par with the needs of the extractives sector	Improve Mozambique's quality standards infrastructure by strengthening the regulatory and institutional an ICT infrastructure; provide technical assistance to firms for upgrading quality standards before certification; and provide support to requests for certification of firms in targeted sectors.	Medium/ Medium	MIC, INNOQ
Access to finance problems	Increase availability of finance for SMEs in order to meet quality or quantity requirements of large contractors. Alternative mechanisms to increase access to finance include matching grants, support to developing private equity mechanisms, and easier-to-implement trade finance solutions.	High/Medium	MIC, MEF, Banco de Moçambique, regional development agencies (ADVZ, ADIN)
<b>Area 4: Access to markets</b>			
High costs of searching for and screening quality suppliers	Coordinate efforts for a comprehensive database of local contractors and competencies to facilitate procurement.	Medium/ Medium	MIC, MIREME
SMEs with challenges in connecting to linkage opportunities	Create an SME support platform that draws on the lessons from the Mozlink experience. An SME support platform could deliver expert support to high-potential firms. Establish expert desks.	High/Medium	MIC, MIREME
Need to develop alternative potential markets	Establish other opportunities for local markets, including linking in public procurement. Promote increased transparency in bidding processes, improve procurement systems in pilot agencies, and provide training to micro, small, and medium enterprises in better identifying the opportunities.	Medium/Low	MIC, MEF

Note: ADIN = Development Agency for the North (Agência do Desenvolvimento Integrado do Norte); ADVZ = Zambezi Valley Development Agency (Agência de Desenvolvimento do Vale do Zambeze); APIEX = Investment and Exports Promotion Agency (Agência de Promoção de Investimento e Exportações); ICT = information and communication technology; INNOQ = National Institute of Standardization and Quality (Instituto Nacional de Normalização e Qualidade); IPEME = Institute for Promotion of Small and Medium Enterprises (Instituto para a Promoção das Pequenas e Médias Empresas); MADER = Ministry of Agriculture and Rural Development (Ministério da Agricultura e Desenvolvimento Rural); MEF = Ministry of Economy and Finance (Ministério da Economia e Finanças); MIC = Ministry of Industry and Commerce (Ministério da Indústria e Comércio); MIREME = Ministry of Mineral Resources and Energy (Ministério dos Recursos Minerais e Energia); MOPHRH = Ministry of Public Works, Housing and Water Resources (Ministério de Obras Públicas, Habitação e Recursos Hídricos); SEJE = Secretary of State for Youth and Employment (Secretaria de Estado da Juventude e Emprego); SME = small and medium enterprise.

### 3.2. AGRIBUSINESS

With 10 agro-climatic zones, Mozambique has considerable agricultural potential. Mozambique's substantial natural capital includes almost 50 million hectares of agricultural land area, about 62 percent of the total area of the country. The cultivated area is estimated at just 5.95 million hectares, of which 5.65 million are arable land and 0.3 million are under permanent crops. Permanent meadows and pastures cover 44 million hectares (FAO 2016). In 2019, agriculture contributed 26 percent to GDP. It is fundamental to the country's development, with about 70 percent of the population depending on the sector. Almost all (99 percent) are small-scale, family-owned plots (average 1.1 hectares). Between 50,000 and 70,000 plots are of medium and large size (MADER 2020): medium-size plots total 51,871 (1 percent of total plots), while large plots total 728 (0.27 percent of total). Smart and Hanlon (2014) estimate 70,000 emerging farmers.

Agricultural production is largely rain-fed and has some of the lowest yields in cereals in southern Africa. Its low productivity is caused by both low inputs and poor techniques. Although Mozambique has had improvements in yields in some crops, including soya and sesame, the productivity levels of main crops such as maize and rice are one-fifth of those in South Africa and close to half those in nearby countries such as Malawi. About 4 percent of farmers have access to extension services, 5 percent use improved seeds, fewer than 1 percent use loans for financing, and 14 percent have information about prices (MADER 2020).

Recognizing the strategic nature of agriculture in the Mozambique economy, the government has made it a key priority for economic development. According to the 2020–24 five-year plan (MADER 2020), agriculture is a constitutional priority and has the potential to help accelerate the industrialization of the economy and create more employment opportunities, particularly for the youth. The main objectives of the government plan are to ensure food security, increase household income, create employment, promote social inclusion, and help increase the production and productivity in the country.





**In 2017, agricultural exports from Mozambique were valued at just under US\$700 million (OEC 2020).** Export-oriented production includes tobacco (US\$300 million), cashew nuts (US\$140 million), pulses (US\$87 million), sugar (US\$70 million), sesame seed (US\$50 million), and cotton (US\$44 million). However, these are not the country's most prolific crops (cashew nut production and exports declined in 2018–19). The major crops produced in Mozambique—mostly for self-consumption and not for the market—are food staples, including maize (1.7 million tonnes, valued at US\$350 million), cassava (2.4 million tonnes), and beans and peanuts (0.71 million tonnes) (FEWS Net 2018).

**Agricultural imports reached US\$850 million in 2017 (OEC 2020).** Several crops were imported that have the potential to be scaled up in the country: rice imports were US\$175 million, despite potential production areas and dedicated irrigated clusters; soya and sunflower oil cost US\$95 million, despite the existence of installed crush capacity; poultry cost US\$35 million; potatoes and onions cost US\$33 million, a consequence of underused irrigated areas and low yields; and maize cost US\$30 million, mostly imported in the south because of logistical challenges.

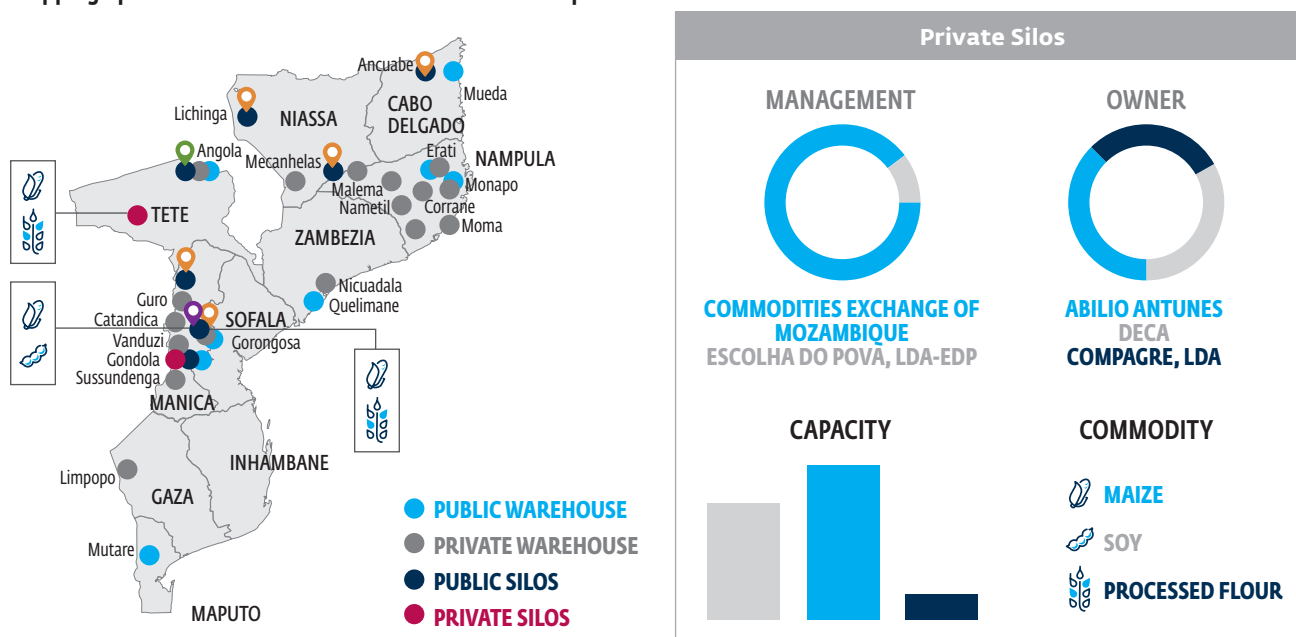
**Smallholder production accounts for about 98 percent of the area under production and accounts for almost all the food crops.** Crops such as maize, cassava, rice, and beans are characterized by small areas (1.8 hectares each on average), low inputs, inadequate equipment, and low yields and returns. Within this group, a small number of commercial farmers are emerging who use some agricultural inputs and out-of-household labor, and who sell their products in local markets.

### Approaches to Develop the Sector

**Mozambique has employed various strategies to meet the challenges in agribusiness, identified in several analyses.** Most notably, the government, international donors, and various organizations have recently followed three multidimensional approaches to develop the sector, with both some successes and some challenges in implementation. These approaches include (a) expanding the infrastructure, chiefly the warehousing capacity and management; (b) supporting emerging farmers through mechanization and extension services; and (c) developing contract farming.

### Warehouse development and management

Mozambique has a considerable warehousing infrastructure, with capacity for almost 1 million tonnes distributed across rural areas (figure 3.5). The private sector has been contributing to the increase of rural storage and market access for small farmers. Donors have also been supporting farmer organizations with warehousing and institutional capacity building. Two government institutions are involved with warehousing: the Cereals Institute of Mozambique (Instituto de Cereais de Moçambique; ICM) and the Mozambique Commodities Exchange (Bolsa de Mercadorias de Moçambique; BMM). These institutions provide about 320,000 tonnes of storage capacity.

**FIGURE 3.5 PUBLIC AND PRIVATE WAREHOUSES AND SILOS IN MOZAMBIQUE****Mapping of Public and Private Warehouses in Mozambique**

Sources: World Bank figure based on government and private sector sources.

ICM is managing an extensive network of 125 warehouses with capacity of 250,000 tonnes. Warehouses are fairly distributed throughout all the provinces. As a market facilitator, ICM has limited direct intervention in the market; most of the warehouses are rented to private commodity traders and traders of fast moving consumer goods. Given improvements of infrastructure and economic growth, many crops have steady demand, and many traders are providing markets for farming surpluses such as pulses and sesame for exports, soya for the poultry industry, and beans and peanuts for urban markets. By leasing the infrastructure to traders, ICM facilitates the market and helps build a supply chain, even if with that's some deficiencies.

Despite their proximity to markets, the traders operate on-the-spot purchases without establishing any durable relationships with farmers or industries. The lack of knowledge about grain handling and quality standards contributes to the loss of quality and value of the products. This is particularly true in the case of maize and soya. As a result, the local milling and processing industry often resort to buying more expensive imports with a guarantee of quality. Other products can also suffer quality losses, such as peanuts, whose aflatoxin risks linked to poor storage pose a food safety risk. Most of the ICM tenants do not provide any agriculture services like inputs, mechanization, or training. Occasionally when food is scarce, local authorities request some volumes to be reserved and sold locally.



**BMM manages another public network of silos and flat warehouses in eight locations with a capacity of 64,000 tonnes.** Most of these structures were purposely built in remote and rural areas with good production history and potential to connect production with final grain users. The storage network is complemented by a trading platform with sellers and buyers of local agricultural goods and is aimed at addressing several problems: (a) lack of transparency and market information; (b) lack of access to finance of farmers, small traders, and processors; and (c) maintenance and improvement of quality standards.

**However, BMM's storage strategy has had problems, including inappropriate design and challenges in keeping up with maintenance.** These problems led to a degradation of the infrastructure. Storage prices were initially attractive but were not followed up through good communication with potential users. Limited demand from the private sector and financial institutions further compromised success. The result was low use of the storage capacity; a cumulative 42,000 tonnes handled in the 2015–19 period, corresponds to only 13 percent of the potential five-year capacity. Maize represented 67 percent of the volume; pigeon pea, 12 percent; and soya beans, 9 percent. Only 2 percent of the maize and soya used by the local industry was traded or stored through the BMM. Most of the storage was done by smallholder farmers.

**Several private agribusinesses have explored some level of engagement with BMM and ICM to run these assets under public-private partnership (PPP) agreements.** These medium to large companies, including Cargill, Servir Moçambique, and Escolha do Povo, can mobilize the financial resources and have the technical capacity and market knowledge to fully operationalize such warehouse facilities and transfer capacity. Negotiations and initial public-private partnership agreements between some of these companies and the Ministry of Industry and Commerce (MIC) took place in 2020. It will be important for these concessions to be completed in a transparent and competitive process.

**Warehouse receipts have been promoted in Mozambique, but still with limited results.** One of the initiatives was promoted by the US Agency for International Development (USAID) and involved the storage locations of several private sector players. At the end of the third year, only 38 receipts were issued, equivalent to 62 tonnes of maize. Another program led by BMM issued 230 warehouse receipts in the period 2015–19. The limited demand for warehouse receipts is related to poor outreach to farmers and industries, shallow trust in the process from stakeholders, financial literacy challenges, limited quality management, low capacity of implementation, limited markets, and little appetite of financial institutions to provide financing.

### Support for emerging farmers through mechanization

The approach that supports emerging farmers through extension programs and mechanization has had some success in several projects (see box 3.2). For example, the Dutch Embassy in Mozambique funded initiatives, and the World Bank–financed Sustenta has pursued a similar approach. The emerging commercial farmers have larger production areas (3–20 hectares), typically employ nonhousehold labor, and provide some aggregation capacity. Although the distribution of emerging farmers is countrywide, their operations are clustered within provinces and by crops. A strong concentration of emerging farmers are in maize and soya production in areas of Manica, Northern Tete, and Zambezia.

#### BOX 3.2 AGRICULTURAL LAND IS A MOZAMBIKAN RESOURCE. THE CASE FOR SMALL COMMERCIAL FARMERS

Mozambique is unusual in that most farmers have access to more land than they use at any one time, and follow a rotating cultivation, leaving areas fallow for several years. First, the small commercial farmers tend to expand the area they cultivate, either by hiring labor or having access to cattle or a tractor for ploughing. The next step is to raise productivity through improved technology, including fertilizer, improved seed, and sometimes irrigation. This group has been able to expand beyond the normal tiny farm, typically to 3–20 hectares, and is producing largely for the market.

We estimate from recent surveys that there are 68,000 small and medium commercial farmers. Although they grow much of their own food, they

produce primarily for the market, and are creating rural jobs and boosting the rural economy. This group has largely arisen in the two decades since the war.

Tobacco has been the biggest driver, followed by cotton, and farmers of these two crops have grown with the support of the large foreign trading companies. But some others have...become commercial farmers of maize, beans, oilseeds, cattle and vegetables. [...]

The litany of problems is well known—lack of credit, inputs, markets, etc. ... It took a decade of continuing support from international NGOs and donors to make soya a profitable crop. This was hands-on help, providing tractors and seed, and creating markets.

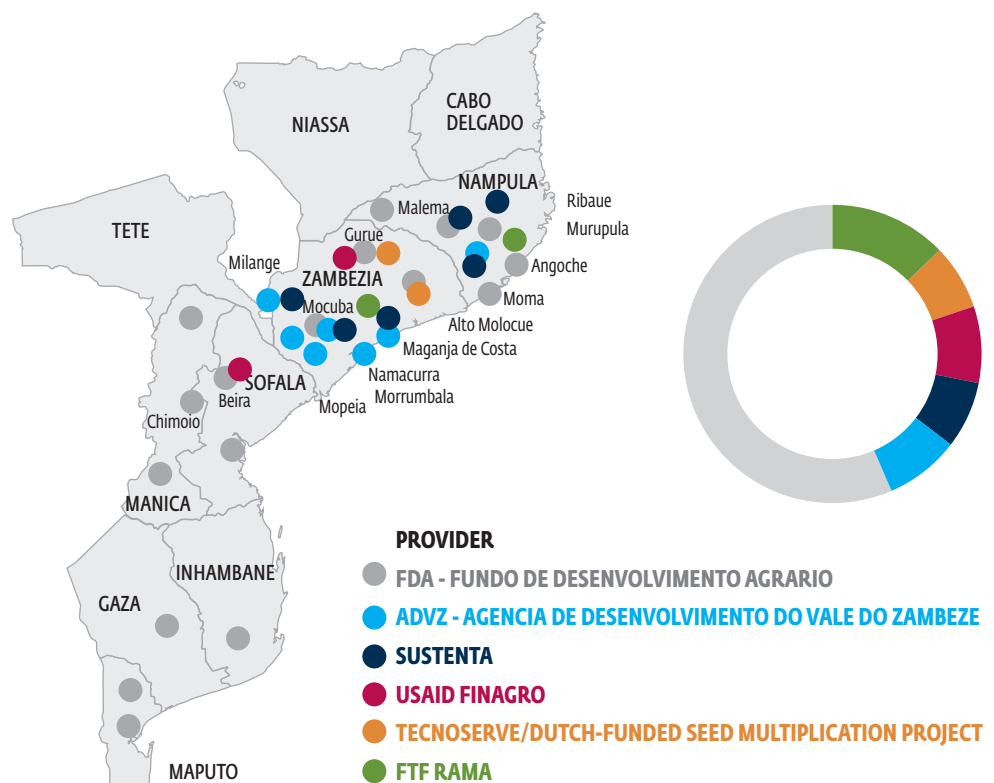
Source: Excerpted from Smart and Hanlon 2014.

To fast-track the surge of small commercial agriculture and farms, the government and development partners have supported mechanization packages and Agriculture Services Centers across the country. The Agriculture Services Centers (Centros de Serviços Agrários; CSAs) are farmer support centers that are created at the local level with implementation led by emerging farmers. The CSAs provide specialized farming services, including land preparation, sowing, harvesting, transport, storage, input provision, and technical assistance. They also provide market linkages and even purchase of goods. In addition to the centers, about 600 tractors and equipment kits have been distributed by several initiatives. The acquisition of the equipment has usually been done through a concessional loan to the beneficiary.

The most notable CSA mechanization program was the Agriculture Development Fund (FDA), which included three components: machinery, complementary services, and credit to farmers at 10 percent interest rates. The complementary services included inputs, technical assistance to farmers, off-take storage and trade, and agro-processing. The CSA service providers should be (a) emerging farmers, (b) selected among those who were already providing services, and (c) recognized and supported in their farming communities. Prior to establishing a CSA, the FDA completed a study on the demand for mechanization services. The service providers then chose the equipment they needed. Each CSA included a demonstration plot run by the manager.<sup>13</sup> According to the FDA, 385 tractors were distributed to 96 CSAs (figure 3.6). The number of beneficiaries has reached almost 22,000 in the period 2015–19, corresponding to a farming area of 49,000 hectares. However, the machinery is significantly underused, with an average of 25 hectares of land preparation per season per machine, which is about one-fifth of what each machine should provide.

**FIGURE 3.6 DISTRIBUTION OF TRACTORS THROUGH MAIN PROGRAMS**

#### Mapping of Tractors in Mozambique



Source: Created by World Bank staff using government and development partner sources.

**In more general terms, the mechanization initiatives face several challenges. Most of the time the investment in equipment is not followed by proper working capital and upgrading of skills.** Insufficient training, coaching, and access to working capital are limiting the consolidation and expansion of the emerging farmers, despite the efforts made. Market linkages are also usually weak. The method used to offer mechanization services is also poorly implemented, compromising existing economies of scale and spatial efficiencies. Lack of demand for the services is the main reason for the underutilization of these assets and the high rate of defaults on credit for the owners of the equipment. Moreover, the mechanization package is often not the most appropriate. For example, it typically includes plowing, which is not a best practice in sustainable farming and significantly increases the cost of production and affects performance.

### **Contract farming approach**

**Modern commercial production in Mozambique is predominant only in the sugar and fruit sectors.** In the latter, Mozambique is experienced in the production of bananas, avocados, and macadamias for export, mostly in the central and southern parts of the country. In the annual row crops, one exception is soya, which is planted quite successfully on some commercial farms in the north of the country. Modern commercial farming in row crops is limited to less than 15,000 hectares nationwide, with at least 10,000 of that in the Nacala corridor in Zambezia and Nampula provinces.<sup>14</sup>

Nevertheless, the country has experience with contract farming across several supply chains. With origins in the tradition of contract farming of cotton and tobacco, the model has been refined and expanded to other crops, including crops with high risk of side-selling, like maize and pulses. About 50 percent of the local poultry supply comes from outgrowers. In addition to direct contract farming, Mozambique has reached good export volumes of several products, such as pulses, sesame, and cashew nuts, with anchor export companies stimulating a relationship with rural traders and farmers.

**Contract farming has gained interest in recent years in Mozambique as an approach to economic development.** Contract farming is seen as a mechanism with potential for increasing smallholder farmers' access to markets and increasing their access to irrigation, mechanization, and better agronomic practices. The partnerships between lead firms and smallholders have been supported in the past by development finance institutions, but also more recently by government projects through matching grants and technical assistance.<sup>15</sup>

**Contract farming has had different levels of success, depending on the approach taken more than on the type of value chain.** A good example is ECA in Manica province, a maize trading business that evolved into a milling operation. Currently supplying the two main breweries in Mozambique with maize grits, ECA is a good example on how it is possible to partner successfully with smallholders, regardless of the trader's competition in the market. ECA sources 12,000 tonnes of maize from over 10,000 farmers and provides credit and training to about 6,000 outgrowers, in one of the most dynamic grain-trading areas of the country. Mutual trust has been built over a 10-year phased approach, starting with a small inputs or credit package. Several factors contributed to the success of the partnership: progressive growth of farmer outreach, constant training, quality inputs, intense communication with farmers, and market premiums paid in relation to grain quality. The case has called the attention of several donors, which also helped the company become sustainable, in a process that took longer than the initial plans.

**Even in the absence of contract farming, the increasing demand from urban centers and Asian export markets, along with the improvements in infrastructure, has enabled some structure to be created in several supply chains.** Stability of demand led to some specialization in production clusters with big anchor clients like the poultry industry or the exporters of pulses and sesame, creating structured supply chains even without contracts. This allowed the poultry and the maize milling industries to be almost self-sufficient in the north and center of the country.<sup>16</sup>

## Main Value Chains

### Sugar

**Mozambique currently produces around 400,000 tonnes of sugar, which makes it a significant export crop.** In 2017, about 240,000 tonnes of unprocessed sugar was exported, valued at US\$70 million (OEC 2017). The balance is largely processed into brown or unrefined sugar for supply to local markets, with other derivatives of sugarcane (for example, molasses) used by local industries, including Coca Cola. It has been more profitable for producers to export raw sugar to European markets, under preferential trade agreements, than refine it for local supply. Because domestic production is inadequate to meet demand from beverage companies and breweries, around 20,000 tonnes of white sugar is imported under a toll refining arrangement, whereby raw sugar is exported to South Africa in exchange for refined sugar.



**Four commercial companies dominate sugar production, each with its own estate and mills.** They also work closely with smallholder cane growers. Maragra, which accounts for 58 percent of total production, and Xinavane are in Maputo province, because of available irrigation, transport infrastructure, and proximity to South Africa. Mafambisse and Marromeu are in the central province of Sofala. The industry has attracted significant FDI, particularly from South African firms: Tongaat Hulett has stakes in two sugar mills and Ilovo (AB Sugar) has a stake in Maragra. In 2019, Tongaat Hulett invested US\$39 million in a white sugar refinery at Xinavane, which may reduce the imports of refined sugar.

**Expansion of sugar cane production with outgrowers is ongoing, encompassing small and medium-size outgrowers, as well as the creation of farmers' associations.** Unlike the early stages of sugar cane establishment in Mozambique, which was dominated by large-scale plantations and vertical integration, outgrower schemes are being developed. With support of the European Union, 28 associations of smallholder farmers were created (Leite, Leal, and Langa 2016).

**New companies are currently investing in the sector, especially focused on organic sugar.** The main example is EcoFarm in Sofala province, a green field sugar mill dedicated to the production of 25,000 tonnes of premium organic sugar (another example is Ouro Verde in Cabo Delgado province). It intends to have up to 50 percent supply from 500 outgrowers. The production system is based in the fertilization by residues and from the cattle herd that complements the sugar business. Although EcoFarm is at its initial stage and is benefiting from multiple capital grants for irrigation, the project is a good example of a patient and a potentially sustainable investment.

### **Cotton**

**Among the export-oriented value chains, a key one for Mozambique is cotton.**<sup>17</sup> Cotton production in Mozambique depends on household farming, with more than 200,000 smallholders in cotton farming and related activities (box 3.3). The average cultivated area is around 1.5 hectares, with cotton typically integrated into an intercrop and crop rotation system that is dominated by staple crops such as maize, cassava, and sorghum. Production is concentrated in the north, with three main concessions representing 75 percent of the operations. Reports suggest that farmers are increasingly switching to crops that offer higher returns, such as sesame. Yields are low when compared with other African cotton-producing countries. Harvested areas vary significantly over the years without showing any growth trend. In the period 2010–19, planted areas varied between 188,000 hectares (300,000 farmers) in 2011 and 101,000 hectares (145,000 farmers) in 2015.

**Nevertheless, and despite the poor yields, cotton farmers show some loyalty to the crop.** That loyalty has been driven by access to training, credit for inputs and operations, and crop diversification. The cotton extension and market networks have good potential to be leveraged not only to increase the cotton production but also to engage in other contract farming models.



**Mozambique Cotton Manufacturers (MCM) is the only cotton lint processor in the country.** The company has invested in the refurbishment of a textile factory in Marracuene. The spinning facility processes prepared cotton roving into workable yarn or thread. The company currently consumes about 7,000 tonnes of cotton per year and is currently exporting 100 percent of the production to Portugal and South Africa, but its expansion into weaving may lead to demand for up to 30,000 tonnes.

### BOX 3.3 TOBACCO AND COTTON OUTGROWERS' TRADITION WITH DIFFERENT PATHS

Mozambique Leaf Tobacco (MLT) contracts green tobacco from about 120,000 families in remote areas of the Tete, Niassa, and Zambezia provinces. Its purchases from farmers reach US\$110 million. This is, by far, the highest revenue per household in farming. Cotton generates about US\$25 million in sales split between 150,000 to 200,000 households, approximately US\$166 per household for cotton versus above US\$800 for a tobacco grower.

Both crops benefit from a regulatory framework that establishes concessions and contract enforcement, providing protection for the investment in inputs, credit, and extension services to farmers. Both crops have primary processing and value addition, but the investment in farming inputs and training is much higher and intensive in the tobacco industry, resulting in high yields, high production, and credit recovery.

The tobacco output rose steadily from less than 10,000 tonnes to more than 100,000 tonnes in the past 20 years, driven by productivity, which compensates for the price volatility of the commodity. Mozambique cotton output has been volatile, losing ground to other cash crops. It is also worth less than tobacco. For the past 10 years,

Mozambique has produced an average of about 50,000 tonnes of seed cotton per year, not showing any upward trend in productivity and production.

Investment in the cotton production packages is low. Some of the concessionaires are in difficult financial situations and not able to serve their farmers. In tobacco, MLT provides a comprehensive input package, covering maize and tobacco as well as capital to employ adult labor. The support also provides technical expertise to supervise and manage the enterprise and an administration team to oversee loan repayments. MLT also promotes reforestation. This model allowed both farmers and MLT to achieve success. Farmers benefited from higher (double) yields and greater profit, as well as market linkages for their maize.

In the cotton industry, SAN JFS and PLEXUS in Niassa and Cabo Delgado, respectively, try to follow the tobacco approach with segmentation by different farmers, providing mechanization services, extra inputs, and crop diversification. This approach can have particularly strong impacts in these remote provinces where smallholders have few alternatives. Success so far has been mixed.

Source: CPSD team.





## Poultry

The poultry value chain in Mozambique has exhibited tremendous growth over the past decade, representing one of the biggest successes in import substitution. Demand for chicken meat in Mozambique has doubled in the last decade and is expected to more than triple in the next 10 years as a result of growing urbanization and income growth (GAFSP 2018). The production of chickens is split into the live chicken market (domestic consumers have a preference for live chickens) and frozen chickens. In 2005, the poultry sector was producing less than 5,000 tonnes, with most of the domestic consumption being met by imports. By 2016, local production surpassed 75,000 tonnes (one-quarter of which was frozen chicken), satisfying 75 percent of domestic demand (Fintrac IFC 2018). Remaining consumption is imported from Brazil, South Africa, and US.<sup>18</sup>

The poultry value chain is relatively well structured and generates multiple sources of opportunities, especially at local levels. The 2011 census estimates that around 2.3 million smallholders were involved in the chicken meat sector. In the central and northern regions, integrated companies dominate all parts of the chain, while in the southern regions there is a greater dispersion, particularly in hatchery, feed production, and breeding, as a result of the linkages with South Africa. Four main integrated companies produce frozen chicken in Mozambique, two in the south, one in the center, and one in the north. The seven main hatcheries in the country are mostly concentrated in the south. As discussed in the CPSD Linkages to Megaprojects chapter, poultry and egg consumption and production markets in Mozambique are still relatively undeveloped.

**Growth in domestic soya and maize production has been a crucial foundation for the growth of poultry in the central and northern provinces.** Soya beans production in Mozambique has grown as fast as chicken meat production, rising from 4,000 tonnes in 2008 to over 40,000 tonnes in 2016. As feed accounts for roughly 70 percent of poultry production costs, expanding domestic soya and soya cake production is expected to alleviate pressure on thin margins of chicken meat producers. Moreover, the opportunity in using soya for oil production as an alternative to palm oil can lead to further investments in the next few years.

**The biggest and better-equipped chicken producer in the country is Abilio Antunes in Manica province.** A family company with a vertically integrated operation, Abilio Antunes is one of oldest poultry producers in the country. It has a biosecurity level equal to international standards. Its main advantage is its proximity to the raw materials of feed. It serves only the Manica, Sofala, Tete, and Zambezia provinces. It supplies the southern markets with soya oil. It is arguably the largest grain buyer in the country, taking advantage of the central location and the access to relatively cheap transport in the Beira corridor.

**In the poultry sector, there are two different models of contract farming, both successful.** The second- and third-biggest poultry producers in the country use contract farming, with 45 percent of the frozen chicken production coming from outgrowers. The companies agree to provide poultry farmers with training as well as chicks, feed, and vaccines on credit, and the chickens are then raised and sold back (thereby paying off the debt). Since the selling price is agreed between the parties beforehand, the poultry farmer does not bear market risk, only the risk of growing its flock.

**New Horizontes Mozambique (NHM) in Nampula province oversees the production of up to 80,000 birds per week entirely in 250 small-scale chicken farmers.** The farmers receive day-old chicks and feed on credit and later sells back the birds to the NHM abattoir. The broiler-rearing farmers receive intensive training and are paid according to a formula based on the food conversion ratio achieved (the quantity of feed used to produce a kilogram of meat). As in other successful outgrower schemes, it has taken over 10 years to achieve this solid outgrower base. The successful growth of NHM attracted foreign investors to grow the operation, having acquired Frango King, their main competitor in northern Mozambique.

**Higest, an enterprise in Maputo province, started with animal feed and veterinary medicines and equipment, but then entered the business of developing an outgrower model.** Problems including defaulting payments, side-selling, and low production performance led Higest to refine their model by gradually culling underperforming farmers and keeping only larger outgrower farmers (with between 30,000 to 100,000 chickens). At the same time, Higest developed their market base, building on the outgrower farmers. Higest has a production of around 100,000 birds per week with an annual output of 5,000 tonnes of chicken. Recently it has increased capacity 50 percent with in-house production.



## Fruits and horticulture

Mozambique's tree fruit sector remains underdeveloped, although it has significant potential. A few commercial agribusiness firms operate in the sector. A sizable fruit production cluster is growing in Manica province. These operations benefit from a favorable climate and good production resources, and they have an advantage in terms of seasonality, by being able to bring production to markets before competitors.

Westfalia Fruit Mozambique, part of the Hans Merensky Group, is a leading fruit producer globally, with strong avocado production and litchi trading in central Mozambique. Besides establishing commercial production of avocados (200 hectares in production and 400 hectares under development), the company also runs a packing house and has been providing market access to several neighboring farms. This activity is unlocking the potential of some fruit investments made by commercial farmers in the region. In 2018, Manica province exported almost 1,000 tonnes of avocados. This volume is fast growing—all the plantations are recent—with the expected output to peak in the early 2020s at 2,500 tonnes.

Parallel to the avocado operation, Westfalia has started to buy litchis from existing producers to export to European markets. This investment has more than tripled farm gate prices from US\$0.80 per kilogram to up to US\$3 per kilogram. The company supported the creation of a litchi farmers association, increased the number of farmers, helped in establishing nurseries to increase areas, and started to supply fertilizer and irrigation equipment. Farmers were also certified in the Global G.A.P. sustainable agriculture program to access premium markets. The program is now reaching around 100 farmers, and incomes are between US\$3,000 and US\$8,000 per farmer.

The fruit and vegetables cluster of Manica is a clear example of the needs for cold chain logistics to make this kind of investment viable. Despite being only 200 kilometers from Beira International Airport, the products currently must be trucked 1,500 kilometers to Johannesburg to be flown overseas, because of the lack of a cold chain and issues of scale. Even with the proof of concept on the production side, the sensitivity of the business model to the scale of the logistic costs is very high, limiting the expansion of the model to a broader range of products and markets.







Also in Manica, Companhia do Vanduzi has been working with about 1,500 small farmers with access to irrigation in horticulture production. The end products (baby corn and other vegetables) are mostly for the export markets, especially UK food retailers, with sales around 3,000 tonnes per year. The project requires strict quality standards guaranteed by extensive training and a comprehensive input package provided to farmers. Companhia do Vanduzi has been the first in Mozambique to guarantee the Global G.A.P. certification to outgrowers. The high cost of transport and the growth of production clusters that are better connected with external markets have been compromising the sustainability of the company, which has been diversifying destinations and market segments.

The tomato value chain in Mozambique presents high potential returns at the farm level (Fintrac IFC, 2018). The International Trade Centre has recently completed the signing of a US\$24 million tomato processing unit in the south of the country.<sup>19</sup> However, seasonal price volatility and lack of domestic value addition are significant risks. Whereas domestic processing could be an opportunity, investors are unlikely to pursue such business until a consistent year-round domestic supply can be secured. Horticulture production still lacks the technical and commercial development needed to supply the processing industries, and more important, to meet the food supply needs of the extractive industries or export markets. Adding to the technical development and structure of the supply chain, the feasibility of a logistics and cold chain are compromised by the lack of clusters of enough critical mass.

Banana has increased in the last decade, with exports growing from US\$3 million in 2007 to US\$30 million in 2017. However, production has been hit by the Panama disease in northern areas of the country, leading to the closure of the Matanusca (US\$80 million project) in Monapo, Nampula. Despite the existence and growth of a solid cluster in Maputo province that exports to South Africa, exports decreased from almost US\$60 million in 2014 to US\$30 million in 2017. Processing of fruits is currently limited, with scattered production, although the juice company Compal has been exploring and piloting local sourcing of fruit to process.

## Constraints

**Despite the progress in various value chains, the constraints to developing the agricultural sector are still significant.** These include a combination of lack of infrastructure, equipment, knowledge, finance, market access, and regulatory constraints.

**To start, emerging farmers are still not significant contributors to the agriculture production in Mozambique.** The biggest limitations for these farmers are agronomic and managerial skills to run the business, aggravated by limited access to financing—namely, working capital.

**Large investments in commercial farming are still limited, and most of the time operations move much slower than business plans.** This discourages new private sector investment. Existing farms often change ownership, leading to stop-and-go investment processes. The slow pace of results is often related to the difficulty of mobilizing a strong workforce, lack of sufficient mechanical supplies in remote places, limited access to power, and delays in securing equipment, including for irrigation. All of those obstacles compromise yields and increase the cost of production. In addition, lack of storage (including cold), deficient roads, lack of rail access, and costly port access erode business operations.

**As in any other sector, skills affect agribusiness on many different levels.** Lack of literacy, hampering farming as a business; institutional gaps; lack of trust, limiting associations; and limited technical skills all affect productivity and efficiency. Having qualified personnel is one of the key issues in more complex production systems, where a skilled workforce is often external, which increases costs. Insufficient skills and collateral are probably the biggest obstacles in accessing finance. Private companies with existing structures are more effective at filling the skills gap and can build local capacity with a framework of learning by doing. But other segments are more sensitive to the problem. This problem is illustrated by the poor performance of some farmer organizations, the high numbers of idle tractors on the CSAs, or even the poor stock management at the silos of the BMM.

**A key issue for farmers is access to finance.** It is estimated that only 3.7 percent of farmers have successfully obtained commercial credit (Fintrac IFC 2018). Most financial institutions in Mozambique are extremely risk averse and do not lend to the agricultural sector without third-party guarantees and minimum 100 percent collateral. As such, only the larger agribusinesses are able to obtain commercial credit, especially those with either foreign capital or dollarized sales that can finance in foreign currency (box 3.4). A binding constraint for farmers to access finance remains the inability to use land title (DUAT) as collateral.

**Lack of access to power and the high costs of connecting farms that are relatively close to the grid limit the development of irrigation, on-farm agro-processing, and storage.** EcoFarm had to pay US\$750,000 to connect its irrigation and sugar factory to the national grid, and the process has been delayed for over two years despite the readiness of the company to start operating.



**Irrigation is insufficient, with few irrigated areas that are often underutilized because of poor maintenance or design.** Lack of irrigation is a serious obstacle to gaining access to finance. Irrigation covers only 118,000 hectares in Mozambique. Of those, sugar cane represents almost 40,000 hectares, illustrating how limited irrigated food production is. Lack of irrigation is a severe limiting factor in the development of the fruit cluster. The same happens with rice, where there is strong potential to decrease the dependency on US\$200 million of imports with local production in Buzi, Chokwe, and Namacurra.

**The storage capacity owned and managed by BMM has several defects in functionality.** This leads to underuse and lack of engagement of the sector, limiting access to finance and other potential benefits. The storage network is an essential tool for the development of farming clusters but needs a change of approach and managerial capacity.



### BOX 3.4 SOME OF THE CHALLENGES OF EQUITY PLUS DEBT AGRIBUSINESS INVESTMENTS IN MOZAMBIQUE

**AgDevCo is a private equity fund supported by the UK Department for International Development that has been operating in Mozambique for many years.** AgDevCo targets investments between US\$2 million and US\$10 million of debt and equity in African agribusinesses. In Mozambique, AgDevCo originally targeted small and medium enterprises (SMEs) in agribusiness with a pilot in collaboration with the Beira Agricultural Growth Corridor. This pilot comprised 14 investees in central Mozambique for a total portfolio investment committed of US\$23 million, of which US\$13 million was disbursed. One advantage of having equity shareholders is that investees are able to secure relatively low-cost equity loans. Unfortunately, many of the SMEs received US dollar-indexed loans just before the financial crisis of 2016, which resulted in loans doubling in size in terms of meticalais. AgDevCo has since been focusing on some of the larger companies. Its latest investments in Mozambique include equity and debt investments in the reconversion of a citrus farm into a banana farm for export markets (Citrum) and a similar investment in an egg production facility and commercialization

network (Transurban). Both of these investments are in the south of Mozambique.

**Norfund is Norway's government main instrument for combating poverty through private sector investment.** The fund has always worked with larger investees, considering deal sizes above US\$10 million. The African Management Services Company (AMSCO) provides a pipeline of deals. Norfund's latest agribusiness investment in Mozambique was a US\$27 million investment in the Matanuska model banana plantation of the Rift Valley Group, producing 1,400 tonnes of bananas a day for export. This investment was based out of Monapo, Nampula province. Unfortunately, poor phytosanitary control led to the spread of Panama disease. The fungus irretrievably destroyed the entire plantation. Following divergent views of the future strategy of the company, Norfund withdrew from Matanuska in 2014. Following a string of failures investing in agriculture in Mozambique, Norfund is now focused on energy and real estate. This specific experience showed that investing in food and agribusiness in Mozambique is extremely challenging.

Source: CPSD team.

As discussed in the transport and logistics chapter, poor-quality roads affect access to inputs and markets. Despite recent investments, only around 18 percent of roads in Mozambique are paved, mostly on the primary network. The low quality of the road network contributes to high vehicle operating costs, high transport costs, and low traffic volume, posing major constraints to agricultural production. The costs involved in transporting maize and soya around the country have contributed to the mismatch between northern supply and southern demand. Even within the center region, the soya production area of Gurue and Molumbo in Zambezia are 500 and 850 kilometers away, respectively, from the poultry industry. And between 50 and 200 kilometers are dirt roads that are almost impassable even with little rain in the dry season. Niassa province has the best soils and climate, but opportunities are 800 kilometers away, in the next urban centers.



The lack of existing cold-chain facilities is an additional problem for the fruits and vegetables sector, especially in the central provinces of Manica and Sofala. The absence of a cold storage facility in Beira airport and Beira port compromise the potential of air freight of fresh vegetables and sea freight of avocados and citrus (and eventually mangoes). This lack of facilities creates a significant cost and challenges the maintenance of quality. In spite of port improvements, shipping costs are high, and demurrage, a charge for failing to load or unload a ship in a timely manner, increases the risk of these investments.

### Recommendations

The CPSD has the following recommendations for agribusiness (table 3.4).

**TABLE 3.4 RECOMMENDATIONS FOR AGRICULTURAL INVESTMENTS IN MOZAMBIQUE**

PROBLEM	RECOMMENDATION	PRIORITY/ FEASIBILITY	MAIN RESPONSIBILITY
<b>Area 1: Warehousing</b>			
Lack of investment in maintenance and lack of use of existing storage facilities	Promote transparent processes to award management contracts for existing warehouse facilities.	Medium/ Medium	MIC
Limited linkages between warehousing and access to finance	Initiate steps to develop cooperatives that can aggregate production around warehousing, using agreements with the financial sector.	Medium/Low	MADER
<b>Area 2: Emerging farmers</b>			
Land issues	Expand land titling processes and planning. Streamline and increase transparency in land registration processes.	High/Low	MITA, MADER, MJCR, regional governments
Lack of usage of existing CSAs	Invest in training, both technical and managerial; develop market linkages, such as mapping and aggregating potential demand and off-take; and create access to finance, building on the risk mitigation in skills and markets.	High/ Medium	MADER
Challenges in dealing with common natural disasters	Support disseminating fintech solutions and insurance platforms.	Medium/Low	MADER, MEF, Banco de Moçambique
Limited productivity in main staple crops when compared with other countries in the subregion	Develop and expand research programs for introducing and deploying improved seeds and equipment for farming.	Medium/ Medium	MADER

PROBLEM	RECOMMENDATION	PRIORITY/ FEASIBILITY	MAIN RESPONSIBILITY
<b>Area 3: Contract farming</b>			
Lack of equity and debt markets for medium to large agribusiness investments in targeted value chains	Use public investment alongside private sector investment to create spillovers to other investments and positive externalities on smallholders' income. Focus on sugar, poultry, fruits and vegetables, cotton, cashew nuts, sesame, and pulses.	High/ Medium	MADER, regional agencies (ADVZ, ADIN)
Lack of access to markets	Create linkages between agribusiness and large corporates, such as those in extractive industries, building on quality infrastructure and technology upgrading programs.	High/ Medium	MADER, regional agencies (ADVZ, ADIN), MIC, MIREME
Lack of cold chains	Support public and private investments around cold chain logistics in the Beira corridor, including air freight.	Medium/ Medium	MADER, regional agencies (ADVZ, ADIN)
<b>Area 4: Institutional support and programs</b>			
Lack of sustainable programs that last beyond project and government cycles	Develop programs that are sustainable in government budgeting and that can have medium to long-term horizon. Do not concentrate government resources in developing policies but be a driver of programs with significant consensus in the sector to remain beyond project cycles.	High/Low	MEF, MIC, MADER, regional agencies (ADVZ, ADIN)
Uncoordinated efforts and strategies hampering success	Promote public-private dialogue and related instruments to support coordination between initiatives, support adequate stock-taking, and drive reforms in targeted value chains.	High/Low	MEF, MIC, MADER

Note: ADIN = Development Agency for the North (Agência do Desenvolvimento Integrado do Norte); ADVZ = Zambezi Valley Development Agency (Agência de Desenvolvimento do Vale do Zambeze); APIEX = Investment and Exports Promotion Agency (Agência de Promoção de Investimento e Exportações); CSA = Agriculture Services Center (Centros de Serviços Agrários); fintech = financial technology; INNOQ = National Institute of Standardization and Quality (Instituto Nacional de Normalização e Qualidade); IPEME = Institute for Promotion of Small and Medium Enterprises (Instituto para a Promoção das Pequenas e Médias Empresas); MADER = Ministry of Agriculture and Rural Development (Ministério da Agricultura e Desenvolvimento Rural); MEF = Ministry of Economy and Finance (Ministério da Economia e Finanças); MIC = Ministry of Industry and Commerce (Ministério da Indústria e Comércio); MJCR = Ministry of Justice, Constitutional and Religious Affairs (Ministério da Justiça, Assuntos Constitucionais e Religiosos); MIREME = Ministry of Mineral Resources and Energy (Ministério dos Recursos Minerais e Energia); MITA = Ministry of Land and Environment (Ministério da Terra e Ambiente).

### 3.3. TOURISM

#### Economic Contribution of Tourism

Mozambique has undeniably strong tourism potential, mostly based on its rich natural endowments. Its greatest tourism asset lies in its Indian Ocean coastline, which contains numerous stretches of pristine beaches, coral reefs, and prolific marine biodiversity. Additionally, the country possesses unique cultural heritage in line with the historic interchange of African, Portuguese, Indian, and Arab cultures.

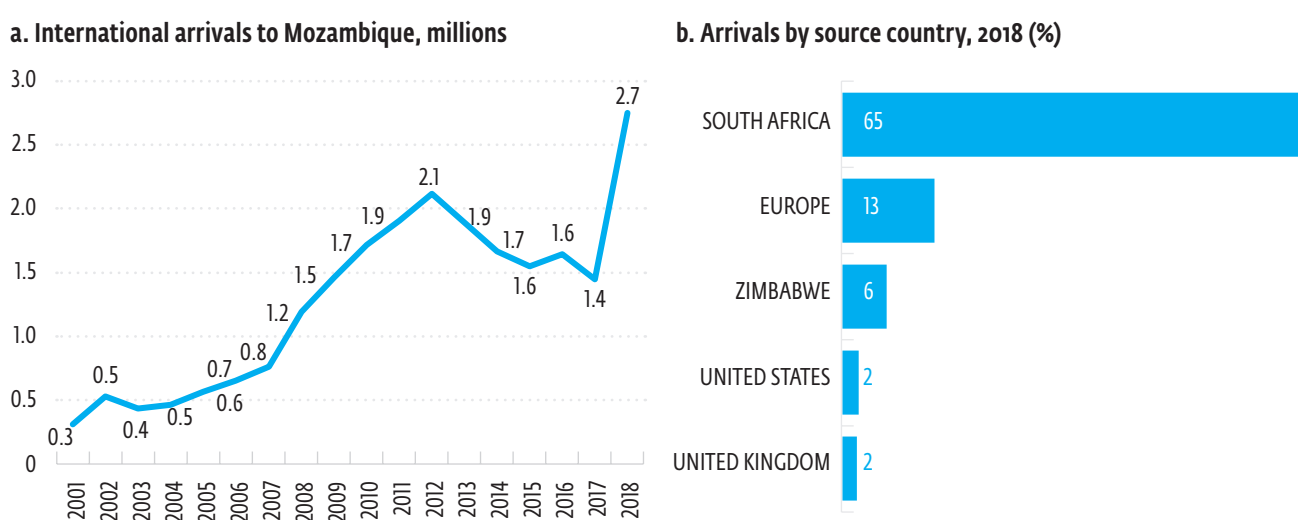
The government considers tourism a priority sector for the economy and set an ambitious vision for Mozambique as Africa's most vibrant, dynamic, and exotic tourism destination by 2025. Tourism is designated as one of four strategic development sectors in the National Development Strategy (2015–35). Moreover, the government's five-year program (2020–24) recognizes the need to strengthen the capacity and role of tourism for boosting economic growth, productivity, and job creation in both urban and rural communities. Aligned with these strategies, the Strategic Plan for the Development of Tourism in Mozambique (SPDTM II, 2015–24), developed by the Ministry of Culture and Tourism (MICULTUR) with support from the World Bank, highlights the need to focus resources on identified Priority Areas for Tourism Investment (PATIs) and to prioritize source markets, products, and places that can increase expenditures in tourism and the overall value created.

Five years have passed since the SPTDM II was adopted, and Mozambique remains an uncompetitive destination with a comparatively weak sectoral contribution to the economy. In 2019, Mozambique ranked 127th of 140 economies for overall competitiveness as a destination in the World Economic Forum's Travel and Tourism Competitiveness Report 2019 (TTCR). The country's regional competitors fare considerably better: Kenya is ranked 82nd and Tanzania is ranked 95th. The World Travel and Tourism Council (WTTC) estimates that in 2019, the tourism sector's total (direct and indirect) contribution to the Mozambican economy was 6.6 percent of GDP, and the sector generated exports amounting to 4.6 percent of the country's total exports. In absolute terms, this is far less than regional competitors such as Tanzania. In 2019, the travel and tourism sector provided approximately 667,000 direct and indirect jobs in Mozambique, representing 6.7 percent of the country's total employment, compared with 8.5 percent in Kenya, 11.1 percent in Tanzania, and 12.2 percent in Madagascar.<sup>20</sup>



Most international arrivals come from the region, with seemingly few high-spending, long-haul leisure tourists. In 2017 and 2018, approximately 80 percent of international tourists (overnight and same-day visitors) came from within Africa according to the United Nations World Tourism Organization (UNWTO 2019). Self-catering and lower-spending leisure visitors from neighboring countries (mainly South Africa, which represented 65 percent of visits) make up the bulk of leisure tourism arrivals. The next largest source market was continental Europe, followed by the United States and the United Kingdom (figure 3.7). Seasonality is high because travel depends on regional markets and related demand patterns driven by school and public holiday cycles (UNWTO and MICULTUR 2014). Although reasons for travel are difficult to discern from available statistics, most long-haul arrivals likely come for work or other business purposes and account for a large proportion of high-end visitors.<sup>21</sup>

**FIGURE 3.7 INTERNATIONAL TOURISM ARRIVALS AND SOURCES**



Source: UNWTO

Note: Recent performance has been particularly mixed. Mozambique registered 1.45 million international arrivals in 2017, which represented a drop of 11.7 percent from 2012, but it rebounded in 2018 to 2.7 million international arrivals, UN World Tourism Organization, 2020 data.

Although the capacity of tourism accommodations has grown, quality and occupancy rates remain low. Since a peak 28.2 percent in 2011, occupancy rates dropped to 17.9 percent in 2017 and 21.3 percent in 2018.<sup>22</sup> Although accommodation capacity has been increasing,<sup>23</sup> this does not fully explain the low occupation rates. With limited competition for accommodation, lower-quality low-budget facilities dominate, often with low profit margins, and only small clusters of high-value leisure tourism lodges and a few internationally branded resorts along the coast are available. In the World Economic Forum's TTCR, the country ranks 119th of 140 for number of hotel rooms and 107th for quality of tourism infrastructure (WEF 2019b).

**Approved investment projects in the sector have also decreased significantly in past years.** In 2017, investment projects were valued at just US\$36 million, compared with US\$137 million in 2016, US\$616 million in 2015, and US\$871 million in 2014. In 2018 a slight rebound occurred, with approved investment projects amounting to US\$176 million (MICULTUR 2020). Limited demand has also resulted in an underdeveloped supply of tour operators and destination management organizations, and an overconcentration of outbound travel agents.<sup>24</sup>

**Short- and medium-term performance of the sector will be heavily affected by the ongoing COVID-19 pandemic.** Globally, COVID-19 has been affecting all businesses along the tourism value chain. WTTC (2020) projects 100.8 million job losses in 2020 around the world and a US\$2.7 trillion loss in travel and tourism GDP. WTTC estimated that the crisis could lead to an annual decline in tourist arrivals of 60–80 percent compared with 2019 figures. In line with other national responses to prevent the spread of the COVID-19 virus, the majority of Mozambique’s international airlift has been temporarily reduced or suspended and businesses are increasingly opting to close. Although the extent of the crisis in Mozambique is as yet unknown, the private sector estimates that tourism will be the most affected industry, seeing a 60–80 percent drop in sector performance during the first semester of 2020 alone, and losses of between US\$53 million and US\$71 million, reflecting around a third of the sector’s annual business (CTA 2020). As other countries, Mozambique foresees a long and challenging recovery period.

### Opportunities for Growth

**Mozambique’s rich natural endowment provides ample potential for nature-based tourism to become a significant contributor to the economy.** When well planned and managed, tourism can be a significant source of income and can improve infrastructure for communities in marginal areas with few alternative economic opportunities. It can drive greater protection of natural assets and efforts to ensure sustainability of ecosystems. Globally, the value of nature-based tourism is expected to increase as the supply of pristine natural assets declines and as demand increases with economies’ rising GDPs (World Bank Group and Forward Keys 2019). Mozambique’s outstanding biodiversity contributes to the country’s notable ranking of 36 out of 140 for its total number of known species.<sup>25</sup> WEF (2019b) global indexes also indicate an emerging or growing demand for nature-based tourism in Mozambique, through its 2019 ranking (up from 2017), for natural tourism digital demand reflected in online searches for such products and packages.

**Coastal and marine tourism, as a subset of nature-based tourism, hold particular promise.** Annually, more than 350 million people travel to the world’s coral reefs, and the coral reef tourism sector is estimated to have an annual value of US\$36 billion (Ocean Wealth 2020). Mozambique’s 2,700-kilometer-long coastline, the fourth-longest in Africa, harbors some of the most spectacular pristine beaches, tropical islands, and coral reefs in the world. Whereas the Bazaruto Archipelago National Park and the Quirimbas National Park have been internationally recognized as some of the world’s best beach locations with high-quality island hotels,<sup>26</sup> other high-potential coastal areas remain relatively unexploited.

**The country's extensive network of conservation areas (CAs) harbors valuable ecosystems and tourism hotspots and is increasingly open to tourism investment.** Mozambique's conservation areas cover approximately 26 percent of the country (Biofund 2020). In 2019, revenues generated by tourism in CAs amounted to approximately US\$2.6 million, up from US\$1.6 million in 2017 (ANAC data; World Bank 2018b). The government has demonstrated its increased openness to experimenting with different models for tourism investments and conservation management, including public-private partnerships. For instance, the Gorongosa National Park is co-managed by the National Administration of Conservation Areas (Administração Nacional das Áreas de Conservação; ANAC) and the Gregory C. Carr Foundation, and the Niassa National Reserve is co-managed by ANAC and the Wildlife Conservation Society (WCS). For tourism investment in CAs, one of the models adopted, as in the case of the Maputo Special Reserve, includes a joint venture between the community and a private operator. The World Bank, through the US\$45 million Mozambique Conservation Areas for Biodiversity and Development Phase 2 project, is supporting ANAC, the managing body of the network, to establish the required basic conditions for tourism development in CAs. This support entails wildlife restocking, basic infrastructure investments, and institutional support to strengthen the capacity of a "business unit" to identify, plan, negotiate, and monitor investments and concessions within CAs.

**The government has also identified catalytic investments in PATIs to increase leisure and business tourism.** The SPDTM II indicates six priority investment nodes selected because of their attractiveness and growth potential for medium- to higher-value tourism development (see appendix C, figure C.1). Although some development is already taking place, especially around the Maputo Special Reserve (Ponta do Ouro node), much remains to be done.

**In addition, to facilitate tourism investment and focus resources for tourism growth, the government has permitted a number of sites to be designated as tourism interest zones (ZITs).**<sup>27</sup> As large-scale economic zones for integrated tourism development, ZITs can also qualify as special economic zones (SEZs). In 2010, the Council of Ministers approved the first granting of ZIT status to 10 sites across the country, including the two IFC-supported coastal anchor sites of Crusse and Jamali ZIT (1,750–hectares) in Mossuril district and Inhassoro district ZIT (2,750 hectares). Although success of the ZITs has so far been limited, the regulatory framework is in place, and INATUR, the body mandated to promote investment in these zones, is keen to see it succeed.

**Domestic travel is a large contributor to the economy, at 77.3 percent (WTTC 2018), and spending is expected to continue growing.** The industry could further maximize on the potential of domestic travel, which is driven by the middle and upper classes as well as the growing expatriate community, through a domestic marketing campaign and offers of discounted rates and packages, especially during the off-peak season. Although domestic travel is likely influenced by domestic business travel as well as individuals visiting friends and relatives, it also could benefit from the development of leisure activities that are often sought by expatriates, such as golf courses, wellness experiences, and cultural or entertainment-related events.



**Maputo city is demonstrating potential for MICE tourism (meetings, incentives, conferences, and exhibitions).** Mozambique has a natural advantage over many other countries in the region, given its proximity to and strong connectivity with South Africa, Africa's leader in MICE tourism. Mozambique has seen significantly increased demand for hosting international meetings, particularly in the capital city, Maputo.<sup>28</sup> That demand is considered to be partly a result of the ongoing boom in the mining, natural gas, and energy sectors, which attract multinational companies. The SPDTM II identifies Maputo city as a priority investment node, involving the development of a MICE strategy and establishment of a convention and events bureau. The government recognizes this potential and plans to establish a Convention Bureau in the first 100 days of its new term in 2020.<sup>29</sup>

**Because of the global pandemic, in 2020 conferences and events are being either cancelled, postponed, or moved to an online format.** Large gatherings of people represent a high risk for the spread of COVID-19, and the short-term opportunities for MICE tourism development have lowered considerably. Even medium to longer term, the industry is also likely to suffer, as businesses may opt for more virtual meetings than physical ones.

**Nevertheless, the largely untapped combination of MICE and high-end leisure tourism could still help generate longer and higher-value visitation and contribute to increasing tourism revenues.** Although ticket prices are high and schedules can be unreliable, domestic flight connections from Maputo to world-famous marine sites in Inhambane province are quick and fairly regular, both from Maputo and from Johannesburg. Other terrestrial and marine sites are reachable at lower cost from Maputo city by road and boat for add-on days to extend business trips. A stronger supply of mid-level accommodation could stimulate and support growth in these leisure and MICE tourism segments, as well as the combination of the two.

**Finally, integrating tourism with southern Africa's regional circuits could help Mozambique diversify into existing, higher-yield market segments.** With its existing air and road connectivity, Mozambique holds great potential as a complementary destination for those already visiting South Africa, which in 2019 welcomed just over 10 million overnight foreign visitors (Statistics South Africa 2019), along with other established neighboring destinations such as Tanzania. Tapping this high-spending leisure segment would depend on improved packaging of products, such as a bush-beach package combining Kruger National Park and the Bazaruto Archipelago, and improved visa measures, such as lower costs and simpler procedures for shorter stays.

### **Constraints on Investment and Growth**

**A number of constraints on tourism supply and demand are limiting tourism investment and growth.** Those constraints prevent the country from effectively leveraging the economic potential of the sector and exploiting the opportunities identified. These include business environment constraints, limited institutional capacity, lack of infrastructure, high cost of travel, weaknesses in service provision, issues with visas, gaps in skills, and poor marketing and promotion.



### Weak enabling environment for tourism investment

The country's overall investment climate is considered unfavorable. The TTCR ranked Mozambique 126th of 140 economies for its business environment, across sectors (WEF 2019b). The private sector highlights a lack of coherent information on investment conditions as a critical barrier to promoting and facilitating investment. For instance, stakeholders cite a lack of clarity in the Investment Law and confusion over the role of different agencies responsible for attracting, negotiating with, and managing investors. The country's Land Law, and associated complex procedures, also heightens investor uncertainty and perception of risk. At the sector level, the country's Tourism Law (2004) and regulations are considered adequate and are currently under revision with the objective of bringing the law more up to date with new developments in the sector.



Remaining gaps in the legal framework for private concessions in conservation areas hinder investment, even when there is strong investor interest. Although investing in CAs entails simpler land procedures than outside CAs, the absence of a formal CA concession framework creates uncertainty and undermines investor perceptions about the government's ability to execute tenders. Previous studies have indicated uncertainty over how CA concessions and tourism-related fees are reinvested to fund CA management, a key criteria for investors to ensure the continued value of the base tourism product (World Bank Group 2012).

**High costs of operations and finance further deter investment.** Although the country compares well in terms of certain cross-sectoral tax rates (such as labor and contributions), high taxes on profits and a lack of financial incentives to enhance profitability dampen investor appetite (Mozambique ranks 134th of 140 economies in terms of its tax rate on profits; WEF 2019b). Operators in remote areas incur higher operational costs because the products tend to be scarcer and more expensive, with increased transport costs. Access to finance is also identified as a challenge, with high interest rates, particularly for SMEs.<sup>30</sup>

### **Limited institutional capacity**

**Weak institutional structures and limited public sector capacities constrain sectoral planning, management, and, ultimately, industry growth.** Many existing structures directly or indirectly linked to the sector are constrained by limited budgets and expertise. Particular capacity gaps include the following:

- **Data collection and provision.** Capacity is needed to generate up-to-date and reliable data on the tourism sector's current and potential performance, as well as the profile of visitation, to inform strategic sectoral decision-making and to attract investors, operators, and airlines.
- **Investment promotion.** Capacity is needed to conduct feasibility studies and commercially package and promote investment opportunities. Where investor interest is established, limited public capacity to evaluate proposals and negotiate contracts has frequently led to failed efforts.
- **Coordinated spatial and tourism planning.** Capacity is needed to strategically plan the development of a tourism destination in an integrated manner, including the planning of complementary infrastructure investments. This limitation is not only from a lack of skills within the relevant planning and tourism bodies, but also because of overlapping agency mandates and a lack of coordination between them.
- **MICE resources:** Capacity is needed to effectively manage and optimize the existing Joaquim Chissano Convention Center in Maputo; a Convention Bureau must be established to plan and capitalize on MICE tourism opportunities.
- **Marketing and promotion:** Capacity is needed to effectively promote the country's assets to both potential investors and tourists, as well as to counteract negative events and media coverage.<sup>31</sup> Mozambique ranked 116th of 140 for effectiveness of marketing and branding to attract tourists (WEF 2019b). Marketing and promotion activities will be critical for the destination's reputation during the COVID-19 pandemic and for sector recovery as the country emerges from the crisis.



### **Weak infrastructure and service provision**

Despite liberalization efforts, air access to and within Mozambique is still limited and expensive.<sup>32</sup> The cost of international flights to Mozambique is comparatively high for the region, because of a combination of limited seat allocation on key routes, scheduling restrictions, expensive ground handling services, financial restrictions for foreign air companies, and air transport infrastructure deficiencies (UNWTO and MICULTUR 2014). Currently, Mozambique has direct routes to 10 other economies, seven of which are in Africa, with South Africa holding the majority (51 percent share) of international seat capacity. There are no direct flights from the Indian Ocean subregion, Asia Pacific, the Americas, or North African countries. In comparison, nearby Mauritius is directly connected to 25 economies across multiple regions (World Bank Group and Forward Keys 2019). Current restrictions and the financial repercussions for airlines may exacerbate air connectivity challenges going forward.

**Insufficient basic service provision and poor road infrastructure limit opportunities for geographical spread of tourism visitation, investments, and benefits.** Mozambique as a whole ranks poorly for basic infrastructure and services out of 140 economies, including basic sanitation services (129th), drinking water (135th), electricity supply (118th), and availability of physicians (131st).<sup>33</sup> Although access to water has improved, water quality can be poor because of littering and sewage seepage, affecting visitors' experience and creating environmental issues (UNWTO and MICULTUR 2014). In addition, Mozambique is a high-risk malaria area, especially during the hot and rainy season (November to April), and the lack of reliable health facilities can deter potential overseas visitors. Mozambique also ranks poorly for both road density (125th of 140) and quality of roads (133rd of 140), according to WEF (2019b). Where road connections are available, they are often difficult and time-consuming, and the costs of hiring private transportation can be prohibitive for visitors. The lack of sufficient infrastructure (for example, road connectivity, water, and electricity) also deters investments in the existing ZITs. As a result, tourism development remains largely restricted to only areas with reasonable connectivity.

### **Incoherent visa framework**

Although Mozambique's visa policy is largely favorable, implementation practices have been stifling visitation. Mozambique ranks 8th in Africa on the 2019 United Nations World Tourism Organization (UNWTO) Visa Openness Index, largely based on the wide availability of visas on arrival.<sup>34</sup> Yet, this largely positive policy has been undermined by a combination of seemingly ad hoc changes to procedures and rules, poor information dissemination, deficient information and communication technology (ICT) systems, and notable gaps in the legislation. For instance, in 2017, unannounced changes to visa procedures for cruise tourists caused cancellations, and although the situation has largely been rectified, it harmed the country's image.<sup>35</sup> High and changing visa costs, insufficient staffing, and long wait times at key gateways, along with the perceived risk of being denied entry upon arrival, represent additional deterrents and ultimately constraining demand.<sup>36</sup>

### **Insufficient skills and service quality**

Insufficient qualified labor in tourism and hospitality drags down standards and service quality. Mozambique ranks among the lowest 10 economies in the world for qualification of the tourism labor force (133 in the TTCR). The rankings for ease of finding skilled employees and extent of staff training are equally as poor, at 128 and 136, respectively (WEF 2019b). Though this problem speaks to overall deficiencies of the education system, it also highlights the insufficient quality and quantity of hospitality and tourism training institutions in the country. The curricula of the three existing vocational hospitality schools are perceived as poorly reflecting the needs of the industry's private sector.<sup>37</sup> Ultimately, the private sector is burdened with (a) hiring unqualified labor, which affects service standards and visitor experience, and (b) bearing the cost of providing in-house training, with related risks of high turnover of staff. Tight restrictions on the hiring of foreigners further limit the talent pool in the sector.<sup>38</sup>

### **Recommendations**

An overall recommendation for the tourism sector is to evaluate progress of SPDTM II (2015–24) implementation and its continued relevance. The Strategic Plan for the Development of Tourism in Mozambique (SPDTM II) clearly identifies catalytic developments for increasing numbers of leisure and MICE travelers. The suggested evaluation should reconfirm these current areas' attractiveness and growth potential, and also strengthen buy-in among current authorities. Some of the recommended actions presented below may support the sector recovery following the COVID-19 pandemic by helping to attract tourists and private sector investment in the country.



**TABLE 3.5 RECOMMENDATIONS FOR INCREASING TOURISM IN MOZAMBIQUE**

PROBLEM	RECOMMENDATIONS	PRIORITY/ FEASIBILITY	MAIN RESPONSIBILITY
<b>Area 1: Improve planning and infrastructure</b>			
Limited institutional capacity	Strengthen cross-sectoral coordination for tourism destination planning and management to ensure an integrated, coherent approach. It is also key to address overlapping functions.	High/Low	MICULTUR, INATUR
Limited capitalization of MICE tourism	Establish a Convention Bureau and related capacities to capitalize on MICE tourism opportunities.	Medium/ Medium	MICULTUR, INATUR, private sector
Weak infrastructure and services (such as road connectivity, water, and electricity)	Develop basic infrastructure to facilitate investment in specific sites. Insufficient infrastructure deters investments and limits geographical spread of tourism visitation and benefits.	High/Low	MICULTUR, INATUR, ANAC, MOPHRH, MIREME
<b>Area 2: Promoting investment</b>			
Limited institutional capacity	Build investment promotion capacity to (a) identify and conduct feasibility studies on potential investment opportunities, (b) package and promote opportunities, (c) evaluate proposals and negotiate contracts, and (d) manage and monitor contracts.	High/Medium	INATUR, ANAC
Lack of readily available investment opportunities	Develop an inventory of potential investments (such as hotels, resorts, and attractions) and prepare profiles for the most marketable opportunities. Prioritize opportunities for filling the gap in mid-level accommodations.	High/Medium	INATUR, ANAC
Information and knowledge gaps	Streamline and communicate tourism investment procedures and operational requirements. Using an online information portal will help ease time and cost barriers to entry for potential investors.	High/High	APIEX, INATUR, ANAC
Weak regulatory framework for investment in CAs	Draw up regulations to govern the award and management of tourism concessions in CAs. Despite past attempts to regulate the special license, Mozambique still lacks a complete regulatory framework for facilitating tourism investment in CAs.	Low/Low	ANAC

PROBLEM	RECOMMENDATIONS	PRIORITY/ FEASIBILITY	MAIN RESPONSIBILITY
<b>Area 3: Stimulating demand</b>			
Lack of a coherent visa framework	Communicate destination openness by (a) introducing legal amendments to fill in key gaps and clarify procedures; (b) considering visa waivers for key markets that do not pose significant security threats, as done in a number of other SADC countries; (c) allowing cheaper, shorter-stay visas to encourage multideestination regional travel; and (d) creating an e-visa system.	High/High	MICULTUR, MINT, MINEC
Limited air connectivity and high cost	Undertake efforts to improve air connectivity to and within the country, including the removal of barriers for new airline operators and/or routes. Review existing aviation-related fees, charges, and taxes.	Low/Low	MICULTUR, civil aviation
Limited regional and international travel	Boost domestic tourism by offering reduced airfares during off-peak seasons or as part of lower-cost packages. Targeting of domestic travel is particularly relevant now and in the post-COVID-19 phase as international travel will be slower to rebound.	High/Medium	MICULTUR, INATUR, LAM, private sector
Limited visibility	Create an online one-stop shop to provide information to attract and inform potential tourists. Such a portal would also disseminate messages in response to crises or negative media coverage.	Medium/High	MICULTUR, INATUR
<b>Area 4: Strengthening the value chain</b>			
Lack of access to markets	Promote links between the hospitality industry and local producers to increase their integration into the tourism value chain and reduce reliance on imports.	High/Medium	MICULTUR, MADER, MIC
Skill gaps and low service quality	Better identify the human resource needs of private sector operators and subsequently address them by revising curricula and increasing the coherence of standards in TVET programs.	High/Medium	MICULTUR, INATUR, MCTESEP, SEJE, private sector

Note: Currently, citizens of nine Southern Africa Development Community countries do not require tourism visas for visiting Mozambique up to 90 days. These include all of its neighboring countries (Eswatini, Malawi, South Africa, Tanzania, Zambia, and Zimbabwe), as well as Angola, Botswana, and Mauritius (30 days). ANAC = National Administration of Conservation Areas (Administração Nacional das Áreas de Conservação); APIEX = Investment and Exports Promotion Agency (Agência de Promoção de Investimento e Exportações); CA = conservation area; INATUR = National Tourism Institute (Instituto Nacional do Turismo), body mandated to promote investment in tourism interest zones (ZITs); MADER = Ministry of Agriculture and Rural Development (Ministério da Agricultura e Desenvolvimento Rural); MCTESEP = Ministry of Science and Technology, Higher, Technical and Professional Education (Ministério da Ciência e Tecnologia, Ensino Superior e Técnico Profissional); MIC = Ministry of Industry and Commerce (Ministério da Indústria e Comércio); MICE = meetings, incentives, conferences, and exhibitions; MICULTUR = Ministry of Culture and Tourism (Ministério da Cultura e Turismo); MINT = Ministry of Interior (Ministério do Interior); MINEC = Ministry of Foreign Affairs and Cooperation (Ministério dos Negócios Estrangeiros e Cooperação); MIREME = Ministry of Mineral Resources and Energy (Ministério dos Recursos Minerais e Energia); MOPHRH = Ministry of Public Works, Housing and Water Resources (Ministério de Obras Públicas, Habitação e Recursos Hídricos); SADC = Southern Africa Development Community; SEJE = Secretary of State for Youth and Employment (Secretaria de Estado da Juventude e Emprego); TVET = technical and vocational education and training.

### 3.4. HOUSING CONSTRUCTION

**Rapid population growth and urbanization are expanding demand for housing.** The supply of housing has not kept pace with demand, resulting in significant unmet needs, especially in the lower-income segment of the market. The problem is twofold, reflecting both limited overall supply and limited availability of housing that is affordable for most people. The current provision of housing is focused mainly on meeting the needs of the upper-income groups, who are a small segment of the population.

**The current gap in the affordable housing market presents an opportunity for the private sector.** Correcting that gap would potentially also create employment, economic diversification, and broader economic growth. However, supporting private investment in housing development and harnessing the potential of the sector will require reforms targeted to address key cross-cutting and sector-specific constraints.

#### Sector Performance and Issues

**Increasing access to housing is one of the priorities of the government's five-year program (2020–24).** Mozambique's housing policy and programs are governed by the Policy and Strategy of Living Places (2011) under the mandate of the Ministry of Public Works, Housing and Water Resources (MOPHRH). Key objectives of the policy include the following: (a) progressively facilitate access to adequate housing for all; (b) promote urbanization, improvement and inclusion of informal settlements; (c) improve the productivity and quality of housing construction; and (d) promote employment opportunities by stimulating SMEs in construction. On the basis of these principles, the main areas of action include land management, access to infrastructure, housing promotion, sources of financing, training and technological development, and institutional organization.





**Potential demand for housing in Mozambique is growing, with urban population growing at 4.4 percent per year, while the country's overall average population growth is 2.9 percent.** Currently, about 32 percent of the population lives in urban areas, and though lower than the rate in other countries of Sub-Saharan Africa, it is growing. By 2050, it is estimated that half of the population in Mozambique will live in urban areas (UN-Habitat 2018). In parallel, the development of the extractives sector can benefit construction, not only in terms of on-site building of infrastructure, but also in housing for the influx of people in locations close to the project sites.

**The supply of formal housing has not kept pace with demand.** Although an updated housing census has not been done, it is estimated that Mozambique has over 5 million units, with a housing deficit of 2 million units (Bah, Faye, and Geh 2015). This figure increases annually, given the growing population and urbanization rates and the low rate of affordable housing construction. To keep the deficit constant, about 150,000 new homes will be needed every year.

**Formal house prices are still out of reach for most Mozambicans.** Using the ratio of house prices to income, there is a limited availability of formal housing that is affordable for most people. The price and cost (including financing cost) of existing units is too high relative to the incomes of the average Mozambican. The average monthly family income is approximately US\$2,400 a year in urban areas and US\$900 a year in rural areas (UN-Habitat 2018). The general rule that is widely used for assessing accessibility of housing is that 30 percent of family income can be used for housing (more than that is considered impractical). For poor households, it is more reasonable to assume 20 percent of the income. Given these levels of spending, the average urban household could pay around US\$50 per month for a mortgage or to rent a house. With 20 percent interest rates, this would mean that most Mozambicans could only afford a home that costs less than US\$10,000. The cost of the cheapest newly built formal housing unit in Mozambique is about US\$55,000, a monthly payment of US\$600. As a result, less than 1 percent of Mozambicans could pay up to US\$30,000 for a home. Even considering an interest rate of 14 percent, only 3 percent of the population would bear that amount (table 3.6).

**TABLE 3.6 PERCENTAGE OF FAMILIES THAT CAN PAY FORMAL HOUSING UNIT COSTS**

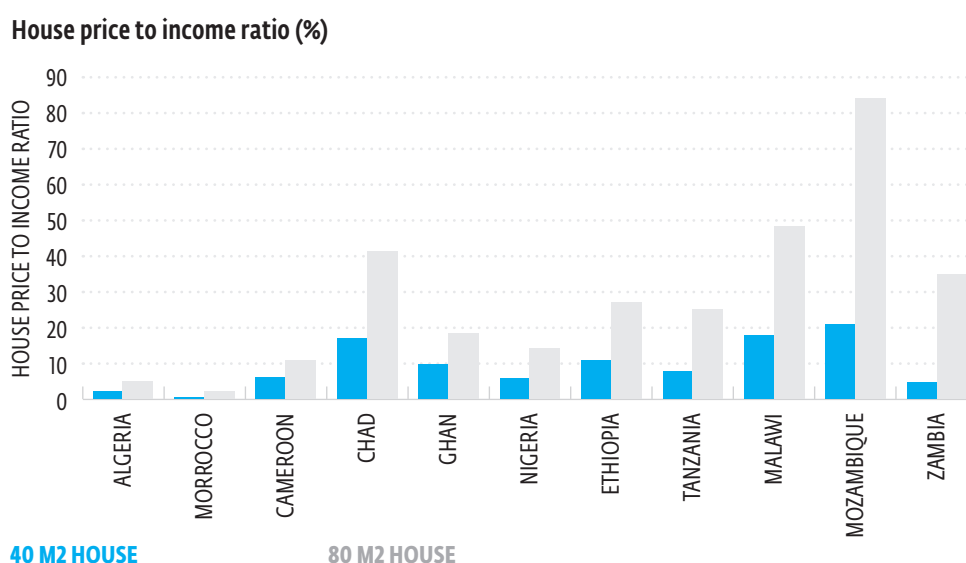
INTEREST RATE	SHARE OF FAMILIES ABLE TO AFFORD HOME PRICE (%)		
	US\$ 20,000	US\$ 25,000	US\$ 30,000
<b>20</b>	4	< 1	< 1
<b>10</b>	8	5	3

Source: Based on UN Habitat data.

Therefore, most of the population in Mozambique live in informal types of housing. Typical, dwellings—70 percent of them—are self-built using materials extracted from the surrounding areas. Often, unlicensed contractors are filling the gap for construction demand that cannot be met by the formal sector (World Bank, Barreto, and Acioly 2018). With the lack of access to mortgage financing, most housing is built incrementally with investment from individual savings or small loans from family, friends, moneylenders, and microfinance (World Bank Group 2015b). Within the context of traditional self-built housing, the local contractor may also supply the materials more affordably, relying on traditional expertise and the assistance of community members and local laborers (Global Development Solutions 2016). The construction undertaken by the households themselves is often done in unplanned and unregulated ways.

Even compared with other countries in the region, many of them with similar average income levels, Mozambique shows a very high house price-to-income ratio. Figure 3.9 shows the degree to which housing is affordable in the region, and Mozambique appears to be the worst compared with its regional peers.

**FIGURE 3.9 HOUSING AFFORDABILITY IN MOZAMBIQUE VERSUS SELECTED AFRICAN COUNTRIES**



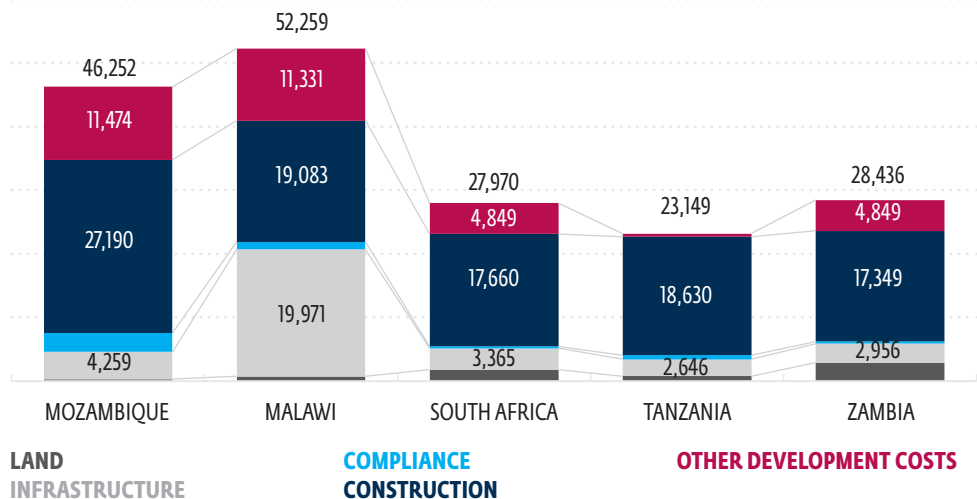
Source: El-hadj, Faye, and Zekebweliwai 2015.

Note: 40 square meters (430 sq ft) and 80 sq m (861 sq ft).

The costs of construction are driving the higher costs of housing in Mozambique. When the overall cost of housing is broken down, the most significant differences in a comparison of selected African countries are in the costs of construction, compliance, and other construction costs (figure 3.10). A generic 55-square-meter unit in Maputo costs US\$46,252, double that of South Africa, Tanzania, and Zambia.<sup>39</sup> The limited number of private developers in Mozambique may reflect the high cost of materials and financing, which probably prevents market entry in this sector, despite the gap.

**FIGURE 3.10 COST OF A STANDARD HOME IN MOZAMBIQUE AND SELECTED AFRICAN COUNTRIES**

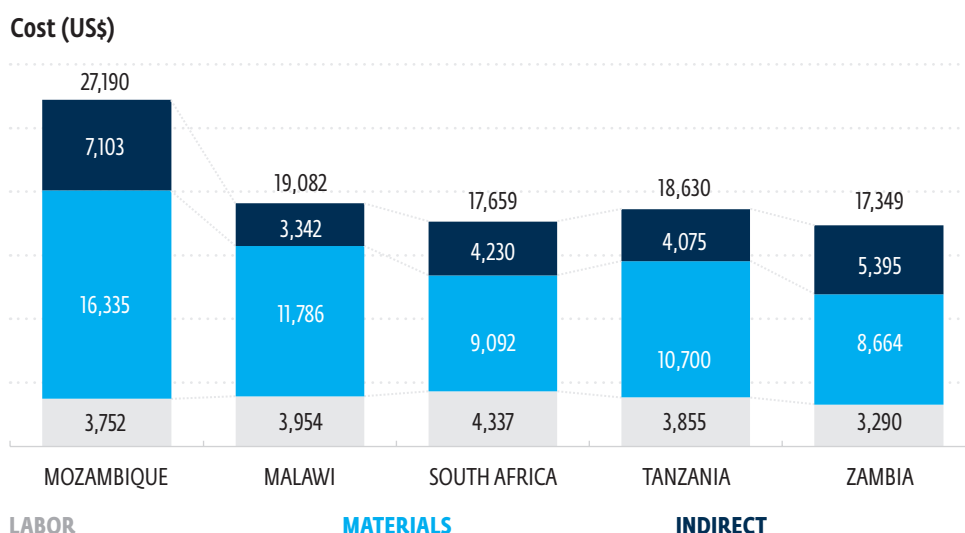
Cost (US\$)



Source: CAHF 2019.

The biggest contributors to the costs of construction are materials costs, which usually amount to 60 percent. Figure 3.11 shows the composition of housing construction costs (labor, materials, and indirect cost components) across selected African countries. The most significant portion of the material costs are secondary materials such as gypsum plaster, ceramics, and tiles. These products are 42 percent more expensive in Mozambique than in neighboring South Africa. Many of these products are imported, but significant delays and hidden costs can compromise the already limited capacity to import and affect the price of materials.<sup>40</sup> On the other hand, the costs of some primary materials that are extracted directly from the environment and require few other processes (sand, stone, and raw timber) are cheaper in Mozambique than in neighboring countries.

In addition, compliance costs in Mozambique are more than double those in peer countries. Although Mozambique scores well on the Doing Business dealing with construction permits indicator (including the number of procedures, time, and costs) and the building quality control index (11 out of 15) (World Bank 2020a, 2019b), compliance costs (which relate to all aspects of registration, licensing, and approval) are very high. These costs probably result from a lengthy process of getting the required documents to build, including obtaining a DUAT (the right to occupy and use land).

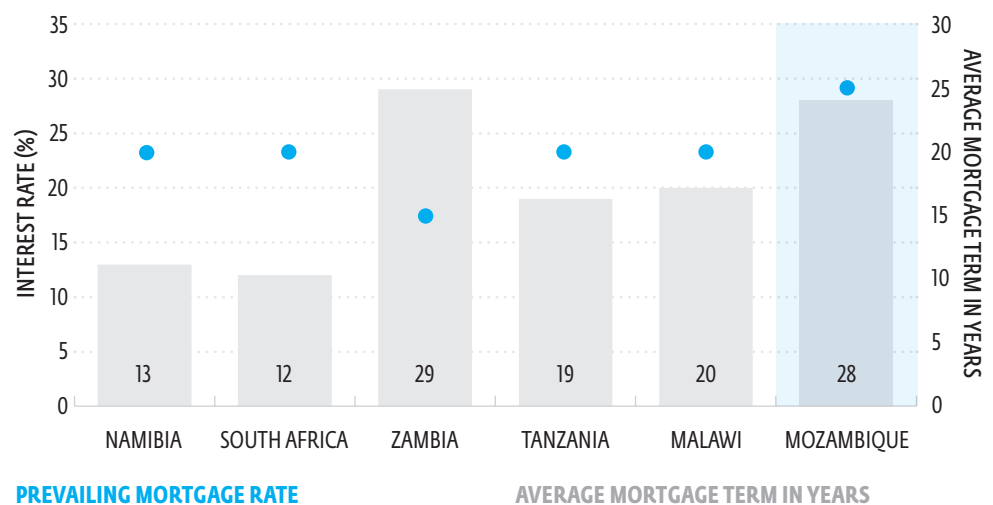
**FIGURE 3.11 COST OF HOUSING CONSTRUCTION IN MOZAMBIQUE AND SELECTED AFRICAN COUNTRIES**

Source: CAHF 2019.

Other costs, such as financing costs, are also significantly higher in Mozambique than in regional peer countries. Mortgage interest rates in Mozambique are around 28 percent and are among the highest in Africa (figure 3.12). The high cost of mortgages is the result of a number of factors related to the functioning of the credit markets. These include the high level of the Bank of Mozambique's prime rates; high credit-risk premiums, reflecting weaknesses in the legal, regulatory, and institutional environment; high maturity premiums caused by the unwillingness of lenders to issue long-term loans; and underuse of the collateral value provided by real estate (CAHF 2019b; Fuchs 2018).

**Uncertainties on foreclosure procedures contribute to banks being discouraged from taking more risks with mortgage loans.** The legal framework covering the mortgage market, National Civil Code of 1966, does not describe borrowers' rights or the procedure borrowers must follow when credit is awarded and in the event of foreclosure for default. The value of the guarantee provided is also very uncertain because of the cost and the time it takes to execute the guarantee when the borrower does not pay. Evidence shows that when creditor rights are protected, availability increases and associated costs decrease (UN-Habitat 2018).

**The underuse of the collateral value provided by real estate is related to the ownership and registration of land.** All land in Mozambique is owned by the state, governed by law, and cannot be sold or included in transactions; however, in practice, a parallel land regime applies. Although the land is considered state property, the law recognizes strong individual rights to use the land through bona fide occupation and tradition, including community land ownership. However, the land law and regulations still present significant gaps that in the short term can complicate the land governance system. Current regulations and implementation processes in place also, directly or indirectly, undermine the affordability of housing.

**FIGURE 3.12 PREVAILING MORTGAGE INTEREST RATE AND TERM AMONG REGIONAL PEERS**

Source: CAHF 2018 and 2019.

**Land tenure rights are complex to obtain.** DUATs can be obtained in the following ways: occupation, authorization, raffle, public auction, private negotiation (by purchase or lease, which must be authorized by the responsible agency), and transfer (inheritance). In the municipalities, the municipal council is responsible for granting DUATs, and they must be registered with the Land Registry Office to protect against conflicting rights.

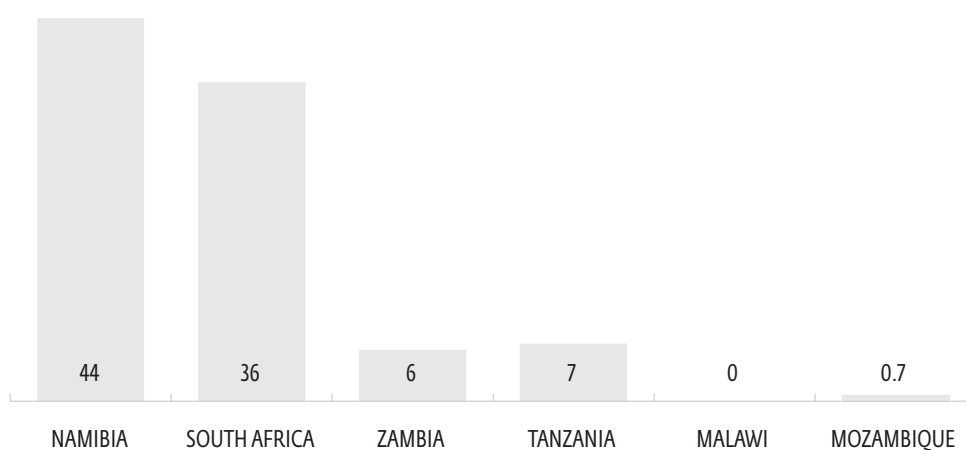
However, only a small proportion of the population has the legal registration of their plot (figure 3.13),<sup>41</sup> and most housing development does not follow formal standards. This lack of structure is mainly due to the complexity of the process and unrealistic requirements. For example, the plot must be in an urbanized area, with approved general plans and a basic level of urbanization, that is, demarcation of plots, access network, and water supply. The laws and regulations for occupancy, including building codes that are structured for durable formal housing, discourage compliance (World Bank Group 2015b).

**Unrealistic guidelines on land ownership, housing markets, and weak enforcement of urban development plans result in occupancy of vacant land with nondurable (informal) housing.** This has given rise to fragmented cities such as Maputo, leading to high costs of living and of doing business.<sup>42</sup> One of the main development challenges Mozambique still faces is territorial planning, despite the efforts to improve land use, consolidation of zoning, identification of specific areas designated for construction, infrastructure, industries, and natural reserves (Ghosh and others 2010; Monteiro and others 2017).



**FIGURE 3.13 SHARE OF RESIDENTIAL PROPERTIES WITH A TITLE DEED IN SELECTED COUNTRIES**

Share of properties (%)



Sources: Current data are from ArcGIS; Centre for Affordable Housing Finance in Africa (CAHF); World Bank Doing Business Indicators (database).

## Opportunities

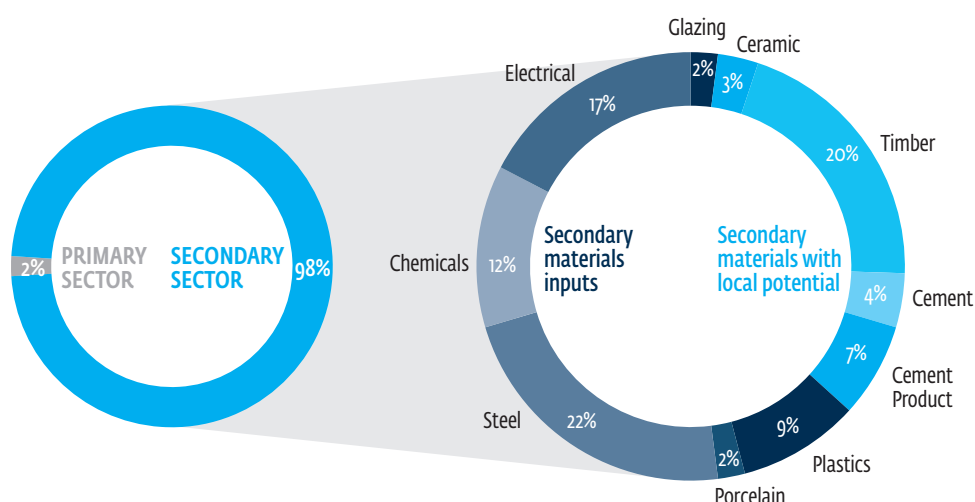
Although the housing market situation in Mozambique presents difficulties because of the unaffordability of housing, the existing housing deficit presents a great opportunity for the private sector. Housing needs in Mozambique are quite extensive: a total of 13.5 million additional units are needed by 2050 to accommodate population growth, replace inadequate units, and reduce overcrowding. The growing demand for housing means an equally growing demand for construction materials. The fast-growing extractive sectors can further drive the demand for construction services and housing.

According to the latest census of firms in Mozambique (CEMPRE 2015), about 2,000 construction companies are operating in Mozambique. Of those, 1,164 companies (56 percent) are dedicated to the construction of buildings; 680 companies (32 percent) are working on civil engineering projects, including constructing roads, bridges, and water transportation networks; and 253 companies (12 percent) specialize in construction activities, including demolition, preparation of construction sites, electric installations, plumbing, air conditioning, carpentry, plasterboard frames, floors, and various finishing services (INE 2015). According to the same census, there are about 60,000 workers in the construction industry. Compared with the construction sector's actual size, this is a small number because of the high number of unregistered companies.

Material inputs account for a significant portion of the total cost of construction and can potentially be an opportunity for greater private investment in Mozambique, given the country's endowment of raw material inputs. Mozambique is very competitive in supplying primary materials (including extractive industries and forestry products), but it is not competitive and has very low participation in the supply of secondary materials (those in which some processing is required), which make up 98 percent of materials costs.

There is a huge opportunity for private investment in the manufacture of some secondary materials, provided it can be done with acceptable quality and at competitive prices. The construction materials subsegments with the greatest possibilities for private sector participation in Mozambique are (a) cement (it is already produced locally, mainly from clinker, which is an imported intermediate product); (b) materials produced from cement, for example, blocks; (c) ceramics; and (d) products derived from wood (figure 3.14). These products are responsible for almost 35 percent of the cost of materials in a house.



**FIGURE 3.14 MATERIALS COST BREAKDOWN FOR A STANDARD HOUSE IN MOZAMBIQUE**

Source: CAHF 2019.

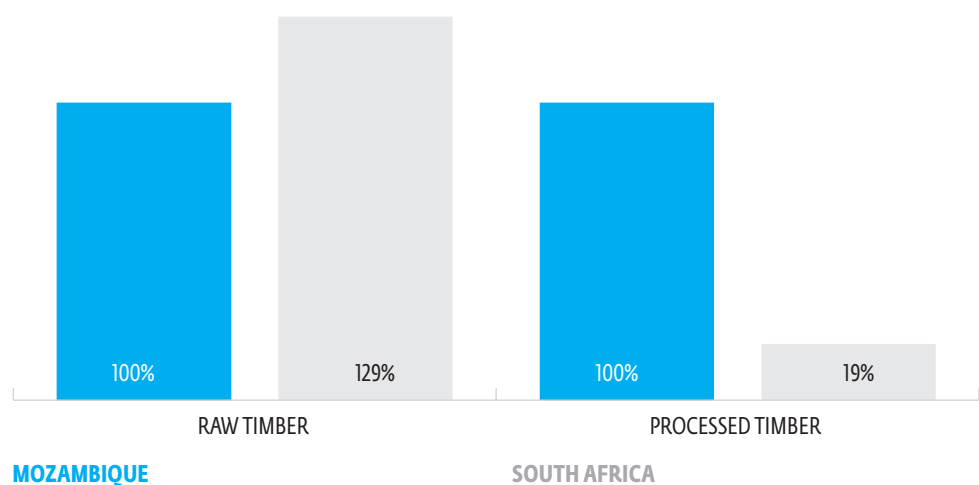
The cement industry currently benefits from government interventions to encourage and protect local industry. Measures include an import tariff for finished cement that increased from 10.5 percent to 20.0 percent in 2017.<sup>43</sup> Moreover, in May 2018 the Ministry of Economy and Finance (MEF) and the Ministry of Industry and Commerce (MIC) set a cement certification fee at more than US\$10,000. This fee is applied to each batch of cement that is imported, making it prohibitive to import cement. As a consequence of these policies, the number of cement grinding plants installed in Mozambique grew from three in 2008 to 13 in 2018, and today the country has cement grinding overcapacity.

All the grinding plants are located in places near the seaports, so there may still be investment opportunities in new integrated plants. Places far from the coast could especially benefit, considering that the costs of transporting cement are significant in relation to its price. Mozambique also has detected mineral resources for the cement production in several parts of the country. Thus the country is positioned to be competitive, provided it can address the wider investment climate and the reliability of electrical power supply.

There is potential for increasing domestic production of blocks, bricks, and tiles. In the case of blocks, firms are producing these locally, but the quality is not uniform, and supply is not always ensured. Hence, some builders prefer to buy imported blocks. By setting manufacturing standards, achieving quality control by independent bodies, and providing adequate training, a qualitative and quantitative leap could be achieved. The production of precast concrete materials can also be a good opportunity for private investment. Regarding ceramic products, bricks are relatively easy to produce, requiring only clay and a ceramic oven, which can be heated by any type of fuel. Floor coverings or tiles require slightly more advanced technology, but with support, the industry could be developed.

Finally, an important opportunity for private sector investment is in the production of wood-derived materials. Mozambique could improve housing affordability by using raw wood to produce processed (secondary) materials such as doors and skirting (trim). According to the CAHF (2019) study, South Africa spends almost 30 percent more than Mozambique on the raw wood in a comparable standard house. Conversely, Mozambique spends five times more on processed wood than South Africa to build the same type of house (figure 3.15). This presents an opportunity considering the availability of raw materials in Mozambique and the fact that the industry does not require a significant investment in technology (see appendix A.3, Forestry).

**FIGURE 3.15 DIFFERENTIAL COST OF RAW AND PROCESSED WOOD IN MOZAMBIQUE AND SOUTH AFRICA**



Source: CAHF 2019.

### Recommendations

To capitalize on these opportunities, Mozambique must tackle the underlying issues driving the high cost of construction, compliance, and financing of housing. Currently the government is addressing some of these issues in its Policy and Strategy of Living Places, but significant work remains to be done. Although the principles, goals, and areas of action identified continue to be relevant, the problem is that the specific activities that are defined are not usually followed in practice because of the lack of both institutional capacity and coordination and given the local reality and conditions. Moreover, a number of other pressing reforms are needed to incentivize private investment in the construction industry, specifically in affordable housing (see table 3.7).

**TABLE 3.7 RECOMMENDATIONS FOR ADDRESSING POLICY CONSTRAINTS IN SUPPLIES OF AFFORDABLE HOUSING IN MOZAMBIQUE**

PROBLEM	RECOMMENDATIONS	PRIORITY/ FEASIBILITY	MAIN RESPONSIBILITY
<b>Area 1: Weak enabling environment</b>			
Inefficiencies in the land titling and registration	Address the land titling and registration systems to create greater legal certainty. The time and difficulty related to land titling and registration systems add to the cost of credit and discourage private investment. An enabling environment can be created by improving coordination between central, provincial, and municipal institutions and increasing technological resources.	High/Low	MITA, regional governments, municipalities
Weak legal framework	Improve legislation related to construction permits and building codes. Some of the legislation must be reviewed and adapted to the reality of the country. In addition, enforcement of regulations must be improved.	High/Low	MOPHRH, municipalities
Limited institutional capacity	Promote the development of PPPs for housing construction in specific locations, to address public objectives of expanding social housing but also to leverage other companies' resources in investments. It is also important to improve coordination between the institutions that govern housing, including redefining the role of the FFH.	Medium/ Medium	MOPHRH, FFH
<b>Area 2: Limited skills and technical know-how</b>			
Skill gaps	Enhance the quality and quantity of the workforce. To achieve these aims, align the TVET programs with the needs of the construction and building materials industries. The strengthening of technical education institutions for the training of artisans not only will expand the availability of labor for the private sector, but also will generate job opportunities and improve quality and cost of self-construction.	High/ Medium	MOPHRH, MCTESEP, SEJE, private sector
<b>Area 3: Development of supporting sectors with high potential</b>			
Unexplored opportunities in growth segments, through coordinated efforts	Focus on potential growth segments in which Mozambique can have competitive advantages, such as timber, tiles, bricks, and cement products (concrete blocks). The government could encourage applied research, improve skills along the value chain, and provide specific incentives for potential investors.	High/ Medium	MOPHRH, private sector

PROBLEM	RECOMMENDATIONS	PRIORITY/ FEASIBILITY	MAIN RESPONSIBILITY
Solutions not adapted to local context	Invest in research and development for resilient materials and construction methods adapted to the reality of Mozambique. Invest in training of builders and consumers, taking climatic conditions into consideration. Mozambique is one of Africa's most vulnerable countries in regard to climate change because it is exposed to extreme weather events like floods, drought, and tropical cyclones. Resilient materials, given their resistance to extreme weather events, provide long-term benefits for the construction. Taking into account the availability of local natural materials, greater possibilities lie in the use of compressed earth block and fiber cement composites.	Medium/ Medium	MOPHRH, FFH

Note: FFH = Housing Promotion Fund (Fundo para o Fomento de Habitação); MCTESEP = Ministry of Science and Technology, Higher, Technical and Professional Education (Ministério da Ciência e Tecnologia, Ensino Superior e Técnico Profissional); MITA = Ministry of Land and Environment (Ministério da Terra e Ambiente); MOPHRH = Ministry of Public Works, Housing and Water Resources (Ministério de Obras Públicas, Habitação e Recursos Hídricos); PPP = public-private partnership; SEJE = Secretary of State for Youth and Employment (Secretaria de Estado da Juventude e Emprego); TVET = technical and vocational education and training.

### 3.5. CONNECTIVITY: TRANSPORT AND LOGISTICS

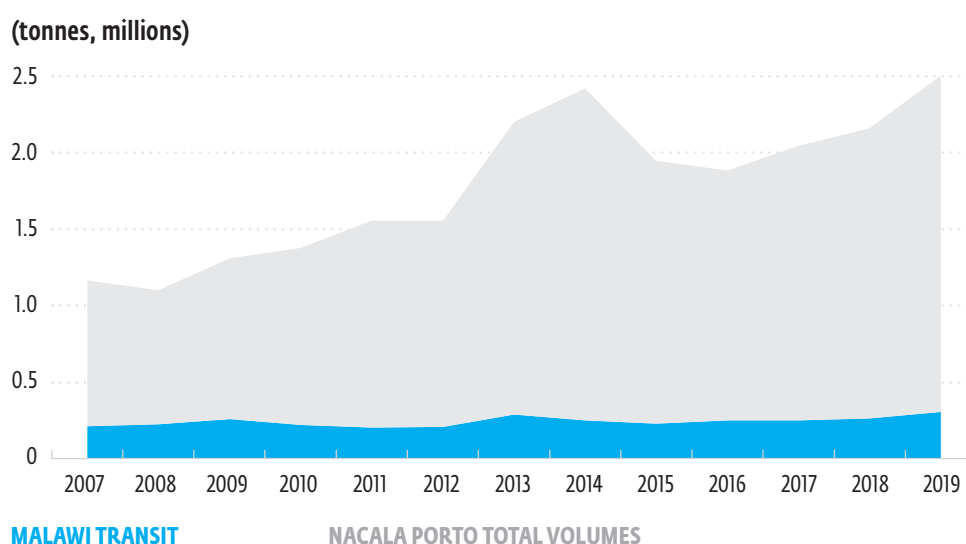
#### Trends

The transport sector has always been an important sector in Mozambique, even prior to independence, with its ports providing access for landlocked countries in the hinterland. Mozambique's location as the maritime link to landlocked neighbors such as Malawi, Zambia, and Zimbabwe places the country's transport network high on the competitiveness agenda. The country's three main corridors are Maputo, Beira, and Nacala, located in the south, center, and north, respectively. The corridors are linked to the natural ports with the same names. There is no direct interconnecting rail service between the corridors, and most road networks are not reliable.

The Nacala corridor covers the central and southern regions of Malawi and five provinces in northern Mozambique: Cabo Delgado, Nampula, Niassa, Tete, and Zambezia. The corridor is home to about 18 million people, and agriculture employs 80–85 percent of the corridor's livelihoods. The corridor's area of influence extends with the rail line east from Nacala port, westward through Nampula province to Cuamba in Niassa province, and on to Nkaya in Malawi and Moatize in Tete province. Moatize is the location of a major coal mine that anchors the west end of the rail line (USAID SPEED+ Project 2018).

Between 2013 and 2017, more than US\$7 billion was invested in rehabilitating existing, and constructing new, rail and port infrastructure in Nacala. In 2012, the government and Japan signed the Nacala Corridor Port Improvement Project for the phased redevelopment of the general freight port infrastructure and operations over 2015–20. Ongoing investments in the Nacala Road Corridor Project—which has support from the European Union, African Development Bank (AfDB), Japan International Cooperation Agency (JICA), and Export-Import Bank of Korea of around US\$750 million—are planned to continue until 2022. Traffic through the corridor has increased over the past 10 years, predominantly through the short stretch between the Nacala port and Nampula, the provincial capital (figure 3.16). By contrast, transit cargo growth has been sluggish because of the enduring preference of Malawi’s exporters and importers for the Dar es Salaam corridor (USAID SPEED+ Project 2018).

**FIGURE 3.16 NACALA PORT VOLUMES: TOTAL VERSUS MALAWI TRANSIT, 2007–19**



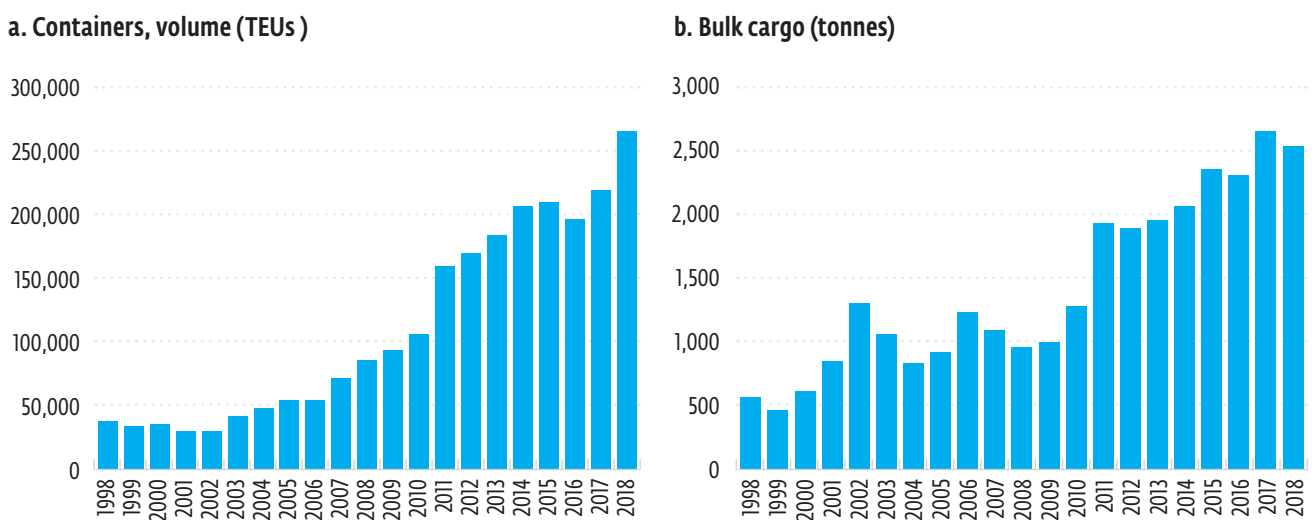
Source: Adapted from USAID Speed+ Project 2018.

Note: Data for 2018 and 2019 were updated for Nacala total. They were inferred for those years for trading with Malawi.

The Beira corridor is a historically important corridor connecting Mozambique to the Democratic Republic of Congo, Malawi, Zambia, and Zimbabwe. The further inland the corridor goes, the more it intersects with other competing regional transport corridors. The most notable of these include the North-South corridor (to Johannesburg, Durban, and Richards Bay in South Africa), the Dar es Salaam corridor (to Dar es Salaam in Tanzania), the Walvis Bay corridor (to Walvis Bay in Namibia), and the Nacala corridor.

The port of Beira has benefited from major investments in recent years (figure 3.17). Its container dwell times have declined from 20 days in 2014 to 10 days in 2018. Liner connectivity in the port has increased, and container throughput has increased from 7.7 million in 2012 to 12.1 million in 2015 (World Bank 2018c). The road along the Beira corridor carries an average of 3,000 vehicles per day (Selemane 2019). Container volumes grew at an average annual rate of 9.4 percent between 1986 and 2017, and general freight volumes grew at an average annual rate of 7.9 percent. Coal exports started in 2012, from Vale's mine at Moatize, peaking at 5 million tons (2015) and dropping off to 2.7 million tons in 2017 as Vale's coal production switched to the Nacala line.<sup>44</sup>

**FIGURE 3.17 GROWTH IN BEIRA PORT HANDLINGS, 1998–2018**



Source: Data are from Cornelder de Moçambique 2018.

Note: Cornelder de Moçambique (CdM) is a joint venture between CFM (Portos e Caminhos de Ferro de Moçambique) and Cornelder Holdings. TEU = 20-foot-equivalent unit.

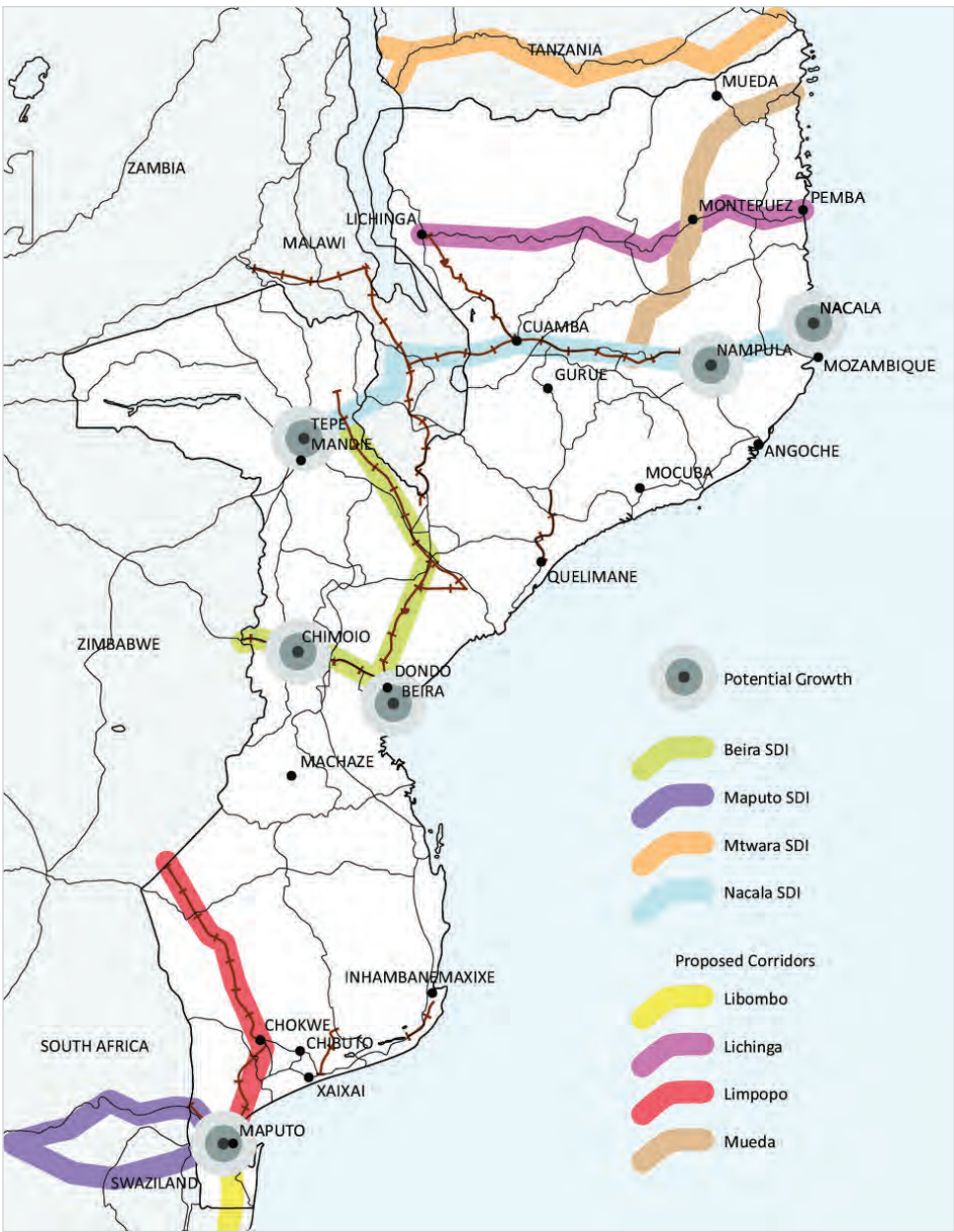
The Maputo corridor connects the industrial area of Gauteng in South Africa, as well as Zimbabwe and Swaziland, to the port of Maputo. Maputo port is Mozambique's largest port, with two main terminals: the Maputo Cargo Terminals, which include the container terminal; and the Matola Bulk Terminals, which are situated 6 kilometers further upstream in Maputo Bay and include a coal, grain, and aluminum terminal. Transit cargo handled by the port, representing 13.16 million tons in 2017 (Nathan Associates 2019), is mainly destined for Botswana, South Africa, and Zimbabwe.





Mozambique's development strategy includes the expansion of further corridors (figure 3.18). These include (a) Libombo, following the new road and bridge connecting Maputo to the Ponta do Ouro border with South Africa; (b) Limpopo, to connect Maputo with Harare in Zimbabwe; (c) Pemba-Lichinga; and (d) Mueda, to leverage the opportunities in Cabo Delgado province. Another corridor—Macuze, north of Quelimane—has been introduced, also to support the pulp and paper industry, although this has yet to be operationalized. Furthermore, the government's new five-year plan (2020–24) has the goal of developing transport as a means of building social cohesion in the country. Despite the prioritization of these corridors, including some major investments in road and rail infrastructure, the country still has one of the lowest road coverages on the continent, both per capita (45th out of 54) and land area (46th). Only 33 percent of the rural population lives within 2 kilometers of an all-season road (AfDB 2018).

FIGURE 3.18 CORRIDOR EXPANSION IN MOZAMBIQUE



Source: IMF 2020..

## Market Structure and Opportunities

The transport and logistics sectors in Mozambique consist of a mix of enterprises. Those include state-owned firms, concessions (such as ports and tolls), large local firms, international firms that have learned to operate in Mozambique and primarily serve international clients, and small-scale local companies that mainly function as subcontractors for larger firms.

### Ports

As with most ports, Mozambican ports are natural monopolies for the domestic markets that they serve while competing with other ports for serving their regional hinterland. There is some overlap between Beira port and Nacala port in terms of the catchment areas served, primarily for Tete province, as well as the Democratic Republic of Congo, Malawi, and Zambia. In the short term, this redundancy reduces the risks of regional fragility or climate impacts limiting regional trade.

A recent review of ports in Eastern and Southern Africa indicates that in Mozambique, the corporate governance and power structures in the port sector are unclear (World Bank 2019b). Mozambique scored in the bottom three in this assessment for institutional framework. The three main ports are all partially owned by the state-run Port and Railway Company (CFM) and managed under different structures (see table 3.8). The port of Nacala does not currently have a concession, having reverted to the hands of the CFM in 2020. The Nacala Development Corridor (CDN) and the Malawian operator of Central East African Railways (CEAR) operate general freight and passenger services on the rail line. The Northern Logistics Corridor was established as a specialist concessionaire to operate the shipment of coal from the mine in Moatize in Tete province, through Malawi, and down to the coal terminal at Nacala-a-Velha opposite the existing port of Nacala (USAID SPEED+ Project 2018). All these companies were merged into Nacala Logistics in 2020.

**TABLE 3.8. CFM PARTICIPATION IN PORT ACTIVITIES**

CFM share (%)			
	MAPUTO	BEIRA	NACALA
<b>Owner</b>	100	100	100
<b>Port authority</b>	49	100	100
<b>Dredging</b>	49	0	n.a.
<b>Operator</b>	49	33	100
<b>Coal terminal</b>	0 (100 Grindrod)	30 (70 Essar)	0 (100 Nacala Logistics)
<b>Rail to the port</b>	100	100	0% (100 Nacala Logistics)

Source: CPSD team.

Note: n.a. = not applicable.

**The Beira port's concession was awarded without a competitive public tender and was renewed in 2018 until 2038.** The concession was awarded to Cornelder de Moçambique, a joint venture between CFM (33 percent) and Cornelder Holdings BV (67 percent). CFM has retained operational management of the liquid bulk terminal in the port. Beira Coal Terminal is managed by a 30-year concession whose shareholders are Essar Ports (70 percent) and CFM (30 percent). Road transport is the predominant mode for transporting freight on the corridor, comprising approximately 68 percent of all cargo and 95 percent of noncoal cargo traffic in 2017 (USAID SPEED+ Project 2019). Tolls are about to be introduced along the road, and the concession has been awarded to fully state-owned company Revimo. The rail network includes Beira to Harare (Machipanda Line, which is currently nonoperational) and Beira to Moatize in Tete province (Sena Line). The rail lines are operated directly by CFM.

**The port of Maputo is managed by Maputo Port Development Company (MPDC), a joint venture comprising CFM (with a 49 percent stake) and Portus Indico.** MPDC has a master concession that runs until 2033, with a possible 10-year extension. Under the master concession, MPDC either develops terminals under subconcession arrangements or handles its own cargoes.

**The management of Nacala general cargo port is under discussion for reconcessioning, although CFM may have limited incentives to do so.** There are also ongoing discussions about other ports, including the Macuze deepwater port and a potential port at Techobanine in Maputo province. The Pemba port may also be concessioned, should it be seen as important redundancy for bringing in construction materials for the gas industry in the north. However, how these plans will be affected post-COVID-19 is unknown.

### **Clearance agents**

**Mozambique maintains obligatory use of customs brokers and clearance agents for all import and export operations, despite this practice being discouraged by the World Trade Organization (WTO).** The profession was restricted to only Mozambican citizens until recently, when it was extended to South African Development Community (SADC) citizens. To be a broker, individuals must pass an exam to become licensed. The supply of brokers is controlled by the revenue authority, which holds the exam to qualify when deemed necessary (World Bank 2019e). The private sector complains that the mandatory use of customs brokers is unfair and increases costs. Mozambique could enable traders to be registered as users of the electronic single window and provide training so that they can input the relevant data for their transactions directly (World Bank 2019e).



### Freight forwarders

The market of freight forwarders is somewhat segmented, with a few dominant players holding most of the international contracts and more localized operators (Neto 2017). Firms concentrated around Maputo predominantly serve the Maputo corridor, and those around Beira serve the Beira corridor. Many provide warehousing as well as logistics services (Selemane 2019). Most do not own many of their own trucks, preferring to subcontract, in some cases even to informal truckers (Neto 2017). In 2015, about 137,000 trucks were registered in Mozambique.

With a number of major players in the field, this subsector seems relatively competitive, with opportunities for new investors limited by established relationships with clients and with networks of transport suppliers. There is no significant legislation regulating the activity, although firms must be registered with the National Institute of Communications.<sup>45</sup> If they wish to also offer brokerage services, the staff member carrying out this function must be a licensed broker. There are few legal barriers or capital requirements to entry, but the established relationships between market leaders and major traders are likely to be the main obstacles for newcomers. Another potential barrier is the limited supply of trucks in some areas (for example, along the Beira corridor at times). Limited space close to ports might also present a barrier; though it is not necessary to be present at the port, many of the main firms are.

### Rail lines

Rail operations are mostly managed by CFM, a public company that is for now largely self-regulated. This could change if the existing plans to restructure the National Institute of Surface Transport (INATTER), which include a rail regulator, are implemented. CFM owns all the infrastructure and operates it with the exception of the northern line along the Nacala corridor, which is concessioned to Nacala Logistics.

As with ports, the rail sector has significant barriers to entry, including the concession structures, capital requirements, and vertical integration (for example, the megaproject investor Vale). There is also a limited market in some areas (for example, Niassa branch line, and the Sena line, apart from coal). It is likely that any entry would be associated with a major associated investment, as has been the case with Vale and coal in Tete. Other opportunities could arise by allowing shippers to use their own operations.

On the Nacala line, traders have previously complained about high costs,<sup>46</sup> which hamper the competitiveness of the rail line for general cargo. The service was suspended in 2016 because of lack of demand caused by the high prices being charged. CDN was charging 75.53 meticaïs/ton, which made rail transport unviable, given that road haulers were charging 50 meticaïs.<sup>47</sup> Following an agreement with the government, rates of 47.54 meticaïs/ton were agreed to for the rail line, and the service was reopened. This episode highlights how unstructured and ad hoc decisions around pricing are.

**The direct rates applied on the international route to Malawi are competitive, but concerns over reliability and security limit operators' interest in switching from road routes.** According to a recent study, freight volumes are too low to generate an operating margin for the rail lines. The tariffs are therefore set to what the market can bear. Tariffs are most often negotiated on a confidential basis, particularly for large customers, and seasonal variations are common (USAID SPEED+ Project 2019).

### **Road haulage**

**The market is segmented, with some very large, professional, national and regional companies with fleets of over 100 vehicles.**<sup>48</sup> Lalgy, J&J, and Mesquita Group are among such companies that mainly work for international clients or major companies on long-distance regional routes, often through long-term subcontracting arrangements with logistics companies. A large range of medium- and small operations often act as subcontractors to the major players operating national routes (Neto 2017).

**One aspect of competitiveness for trucking routes is the ability to secure backloads, to avoid a truck returning empty.** According to Perez-Niño (2015), referring to operators in Beira, “only companies with a sizeable fleet have the scale to sustain frequent accidents and losses, to buy parts in bulk, and to have dedicated road mechanical equipment on standby to assist trailers that breakdown while on remote stretches of the road.”

**The largest companies often have dedicated roadside assistance teams and offices throughout the country.** The largest transport company in the Beira corridor has a market share of about 25 percent, with the largest two companies combined having about a 33 percent share (USAID SPEED+ Project 2019). Many offer warehousing, and some have integrated further; for example, J&J have shares in a terminal operations company at the port, and Grupo Mesquita have interests in terminals, warehousing, stevedoring, and equipment supply to the port, and in ships' agents and customs brokers. Some regional specialization does occur even among the big players with nationwide networks (Neto 2017). Lalgy, for example, has many contracts from South Africa to the south and center of Mozambique.

**Capital requirements can constitute a barrier to entry in a market with little leasing and expensive access to credit.** This situation has not been insurmountable for small businesses in the past, and in fact most of the major trucking companies nationally grew organically from one or two trucks and one main contract (Perez-Niño 2015). However, the market has evolved, and fleet size has increased over time a result of growth and consolidation in the sector, particularly in the Beira and Maputo corridors, such that scale can now be considered a barrier to entry (Perez-Niño 2015).

**The segmentation of the market also means that the large players subcontract to the smaller firms if necessary.** Along the Beira corridor, at times there is a limited supply of trucks—mainly from July to January during fertilizer import season—and having good relationships with suppliers may give dominant firms an advantage. These smaller firms can often undercut the bigger players, as they operate with varying degrees of informality. Larger players report less harassment of truck drivers by police and customs, and they often have their own weighbridges, GPS tracking, and staff based at the border (USAID SPEED+ Project 2019).



**Mozambican firms face a number of competitive advantages in relation to hinterland companies.** First, being close to the port enables Mozambican firms to get market information about shipments (Katungwe 2016). The import bias of both the Beira and Maputo corridors means that more traffic is heading inland than toward the ports, which gives Mozambican companies an advantage. The Beira corridor in particular has only 40 tons of exports for every 100 tons of imports.

**Trucking companies from Mozambique charge lower rates than Malawian truckers** (Katungwe 2016).<sup>49</sup> One aspect relates to higher fuel costs in Malawi, which can constitute around 50 percent of the transporter's costs. The fuel price in Malawi is around 30 percent higher than in Mozambique. Other related costs include the 25 percent duty that has applied since 2012/13 in Malawi for the importation of tires, plus duties charged for retreading tires. In Mozambique, transporters can import parts and tires on a duty-free basis. In addition, regional foreign firms face particular barriers to entry and operation in Mozambique. Besides the additional requirements for foreign transporters, they face language obstacles because drivers often do not speak Portuguese (USAID SPEED+ Project 2019). Anecdotally, harassment of truck drivers by police and customs is more common for foreign drivers.

**Although competition in central and southern corridors seems to be stiff, the north corridor seems to have different dynamics, largely because of the smaller market.** Few large operators are based in the north, and the association in Nacala recently complained that major international companies prefer to contract directly with the large transporters, effectively bypassing the operators in Nacala.<sup>50</sup> The gas developments in the north are likely to solidify these market dynamics, because they will demand quality assurance levels and certification that local firms may not be able to achieve. This view is confirmed by a recent move by Mammoet, a global heavy lifting and transport company, which mobilized a fleet of specialized equipment and supporting crews to support the gas developments.<sup>51</sup>

**Finally, in general, use of trucks is preferred over rail on both Beira and Nacala corridors because of greater flexibility, reliability, and fewer delays.** A recent study found that "the price charged by informal truckers who overload and carry 40 tons/truckload instead of 30 tons impacted the perceived trucking price and willingness of some potential clients to pay for railway services." It is estimated that about 25–35 percent of trucks in both corridors are overloaded (Southern African Trade Hub 2012).



## Constraints

Mozambique is ranked 84th out of 160 economies in the 2016 Logistics Performance Index. The country performs relatively better in terms of the ease of arranging competitively priced shipments (ranking of 58) and in the ability to track and trace consignments (ranking of 79). On the other hand, it performs more poorly in terms of the quality of the trade and transport infrastructure (ranking of 116) and the competence and quality of logistics services such as trucking, forwarding, and customs brokerage (ranking of 97).

Mozambique is showing some progress in reforms, but problems are still significant. A draft of a proposal to develop a Ports Law was circulated for comments in 2019 (República de Moçambique 2019). The draft law included providing a legal framework for ports in the country and creating an independent regulator (Autoridade Reguladora do Sector Portuário de Moçambique; ARSPM). Other examples of reforms include the decision to remove preshipment inspection, which until recently was considered politically impossible. The decision to accede to private sector demands to abolish the obligatory use of the Special Export Terminal of Nacala (TEEN) might also be a sign of the government's willingness to promote competitiveness.

In addition to the direct costs of operating in this sector in Mozambique, many indirect costs are associated with the use of the various competing transport corridors. Those include unreliability, port inefficiency, insecurity, harassment and corruption, border delays, the requirement of value-added processing before shipping, the need for special handling of particular goods, the number of vessel calls at ports, and more. Table 3.9 describes the main issues affecting the competitiveness of the sector.

**TABLE 3.9. MAIN CONSTRAINTS AFFECTING COMPETITIVENESS IN TRANSPORT AND LOGISTICS**

CONSTRAINT	DESCRIPTION
<b>Political economy factors</b> potentially increasing transport costs	<ul style="list-style-type: none"> <li>• Concessions awarded for key services—particularly monopolies—without tender, lacking KPIs, and with unclear regulation.</li> <li>• Potentially unfair competition due to conflicts of interest. Lack of transparency in public procurement of transport services. Lack of implementation of regulations facilitated by corruption (for example, on overloading). Informal road fees.<sup>a</sup></li> </ul>
<b>Competition factors</b>	<ul style="list-style-type: none"> <li>• Vertical integration among some subsectors (for example, port operations and ICDs, brokerage and freight forwarding, and long-term subcontracting arrangements between freight forwarders and road transporters).</li> <li>• Higher than market rates for brokerage services due to the limited supply of brokers and barriers to entry into the profession.</li> <li>• Market power of major players due to scale. Lack of independent regulators. Poor reliability of rail, which means limited genuine competition, potentially undermining the cost effect rail could have. Predominance of public sector involvement in services.</li> </ul>

CONSTRAINT	DESCRIPTION
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>Poor quality road and rail infrastructure.</li> <li>Lack of storage at Nacala port, causing some to prefer to pay more to use Beira (World Bank 2018c). Lack of bypass roads leading to congestion and delays. Inefficient ports despite improvements in recent years.</li> </ul>
<b>Trade facilitation</b>	<ul style="list-style-type: none"> <li>Delays at ports due to opening hours being different. Absence of key staff such as for sanitary and phytosanitary inspections at the border, lack of knowledge of procedures, and electricity or system outages that can lead to long delays. Duplication of procedures, delays, and high fees for export in Nacala.</li> <li>Lack of corridor coordination and established cross-border cooperation. The Ministry of Transport and Communication (MTC) lacks resources to implement change. Inadequate use of the authorized economic operators scheme. Delays caused by the inability of the port to provide the unique vessel number prior to docking, which means in practice that preclearance cannot occur.</li> <li>Regulations that differ from neighboring countries.b Compulsory escort of sensitive transit cargo (including fertilizer), which is an unnecessary cost, especially since the cargo is secured via a transit bond and can be sealed (containers).</li> </ul>
<b>Market size</b>	<ul style="list-style-type: none"> <li>Difficulty in obtaining backhaul loads. Lack of critical mass to make rail a more attractive proposition and drive down costs. Small-scale agriculture production.</li> </ul>

Note: ICD = Islamic Corporation for the Development of the Private Sector, KPI = key performance indicators.

a. Traveling from Nacala to Lichinga, road users noted informal checkpoints and charges, including 1,500–2,000 million tonnes (MT) at a nonfunctional weighbridge on the Cuamba-Lichinga road; 2,500 MT at the weighbridge near Nacala; and 2,000–3,000 MT for bribes along the corridor.

b. For example, all corridor countries but Mozambique are part of COMESA and accept the COMESA Yellow Card.

### Policy constraints

Much of the overarching national policy framework is outdated and does not provide a plan for prioritization. The transport policy dates from 1996. It has no method for estimating costs, and there is no indication of which of the many investments and activities should be prioritized. The Strategy for the Development of an Integrated Transport System dates from 2009, and although an attempt is made to define key principles for intervention, the strategy does not provide clear prioritization for strategic choices that need to be made regarding developing the transport sector, that is, criteria to prioritize road versus rail investments, choices between corridors, in what circumstances different transport investments are more appropriate, cost factors and so on.

**The main objective of the strategy is to develop an integrated transport system, with the various modes of transport interconnecting, but it lacks clarity in some areas.** It defines a threefold approach. First is to develop a north-south rail line linking the existing east-west rail lines for routes greater than 500 kilometers. It identifies five new rail lines but does not indicate which ones should be priorities. Second is to promote the development of efficient regional ports to serve landlocked regions, and to distribute cargo by cabotage services to other smaller national ports (but it does not look beyond upgrading roads and rail lines and into modern logistics, including border posts, regional harmonization, and more). And third is to liberalize air transport services to support the development of a tourism industry (but it is not clear on how that will be supported).

**In fairness, some progress has been made on the priorities outlined in the strategy.** Although the north-south rail line does not yet exist, there have been investments in the major rail lines; the ports have improved in terms of performance, although they cannot be considered regional hubs; cabotage is starting; and air transport is slowly being liberalized. Progress has been made in trade facilitation with the introduction of the single electronic window system to reduce customs clearance times (but not costs) (World Bank 2019e), introduction of an Authorized Economic Operator scheme, establishment of a National Trade Facilitation Committee, ratification of the Trade Facilitation Agreement of the WTO, development of a trade portal,<sup>52</sup> improvements on access to information, and more.

### **Competition issues**

**The transport sector and the different subsectors do not have an independent regulator that is mandated to look at competition issues.** Although the Competition Law was passed, a regulatory competition authority (Autoridade Reguladora de Concorrência) has yet to be created (discussed further in chapter 4 in the competition policy section). In transport, competition issues continue to be addressed either by sector regulators or on an ad hoc basis by the government. An example of this is the approval by the Council of Ministers in 2018 of Decree 35/2018, establishing competition rules for air transport in the country.

**One area distinctly lacking is the regulation of concessions, which have not been subject to the definition and monitoring of key performance indicators (KPIs).** Law 15 of 2011, which establishes “the guiding norms for the process of contracting, implementing and monitoring of PPPs, of large projects and of concessions,” states that concessions are subject to “sectoral supervision” by the government entity responsible for the sector in which it operates, and that this is “complemented by the respective sector or sub-sector regulator” (Article 5). In reality, it seems that concessions in ports and rail lines have been reported to the Ministry of Transport and Communication (MTC) by CFM, making CFM both the de facto regulator and operator.<sup>53</sup>

## Governance issues

**The transport sector has been rich ground for rent-seeking.** As with the rest of the economy, conflicts of interest in the transport sector are common, corruption is rife, operations of state-owned enterprises are opaque, violations of public procurement laws are common, and political economy dynamics can lead to unfair advantages for some firms. However, the sector is not monolithic, and it has been growing rapidly. With relatively low barriers to entry in some components of the value chain (such as trucking), it has been possible for some private sector firms to thrive, albeit by learning to navigate the tricky political landscape.

**The awarding of concessions raise some political economy concerns.** One example is the electronic scanning, which is obligatory for almost all cargo, and concessionaires charge fees whether cargo is scanned or not.. The decision regarding award of the operation of the single electronic window system has also been criticized by anticorruption watchdog Center for Public Integrity (CIP) and by civil society organizations for the lack of transparency and performance monitoring (CIP 2016).<sup>54</sup>

## Information gaps

**Information about logistics operations does not flow swiftly within the private sector.** Although some operators, those with infrequent trading patterns, pay about US\$7,000 to send a truck between the south and the center of the country, the costs for others are below US\$2,500 per truck. For the first operators, an alternative to costly road transport is the local “cabotage” solution of moving goods by sea freight along the coast (Maputo to Beira). Though this transportation route holds promise as an alternative to roads, it is also costly because domestic shipments currently do not have separate domestic ports, increasing the time of delivery.

## Underinvestment in infrastructure and systems

**Addressing performance gaps can be critical for the competitiveness of Mozambican ports because many are struggling to meet current demand.** In East and Southern Africa, the FDI boom freight volumes have been growing at 9 percent annually through some of the key ports, with transit consignments to landlocked countries growing at 16.5 percent per year, and these growth trends are expected to continue. High ship waiting times, high berth occupancies, and congestion on both the land and maritime side in Mozambican ports are contributing to increased transport cost. The ports must continuously improve spatial and operational efficiency, introduce modern IT systems, improve the functional integration in the logistic chain, and improve land-side access and the port-city interface. In Mozambique, the three main ports are similar in size to the other 12 major ports in East Africa, but Durban manages up to five times the volume of Maputo.

**Mozambique has no independent regulator for ports.** The Doing Business in Mozambique subnational analysis found that tariff books for all three main ports were missing information, and that ports “regulate themselves in terms of the scale and structure of tariffs” (World Bank 2019b). This could potentially increase overall transport costs: a lack of clear KPIs, no independent oversight, and the unclear role of the state-run CFM.



**Because of problems of governance, lack of a trained workforce, and poor infrastructure, rail transport is underutilized as a potentially lower-cost alternative to road transport.** The shortage of rolling stock and weak infrastructure prevent significant uptake of rail as a primary transport option. Services are unreliable, and as a result, 80 percent of all freight on the Nacala corridor is transported by road.

**Equally action is needed to improve road maintenance and conditions, as well as create a system of agricultural consolidation centers and dry ports connected to the port management systems.** Those actions would favor the development of local operators and the follow-up of a cold chain for export products with transparent access to the market. It is also necessary to create a group of truck centers and rest areas along the corridors to make the transport service more comfortable and secure for the drivers. The private sector is not likely to make these investments on their own.

**Mozambique's road infrastructure presents a rural-urban divide, in which rural areas are constrained by a need for density, maintenance, and quality of infrastructure** (World Bank 2019c). Much of the deterioration of the road network is attributed to environmental factors and exacerbated by poor drainage design and maintenance practices. There is also lack of road connectivity between economic centers and producers to major transport corridors. The issue was exacerbated when two cyclones that hit in 2019 destroyed the road infrastructure. The post disaster needs assessment identified US\$1.5 billion in damages and US\$3 billion in needs, with road sector needs estimated at nearly US\$500 million (Government of Mozambique 2019).

### **Security**

**Insecurity is a significant issue, for both the Nacala and Beira corridors, although for different reasons.** Renamo had its base along the Beira corridor, close to the connection of the EN6 (Beira corridor road) and the EN1 that links the north and the south of the country. In the most recent flare-up, Renamo repeatedly attacked trains on the Sena line that were carrying coal and vehicles on the EN1 and occasionally the EN6. It was hoped that the peace process would bring this to an end, but a few dissidents continued to operate. Twenty-two people have been killed by attacks since the “definitive” peace agreement in August 2019 (Carta de Mozambique 2020). A Malawian truck driver was shot dead as recently as January 2020, it is thought by this junta, on the Beira corridor (Frey 2020).

**Further north, in Cabo Delgado, the complex Islamic insurgency/local uprising is rapidly gaining ground, with thousands displaced and hundreds killed.** Given the speed and southward progression of these attacks, in addition to the seeming inability of the government forces to address the situation, this is a significant concern for transport in the region. Furthermore, the organized crime groups known to operate in the northeast of the country, which are trafficking heroin in particular but also guns, explosives, and other contraband, are an additional concern. Another issue is the consistent export of protected species of hardwood, which has been shown in the past to be linked to politically connected people.



### Problems with nearby countries

Relations with nearby countries are also sometimes complex. Historically, relations with Zimbabwe have been friendly; however, little practical, on-the-ground cooperation has developed. Relations with Malawi have fluctuated since independence (Chambote 2015). Most problematic has been the consistent demand from Malawi to operate river services on the Chire-Zambeze River, which would give them access by river to the sea. Disagreements over the feasibility of navigation along this route have rumbled on for many years since Malawi built the river port of Nsanje without securing Mozambican agreement to provide access to the river on the Mozambican side (Chambote 2015).

### Recommendations

Recommendations for improvements in transport and trade are in table 3.10.

**TABLE 3.10 RECOMMENDATIONS FOR IMPROVING CONNECTIVITY**

PROBLEM	RECOMMENDATION	PRIORITY/ FEASIBILITY	MAIN RESPONSIBILITY
<b>Area 1: Regulatory and institutional</b>			
Lack of priorities in the long list of investments	Update the Transport Policy and Strategy, including clear prioritization and criteria for choice of investment. <sup>a</sup>	Medium/ Medium	MTC
Concessions awarded without competitive processes	Improve concession regulations, including criteria for award of concessions. Include KPIs. Appoint independent regulator to ensure compliance. Ensure transparency of KPIs.	High/Low	MTC, MIC, CFM
Pervasive corruption in the sector	Help address corruption where possible by imposing weighbridge calibration, dissemination of rules to transporters, and auditing.	High/Low	MTC, police
Mandatory customs brokers	Remove obligatory use of customs brokers.	Medium/Low	Tax authority/ Customs
Missed agreements with neighboring countries that affect competitiveness and opportunities	Harmonize standards with the region. Join the regional insurance scheme. Review regulations on axle loads. Revitalize agreements with neighboring countries. Agree on terms for access to the Zimbabwe rail network and vice versa. Actively promote Mozambique corridors to specific value chains in neighboring countries.	Medium/Low	MINEC, MTC, MIC, tax authority/ Customs
<b>Area 2: Firm-related issues</b>			
Firms' limited access to finance, especially on the back of COVID-19 pandemic	Increase access to finance solutions for transporters, including to develop the leasing market.	High/ Medium	MIC, MEF, MTC

PROBLEM	RECOMMENDATION	PRIORITY/ FEASIBILITY	MAIN RESPONSIBILITY
Uncompetitive pricing	Develop the electronic backhaul platform, linking Mozambique to regional platforms that can match transporters looking for backhaul with return loads.	Medium/Low	MTC
Limited market, hindering development of rail lines	Support key value chains in Mozambique and neighboring countries to create critical mass for exports by rail. <sup>b</sup>	High/ Medium	MEF, MIC, MADER, regional agencies
<b>Area 3: Infrastructure</b>			
Poor-quality infrastructure that results in high transport costs	Continue to improve infrastructure, including Machipanda rail line, Nacala corridor roads, and bypass roads at ports and major cities	High/ Medium	ANE/MOPHRH, CFM
Truck overloading <sup>c</sup>	Enforce weight regulations	Medium/Low	MTC, police
Delays at borders that increase costs	Improve border posts. Longer term, harmonizing procedures and developing one-stop border posts could significantly reduce time spent at borders.	Medium/ Medium	ANE/ MOPHRH
<b>Area 4: Trade facilitation</b>			
Limited use of the single electronic window for customs, not reducing clearance times overall	Fully populate the single electronic window system, including to integrate SPS institutions and other licensing requirements.	Medium/ Medium	Tax authority/ Customs, MADER, MISAU, MIC, and so on
Corridor authorities who have no support to carry out a coordination role	Develop corridor authorities.	Low/High	Stakeholders in Nacala, Beira, and Maputo corridors
Trade restrictions in inspections	Improve the capacity building of customs to enable a genuine alternative to the TEEN at Nacala and to replace the work previously done by the preshipment inspection company.	Medium/ Medium	Tax authority/ Customs
Preclearance without the ability to generate the contramarca number prior to ship docking	Improve allocation of unique identifier to ships. Enable this to be provided prior to docking, so that preclearance can occur.	Low/High	Ports, Customs
Congestion around the ports, causing delays and creating inefficiencies	Develop a truck appointment system at the ports.	Medium/ High	Ports

Note: ANE = National Roads Administration (Administração Nacional de Estradas); CFM = Mozambique Railway Company (Caminhos de Ferro de Moçambique); MADER = Ministry of Agriculture and Rural Development (Ministério da Agricultura e Desenvolvimento Rural); MEF = Ministry of Economy and Finance (Ministério da Economia e Finanças); MIC = Ministry of Industry and Commerce (Ministério da Indústria e Comércio); MINEC = Ministry of Foreign Affairs and Cooperation (Ministério dos Negócios Estrangeiros e Cooperação); MISAU = Ministry of Health (Ministério da Saúde); MOPHRH = Ministry of Public Works, Housing and Water Resources (Ministério de Obras Públicas, Habitação e Recursos Hídricos); MTC = Ministry of Transport and Communication (Ministério dos Transportes e Comunicações); SPS = sanitary and phytosanitary; TEEN = Special Export Terminal of Nacala.

- The transport policy dates from 1996; the Integrated Transport Strategy from 2009. Neither have clear priorities or criteria for choice of interventions; rather they present a long list of needs.
- Key value chains include copper from eastern Democratic Republic of Congo and Zambia, and tea and tobacco from Malawi.
- Overloading affects road quality while making road artificially cheaper than rail.

### 3.6. ENERGY

#### Trends and Opportunity

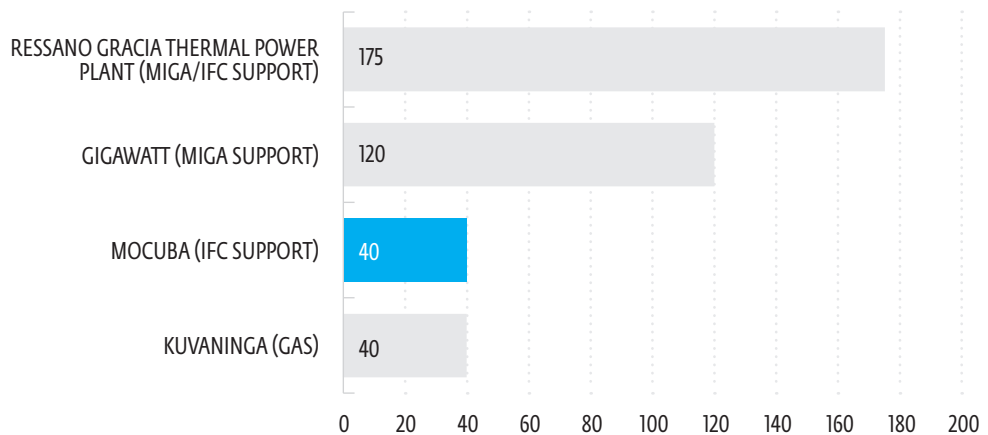
The government of Mozambique has a goal to achieve universal access to electricity by 2030. Only 8 percent of the Mozambican population had access to electricity in 2006; by 2018, the access rate jumped to 30 percent. In the same year, the president launched the National Electrification Strategy, to be implemented through the Programa Nacional de Energia para Todos (Energy for All), to strengthen momentum toward achieving the national objective of universal electrification.

The government has pursued a strategy for financing new power generation projects mainly through PPPs. Achieving universal electrification and increasing energy exports will require significant investments in electricity generation. The government adopted a strategy of involving the private sector in financing, constructing, and operating new power plants under the independent power producer (IPP) arrangements and long-term power purchase agreements (PPAs) with the state-owned Electricidade de Moçambique (EDM). EDM co-invests in some generation projects with the private sector and constructs transmission lines connecting the plants to the system.

This strategy has resulted in Mozambique adding about 480 megawatts (MW) in five new generation plants since 2015. That represent the first substantial additions to the power generation fleet in 40 years, since the 2,075 MW Cahora Bassa Hydroelectric Complex (HCB–Hidroeléctrica de Cahora Bassa) was built in the early 1970s. Four of these plants, with total capacity of 376 MW, were developed with participation of private investors, three gas-based plants, and one solar photovoltaic plant (figure 3.19). Another solar photovoltaic project of similar size is in an advanced stage of preparation. Implementation of these power generation projects have enabled Mozambique to terminate most of the short-term contracts with rental plants (emergency generation), and to maintain its export position in the Southern Africa Power Pool (SAPP) regional market.

**As of 2019, the private generation represented 40 percent of domestic consumption and 12 percent in terms of the total generation capacity, including exports.**

Mozambique's installed capacity is about 2,580 MW, and domestic peak demand is at 911 MW.<sup>55</sup> Of the installed capacity, 70 percent of HCB's capacity is committed to the South Africa power utility (ESKOM) under a PPA ending in 2029. The rest of the capacity is imported back to Mozambique.

**FIGURE 3.19 MOZAMBIQUE OPERATIONAL IPPS AS OF 2019****Generation capacity (MW)**

Source: World Bank 2019f.

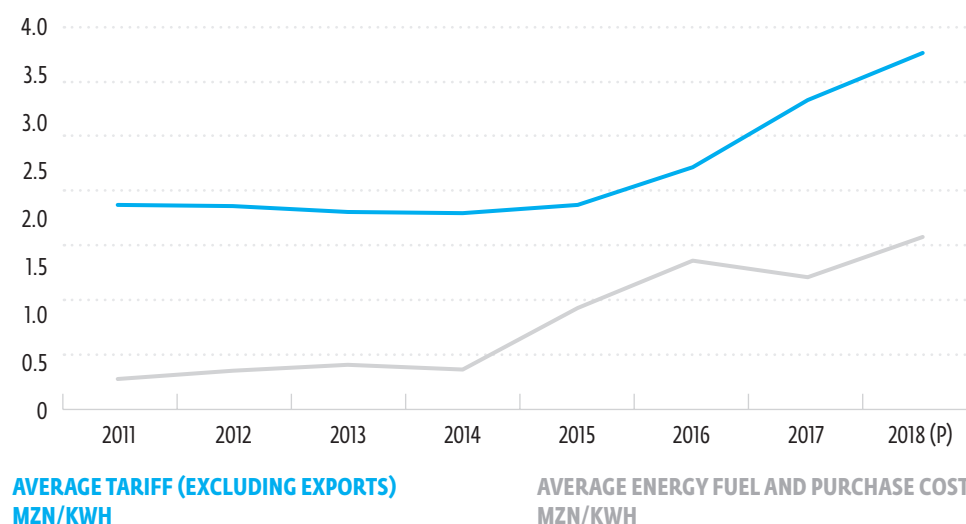
Note: IPP = independent power producer; MIGA = World Bank Group's Multilateral Investment Guarantee Agency; MW = megawatts;

**Mozambique is becoming a regional energy hub.** Mozambique has been an active member of SAPP since the pool's creation in 1995. It is physically interconnected to three countries, with a history of trading with more than six countries in the region. New interconnections are in the pipeline: Mozambique-Malawi will be completed in 2022, and connections to Zambia and Tanzania are under preparation. As of March 2020, Mozambique is a net exporter of electricity and will continue to be for the foreseeable future, in accordance with regional and domestic master plans.

**Yet domestically, unreliable last-mile electricity supply is still in the process of getting fixed.** According to the Mozambique 2018 Enterprise Survey, 26.5 percent of the formal firms consider electricity to be an obstacle to current operations. About 53 percent of the firms in Mozambique have electrical outages lasting an average of 5.4 hours. Almost 30 percent of firms own backup generators that they use for 17 percent of their electricity use.<sup>56</sup> For medium voltage clients, the 2020 Doing Business report showed that the ease of getting electricity in Mozambique ranked 103 out of 190 economies, including four procedures, 40 days, and the need to purchase a 140-kilovolt-ampere transformer at US\$10,000 (World Bank 2020a). Only 4,061 customers are medium voltage customers, or 0.28 percent of total customers, but they represent 33 percent of total consumption (Quantum 2018).

End-user electricity tariffs for business customers are competitive, and tariffs, on average, have been increasing at a steady pace. Average electricity tariffs increased by 62 percent from 2014 to 2018 in metical 2011 prices (figure 3.20). EDM's average energy purchase—related to expenses for electricity supply from HCB and IPPs, imports and wheeling costs, and EDM's own supply costs—increased significantly since 2014 when IPPs began sizable additions of gas-fired power plants, which were more expensive than the hydropower that had been dominant in Mozambique. Furthermore, the costs of electricity supply increased in metical nominal prices because of escalating fuel supply costs aggravated by a sharp depreciation of the metical against the US dollar (Mt 31.5 to Mt 62.6, 2014–16).

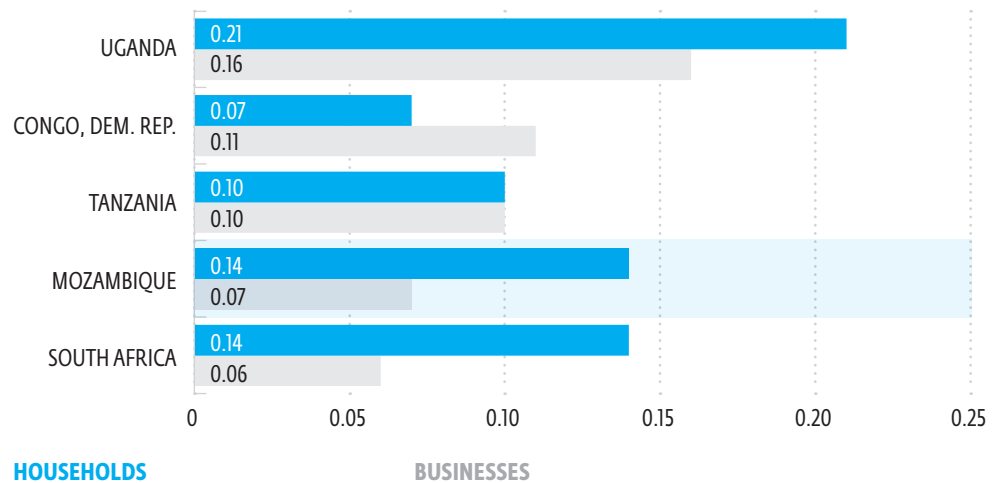
**FIGURE 3.20 AVERAGE TARIFF AND FUEL AND POWER PURCHASE COSTS, 2011–18, (MT, 2011 PRICES)**



Source: World Bank.

Note: Mt = Mozambique metical; kWh = kilowatt-hour.

The average costs of electricity services are close to cost recovery. In 2018 they were US\$0.12/kWh, relative to the average tariff of US\$0.11/kWh (World Bank 2019f). The average tariff is lower for business customers in Mozambique, around US\$0.04–0.07/kWh.<sup>57</sup> The average household tariff is relatively high at US\$0.14/kWh (figure 3.21), but many households have largely benefited from the social tariff, which is very generous covering 120 kWh/month (normally the social tariff is limited to 30–50 kWh/month).

**FIGURE 3.21 ELECTRICITY PRICES FOR BUSINESSES AND HOUSEHOLDS, JUNE 2019****Cost per kWh (US\$)**

Source: Global Petrol Prices (Mt 65 = US\$1)

Note: Average business tariff was estimated based on 1 GWh annual consumption for consistent comparisons because the data sources cover economies with all income levels. Average households' tariff is calculated at the average annual level of household electricity consumption. kWh = kilowatt-hour.

**The investment opportunities are significant, but the public and private sectors need a cooperative platform.** Growth of demand, prior to the impact of COVID-19, was estimated at 5 percent per year for the next six years (World Bank 2019g). To achieve universal access by 2030, an estimated investment of US\$6.5 billion would be needed, resulting in 70 percent of the population being connected to the grid and 30 percent having off-grid energy solutions.<sup>58</sup> In reality, a high opportunity cost results from investing in universal coverage of electricity rather than other more productive interventions, especially considering that usage will be quite limited for years to come (Lee, Miguel, and Wolfram 2020).

**In the base case scenario of the Ministry of Mineral Resources and Energy master plan, additional peak demand of 8,126 MW is expected from 2018 to 2042.**<sup>59</sup> To meet the incremental peak demand, additional capacity would be needed as follows: 4,395 MW of hydropower; 2,632 MW of CCGT and gas reciprocating engine; 1,950 MW of coal; and 680 MW of solar and wind. The total investments needed to meet the master plan would be about US\$34 billion in 2017 prices for 25 years, from 2018 to 2043 (generation US\$19 billion, transmission US\$9 billion, and distribution US\$6 billion).<sup>60</sup>

**The principle of having one plan with many partners is essential.** Many development partners' different agendas, plans, strategies, and reporting requirements could overwhelm the government and EDM and result in unnecessary redundancies and inefficient and unsustainable use of resources. The government also lacks the capacity to deal with potential investors, coordinate planning, and execute competitive procurement. Thus, the government and EDM have now prepared a power sector master plan for 2018–43 and the Electricity for All National Program (NES). The government, EDM, and FUNAE must follow least-cost principles developed in the plan and NES, as well as a competitive and transparent approach to execution.



Recently, Mozambique succeeded in generating capacity for gas-fired power through a competitive bidding process. The selection of a private investor in the 400 MW Central Térmica de Temane (CTT), a thermal IPP with World Bank guarantees in 2017.<sup>61</sup> CTT is the first competitive transparent selection of a private sector generator and is an example of good practice. The project is expected to result in lower equity return on investment compared with previous noncompetitive processes. In addition, electricity cost is expected to be 35 percent lower than existing IPPs, improving the ability to export surplus electricity.

Further, renewable energy based on solar photovoltaic is becoming increasingly attractive as a least cost option for additional generation capacity in Mozambique. Using the least cost principle in the NES, minigrids and on-grids in line with demand forecasts and the grid expansion planning could be tendered competitively under a PPP framework, whereby solar power IPPs will invest, operate, and maintain generation facilities under PPAs. The distribution network and service connections would be public investments operated by EDM. Additionally, the World Bank is also supporting off-grid solar systems with the certified quality by Lighting Global under the result-based financing scheme. Ongoing and potential support by World Bank and IFC in this photovoltaic space will complement other development partners' assistance (World Bank 2019d).

## Constraints

### Limited interconnectivity

Lack of a countrywide, interconnected transmission system with limited redundancy and capacity presents a challenge for operation and security of electricity supply. The system cannot transfer the surplus of energy from the south of the country to other areas that are energy deficient, such as northern Mozambique, where the demand for electricity is increasing because of gas and mining industry activities. The medium and low voltage distribution networks were not dimensioned for such rapid growth of electricity demand and have deteriorated. Thus, the distribution networks have become overloaded in the main load centers, worsening the reliability of the electricity service.

At the same time, the medium voltage lines to reach districts are underutilized. The low energy consumption and long distance of the lines challenge the ability to transfer energy at acceptable quality. Inadequate planning and financing prevent EDM and the Energy Fund (FUNAE) from implementing an efficient electrification program to optimize the use of the medium voltage networks (World Bank 2017c).



### **Demand, but at what price?**

Because there are few large consumers and limited consumption by the rest of the economy, the financial viability of expanding electricity supply could be challenging. As of 2018, EDM has only 10 special customers, whose contract is 1 MW and more and who are supplied by 66 kV and more (MIREME 2018). In addition to the small economy problem, part of the reason for the limited number of large consumers is related to the underperformance of EDM, with a high system loss of 30 percent, representing forgone revenues of around US\$150 million.<sup>62</sup> Moreover, revenues from consumers rarely cover costs. Most consumers are in the domestic consumer category, and very little electricity is used for economic purposes. Under the uniform tariffs, consumers in the larger cities and towns implicitly cross-subsidize those in the low-demand centers.

### **Weak financial health of public provider**

Macroeconomic shocks worsened EDM's already fragile financial situation. The causes were a combination of (a) capacity expansions by thermal IPPs with hard-currency-denominated PPAs, increasing the unit cost of generation; (b) increased foreign currency (US\$) liabilities held by EDM in 2015–16; (c) non-cost-recovering retail tariffs; (d) capital expenditures for the network rehabilitation and increasing operational expenses and electrification; (e) volatile regional power market (for example, droughts, transmission bottlenecks); (f) limited hydroelectric supply from HCB due to hydrological constraints; and (g) high electricity losses.

**EDM needs to improve its efficiency to pay its already high debt to the private sector.** EDM has payables to IPPs and other suppliers of US\$450 million and debt of US\$1.1 billion as of 2018. To address this situation, the government has been implementing a financial strengthening plan with World Bank support. This plan includes (a) reduction in system losses from 29 percent in 2018 to 19 percent in 2024; (b) 50 percent recapitalization of EDM debt; (c) electrification financed by the government; and (d) electricity tariffs adjusted to domestic inflation and full pass-through of generation costs (World Bank 2019f). Since 2017, IFC has been working as well with EDM on cash, treasury, and risk management (MIREME 2018). EDM's financial situation remains difficult, in spite of significant tariff increases during the last several years, mainly because of persistently high commercial and technical losses. This situation undermines the power sector's performance and is a major constraint to securing cost-effective financing and private sector investment.

**EDM has been pursuing demand-side management to free up electricity supply and reduce the investments for additional capacity.** EDM organized the Energy Efficiency Directorate in 2011. Yet ad hoc development partner-funded activities and the lack of any practical plan kept it from being included in the master plan (MIREME 2018; World Bank 2019d). Demand-side management must be strengthened to free up electricity supply while reducing peak demand and load shedding that could reduce the cost of additional capacity and interruptions of economic and social operations. As the country increases urbanization, energy efficiency is essential.

**EDM surveys have indicated that it requires continuous reforms.** High levels of unhappiness within EDM employee surveys show the need for change is paramount. Nearly 60 percent of those surveyed were unsatisfied with their working conditions and remuneration, and 77 percent were unhappy with their training. Over two-thirds of respondents are in favor of EDM's transformation.<sup>63</sup>

### **Competition and coordination issues**

**Transmission and distribution subsectors have legal restrictions for private participation.**<sup>64</sup> Private companies are not allowed to manage and operate the national transmission grid, as stipulated by Decree 43/2005 (EDM 2018). In general terms, the private sector involvement in the distribution sector does not form part of EDM or the government's plans (AFD 2012; MIREME 2018). The earlier experience with private sector-operated distribution in Vilanculos and Inhassoro did nothing to encourage further private involvement in distribution (AFD 2012; MIREME 2018). The existing policy supports the concept of a uniform national tariff, and it is unlikely that this will change any time soon. Furthermore, EDM lacks the capacity to evaluate bidding and manage concessions or management contracts (MIREME 2018; World Bank 2019h).

### Impacts from natural disasters

Climate change is adding costs to the power system. Mozambique is ranked the third most vulnerable country to climate change in Africa, affecting 58 percent of the population and over 37 percent of GDP by two or more natural hazards per year, which can easily set back years of infrastructure investments. Extra investments must be assessed on a case-by-case basis. For example, the cost of the Temane Regional Electricity Project is estimated at 20 percent extra, based on the transmission and substation infrastructure (World Bank 2019g). Extra costs, risks, and uncertainties would affect the private sector investors, demanding higher returns and guarantees, adding pressures on the cost recovery tariff.

### Corruption

Finally, firms complain that requests for bribes to provide electricity service connection are increasing and are higher in Mozambique than average in Sub-Saharan Africa. According to the Mozambique Enterprise Survey, electricity supply service connection is the second-highest bribe request in Mozambique. About 30 percent of the surveyed firms received bribe requests in 2018, and increase from 15 percent in 2007 (World Bank 2019, 2018 Enterprise Survey).

### Recommendations

Recommendations for actions to promote private sector participation in the energy section are in table 3.11.

**TABLE 3.11 RECOMMENDATIONS FOR ACTIONS ON ENERGY**

PROBLEM	RECOMMENDATION	PRIORITY/ FEASIBILITY	MAIN RESPONSIBILITY
<b>Area 1: Regulations</b>			
Lack of a high-level road map for the sector	Develop a realistic medium- to long-term reform road map under a high authority (such as the president's office) to help ensure that the road map will be implemented. It must be consistent with the existing NES and master plan to avoid overlap and confusion.	Medium/ Medium	MIREME, EDM

PROBLEM	RECOMMENDATION	PRIORITY/ FEASIBILITY	MAIN RESPONSIBILITY
<b>Area 2: Financing and EDM performance</b>			
Poor EDM performance	Improve the operational performance of EDM and ensure that commercial losses are reduced. These are the most important measures to avoid a further buildup of payment arrears with suppliers.	High/Medium	MIREME, EDM
Lack of longer-term sustainable financing for the sector	Secure sustainable financing of necessary capital expenditures needs to allow EDM to increase electrification. Capital expenditures required to provide access to electricity (universal service obligation) are commercially unviable and need to be funded separately from EDM's commercial operations.	High/Medium	MIREME, EDM
EDM's weak technical capacity to manage the system	Improve EDM capacity to manage more sophisticated system of supervision and control in line with system expansion and international power interchanges. EDM, as the transmission system operator, must adjust power and operate the system stably.	Low/Medium	MIREME, EDM
<b>Area 3: Opportunities around HCB</b>			
Future options to unlock additional value in HCB	Exert careful consideration in transitioning the major PPAs between HCB and the South Africa power utility ESKOM and between ESKOM and Mozal. The PPA between ESKOM and Mozal ends in 2025, and the PPA between HCB and ESKOM ends in 2029. This is a moment for exploring options to unlock additional value in HCB.	Medium/Low	MIREME, EDM

Note: EDM = state-owned Electricidade de Moçambique; ESKOM = South Africa power utility; HCB = Hidroeléctrica de Cahora Bassa; MIREME = Ministry of Mineral Resources and Energy; NES = National Electrification Strategy; PPA = power purchase agreement.

## 4. CROSS-CUTTING CONSTRAINTS TO PRIVATE SECTOR GROWTH

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In addition to the sector-specific challenges, the cross-cutting constraints facing private investment hamper economic development and job creation in Mozambique. These constraints are captured in the following areas:

1. Skills
2. Investment policy and promotion
3. Market and competition policy
4. Regulatory environment (and trade policy)
5. Governance
6. Labor regulations
7. Access to finance
8. Access to land
9. Macroeconomic scenario
10. Infrastructure

This section of the CPSD covers the following in detail: **skills, investment policy, and market and competition policy**. The regulatory environment, governance, labor regulations, land access, and macroeconomic challenges are presented in appendix B. Cross-cutting constraints that have been addressed in part in individual sector discussions include the lack of adequate skills, the challenging business environment, governance issues (including corruption and lack of transparency), difficulty of access to finance and land, and poor infrastructure.



## 4.1. SKILLS

Labor force participation is high in Mozambique; however, the average number of years of education of those in the labor force are below other Sub-Saharan African countries. In the 2019 Global Competitiveness Index, the quality of human capital (health and education) is ranked next to last out of a sample of 140 economies (WEF 2019a). This is the legacy of wars that prevented generations from attending school. But Mozambique is catching up to the rest of Sub-Saharan Africa: in 2010, less than one-half of the adult population was literate, but among youth the literacy rate was 78 percent, which is close to the African average. Nearly 60 percent of Mozambique's young private sector workforce has received some postprimary education (World Bank 2021). Mozambique is moving in the right direction, but it will need to move even faster considering education's critical role in enabling jobs transformation.

In addition to the investments linked to megaprojects, the other major opportunity for youth is given by the prospect of a significant demographic dividend. Mozambique is in the early stages of demographic transition. If the country can reduce its fertility rates, its working-age population can expand relative to the proportion of children and old nonworking population, causing the dependency ratio to decline. This prospect creates an opportunity if the skills can be leveraged to reduce poverty.

A critical element in tapping both the megaprojects and the demographic dividend opportunities is having the right skill sets in the country. For Mozambique to succeed in generating enough additional jobs to employ the faster inflow of new workers in the labor force, it needs to reduce gaps in skills to align with the requirements of the most productive sectors. Otherwise, the inflow of more workers would merely result in more unemployment or low earnings.

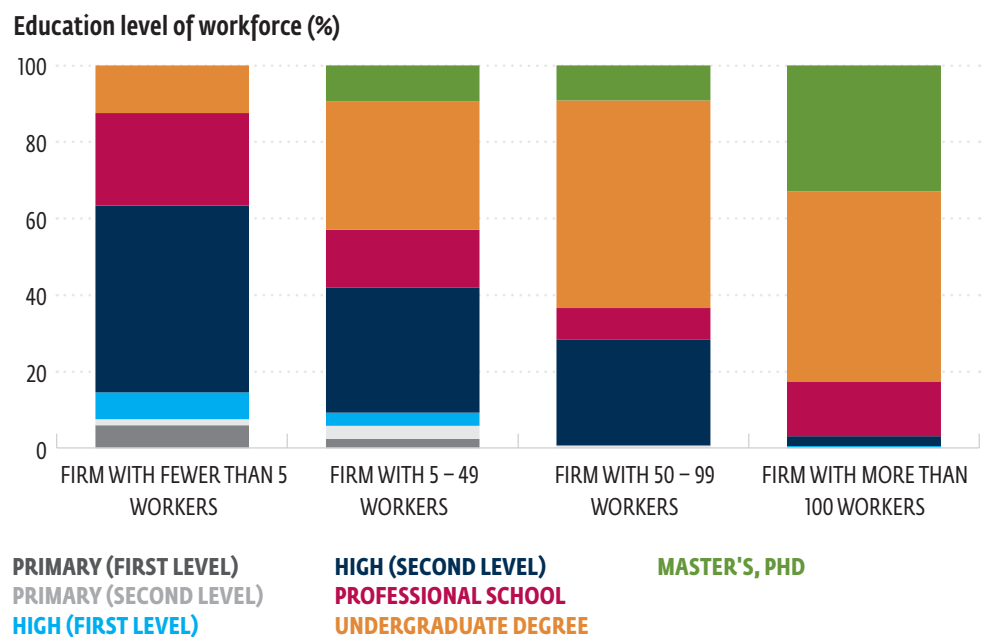
### Current Situation: Firm-Level Practices Regarding Employees' Skills

In Mozambique, larger firms are more likely to employ workers and managers with higher levels of education (figure 4.1). Firms that use technology and foreign inputs have higher skill sets. But there are no significant differences in the skill sets for younger firms, for different regions, for exporters, and by business ownership (Aga and others 2019). Across sectors, the differences in education of workers are also small. In extractive industries, firms are more likely to employ workers with tertiary education (figure 4.2), but in most sectors, notably in retail, the norm is to employ workers with secondary education or mid-level professional education. Fewer than 10 percent of the workforce in the formal private sector have primary school or less as the highest education, which compares with over 50 percent in the informal sector (World Bank 2019e).

**Managers have on average more years of experience than other employees, and professionals' and associates' years of experience are similar to technicians.** On average, managers in formal firms in manufacturing and extractives have 16 years of experience in the sector. In retail and services, they have 12 years of experience. Professional workers and technicians (for example, plant and machine operators and assemblers, clerical support, service and sales) have on average 6.0 and 6.6 years of experience, respectively. In foreign-owned firms, workers are more experienced, with professionals having on average 9 years of experience and technicians having just over 7 years of experience.

Close to 40 percent of the enterprises in Mozambique with at least five workers have foreign employees as managers or professionals. That is the case in the firms with majority foreign ownership, where 86 percent of them have foreign employees in management or mid-level professional roles. It is also true more generally for large firms: three-quarters of the enterprises with more than 100 workers have foreign employees in key roles. In terms of sectors, in extractives, retail, and other services, about half or more of the firms have foreign employees in management or mid-level professional roles.

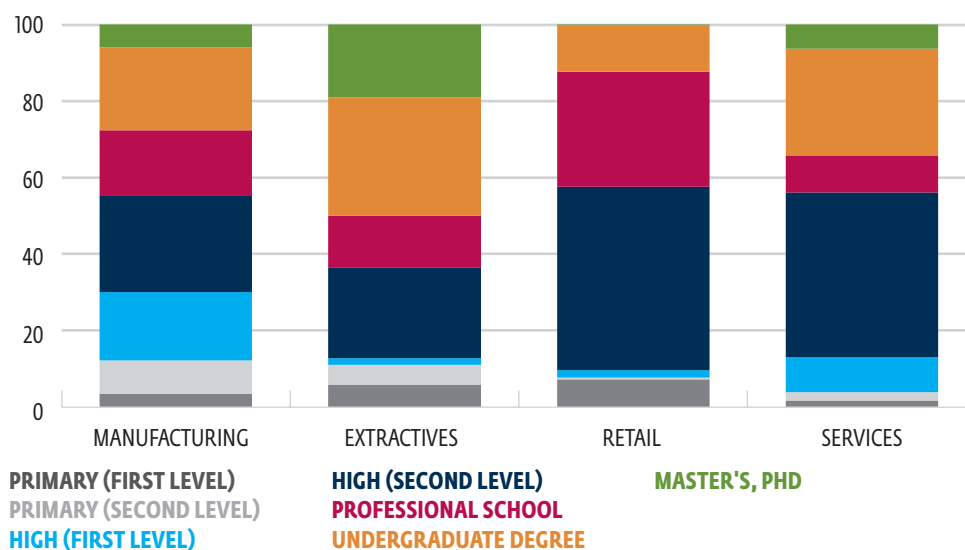
**FIGURE 4.1 LEVEL OF EDUCATION OF THE WORKFORCE IN FORMAL FIRMS, BY FIRM SIZE**



Source: World Bank staff based on World Bank 2019e.

**FIGURE 4.2 LEVEL OF EDUCATION OF THE WORKFORCE IN FORMAL FIRMS, BY SECTOR**

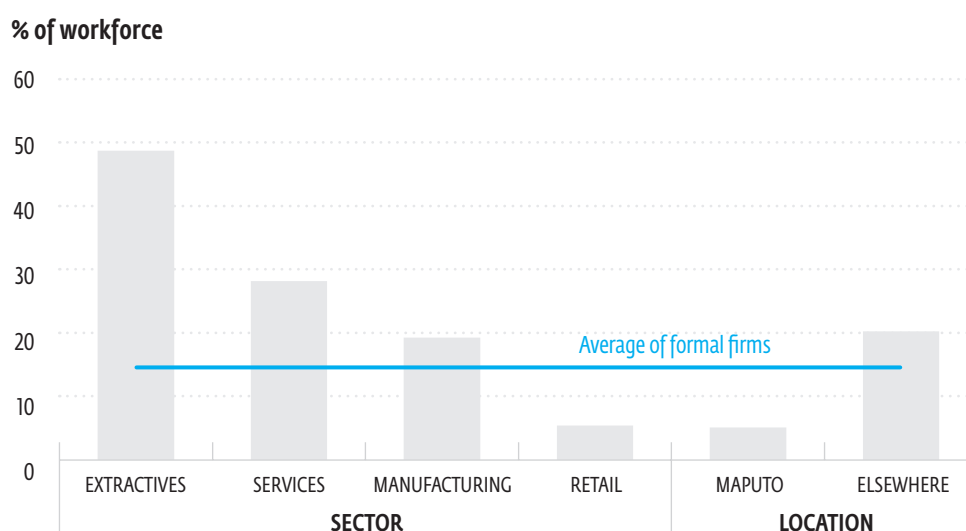
Education level of workforce (%).



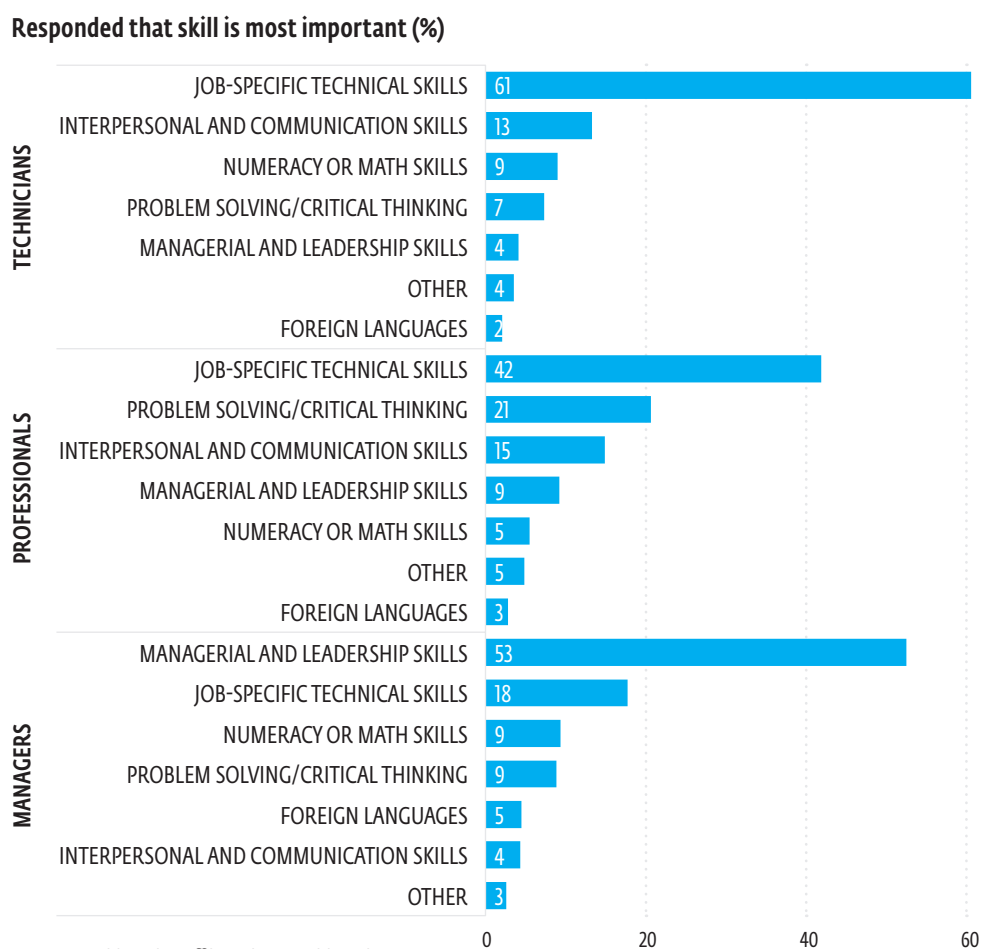
Source: World Bank staff based on World Bank 2019e.

About one-quarter of the permanent jobs in enterprises in Mozambique are unskilled. One-third of the permanent jobs in firms with more than 100 workers are unskilled. Several firms also use temporary workers; about 15 percent of the workforce is composed of temporary employees. They are more common in firms operating outside of Maputo and in sectors such as extractives and manufacturing (figure 4.3). Agriculture is not included in the Enterprise Survey, so that is not driving the difference.

Enterprises mostly consider only technical skills of applicants when contracting technicians and support services. Few firms consider other types of skills relevant when deciding to hire technicians. Even when hiring professionals, only 15 percent of firms consider interpersonal and communication skills as most important for deciding who to hire (figure 4.4). Managerial and leadership skills become important only when managers are being hired.

**FIGURE 4.3 USE OF TEMPORARY WORKERS IN FIRMS, BY SECTORS**

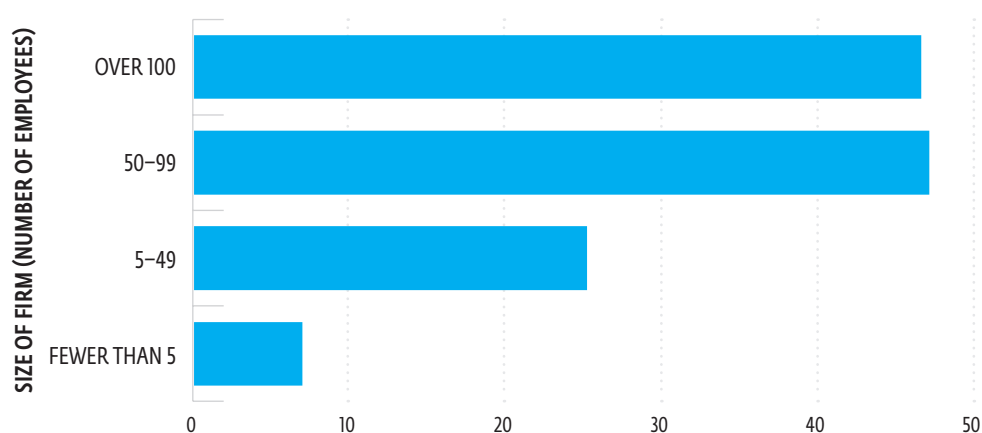
Source: World Bank staff based on World Bank 2019e.

**FIGURE 4.4 SKILLS CONSIDERED MOST IMPORTANT BY FIRMS WHEN HIRING**

Source: World Bank staff based on World Bank 2019e.

When hiring, larger firms are more likely to complain about the skills of the applicants. On average, firms wait almost nine weeks to fill in managerial positions, and close to eight weeks for mid-level professional positions. In contrast, it takes less than five weeks on average to fill in a technician role. Close to half of the enterprises with 50 or more workers consider that the applicants to job positions lacked the required skills. That compares with 25 percent for small enterprises of between 5 and 50 workers, and only 7 percent of the microenterprises when hiring workers (figure 4.5).

**FIGURE 4.5 SHARE OF FIRMS SAYING APPLICANTS TO JOB POSITIONS LACKED THE REQUIRED SKILLS**



Source: World Bank staff based on World Bank 2019e.

Only 20 percent of formal enterprises have formal training programs for their permanent, full-time employees. About 55 percent of the firms with trainings do them in-house. Of the remaining, 25 percent of the firms do both in-house and external training, and 20 percent do only external training. Just 12 percent of the permanent, full-time employees in formal companies have received formal training. The majority of the training has been conducted on job-specific technical skills, with just over 10 percent of the training on managerial and leadership skills and numeracy and math skills. Training on job-specific technical skills is especially common in manufacturing and extractives.

### Demand for Extractives

For the near future, the most important opportunities are related to extractives. During the five years of construction of Area 1 and Area 4 gas projects, the majority of technicians needed are going to be the specialized or semispecialized workers, accounting for 63 percent of total demand (table 4.1). During the period, most workers will be foreign. The Mozambicans are expected to be 40 percent on average. This is the pattern in many oil and gas projects in developing economies. Because Mozambique does not have the highly specialized skills required for this industry, the projects will recruit foreign workers. That loss of opportunity is expected to be compensated for during the operational phase (with 2,400 fixed jobs for the two major gas projects), but more importantly through the induced and indirect jobs, which are estimated at over 200,000 jobs (Standard Bank and Conningarth Economists 2019).

Gas projects will demand the best employees from technical fields in Mozambique, who will mostly be placed on the sites. Job advertisements published by companies such as Total, Sasol, and Vale indicate that the candidates' eligibility requirements include a mix of higher education for high-demand jobs, such as specialized labor—for example, electricians, scaffolding, welders, and so on (table 4.2). In gas, the demand for labor during operations will be geographically divided between Maputo city and Afungi, Palma district. Employment will be divided in a proportion of 15 percent for Maputo and 85 percent for Afungi (table 4.3).

**TABLE 4.1 EXPECTED LABOR DEMAND IN AREAS 1 AND 4 GAS PROJECTS**

CATEGORIES	CONSTRUCTION YEAR				
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Senior manager	160	400	740	500	220
Professionals	680	1,720	3,300	2,380	1,200
Supervisors	1,120	2,140	4,600	4,700	2,440
Specialized	3,460	7,300	15,820	14,920	7,620
Semispecialized	1,600	3,280	4,320	3,160	1,380
Basic specialized	3,120	4,720	2,920	2,520	400
<b>Total Labor</b>	<b>10,140</b>	<b>19,560</b>	<b>31,700</b>	<b>28,180</b>	<b>13,260</b>
<b>Mozambican labor demand</b>	<b>5,380</b>	<b>10,560</b>	<b>12,060</b>	<b>7,900</b>	<b>3,300</b>
<b>Share who are Mozambican (%)</b>	<b>53</b>	<b>54</b>	<b>38</b>	<b>28</b>	<b>25</b>
<b>Senior manager</b>	Executives with decision-making ability, significant experience, or graduate qualifications				
<b>Professional</b>	Engineers, accountants, lawyers, other specialties				
<b>Supervisor</b>	Technically qualified construction supervisors, equipment supervisors, with many years of experience in the sector				
<b>Specialized</b>	Electricians, scaffolding, welders, technically qualified pipe fitters				
<b>Semispecialized</b>	Some technical skills or professional technical experience specific to functions such as cook, digger, postfounder, cable puller				
<b>Basic specialized</b>	No specific technical or professional experience for jobs such as master worker, cook, digger, postfounder, cable puller				



**TABLE 4.2 JOB REQUIREMENTS ACCORDING TO ADVERTISEMENTS**

CATEGORY	ELIGIBILITY REQUIREMENTS
<b>Professional</b>	<ol style="list-style-type: none"> <li>1. Higher education in a recognized institution</li> <li>2. Experience of 5 to 10 years with knowledge of the mining, forestry, or energy sector (electricity, oil and gas, gas or oil pipeline)</li> <li>3. Fluent in Portuguese and English (spoken and written)</li> </ol>
<b>Specialized</b>	<ol style="list-style-type: none"> <li>1. Higher education: must have at least the Industrial Complete Institute; additional training in the technical area an advantage</li> <li>2. Must have practical training in mechanics</li> <li>3. "At least 5 years of practical experience as a maintenance mechanic" or "Minimum 2 to 3 years of experience in similar roles"</li> <li>4. Excellent knowledge of Microsoft Office</li> <li>5. Fluency in Portuguese and English (spoken and written)</li> <li>6. Leadership skills and proactive goal orientation</li> <li>7. Good organizational skills</li> <li>8. Ability to deal with customers</li> <li>9. Heavy truck drivers license</li> <li>10. Ability to work under pressure</li> <li>11. Ability to work as a team</li> </ol>

**TABLE 4.3 DISTRIBUTION OF EMPLOYMENT FOR GAS PROJECTS BETWEEN MAPUTO AND AFUNGI**

JOBS BASED IN MAPUTO	JOBS BASED IN AFUNGI
Government relations	LNG onshore operations and maintenance
Project management	Offshore LNG maritime operations
Professional support functions	Contractor support services
	Community relations
	Professional support functions
	Supply of Human Resources

### Supply of Human Resources

In general, Mozambique achieved significant progress in its national education system in the past decade, despite the difficult environment. The country is on a path toward the universalization of primary education, the rapid expansion of secondary education, followed by the exponential growth of professional education and higher education. The school enrollment rate at age six years went from 72 percent in 2012 to 84 percent in 2015 and over 93 percent in 2018. The 2018 gross enrollment rates for primary and secondary education reached 139 percent and 70 percent, respectively. This strong expansion of primary and secondary education has led to rapid growth in the number of institutions, students, and graduates in both TVET and higher education.

**The coverage indicators show a rapid growth in the education system, largely attributable to the abolition of enrollment and tuition fees in primary education and the introduction of progression-through-learning cycles.** The government made major investments in its education system, having in the period 2009–14 surpassed most comparable countries in terms of key financing indicators (World Bank 2016a). Almost 20 percent of total government expenditure has been allocated to the education sector (compared with an average of 16 percent in Sub-Saharan Africa).

**However, the response of the education system is still modest.** The gross rates of access to the last grades of primary education from 2012 to 2018 declined from 60 percent to 58 percent, and those for secondary education increased from 16 percent to 24 percent. These figures compare with 69 percent and 41 percent for primary and secondary education, respectively, in Sub-Saharan Africa, as of 2014. Using a theoretical cohort of 1,000 students, reconstituted with success, failure, and dropout rates, data from 2016–17 show that half of the students with seventh-grade completion failed at least once; only half of the students complete the seventh grade without a single repetition; 35 percent complete it failing once, and 15 percent complete it failing at least twice.<sup>65</sup>

**Key factors responsible for the low completion rates are widespread poverty, poor school management, and lack of adequate infrastructure.** Even though education is supposed to be free in Mozambique, many students drop out prematurely because they cannot afford the exam fees, cost of uniforms, and school materials, or because they have to provide family support. Other reasons are poor school management, which contributes to high teacher absenteeism, and insufficient infrastructure, which leads to overcrowded facilities and long distances to travel to school, leading them to drop out. In the secondary school system, the quality of education is considered poor and too focused on social sciences instead of the STEM curriculum<sup>66</sup> (World Bank 2021).

**Furthermore, Mozambique incurs high costs to produce results that other systems achieve with fewer resources.** According to a national assessment (INDE 2017), only 6.3 percent of third-grade students were able to demonstrate that they had acquired second-grade reading skills. In 2016, this dropped to 4.9 percent. In the 2014 Service Delivery Indicators Survey, which applied to fourth-grade students' competencies in Portuguese, mathematics, and nonverbal logic, Mozambique had the worst results among six countries in Sub-Saharan Africa (19 percent, 25 percent, and 21 percent, respectively), compared with an average of around 45 percent for the other five countries.

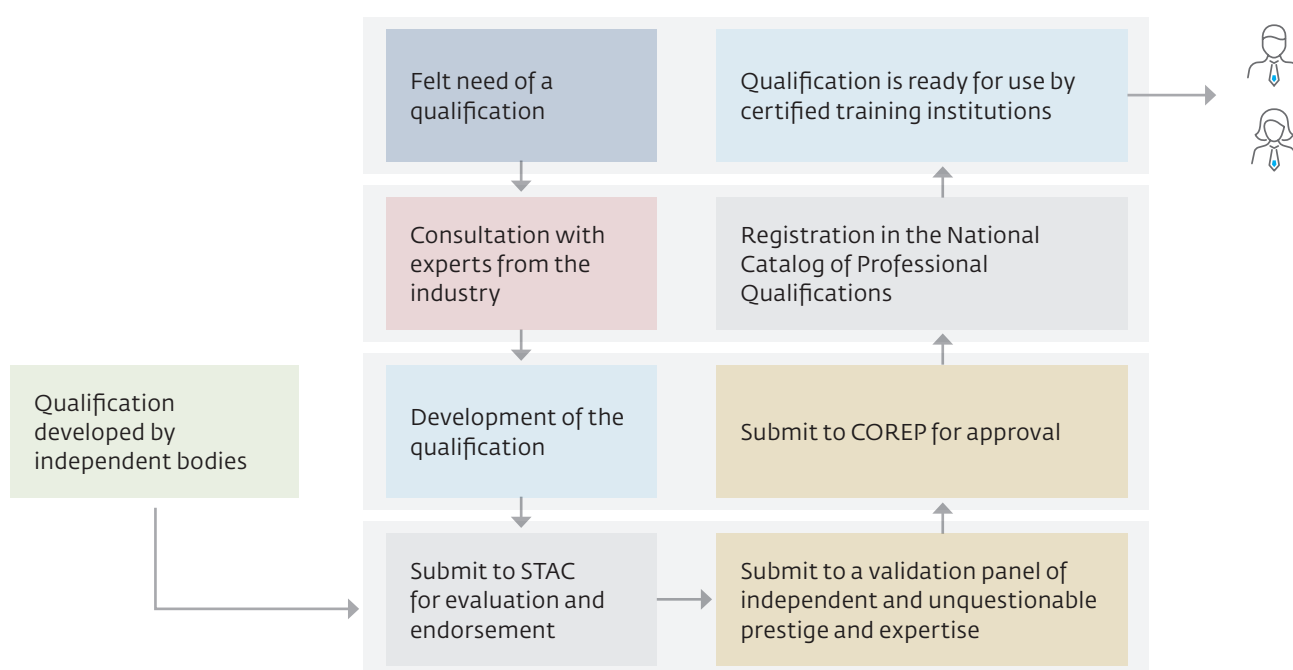
**Going forward, the investments in extractives, tourism, agribusiness, and housing construction will require a robust national contingent of well-trained workers.** Notwithstanding recent efforts made by the government of Mozambique in adopting demand-led TVET reform and promoting rapid expansion of higher education (by establishing public polytechnic institutes and facilitating private sector participation, among other things), the supply of qualified personnel is not only modest but is of poor quality.

With a net enrollment rate of less than 6 percent in TVET, Mozambique will have to increase by 2030 the number of youth who have relevant skills, including technical and vocational skills, for wage jobs and entrepreneurship. In 2006, the Mozambican government launched a TVET reform program known as PIREP, the Integrated Program for the Reform of Professional Education. PIREP received funding from the World Bank and a number of bilateral partners.<sup>67</sup> The objective of the TVET reform was to train young Mozambicans to become competent participants in a rapidly changing economy. The TVET system is demand driven, integrating education and work, and includes girls and women and urban and rural youth. The curriculum is competency based and designed with wide involvement of the private sector. Figure 4.6 shows the steps professionals can take to develop qualifications.

Since its inception, PIREP has developed 115 qualifications under the National Qualifications Framework (QNQP) in several fields. Those include, for example, agriculture, industrial maintenance, hotel and tourism, management, civil construction, ICT, and energy and mining. Each qualification consists of sequenced competencies deemed necessary for the student to master the profession.<sup>68</sup> The exercise was done in close collaboration and consultation with the industry and close dialogue with Sectoral Technical Advisory Committees (STAC), purposefully created for each trade and composed of a panel of experts. There is a STAC for the extractive industries, but its functioning is irregular and more reactive than proactive. Sasol used to be an active member, but Total has taken its place. Figure 4.6 shows the steps to register a qualification in the National Catalog of Professional Qualifications. All qualifications are registered under the National Authority for Professional Education (ANEP).

**FIGURE 4.6 STEPS TO REGISTER A QUALIFICATION IN THE NATIONAL CATALOG OF PROFESSIONAL QUALIFICATIONS**

**The development cycle of a qualification at ANEP**



Source: CPSD authors for IFC.

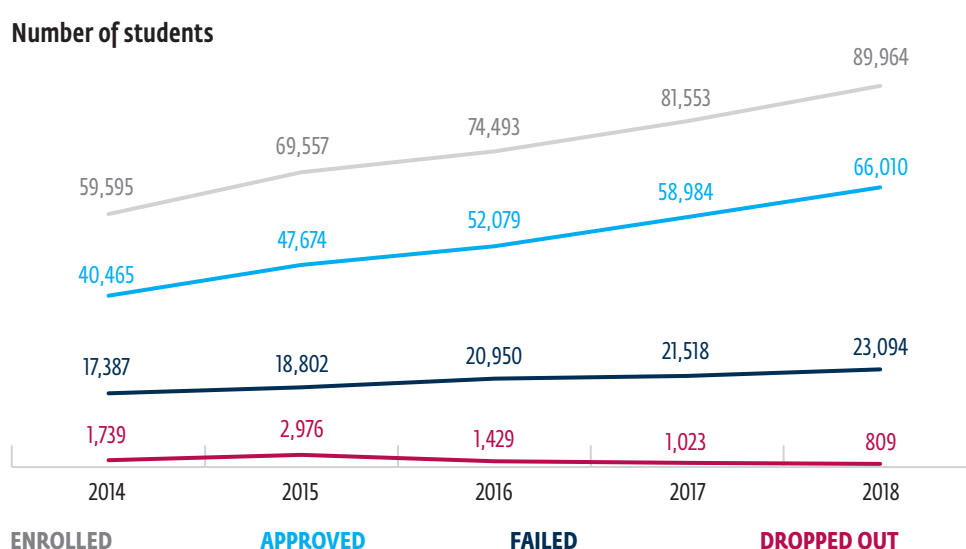
Note: ANEP = National Authority for Professional Education; COREP = National Commission for TVET Reform; STAC = Sectoral Technical Advisory Committee.

The TVET system in Mozambique is well thought out and well designed. Every qualification is registered, so only validated and registered qualifications are used in certified Mozambican institutions for training. Any public or private entity can submit a new qualification for registration. Once the qualification is registered and part of the National Catalog of Professional Qualifications, any certified TVET institution, with the qualified trainers and appropriate equipment, can deliver the training on that qualification. The QNQP, the bedrock of the TVET reform, has five levels. Learning and training at the first two levels involve building basic knowledge and skills and are not always geared toward specific occupations. The QNQP has a set of descriptors for each level that represent expected outcomes of learning in terms of knowledge, skills, and degree of independence. Participants can achieve qualifications by either completing a program or accumulating credits accumulation by taking short courses.

Since the reform was launched, TVET has experienced significant growth. The number of institutions involved increased from 145 in 2012 to 171 in 2017. The number of students increased from 2014 to the end of 2018 (figure 4.7). Female participation in TVET, a traditionally male-dominated area, grew significantly, from almost 34 percent in 2012 to 45 percent in 2017. All students enrolled in vocational and technical schools, irrespective of the qualification, must study ICT, English, and communication skills.

Several institutions throughout the country, both public and private, have adopted the new qualifications, and more than 26,000 students have so far been trained under the new competency-based curricula. In the tracer studies conducted so far, students of the new PIREP qualifications score high in several aspects (COWI/COREP 2014). Teachers, pre- and in-service, have been trained for the new qualifications, and rehabilitation of several technical institutes has taken place. New equipment has been contracted to match the new qualifications, and a High Polytechnic Institute is dedicated to training teachers on the TVET system.

**FIGURE 4.7 OUTCOMES FOR TVET STUDENTS IN MOZAMBIQUE, 2014–18**



Source: Ministry of Science, Technology, and Higher Education 2019.

**However, the system still has some important gaps, especially in implementation of its design.** The TVET system has not been effective so far in matching workers' skills with firms' needs. This is attributable in large part to well-known deficiencies in the traditional, publicly delivered, supply-driven approaches that have been followed by the Mozambican Employment and Vocational Training Institute (IFPELAC). Furthermore, Mozambique's public spending on TVET—accounting for only 3.5 percent of the government's total education budget—is among the lowest in Sub-Saharan Africa. Given Mozambique's tight fiscal situation, this spending offers little room to maneuver in terms of public provision of TVET services, and underscores the need to rely more on private sector delivery systems (World Bank 2021).

**The effects of the TVET reform are still small because students who have had competency-based training are still a minority.** A comparison with other countries, including Angola and Ghana, signals the need to further increase the enrollment intake in TVETs for Mozambique to reap the opportunities that are being created. According to recent tracer studies that show that the dropout rates are small in competency-based training courses, as more qualifications are developed and more training institutions adhere to, and get certification to deliver, competency-based training programs, school efficiency will improve.<sup>69</sup>

**Practitioners complain that the main problem in implementing such modern reform is its complexity.** Information does not seem to flow smoothly in the ongoing reform: corporations often do not use the National Catalog of Professional Qualifications; as a result, they end up recruiting internationally. Experts suggest that proper dialogue and coordination could help increase the size of recruitment of qualified nationals, particularly if HR contractors would approach ANEP and present their specific needs. In most cases, the gaps in skills are in small, complementary specific competencies.

**The system today is still very dependent on on-the-job training, with workers having limited skills when they start.** Construction and tourism companies report that most technical skills are learned on the job. Putting in place a system that uses the on-the-job training more sustainably requires management of apprentices and experienced workers. This is not an easy process for a medium-size business. A promising approach might be a program that arranges business services support with foreign companies to provide assistance to potential subcontractors.

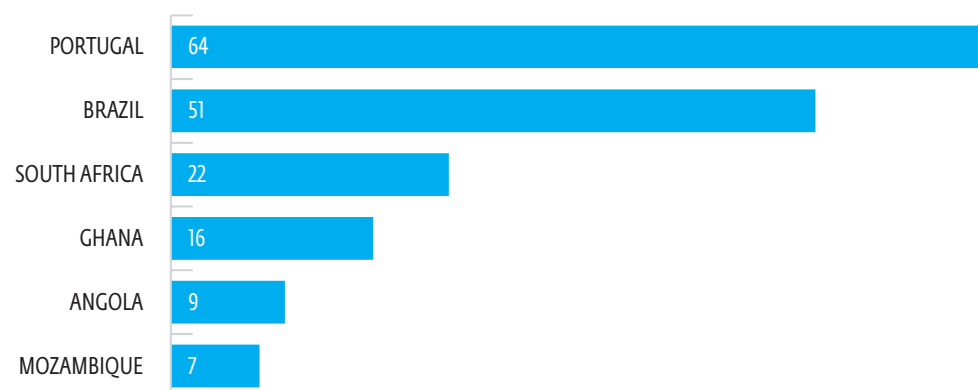
**Outside the TVET system, Mozambique has witnessed a surge in tertiary education.** The university student population grew from 105,484 students to 200,649 between 2010 and 2018, an increase of 90 percent, with the private higher education sector growing faster than the public system (171 percent growth versus 58 percent). The number of institutions went from 36 to 56, with the number of private higher education institutions rising from 19 to 37. As a result of these records, the number of students per 1,000 population increased from 4.9 in 2011 to 7.4 in 2017 (Ministry of Science, Technology and Higher Education 2019).

Despite the rapid increase in numbers, the higher education system suffers from high levels of inefficiency. The graduation rate of students after four years in one of the major public universities is about 30 percent; after six years it increases to about 70 percent.<sup>70</sup> This rate represents a significant cost to universities, families, and industry. One effect is that it reduces universities' capacity to enroll new entrants. Thus, despite progress, Mozambique compares unfavorably with other economies in terms of gross university enrollment rate (figure 4.8). In addition, students enroll in high numbers in social sciences and humanities instead of science and engineering (figure 4.9). A positive counterbalance, though, is that most of those studying abroad opt for natural sciences and technology (3,000 fellows annually versus about 1,600 majoring in social sciences and humanities, according to information obtained from the Instituto de Bolsas de Estudo in 2018).

Between the numbers of TVET and higher education graduates in-country and abroad, Mozambique can project over 6,000 graduates per year for the next five years in appropriate fields to serve growing opportunities in gas, mining, construction, and other sectors. The supply of TVET graduates is expected to reach 17,420 every year, from 2020 to 2024 (figure 4.10). Considering that historically 20 percent of all TVET graduates are being trained in areas such as industrial maintenance, geology, mining, and civil construction, there will be 3,484 graduates every year until 2024. The supply of higher education graduates in the foreseeable future can be estimated based on the number of students, roughly 200,000, in 2018. Of those, 26,000 were studying engineering, science, and technology. Added to graduates in TVET and higher education, about 1,100 students studying abroad are studying science and technology, including 90 percent through fellowships and about 10 percent paying their own expenses. If 20 percent of those complete their training annually, then the number of graduates in the appropriate fields abroad are 220. Altogether, about 6,044 students graduate every year in the fields of interest to industries.

**FIGURE 4.8 ENROLLMENT IN TERTIARY EDUCATION IN SELECTED COUNTRIES**

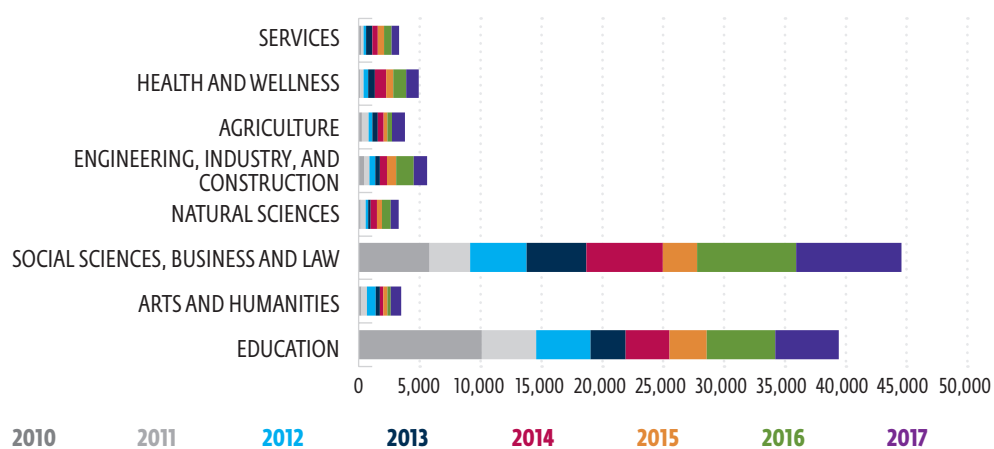
Gross enrollment rate (%)



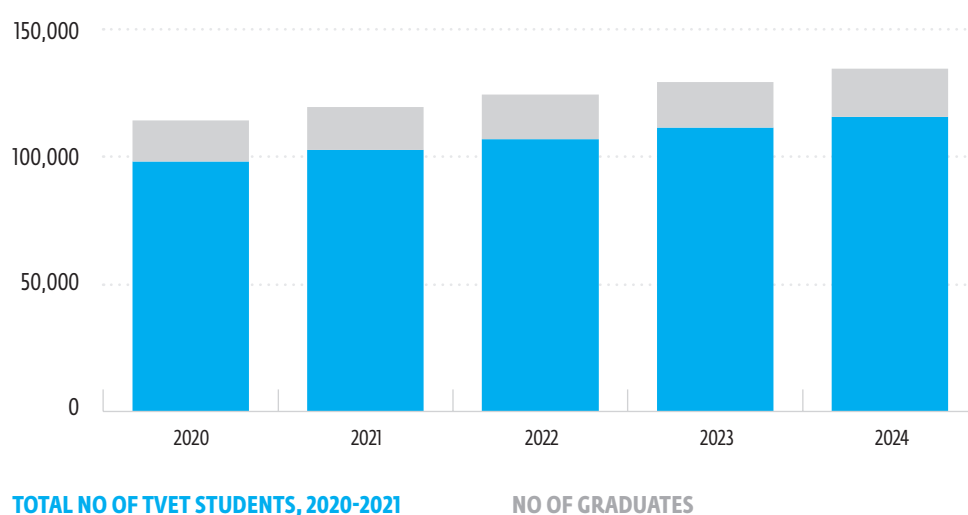
Source: Ministry of Science and Technology and Higher Training 2019.

Note: Gross enrollment rate measures the number of students enrolled in school compared with the number of people in the country that qualify in the age group.



**FIGURE 4.9 NUMBER OF GRADUATES IN MOZAMBIQUE, BY TRAINING AREA, 2010–17**

Source: Ministry of Science and Technology and Higher Training 2019.

**FIGURE 4.10 NUMBER OF STUDENTS IN TVET AND GRADUATES**

Source: Ministry of Science and Technology 2019.

Note: TVET = technical and vocational education and training.

**Mozambique needs to continue to build capacity for developing more skills.**

Graduates will need practical training to match their skills to those required by the growing sectors. More broadly, companies need to work with training institutions. In addition to their large-scale capital investments and ongoing operations, megaprojects specifically bring with them world-class expertise and technology that can be leveraged to benefit local skills development. Some of the best global workplace training capabilities lie with these companies, and since global best practice clearly shows that effective TVET requires strong employer involvement, Mozambique has a potentially powerful vehicle through which to promote skills development for its workforce.

## Recommendations

**To exploit the upcoming opportunities in extractives, agribusiness, construction, tourism, and enabling services, it will be necessary to build up the skills of Mozambique's labor force.** However, there is currently a mismatch between the skills supplied by Mozambique's education system and the skills demanded by firms in the fast-growing sectors, such as oil and gas and mining. Local and foreign firms face a shortage of experienced and skilled labor such as accountants, engineers, mechanics, and managers, as well as experienced, semiskilled labor in some trades, such as plumbing, welding, and electrical components, among others. Actions listed below are considered to be the highest priorities.

### Area 1: Leveraging private sector resources and knowledge

1. Develop training centers with the megaprojects.
2. Involve megaprojects further in the coordination of policies and programs.
3. Create incentives for investments in private training in TVET and higher education centers of excellence in science, technology, engineering, and ICT.

Effective TVET requires a combination of up-to-date training, practice with the right equipment, trainers, and time on the job to enable application of skills in a workplace setting with a coach or mentor. This cannot be achieved through training centers isolated from the skills needed by local employers or communities in their operating areas. TVET experiences elsewhere have shown that such programs are more likely to succeed when they are strongly linked to firms' demand for skilled labor.

Consequently, it is proposed that extractive and other major industries assist the government to establish dedicated training centers focusing on priority skills. They should consider cross-sectoral (for example, trades, technicians, and maintenance technicians) or sector-specific (for example, food processing) focus. This will allow some training centers to become dedicated training hubs for specific sectors. In addition, the Mozambican government should incentivize private investments in TVET and higher education centers of excellence in science, technology, engineering, and ICT.

Keeping in mind the need to raise the quality and relevance of TVET in Mozambique, corporations should be encouraged to invest in the future skills requirements of the economy through a coordinated process and based on a national skills plan. The FDI contributions could include, but not be limited to, using companies that provide structured workplace training for the market beyond their own requirements, as well as encourage FDI corporations to invest in state-of-the-art training centers in a planned and structured way. This may involve megaprojects' participation in the following:

- Open up their own training centers to more learners than they require for their operations (“train for the market”), and manage training centers independently or in partnership with local communities and government.
- Upgrade and support the governance and management of existing public training centers under MCTESEP (Ministry of Science and Technology, Higher Education and Professional Training) and SEJE (Secretariat of State for Youth and Employment).
- Contribute to the National Training Fund dedicated to professional education.
- Encourage structured training initiatives to support local small and medium businesses, particularly those forming part of its supply chain.
- Encourage corporations to actively use their expertise to support and improve the TVET policy
- Participate actively on the dialogue with ANEP.

#### Area 2: Helping to reform public institutions' delivery

1. Improve the Mozambican Employment and Vocational Training Institute (IFPELAC).
2. Take measures to increase efficiency and effectiveness of TVET and training systems.
3. Strengthen the capacity of the existing Labor Market Observatory to provide relevant and timely information.
4. Develop new skills or new ways of delivering the same skills.

To improve the development of skills and enable faster jobs transformation, IFPELAC could be reformed so that it relies more on private delivery mechanisms and becomes more responsive to firms' training needs.

A plan to increase the programs of higher education offering degrees in science, engineering, and ICT, and the number of students, should be accompanied by measures to increased effectiveness and efficiency in higher education and TVETs. New private investments should present in advance their manpower needs (number, occupation fields, qualifications, and required competencies), with further links between Agency for Promotion of Investment and Exports (APIEX), ANEP and the National Petroleum Institute (INP). With this information systematized and organized, TVET and institutions of higher education can be better prepared to match the expressed demand.

A national skills development plan with a five-year horizon, updated annually, should guide FDI project investments in TVET. The plan should be divided into three components:

- Demand analysis and priorities: a socioeconomic analysis examining sectoral output, employment, and occupational growth rates, broken down by regions. This is the backdrop for an analysis of priority skills, both across and within sectors. The plan should include estimates of the demand for priority skills and occupation skills.
- Supply gap analysis and priorities: an assessment of delivery gaps and constraints and setting of priorities for investment in capacity to increase access to good-quality TVET, particularly in priority skill areas.
- Preferred megaproject investments in skills and TVET capacity.

In the short run, it is important to work on the transition of youth from the secondary school system to the labor market. In the medium term, the development of high technical skills will be a key part of preparing future generations. This is not the traditional TVET. Rather, university-level technical skills in engineering will be required. It will also require soft or general skills, which are often underestimated, but which also play an important role in stimulating the productivity of workers. Moreover, modern factory work requires basic literacy and numeracy of the type normally acquired by completion of primary education, and, increasingly, requires the behavioral skills and more advanced cognitive skills acquired by completion of secondary education. The latter are required to achieve global productivity and quality standards, even for light manufacturing production.

### Area 3: Supporting demand-side interventions for job creation

1. Support programs that help drive new private sector investment with job creation potential.
2. Plan the public investment beyond current opportunities in extractives.

On top of well-defined demand from the extractives industry, it is critical to expand the demand for formal wage employment in other sectors, including food manufacturing, tourism, and others, as a means of developing better skills and economic opportunities in Mozambique. Only 17 percent of Mozambique employment is constituted by wage jobs. About 21 percent of urban youth are unemployed, while in peri-urban and rural areas, youth tend to be in less productive activities (World Bank 2020b). A recent review of youth employment interventions in Mozambique has identified high-growth entrepreneurship as an underexplored area in existing programs, while evidence from various African countries (Ethiopia, Nigeria, and Zambia) provides confidence for interventions in this space to create skills and jobs. In response to this lack of employment opportunities, programs that include business plan competitions and other mechanisms of driving demand for jobs in productive sectors are critical for improving the skills base in the country.

Mozambique would also be advised to focus on regional and sectoral initiatives to accelerate jobs transitions in high potential labor-intensive industries (World Bank 2021). Private investors will need to mobilize capital to equip the firms and create productive jobs.

Finally, when construction is complete and the operational phase begins in extractives, demand will reduce while supply of youth may maintain or increase. Then Mozambique will have to reconvert thousands of national workers for different jobs that may result from investments in infrastructure or find new markets for its qualified contingent. Students should learn to learn and should be creative and able to solve problems. This reform is necessary in various areas of the education system. The low internal efficiency of Mozambican schools limits the amount of human capital available in the future. The government of Mozambique should invest in training youth with market skills primarily for national needs.

## 4.2. INVESTMENT POLICY AND PROMOTION

### Benchmarking Mozambique's Legal and Regulatory Framework

Mozambique's investment climate is considered risky, with low rankings in established international indexes affecting the country's attractiveness for FDI (table 4.4). The country's rating by established risk indexes—including the PSR Group's International Country Risk Guide (ICRG)<sup>71</sup> and the Economist Intelligence Unit's Country Risk Model (EIU),<sup>72</sup> which are frequently consulted by foreign investors—and Credendo put Mozambique among the riskiest countries in the world to do business.<sup>73</sup>

**TABLE 4.4 MOZAMBIQUE'S INVESTMENT CLIMATE IS CONSIDERED RISKY ACCORDING TO GLOBAL INDEXES**

PEER COUNTRY	CREDENDO	ICRG	EIU		WEF	DOING BUSINESS
	SCORE (7 = MOST RISK)	SCORE (100 = LEAST RISK)	RANK (TOTAL = 131)	SCORE (100 = MOST RISK)	RANK (TOTAL = 141)	RANK (TOTAL = 190)
Ethiopia	6	61.5	118	65	126	159
Ghana	5	68.3	96	55	111	118
Kenya	6	64.3	109	61	95	56
<b>Mozambique</b>	<b>7</b>	<b>57.8</b>	<b>126</b>	<b>74</b>	<b>137</b>	<b>138</b>
South Africa	4	67.5	54	41	60	84
Tanzania	5	65.8	68	46	117	141
Zambia	6	61.8	116	64	120	85
Zimbabwe	7	50.5	127	80	127	140

Source: Credendo, Mozambique profile, <https://www.credendo.com/country-risk/mozambique>; EIU Country Risk Model, December 2019, <https://www.eiu.com/n/solutions/country-risk-model/>; PRS Group, International Country Risk Guide (ICRG), December 2019; World Bank 2020a; WEF 2019a.

**The performance on key global indicators is worsening compared with previous years and Mozambique is losing ground in relation to its competitors in the region.** The World Economic Forum's Global Competitiveness Ranking in 2019 ranks Mozambique at 137 out of 141 economies, and the country is ranked 138 out of 190 economies on the World Bank's 2020 Doing Business. This underscores a general perception of a business environment that is complex, inconsistent, and rigid. A combination of high political risk and weak governance decreases trust in the transparency and quality of government and in the country's rule of law. Political risks frequently reported to affect FDI are unpredictable and arbitrary actions, the absence of regulatory transparency, delays in obtaining necessary permits and approvals, transfer and convertibility restrictions, breaches of contract, and expropriation (World Bank Group 2018).

### **Overview of the Institutional and Regulatory Framework and Existing Gaps**

Despite the risk dimensions outlined above, **improving the investment climate is a policy priority for the government of Mozambique.** The government recognizes the dampening impact that barriers to investment have on domestic economic development, as shown in recent action plans.<sup>74</sup> State policy objectives include attracting new investment, easing entry and operation, and improving transparency to reduce corruption and risk, including through the strengthening of the Investment Law.

**The regulation defining the framework for investment policy has remained largely unchanged even though the institutional framework and market conditions have not.** The legislation that anchors this framework is Law 3/93 from 1993, referred to as the Investment Law. The law defines and covers both domestic and foreign investors. It is under this legislation that the guarantees for all investors are implemented.

**Remarkably, the legal and institutional framework governing investments in the extractives sector is largely independent from the general framework for investments.** Extractives, mining as well as oil and gas, are by far the largest recipient of FDI inflows.<sup>75</sup> Yet the sector is explicitly excluded from the rules set forth in the Investment Law and Decree 60/2016. Indeed, the extractives sector has its own sectoral laws and regulations,<sup>76</sup> and the principle entry point with the government is the Ministry of Mineral Resources and Energy (MIREME). This parallel investment framework creates challenges regarding coordination between entities and the protection framework. The obligations Mozambique entered into under its BITs, including the protections offered, apply to investors in all sectors. Therefore, this parallel protection framework can create a misalignment with international obligations and the protections offered in the investment law, which can increase the risk of international arbitration.



**Mozambique has recently set up the APIEX, but implementing regulations have not been updated, and the institutional reform of APIEX is incomplete.** APIEX was created in 2016 as the entity responsible for promoting and approving new investment projects and promoting exports, and it also houses the special economic zone (SEZ) regulator and developer functions.<sup>77</sup> APIEX has reporting lines to the MIC and the MEF. Its lead ministry, MIC, is not the primary ministry mandated to deal with investment issues, and as such does not control the regulation and procedures for granting incentives to investors, one of APIEX's main promotion tools. MEF formulates the investment policy and incentive regimes, negotiates international investment agreements, and controls the APIEX budget. MEF is therefore infringing on the MIC mandate for investment policy formulation. The existence of multiple players increases the risk of different rules being implemented and different priorities being set from one agency to another.

**Combining the APIEX mandate to promote investment with SEZ regulatory and administrative functions may dilute its role and image.** An Investment Promotion Agency's main function is to provide services to foreign investors, including marketing, information, assistance, and advocacy, across the investment project cycle to encourage investment in the country. Regulatory functions differ from the promotional function and require a different set of skills and capabilities. Similarly, the integration of FDI, exports, and SEZ agendas in one agency is generally not recommended (Heilbron and Whyte 2019).

**Another area that lacks coordination is the one-stop shop (Balcão de Atendimento Único; BAU).** One-stop shops typically aim to simplify administrative procedures for investors by providing a central point of communication for all approvals, licenses, and permissions. The BAU network currently in place is not a single window but rather a one-roof solution housing representatives from a number of public agencies. Additionally, the BAU does not house all the relevant agencies an investor needs. Although the launch of the e-BAU, an integrated platform for service delivery that aims to connect institutions relevant for investors, is welcome, it is only being used for certain types of business licenses, thus it is not reducing time, cost, and complexity of the business establishment process (World Bank 2019b). If effectively implemented, it would be a relevant instrument for investors.

## Nationwide Barriers to Investment Entry

Investment entry barriers are restrictions, through regulation procedures (de jure) and practices (de facto), that impose additional burdens on foreign investors during the entry process. Entry barriers are often intertwined, and regardless of their nature, they may deter investment.

### Main de jure barriers to investment

#### Lack of transparency on the openness of sectors to FDI

**Mozambique has an open FDI regime, but the legislation is unclear on what sectors are restricted to foreign investment.** The Investment Law and its regulations generally do not distinguish between investor origin or limit foreign ownership or control of companies. However, the law does not list the sectors that are closed or restricted to investment.<sup>78</sup> Information on foreign ownership restrictions is mostly covered in sectoral regulations or BITs, which makes their identification difficult.<sup>79</sup> As a result, foreign investors are left wondering which sectors they may invest in. Although various sources of information about APIEX and other investment intermediaries highlight certain restrictions, they are not coherent and are disbursed across various websites and brochures on the legal and regulatory framework in Mozambique.<sup>80</sup>

#### Screening of FDI

**All foreign investors in Mozambique must undergo a cumbersome screening procedure that is not clearly defined.** According to the Investment Law, screening is for all investors that want to benefit from incentives and the guarantees offered to protect against political risks. By making screening a condition to access the guarantees, the screening becomes obligatory to all foreign investors, because the protection aspect is of fundamental importance.<sup>81</sup> Furthermore, the Investment Law regulations state that APIEX serves as the “single window” for screening. In fact, according to the same decree, APIEX is responsible for screening investments between US\$23 million and US\$200 million. Any smaller investments will be screened by the Municipal Council and larger ones will be screened by the Council of Ministers.<sup>82</sup> In addition, the respective government bodies do not have to explain why a certain investment was approved or rejected, nor does the law provide for an independent appeals procedure, all of which increases risk. Once granted, the approval for the investment does not expire. According to APIEX, costs are around 0.1 percent of the investment value but are capped at a maximum of US\$50,000.

**Delays in screening of investments may severely increase the time, cost, and uncertainty for all new investments and decrease the attractiveness of the country for investments.** Although Decree 43/2009 provides a timeline for screening, it is rarely enforced, and the process can take between two weeks and five months. Moreover, this does not yet include the sectoral and environmental licenses that are still necessary before operations can start. To attract FDI inflows, countries are moving away from an economywide FDI screening by regulating the business activities,<sup>83</sup> rather than the actor, and by focusing on activities that may have significant health, safety, environmental, or security implications.

### Restrictions on owning land

**The current regulation on the right to use land presents legal challenges for foreign investors in Mozambique.** There is a difference in treatment between domestic and foreign investors in how they are able to access the land. Although Law 19/1997 grants foreigners the right to use land, it discriminates against foreign investors and imposes more conditions than it does for domestic investors. First, a foreigner, whether a physical person or a company, can lease land only if they have been living in Mozambique for at least five years, which increases the barrier for FDI, preventing many investors from just entering the country once an opportunity arises.<sup>84</sup> Second, the same law states that the preliminary authorization of the DUAT granted to foreign investors will only be valid for up to two years, instead of five for domestic investors. This discrimination violates the national treatment guarantee and is thus not in compliance with Mozambique's international commitments. Besides the legal provisions, it can take investors up to a year to get a definitive DUAT, and the application for the use of land can begin only after an investment project has been screened and approved by the relevant authority.

### Local content policies

**Although local content requirements (LCR) are usually introduced for legitimate policy objectives, they often turn out harmful.** Frequently influenced by experience with natural resource-seeking investment, governments imposing LCRs often envision them as a policy response to two fundamental challenges: (a) ensuring the efficient use and equitable distribution of the benefits of FDI, and (b) improving the typically low technological capacity of the domestic private sector. However, LCRs not only fail to address these underlying issues but may, in fact, exacerbate the problem. Even where LCRs achieve short-term political objectives, they often undermine long-term competitiveness.<sup>85</sup>

**Mozambique enforces LCRs in the extractive sectors.** The country has developed local content policies that mandate the investor to enter a joint venture with the state (where the state will own 5–20 percent of shares), and to give preference for local goods, services, and domestic workers (Decrees 20/2004 and 21/2004 for mining, and oil and gas). Natural resource-seeking investors tend to be somewhat less sensitive to such policies, not least because of the lack of alternative investment locations. Despite those LCRs, nearly 50 percent of FDI inflows to Mozambique between 2008 and 2016 were gathered in the extractives sector.<sup>86</sup> The fact that there are no set quotas for sourcing local goods or hiring a local workforce may contribute to the sustained flow of FDI because it allows both the government and foreign investors to have more flexibility when discussing an investment project.

**Implementing an economywide local content law may stymie the growth of sectors relying on competitiveness and can duplicate obligations already existing in sectoral laws.** In light of the recent gas discoveries and increased investor interest, the government has been developing a horizontal local content bill setting stricter targets for all economic activities. Beyond the political signal it sends, such policy is unnecessary at best, but may seriously damage business at worst. It duplicates much of the sectoral regulation and the local content framework applied to large-scale investment projects as regulated by the Law 15/2011 on Public-Private Partnerships, large-scale projects and business concessions (Projectos de Grande Dimensão). Table 3.2 presents some of the main issues of the local content bill that was discussed and abandoned in 2019.

### **Main de facto barriers to investment**

#### **Lack of transparency and information on regulations**

**The lack of transparency fosters abuses of power and corruption.** According to Transparency International's 2019 Corruption Perception Index, Mozambique ranks 146 out of 180 economies,<sup>87</sup> although it is encouraging to note that the country improved by 12 points compared with the 2018 index. Nevertheless, the Mozambique 2018 Enterprise Survey (World Bank 2019e) confirms that corruption is the number one obstacle to doing business in Mozambique, for international and domestic investors alike, and constant across all firm sizes. Given the opacity of the regulatory framework, fiscal authorities for example, often charge more than they should, which creates a variety of challenges for investors. Investors may need a strong compliance department to defend themselves against abusive practices. The situation might also simply render the cost of doing business too high, especially for small investors, which often decide to operate informally.

#### **Weak implementation of the existing rules and regulations**

**The existence of legal and procedural barriers is exacerbated by incomplete information, complex rules and processes, and arbitrary decisions by government officials.** Laws and regulations are often written in general terms with a promise of more detailed implementing regulations and guidelines to come. Investors, and often the implementing officials themselves, are thus unclear about how to interpret the new regulations, including their compliance requirements. The regulatory framework creates an opportunity for discretionary interpretation by officials. Investors feel that decisions do not always follow clear criteria but are driven by subjective considerations. More often than not, they depend on their personal network to get things done.

### Barriers to Investment in Mozambique's Special Economic Zones

SEZs are an investment policy measure aimed at providing preferential treatment to investors. Those zones usually offer fiscal incentives, infrastructure, and services; streamlined business registration and customs procedures; more efficient processing of labor and immigration permits; and other investment facilitation services (Farole and Akinci 2011). The various forms of SEZs depend on the industrial structure of a country, the institutional environment, and the broad policy goals they want to achieve, such as job creation or exports, but they all aim to attract FDI.

In Mozambique, the legal, regulatory, and institutional weaknesses of the general investment framework are duplicated when it comes to SEZs. The lack of transparency, detail in regulation, and information, as well as gaps in institutional capacity and coordination outlined in the previous sections, also apply to SEZs in Mozambique. Those make it harder for individual zones to compete in the region. There is no single and independent SEZ law with associated implementing regulations, leaving the investor with a complex and confusing set of provisions.

Another key constraint to promote investment in Mozambique is the lack of developed SEZ projects. The new SEZs planned in Nacala, Mocuba, and Manga-Mungassa have not yet been developed, meaning that there is no serviced industrial land connected to infrastructure that is available for lease (that is, plots with roads, reliable power, water, drainage, telecom, and wastewater treatment facilities).<sup>88</sup> Given Mozambique's shortcomings on some Enterprise Survey indicators related to accessing infrastructure such as getting electricity, well-serviced SEZs could fill a critical gap in attracting investors to Mozambique and help the country compete with its neighbors. However, SEZ development needs to be based on comprehensive feasibility studies, including future market demand assessments, because the often-used "build it and they will come" approach does not usually deliver results.

The competition on SEZs in East and Southern Africa is significant, with most countries in the immediate neighborhood (Ethiopia, Tanzania, Kenya, Zambia, Zimbabwe, and South Africa) promoting their SEZs as an attractive investment location. Besides their legal and regulatory frameworks, their institutions are better prepared, including the higher capacity of staff to operate in foreign languages, to master their mandate, and to help investors set up operations. Modernizing the SEZ regime is fundamental for Mozambique to be competitive in the region.

## Gaps in the Investment Protection Framework

**Investment protection guarantees are critical for retaining and expanding investments in the long term across all types of FDI.** Over 90 percent of all investors rate various types of legal protections as important or critically important (World Bank Group 2018). Those rules may be enshrined in the constitution or under a specific regulation such as an investment law, and they also typically form part of international investment agreements, such as BITs.<sup>89</sup> Mozambique grants variations of all fundamental guarantees for foreign investors, and a better alignment between domestic and international commitments is required.

### Protection against nondiscrimination through the National Treatment

**As a WTO member, Mozambique needs to uphold the National Treatment principle.**<sup>90</sup> This guarantee is defined by a host country offering a treatment that is as favorable to foreign investors as to domestic investors in like circumstances. As such, this guarantee has a relative standard: it observes the treatment two types of investors receive when faced with the same situation to determine if there is a violation or not.

**Mozambique guarantees this principle at both domestic and international levels, but the domestic quality of the protection is not aligned with best practice.** The Investment Law states that domestic investors and foreign investors will have the same rights and obligations. However, it leaves gaps with regard to the quality and scope of the guarantee. First, Article 4 should also mention that it treats investors equally “in like circumstances” and the BITs with Japan, India, or the Economic Union of Belgium and Luxembourg already include this clause up to best practices. Thus, it is simply a question of modernizing the language. Second, the scope of the guarantee creates a gap with regard to international commitments. This guarantee can extend only to the postestablishment phase or can also include the establishment phase. In its BITs with Japan<sup>91</sup> and the United States,<sup>92</sup> investor activities are defined as covering both phases, therefore extending the guarantee compared with its definition in the Investment Law. Bringing attention to this discrepancy is important because investors from Japan and the United States may be entitled to start an arbitration procedure against Mozambique even before they have started operations.

### Fair and Equitable Treatment: An absolute standard of protection

**This guarantee has become the most important standard in investment disputes but is not defined in Mozambique’s Investment Law.** The Fair and Equitable Treatment (FET) standard is designed as a rule of international law and is not determined by the laws of the host state. Thus, unlike National Treatment, the FET standard might even be violated if the foreign investor received the same treatment as a domestic investor. Thus, a clear definition of this is paramount for the government and investors alike. Mozambique upholds this guarantee in its BITs, but again, without providing a granular definition. This could allow different arbitral tribunals to give different interpretations as to what the content of such a standard may be.<sup>93</sup>



Mozambique already had to defend itself at the International Centre for Settlement of Investment Dispute (ICSID) on the basis that it had violated the FET provision of the Mozambique-Italy BIT.<sup>94</sup> The Italian investor argued sudden and arbitrary conduct from the government of Mozambique when it refused to pay compensation that it had supposedly agreed to. Although the ICSID award was in favor of the state,<sup>95</sup> it reflects the risk of other such cases in the future. It is therefore recommended that the government define the FET provision in the Investment Law to have more control over what may fall in the scope of this guarantee.

### **Protection against unlawful expropriation**

Mozambique is regarded as having medium risk for expropriation, but its performance is deteriorating. Credendo's assessment ranked the risk of expropriation in Mozambique as 5 out of 7 (highest risk).<sup>96</sup> However, the ICRG's assessment,<sup>97</sup> which classifies indicators from 0 (high risk) to 4 (low risk), saw the risk of expropriation in the country go from 3 in 2015 to 2 in 2019, suggesting an increase of this type of risk.

The domestic regulation in Mozambique offers protection against unlawful expropriation, but key elements of the provision are not present. Investors should be allowed to argue in the judiciary the decision by the government to expropriate to ensure the fairness of the review. Further, the Investment Law secures compensation for the investor, but it states that the amount will be determined by individuals selected by the state. Thus the compensation may not necessarily be equivalent to free market value before the expropriation. This provision is typically of great concern to investors, as they may not be adequately compensated.

Mozambique needs to fill the gaps in domestic legislation related to indirect expropriation, which is the most common type. International Law distinguishes two types of expropriation: (a) direct, which means that the government takes clear action to seize the property title, and (b) indirect, which is the cumulation of actions that result in a de facto expropriation for the investor.<sup>98</sup> Although the Investment Law does not mention this type of expropriation, Mozambique is committed to enforce it under the BITs it has signed. Missing this element in the law constitutes an important misalignment between domestic and international commitments.

Mozambique already had to defend itself at ICSID for alleged indirect expropriation filed by a South African investor.<sup>99</sup> Although the award was rendered in favor of Mozambique, it was only done because the BIT with South Africa was not yet in force at the time the decision was made (October 2019). Thus, a procedural aspect protected the state.

### **Free transfer of funds**

The restrictions on transferring funds out of Mozambique severely hurt its investment competitiveness. Mozambique, together with Zimbabwe, ranks as the country with the highest risk on transfer and convertibility of currencies. Just as with the expropriation indicator, Mozambique's performance has deteriorated from 2015 to 2019.<sup>100</sup> The repatriation of profits and capital to the investor's home country is a primary concern of foreign investors, who pay close attention to this provision.

To be compliant with international commitments, Mozambique cannot restrict the amount of funds that can be transferred. Under international law, this guarantee needs to explicitly offer the foreign investor the opportunity to transfer funds in and out of the country, in a freely convertible currency, and without undue delay. This is how it is stated in Mozambique's BITs with India (Art. 7) and with Japan (Art. 15). Most importantly those BITs ensure that all types of profits may be repatriated out of the host country. There is one accepted exception to this international standard, which is in times of balance-of-payment crisis. In such a case, a state may restrict the transfer of funds for a determined period of time.

Nevertheless, Mozambique enforces a minimum transaction threshold set at approximately US\$40,000 to allow transfer of funds out of the country.<sup>101</sup> Not only does this provision limit affect smaller investors disproportionately, but it goes against all BITs that Mozambique has in force and thus exposes the country to arbitration risk.

### **Investor access to state dispute settlement**

Granting access to international arbitration is a common standard of foreign investment legislation. Since the independence and quality of the judicial systems vary across the globe and executive interference in court proceedings are likely, especially where substantial financial amounts are at stake, this is an important guarantee for foreign investors to resolve disputes with the host state. Weaknesses of the courts in Mozambique may be verified by its ranking at 168 out of 190 economies in the Doing Business indicator that measures enforcement of contracts.<sup>102</sup> The ranking suggests that companies need to invest a significant amount of time and money to get a decision in the first instance of the courts, making them less likely to try or be willing to solve disputes that way.

In a positive step, Mozambique offers access to international arbitration at both the international and domestic level. All the BITs in force and the Investment Law (Art. 25) include a provision that grants access to Investor-State Dispute Settlement (ISDS) to foreign investors. However, for the investors to benefit from access to arbitration, the host country must clearly define the scope of this provision. Such a provision would protect the state against frivolous claims, because ISDS can be very costly.<sup>103</sup> Currently, the Investment Law offers only very general provisions.

Given the challenges ISDS can pose to host economies, solving grievances before they escalate into a legal dispute is in the host country's best interest. Investors in Mozambique have been calling on the government to establish an ombudsman that can help them resolve problems before they escalate. Although APIEX would be a possible candidate, it lacks technical capacity and might create additional challenges.

## Recommendations

Given the gaps and weaknesses outlined in this chapter, restoring trust in the country's legal, regulatory, and institutional framework points to the need for deep structural reforms. Such reforms should be sponsored by a high-level reform champion with enough political clout to ensure adequate implementation across the following recommended focus areas.

### Area 1: Legal and regulatory framework

1. **Modernize the Investment Law, and other related legislation, and align it with international investment policy commitments:**
  - a. Implement a registration mechanism instead of a screening mechanism within APIEX. Moving to a simple registration process in the Investment Law would considerably simplify the process of establishing new investment in the country.
  - b. Define and clearly communicate which sectors of the economy are open, restricted, or closed to FDI. Develop a negative list to increase transparency on sectors where investment is restricted.
  - c. Define the FET guarantee and the protection against indirect expropriation, as those are the most common breaches alleged by investors under ISDS.
  - d. To the extent fiscally possible, allow free transfer of funds in and out of Mozambique for foreign investors. The free transfer of funds is one of the core guarantees that should be offered to foreign investors in a host country.
  - e. Accede to the Hague Apostille Convention<sup>104</sup> to simplify the companies' legalization process by the delivery of a standard certificate. Governments benefit from enhanced integrity and a stable revenue stream from charging fees for authentication services (World Bank Group 2015a).
  - f. Review the specificity and clarity of specific provisions and procedures mandated by the Investment Law.
2. **Improve the legal, regulatory, and institutional framework for SEZs.** This reform area is intertwined with the transformation of APIEX and the modernization of the laws and regulations, but there needs to be an explicit framework for SEZs:
  - a. Modernize current SEZ legislation and streamline it into one independent SEZ law with corresponding implementing regulations.
  - b. Clarify criteria, procedures, costs, and timeline and compile this information in an investor handbook and portal that is easily accessible and widely shared.
  - c. Set up an independent SEZ regulator and improve the business mindset and capacity of staff.
  - d. Promote the creation of serviced industrial land within Mozambique's designated SEZs as a product to offer its potential investors (roads, power, water, telecom, drainage, and so on).

**3. Reduce the prescriptive and mandatory nature of performance requirements:**

- a. Consider adapting the hard quota on foreign labor to implement a more flexible quota based on economic needs or at least a rule adapted to sectoral needs.
- b. Reconsider an economywide local content law. The draft bill on the table is unclear and risks duplicating already existing laws and regulations. Further, it is noncompliant with Mozambique's international commitments, increasing the risk for investor state disputes while at the same time potentially introducing new barriers to investment.

**Area 2: Institutional framework and capacity**

**4. Introduce mechanisms that help investors navigate regulations and procedures, streamline the business environment, and address grievances, such as the following:**

- a. Create a functioning one-stop shop. One-stop shops, especially when they offer online portals, may reduce corruption, eliminate the need for physical presence, and cut cost and time. Linking different agencies requires a well-coordinated and politically supported approach, as other parts of the bureaucracy might fear the loss of control.
- b. Establish an investment ombudsman that has political clout within an agency. The ombudsman function should restore trust with investors so that it can actually act on its mandate.
- c. Systematically publish laws and regulations online, at least those governing investment.

**5. Transform the institutional framework to facilitate investments by clarifying the lead ministry responsible for investment policy and empowering specialized agencies to implement it:**

- a. Design an FDI strategy under the leadership of MIC that is aligned with national development priorities and sets objectives for, targets, and sequences activities to support FDI.
- b. Finalize the institutional reform of APIEX. Clarify how the investment promotion agency will implement the strategic vision developed by the lead ministry. To do so, the ministry should clearly develop the agency's role, priorities, reporting, monitoring and evaluation, and staffing. Regarding division of the regulatory and promoting roles for investment and exports, the former should be with the ministry and the latter with the agency.
- c. Strengthen capacity to proactively deliver the core services to investors, including foreign language proficiency, a business mindset, and a service mentality.

### 4.3. MARKET AND COMPETITION POLICY

Several perception-based indicators point to an overall low level of competition in Mozambique compared with peer economies. For example, the World Economic Forum's 2019 Global Competitiveness Index, ranked Mozambique 131 in terms of domestic competition among 141 economies. That ranking reflects poor performances on distortive effect of taxes and subsidies on competition (124), extent of market dominance (129), and competition in services (133). Among eight Sub-Saharan Africa comparator countries considered, only Angola performs consistently below Mozambique in these indicators.

**In Mozambique, restrictive economywide and sector-specific government interventions combined with unchecked anticompetitive behavior of market players is driving the economy's perceived low level of competition.** The main competition constraints include relevant presence of state-owned enterprises (SOEs) in markets affected by distortive state aid; lack of competitive neutrality between firms; restrictive sector regulations that prevent entry, foster collusion, and discriminate among market players; undue price controls; and absence of an authority able to identify, sanction, and deter anticompetitive market behavior.

#### Lack of Competitive Neutrality between Firms—SOEs in Markets

**In Mozambique, SOEs are present in more than 30 key enabling sectors, frequently controlling significant market shares and often holding dominant positions in their markets.** Overall, the presence of SOEs presents risks for competition and market dynamics when the SOEs hold market power in sectors that could be efficiently served by the private sector. Competition is particularly affected when the SOEs are granted privileged access to state aid or preferential regulatory treatment. The Institute for the Management of State Holdings (IGEPE), an SOE management agency in place since 2001, has a mandate to manage, coordinate, and monitor government investments in the productive sector. With the issuance of Law 3/2018 and Decree 10/2019, the structure and resources of the authority were revamped, and the oversight of several key SOEs was transferred from line ministries to IGEPE. It currently oversees 32 SOEs (public enterprises or majority-owned corporations) plus minority stakes in another 23 privately controlled corporations. The revenues of only six<sup>105</sup> of the largest SOEs<sup>106</sup> currently under IGEPE's oversight represented 9 percent of GDP in 2017.<sup>107</sup>

**Most SOEs have several subsidiaries and minority investments across the economy.** Those investments often are outside of their core activity. For example, CFM, the national rail company, is a main player in the private network of maritime ports and rail transport companies, as well as other highly regulated sectors. It also participates in companies in cement, tourism, and financial services, sectors that normally face fewer market failures that would justify SOE presence (IGEPE 2019). If one considers only the main companies of the agency's economic group rather than all their subsidiaries, IGEPE's SOEs can be found in more than 30 sectors, from natural monopolies and network sectors to activities that could be fairly provided by private investments without market regulation.

**Seven sectors are legal or de facto monopolies, but the private sector competes against SOEs in all the other 23 sectors in which there is available information.** More important, in most of these, SOEs are either monopolists or hold dominant positions in the markets they are in. In at least half of these sectors, an SOE controls more than 50 percent of the estimated market share (appendix C, table C.3).<sup>108</sup> Mozambican SOEs have (a) a legal monopoly on import of liquefied petroleum gases (LPG), automobile gasoline, aviation oil, lighting oil, and diesel; (b) a de facto monopoly on electricity imports, transmission and distribution, telecom backbone infrastructure and fixed lines, airports, and maritime ports;<sup>109</sup> and (c) significant market participation in electricity generation, fuel retail and wholesale, and air transport services. SOEs are also relevant players on news, media, and broadcasting; construction; mobile and internet services; and pharmaceutical imports, production, and retail.

**In the context of a significant SOE footprint in the economy, the government may create an uneven playing field in markets where SOEs compete with private firms by receiving direct or indirect benefits not offered to private firms (OECD 2011).** If not carefully designed, state support measures afforded to market players, be they public or private, can be detrimental to productivity growth. The government can directly or indirectly support market players through various forms, including preferential regulation, tax exemptions, loan guarantees, provision of resources below market prices, subsidies, and capital injections. Most of the largest Mozambican SOEs run with regular losses or have negative equity, depending on subsidies to survive while competing with private players without similar benefits. EDM, for example, had net losses every year between 2013 and 2017. Other key players in their markets, such as PETROMOC S.A. (the main fuel wholesaler and retailer and controller of IMOPETRO, the monopolist fuel importer) and LAM, the airline operator, endure larger liabilities than losses. Such support schemes can also be seen in the balance sheet of public banks: in 2017, almost one-third of the loans given by Nosso Banco (former BMI) were to other SOEs, totaling 400 million out of 1.3 billion meticaís (IGEPE 2019, 117). The air transport sector, with the participation of three loss-making SOEs, illustrates how different public entities along one value chain can discriminate against private competitors by offering goods and services that are not priced according to commercial standards.

**SOEs also face different corporate rules and government strategies that can give them an advantage over other private sector firms.** Mozambique maintains a parallel legal regime with separate laws on SOEs. This affects several dimensions of business management and performance. For example, the law establishes special procedures for bankruptcy of public enterprises that depend on a decision of the Council of Ministers rather than the procedures set out by the bankruptcy rules.<sup>110</sup> IGEPE's 2020–2030 strategy can also lead to lack of competitive neutrality by forcing SOEs to contract with other SOEs rather than seek the best market opportunities. Although promoting synergies among government companies is desirable, it should not discriminate against current competitors or potential entrants (IGEPE 2019).



There is a high degree of overlap between ownership, regulation, and management of SOEs that can lead to preferential treatment for public companies, crowding out private investments. Government officials are often part of SOE staff and management teams.<sup>111</sup> Sector regulators respond directly to line ministers, and SOEs with monopoly positions often act as sector regulators by defining entry and prices, as in the electricity sector. Even though the strengthening of IGEPE's structure and mandate following Law 3/2018 and Decree 10/2019, as well as the development of the 2020–2030 strategy, were relevant improvements in Mozambican SOE policy framework, more needs to be done to further insulate regulators and managers from political influence, as well as to prevent dominant SOEs from either directly regulating markets or receiving preferential regulatory treatment owing to their common links to the government. Some of these risks can be illustrated by the governance of the electricity sector (box 4.1).

#### **BOX 4.1 COMPETITIVE NEUTRALITY RISKS ILLUSTRATED BY THE CASE OF THE ELECTRICITY SECTOR**

Electricidade de Moçambique (EDM) is a vertically integrated state-owned enterprise (SOE) in the electricity sector, comprising generation, transmission, and distribution services. More important, it often fills the shoes of the sector regulator, participating in the decision process of licensing new entrants while serving as the ultimate buyer of all production and setting final prices for consumers without regulatory oversight. These characteristics can generate several competition risks. First, the verticalization of upstream segments—where entry and competition are feasible—with downstream sectors characterized by natural monopoly features, often dependent on subsidies, facilitates cross-subsidization that may distort competition along the value chain. Second, the direct participation of the SOE in regulatory matters, by identifying which players can enter segments of the market and in which conditions, can generate an unlevel playing field. Finally, given the monopoly in distribution, unregulated prices and service conditions can facilitate the exercise of market power.

Sources: Based on consultations with public and private stakeholders and on IGEPE 2019.

Mozambique should consider developing frameworks to embed competition principles in government support measures and therefore minimize economic distortions. State support measures should always (a) be awarded based on transparent criteria applied consistently across economic activities and firms, (b) be granted to broad segments of the economy under equal conditions, rather than on an individual-firm basis, and (c) be subject to close monitoring of their expected effects. At the same time, Mozambique should implement mechanisms to separate commercial and noncommercial activities of SOEs and determine the true cost of public service obligations in order to avoid inappropriate cross-subsidization of commercial activities. Finally, it is important to promote separation between ownership, regulatory, and management functions of government toward SOEs.

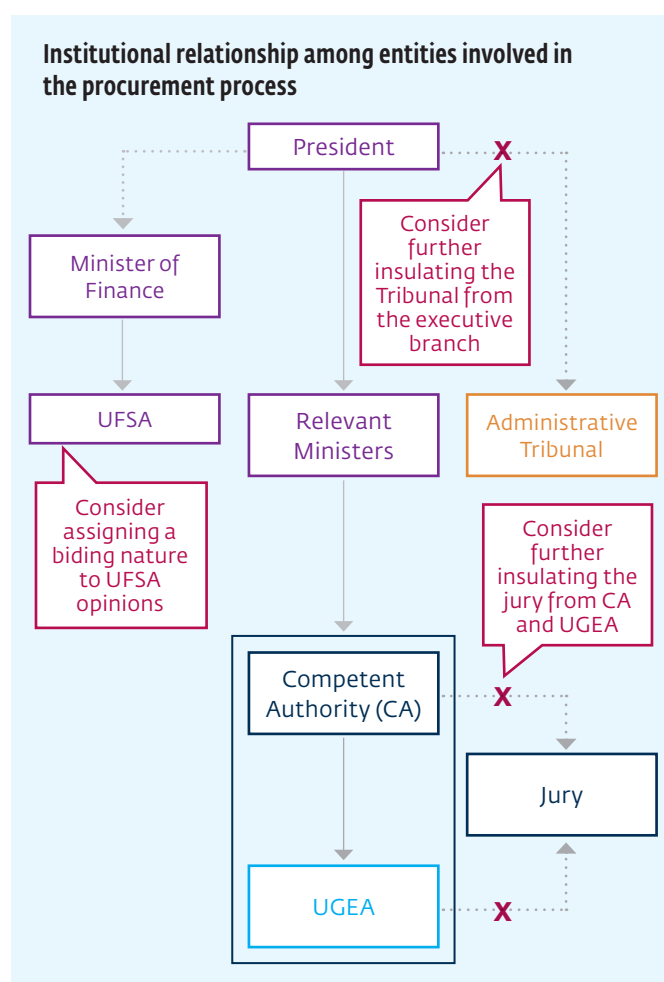
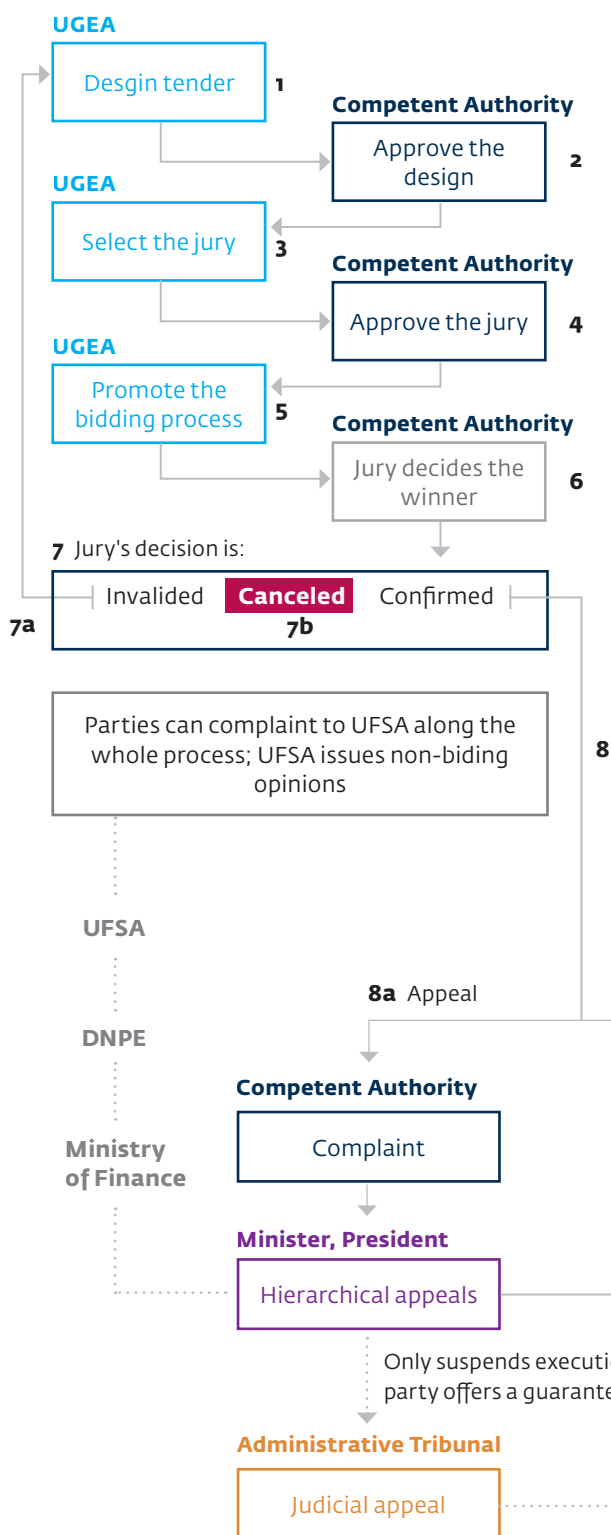
## Restrictive Sector Regulations That Prevent Entry, Foster Collusion, and Discriminate

### Public procurement processes that are complex and opaque

Promoting greater market participation and transparency in public procurement will allow for open and competitive selection of suppliers as well as actions to prevent bid rigging. Public procurement accounts for a significant share of the economy: 31 percent of public expenditures and about 10 percent of the GDP in 2018. Even though Mozambique has advanced significantly on its procurement rules—promoting reforms in 2005, 2011, and 2016—implementation of the procurement framework is one of the main challenges. Although the 2016 legislation established bidding as the rule in procurement processes, and special and exceptional procedures as the exception, in practice around 50 percent of procurement is single sourced. Private stakeholders claim that the remaining amount is conducted under unclear processes, without impartial review or transparency, despite the internationally aligned principles set out by the legislation.

The government, led by MEF's National Directorate of State Assets (DNPE), is taking actions to develop IT systems and electronic databases to allow implementation of e-procurement in the country. Such systems and information, including a repository of suppliers, reference prices, and list of goods and services procured, will facilitate the participation of market players and increase contestability and opportunity for SMEs. At the same time, increased transparency and data systematization improve monitoring and further the identification and sanctioning of bid rigging, a system that the competition authority, once established, can leverage.

However, more can be done to further insulate the entities involved in the process from undue influence. Public procurement by government entities (excluding SOEs) involves a multitude of government players that are connected by either direct hierarchy or channels of influence that reduce the scope for checks and balances and impartial decision making. Figure 4.11 presents a flowchart on all the basic steps, from the design of a tender, to results issued by the competent authority at the procuring entity level, to available appeals until contract execution. The flowchart also highlights, in its upper-right side, the relationship among the main stakeholders participating in the process. Those include (a) the UGEA (Unidade Gestora de Aquisições do Estado), under each procuring entity, responsible for designing the bids, proposing the composition of the jury, and implementing the procedures; (b) the competent authority, head of the procuring entity, responsible for approving the design, the jury's composition, and the jury's decision, as well as serving as first appeal instance; (c) line ministers and the president, who provide hierarchical appeals; and (d) the Administrative Court (TA–Tribunal Administrativo), that provides (in most cases mandatory) clearance prior to the execution of the contract and also serves as final appeal level. The figure also references the UFSA (Functional Unit for Monitoring of Procurement), a body under MEF that is responsible for the overall procurement policy in the country, in addition to providing training, monitoring, and overall regulation to all UGEAs. It can also receive complaints during tender procedures and issue nonbinding opinions.

**FIGURE 4.11 PUBLIC PROCUREMENT IN MOZAMBIQUE: FLOWCHART AND MAIN STAKEHOLDERS****Flowchart of basic tender procedure**

Source: Work Bank staff.

Note: CA = competent authority; DNPE = National Director of State Assets; UFSA = Functional Unit for Monitoring of Procurement; UGEA = State Procurement Management Unit (Unidade Gestora de Aquisições do Estado).

**As figure 4.11 shows, the lack of insulation between stakeholders can favor conflicts of interest.** The entity procuring the goods and services (competent authority and UGEA), the stakeholder deciding the tender (jury), those responsible for first levels of appeal (competent authority, ministers, and president), and the final appellate entity (Administrative Court) all have direct or indirect links (through direct reporting hierarchies or through the ability to appoint officials) that jeopardize the robustness of the checks and balances framework that is needed to mitigate conflicts of interest. In this context, and considering the implementation challenges faced in the country, the government should consider (a) separating the jury from the procuring entity; (b) transforming UFSA into an official appeal level, with binding power; and (c) strengthening the rules of engagement of the Administrative Court, guaranteeing greater autonomy in relation to the executive branch.

**Finally, some risks associated with excluding SOEs from the general procurement regime must be highlighted.** Both the procurement legislation of 2016 and the public enterprise law of 2018 established that SOEs should apply general principles such as giving preference to bids and promoting transparency, publicity, and impartiality. However, they allow each company to develop its procedures and criteria (Art. 25, Public Enterprise Law), which should be approved by IGEPE. On one hand, it is positive to provide SOEs with greater flexibility when buying goods and services, particularly for those that perform commercial activities and compete against the private sector. On the other hand, it places a significant burden on IGEPE to effectively approve and monitor the procurement rules of each SOE. This latter role will be particularly relevant, for as long as Mozambique fails to separate commercial and noncommercial SOEs, the current legislation may allow companies offering services of public interest, under public subsidies, to procure outside of the general procurement standards.

### **Undue price controls**

**Mozambique currently has several price control policies in place that do not consider competition dynamics as one of their guiding principles.** Countries should be able to differentiate sectors characterized by a natural monopoly that could merit price fixing, such as sectors with high barriers to entry and market power that could function under access regulation rules, or those markets that, although they may benefit from other types of regulation (for example, quality, security, and information), could fairly set all their prices competitively. Mozambique implements price controls in several sectors that are currently supplied by several players, most of them private, in fairly functional sectors, such as wholesale and retail of fuel, retail telecommunications, and some staple goods. On the other hand, it fails to control access or prices in monopolized industries in a context of lack of antitrust enforcement, such as electricity. Under Decree 56/2011, the government can control profit margins, fixed at 10–12 percent for wholesale and 20–25 percent for retail, of several staple goods such as tomatoes, potatoes, and onions. Although they are all relevant for the food consumption basket, the rationale for price controls as the adequate policy for those goods is not clear.

At the same time, the National Inspection Authority (Inspecção Nacional de Actividades Económicas; INAE) rarely has the human resources and the needed information (as receipts) to carry out monitoring and implementation of the price controls. To find a sustainable solution to issues of high prices, the government would be advised to conduct in-depth market assessments to identify the root causes of potentially high prices in Mozambique and to advocate for reforms.

### **Absence of an authority able to identify, sanction, and deter anticompetitive market behavior**

The absence of a sound antitrust framework cannot be overlooked. Competition laws can promote market efficiency, lower prices, and higher quality of goods and services by providing a level playing field and opening markets to entry. For that end, competition laws typically deter business practices that restrict, distort, or prevent competition that stem from agreements and concerted practices among competitors to unilateral abuses of market power by dominant players.

Even though Mozambique already has a Competition Law, the authority responsible for implementing the competition framework has not yet been established. The Competition Law issued in 2013 includes powers on identification and sanctioning of anticompetitive practices (for example, cartels and abuse of market dominance) and merger control. The law features relevant enforcement tools such as dawn raids, capacity to request information from both private and public stakeholders, and minimum due process rules.<sup>112</sup> However, overall lack of technical capacity, lack of budget allocation, and effective appointment of officials has prevented the creation of the institutional body that would be responsible to implement the competition mandate. Establishing the competition authority is part of the government's Action Plan for the Improvement of the Business Environment (PAMAN 2019–2021), and making sure this is accomplished is a paramount step toward promoting competition in the country.

Despite the law, there are still some significant shortcomings in the current framework that, once an authority is established, could reduce the effectiveness of antitrust policy. Improvements could be made in terms of (a) enabling competition advocacy, (b) boosting merger control, (c) streamlining the types of anticompetitive practices covered by the framework, (d) strengthening enforcement tools, (e) limiting exceptions and exemptions, and (f) improving the institutional design. When discussing each of these possible improvements, it is important to keep in mind that to implement them Mozambique will need to develop minimum technical capacity to deliver on its competition policy mandate, particularly economic training.

## Recommendations

To promote greater competition it is necessary to implement a comprehensive framework that includes a set of policies and laws ensuring that competition in the marketplace is not restricted in a way that reduces economic welfare (Motta 2004). Pro-competition reforms are not a synonym of deregulation or privatization; they encompass government rules and interventions to help markets function better and deliver welfare-enhancing results that consider the specific country context and priorities.

### Area 1: Competitive neutrality

On SOEs:

1. Add SOEs' effects on markets as criteria in the IGEPE's SOE and public investments 2020–2030 strategy to inform the creation, continuation, or elimination of public investments and to inform other pro-competition sector reforms to accompany exits.
2. Embed competition principles in the design of incentive schemes or consider some form of state aid control, including to reduce the degree of discrimination and discretion in their granting processes.
3. Increase transparency in incentives granted by publishing beneficiaries and increase ex post monitoring to assess the impact on the market. Such a control and monitoring mandate could be included under the competition authority's mandate.
4. Review the Law on Public Enterprises to demand separation between commercial and noncommercial activities of SOEs.
5. Reduce the number of corporate rules and regulations favoring SOEs relative to private players, such as bankruptcy and antitrust exemptions to noncommercial activities of commercial SOEs.
6. Duly staff, resource, and insulate sector regulators to prevent SOEs from acting as de facto regulators in their respective industries, and setting standards, entry criteria, or prices that create disadvantages.

On public procurement:

7. Review the rules of engagement of key stakeholders along the public procurement value chain in order to increase their insulation and strengthen checks and balances mechanisms.
8. Consider removing the oversight that the procuring entity currently has over the jury.
9. Consider assigning binding nature to the Functional Unit for Monitoring of Procurement (UFSA's) opinion and including it as part of the appeal procedures.
10. Implement the antitrust law to identify, sanction, and deter bid rigging in public procurement.
11. Finalize the databases and electronic systems needed to implement e-procurement.



On price controls:

12. Develop a methodology to assess what markets merit price intervention, and of what type and for how long. Use this methodology to consider introducing price controls on unaccounted monopolized sectors while removing controls from competitive retail markets.

## Area 2: Competition enforcement framework and establishment of the competition authority

13. Ensure the creation of the competition authority, with assignment of a public budget, appointment of officials for its board, and technical staff to meet the demands of the competition mandate.
14. Review current law and secondary legislation to do the following:
  - Enable competition advocacy, adding capacity to review draft and current laws, policies, and regulations; develop market studies and inquiries; and promote awareness to market players.
  - Boost merger control:
    - Include minority acquisition and joint ventures in merger definition.
    - Limit merger thresholds to objective criteria, preferably annual revenues.
    - Implement fast-track procedures to assess less complex transactions with mandatory notification.
    - Define criteria to implement public-interest grounds for merger approval.
  - Streamline anticompetitive practices by defining hard-core cartels, considering them per se illegal and differentiating them from other coordinated practices.
  - Strengthen enforcement tools:
    - Increase minimum fines and develop a fining guideline.
    - Establish settlements for anticompetitive practices and revamp leaning regime by (a) allowing 100 percent fine discount, (b) creating a marker system, and (c) regulating use of information.
  - Limit exceptions and exemptions by developing economic grounds and objective criteria on how to narrowly apply these carve-outs, especially for players performing noncommercial activities, and in cases with a need to protect a sector because of consumer or national interests.
  - Improve institutional design:
    - Insulate the authority from public stakeholders through more robust rules of engagement of senior officials, such as cooling off periods and objective criteria for removal, and less delegation of functions from the competition authority to the Council of Ministers.
    - Insulate the authority from private stakeholders reviewing the right of business associations, labor unions, and consumers to take part in decision-making bodies of the competition authority.
    - Review merger fees to align them with service costs; limit the capacity of the authority to be financed by the fines it imposes.

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# APPENDIXES

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## APPENDIX A. OTHER SECTORS WITH POTENTIAL

### A.1. Downstream Linkages to Extractive Industries

The gas investments in Mozambique could open downstream opportunities for **diversification and upgrading to other sectors**.<sup>113</sup> These include (a) nonliquefied natural gas and rare gases, each providing further progression opportunities to chemicals, metals, and agricultural products; (b) chemicals, including urea ammonium nitrate, which is used as a crop fertilizer; and (c) metal products, where there is a direct link to base metals (Standard Bank and Conningarth Economists 2019).

In addition, analysts believe further industries could be developed. Examples are around small-scale liquefied natural gas (SSLNG) and power production, methanol to olefins and further petrochemical industry, LNG bunkering, and liquefied petroleum gas (LPG). These opportunities are possible to consider, given novel developments in infrastructure development and petrochemicals worldwide.

In 2014, Mozambique approved a natural gas master plan that lays out ambitious plans to create a domestic downstream industry. This plan, particularly to offer gas to support industrialization, was included as a motivating factor—because of its potential social impacts—in obtaining Mozambique’s endorsement to develop the LNG projects. The gas master plan aimed at maximizing domestic benefits of national resources, promoting industrialization, and avoiding problems that a number of African oil producers have encountered in developing their resources (Eardley-Taylor 2015).

The gas master plan sets a domestic market quota of 20 percent of all gas produced and processed, which was increased to 25 percent in the Petroleum Law approved later in 2014. According to data published by the National Petroleum Institute (INP), Mozambique natural gas consumption in 2016 equaled 33 million gigajoules (GJ), corresponding to approximately US\$10 million. Therefore, the domestic market quota of 25 percent is much higher than Mozambique’s current domestic consumption, as per capita liquid fuels consumption remains well below the Sub-Saharan African average.

In line with the process of developing the local market, Area 1 operator signed an memorandum of understanding (MOU) with government to supply 400 million standard cubic feet per day (MMSCFD) to the domestic market.<sup>114</sup> The gas would be sold by the concessionaire to the aggregator (identified to be ENH or its subsidiary) for purchase on commercial terms, with the delivery point being at the LNG site. A provision following the initial agreement in 2015 indicated that the gas for downstream processing would be purchased at US\$2.50 per MMSCFD. The Area 4 Plan of Development (POD) includes a domestic gas commitment to supply up to 500 MMSCFD, of which an initial 150 MMSCFD is associated with Phase 1, with an additional 350 MMSCFD to be developed in terms to be agreed.



Even if the domestic market is not fully capable of supporting such planned production, the wider region could offer a market. All of Mozambique's neighboring countries are net importers of fertilizer; all import their downstream petroleum products (except South Africa and Zambia); and energy constraints have been a persistent challenge throughout southern Africa for years. Downstream processing relates to highly capital-intensive industries that usually rely on economies of scale to be competitive and on specialized jobs. The focus on downstream opportunities is therefore linked to a vision for domestic industrialization and its potential spillover effects, rather than on high hopes of direct job creation.

Downstream opportunities are hindered for the moment by volatile oil prices, the uncertainty around COVID-19, and delays in decision-making, legislation, and policy making. The execution of domestic gas projects requires that multiple challenges be solved at the same time. As an example, the prices for crude oil, refined petroleum, and natural gas are more volatile than prices for about 95 percent of products sold by domestic producers.

To establish a sustainable model for downstream opportunities, one variable is the international price at which LNG is traded. That represents the benchmark against which the concessionaires evaluate the profitability of selling gas to the aggregator instead of processing it for LNG export. However, the gas allocated to downstream processing may not be priced to the aggregator at the same price as it is when liquefied, affecting profitability.

Furthermore, for the case of gas-to-liquid, international oil prices should also be considered, as the final product should be competitive with—and preferably cheaper than—imported fuel. In the current COVID-19 environment, this comparison is difficult to achieve. The focus of downstream companies has been on identifying a mechanism to determine a fair price for gas, one that could trigger in-country investment, allowing downstream processors to obtain some margins. For that, it should be considered that the total investment required to establish a plant in Mozambique also includes the cost of importing a skilled labor force, training the local workforce, and developing infrastructure.

At the time of writing, a fair price could range from US\$0.70 to US\$1.70 per MMSCFD, when the Henry Hub price for natural gas fluctuated between US\$2.45 and US\$3.00 per MMSCFD in the previous 12 months.<sup>115</sup> In 2015 an indicative price of US\$2.50 per MMSCFD was agreeable by the upstream companies and viable for downstream processing. The pricing model clearly needs to cater to the possible—and today probable—further depreciation of the commodity to ensure viability for downstream industry (Zitamar News 2017).

### **Description of the downstream opportunities**

For the moment, three proposals have been accepted, and the respective MOUs have been signed, with a clear indication that prices still need to be negotiated. Since these were signed, one project has officially withdrawn and the remaining have not made any progress.

### Gas-to-liquid plant by Shell

Anglo-Dutch oil major Shell signed an MOU with the government for 330 MMSCFD of gas from the fields to supply a proposed 38,000 barrels per day gas-to-liquid (GTL) plant. The plant will produce synthetic diesel, naphtha, and kerosene, and 50–80 MW of power.<sup>116</sup> However, uncertainty remains on the quantity of gas supplied by Total, after its purchase of previous concessionaire Anadarko. The American company had initially committed to 400 MMSCFD but then declared that it will make only 100 MMSCFD available in an initial phase; two years after that, they would offer the additional 300 MMSCFD, coming online around 2029.

The economics of Shell assumed the project would be up and running in the mid-2020s, but this now looks optimistic. Area 4, operated by Exxon, was expected to deliver 500 MMSCFD of gas to the domestic market. The first 100 MMSCFD would be delivered when the two trains come online, and the remaining 400 MMSCFD would be delivered once the government signs a sales and purchase agreement with a gas off-taker. However, at the end of February 2021 Exxon postponed indefinitely its FID for Area 4. If implemented, the Shell GTL plant would supply a captive domestic market where diesel currently costs US\$10 per barrel more than in Europe.

Shell made a long-term commitment to Mozambique, but its interest in the GTL plant project may decrease with time. It will be competing with other global opportunities presented to the company and changes in the price of diesel. Only a few GTL plants have ever been built, with wildly varying costs. Sasol's 34,000 barrels per day (b/d) facility in Qatar cost US\$1.2 billion, though Chevron's 33,000 b/d plant in Nigeria rose from the US\$2 billion estimate to US\$10 billion actual cost. Building a plant on the remote Afungi Peninsula, with a limited pool of local skilled labor, is likely to hike up costs.

At the same time, state-owned Empresa Nacional de Hidrocarbonetos (ENH) is conducting a feasibility study to establish the location, design, timeframe, and capital investment needed for the construction of the first refinery, which should be fed by crude supplies from the Rovuma and Mozambique basins (Goodrich 2020). In the meantime, proposals are being evaluated to define how the gas can be transported from the north to the south. The options considered are a US\$5 billion pipeline crossing the country or LNG terminals to be built in Nacala, Beira, and Maputo.

### Fertilizer Plant by Yara

Norwegian fertilizer giant Yara International signed an MOU requesting 80–90 MMSCFD to produce annually 1.2–1.3 million tons of ammonia and urea, and 30–50 MW of electricity.<sup>117</sup> This plant would provide Mozambique with an opportunity to reduce fertilizer imports and increase domestic product supply to increase agricultural outputs. An optimal fertilizer project (fed by domestic gas) would also include a nationwide system of fertilizer distribution, a detailed program of training in the use of fertilizers, and an arrangement for increased mechanization of agriculture.

**In November 2020, Yara officially abandoned its project in Mozambique, having failed to reach an agreement over the gas purchasing price (Zitamar News 2020).** The company was initially committed to set up a US\$2 billion fertilizer plant, but in 2016 it had narrowed its ambition to producing nitrogen fertilizer for exports. Four years later, the company shifted its strategy to farming and food value chain solutions. Large-scale commodity greenfield projects are no longer prioritized, particularly when their unit economics are not yet guaranteed. Additionally, the international nitrogen price has not been supportive of project profitability. In June 2019, Yara had threatened to abandon the project unless the gas could be purchased at US\$0.75 MMSCFD (Zitamar News 2019).

#### Power plant by GL Africa

**Kenyan-owned GL Africa Energy requested 41.8 MMSCFD of gas to build a 250 MW power plant in Nacala.** The UK-listed company signed an MOU with Mozambique in May 2018 (Zitamar News 2018); however, the bidding proposal raised some concerns because it did not include a solution to transport the gas from Palma (Standard Bank and Conningarth Economists 2018). The company did not release any statement on the cost of a 400-kilometer pipeline, whether importing gas such as LNG would be a viable alternative solution, nor at what price it would sell power to the national grid, if gas was priced at US\$2.50 per MMSCFD.

#### Other opportunities to be explored

Although other downstream opportunities of various dimensions have been proposed, pragmatism and experience are needed to prioritize the investment projects that are commercially worthy of support.

#### Small-scale liquefied natural gas (SSLNG)

**The geography of Mozambique, with its 2,700 kilometers of coast, offers better opportunities for maritime transport than for long-distance pipelines** (Standard Bank and Conningarth Economists 2018).<sup>118</sup> The abundance of gas reserves suggests that there should be no constraint to making local LNG available to local and regional customers, particularly because Mozambique's domestic demand will always be a small portion of the produced LNG. Over time, Mozambique will have access to significant revenues from LNG proceeds, some of which could be used to fund the upfront costs of SSLNG infrastructure.

**Mozambique could therefore develop a coastal network of gas-to-power plants located at development centers.** It could even develop the ability for truck-transported LNG to substitute for diesel fuel, particularly targeted at local and regional mines of Malawi, South Africa, Swaziland, and Zimbabwe. In this vein, SSLNG offers a diesel import substitution opportunity.

**The Rompco Natural gas pipeline may open up a route to market for liquefied natural gas (Burkhardt 2020).** SASOL launched a bid to sell its stake in half of the 865-kilometer (538-mile) Rompco natural-gas pipeline that runs from Mozambique to South Africa. Rompco currently transports gas from the onshore Pande and Temane fields in Mozambique to Sasol operations in South Africa. After those resources are depleted, it could be filled again from LNG landing at a terminal planned in Maputo. Total SE and Gigajoule Group were among bidders for the pipeline stake in October 2020; they are also partners in the import terminal.

#### LNG bunkering

**LNG bunkering is the practice of providing LNG fuel to a ship for its own consumption, with the advantage of significantly reducing pollution.** In 2020, the International Maritime Organization introduced rules that prevent the maritime emission of high sulfur diesel (more than 0.5 percent) powering ships across the oceans. In the medium term, the market expects a major increase in the maritime usage of LNG, so-called LNG bunkering. Mozambique can serve the transit traffic passing around the Cape of Good Hope (for example, traveling to the Middle East or to Asia one way, or to Latin America and North America the other way), cementing Mozambique's presence in the global maritime economy. LNG bunkering has the advantage of requiring low capital expenditure (US\$60 million for individual sites). SSLNG and LNG bunkering are closely linked opportunities.<sup>119</sup>

#### Liquefied petroleum gas

**The most concrete downstream opportunities are being explored by Sasol and its partners in the Central Termica de Temane, where the first LPG plant has a US\$760 million investment to produce liquefied petroleum gas for domestic consumption.**<sup>120</sup> Sasol and its partners aim to develop new gas reserves in Inhambane, supplying a 450 MW gas-fired electric power project for the Centrale Termica de Temane (CTT) and producing 30,000 tonnes of LPG per year. This will be the first plant producing gas for domestic consumption in Mozambique and will be enough to replace 75 percent of imported gas per year.<sup>121</sup> The remaining gas from the Sasol Production sharing agreement license will be exported to South Africa.

**The investment is also expected to generate clean energy for Mozambique and the region.** The Spanish company TSK has been appointed to design and construct the CTT power facility with financial arrangements expected to close by Q2 2021. First power is anticipated in Q4 2023. CTT will provide power to EDM under a 25-year tolling agreement. CTT will anchor the development of the 563-km high-voltage transmission line and associated transmission infrastructure (the Temane Transmission Project or TTP), which will eventually carry power to Maputo, home to 1.2 million people, and then to the Southern Africa Power Pool (SAPP).

**The Area 4 operator in Cabo Delgado province will offer LPG burners, stoves, and associated equipment, such as bottles and hoses, to 5,000 local households and community centers.** It will also provide training on the correct use and maintenance of the equipment.

Downstream processing may seem to offer obvious advantages, starting with a far lower export transport cost compared with that of the unprocessed commodity. Nevertheless, factors such as the absence of necessary economies of scale, the poor availability of key inputs, the limited size of the domestic market, long distances to an export market, and the lack of a favorable business climate tend to offset that advantage.

## **Constraints to development and areas of critical work**

### **Lack of common vision and coordination**

According to analysts and downstream off-takers, the government of Mozambique does not seem to have a defined vision for what it wants from its domestic gas reserves. Gas is a cross-sectoral topic for which many ministries need to be involved in the negotiations. The ministries that need to be involved start with the Ministry of Economy and Finance, for the obvious budgetary implications of the projects; Mineral Resources and Energy, for technical discussions; Industry and Commerce, for the causal relationship between domestic gas and industrialization of the country; Public Works and Water Resources, for the need for infrastructure in project development; the ministries of Land and Environment, Agriculture and Rural Development, and Inland Water and Fisheries, to regulate rights of use and access to land and sea; and Education, for local content repercussions. Various people, including those in the government, suggest that ideally the negotiations would be led directly by the cabinet of the prime minister to ensure coordination and a strong political champion of the cause, instead of being a sectoral discussion that engages multiple ministries, as it seems to be treated today.

**The government's lack of capacity to negotiate the complex petrochemicals opportunities is a challenge.** At each step of the decision process—whether negotiating gas volumes, gas price, the timing of delivery, or sea access for domestic gas users at the Afungi site—large asymmetries in the available information about the future hinder the proceedings. Corporations typically hold a significant advantage over government policy makers in this regard, with a much keener understanding of the risks they run.

**A revised and clearer framework for delivering on this agenda is still absent.** It is true that LNG projects are critical to ensure domestic gas, yet more focus is needed to drive other projects forward. To date, a clear framework determining the contractual arrangements under which gas would be sold and purchased by the aggregator (Empresa Nacional de Hidrocarbonetos; ENH) and the political, legislative, and regulatory underpinning of this framework are still lacking.

### Unclear pricing model

The government wants the operators of areas 1 and 4 to offer domestic gas at cost plus, which is the cost of delivering the domestic gas to users, plus a negotiable fair return. Under this plan, operators would make their infrastructure available to transport the gas and absorb the cost. The operators, instead, propose a netback pricing model, which uses the value of the gas on the international market, less transport costs. However, gas off-takers allege that under these terms, the viability of their projects would be jeopardized. A joint task force led by ENH was created to study the ideal pricing model, with an expectation of producing a term sheet that includes a pricing model and the aggregator role.

Settling on case-by-case negotiations does not seem to be a viable option, even if downstream industries require different maximum prices for their viability. An option raised by actors in the sector could be to negotiate a reasonable fixed price, with government subsidizing industries of interest that require lower prices, using proceeds from LNG exports. This solution may not be ideal to ensure competitiveness and sustainability.

### Issues with land

Shell requires 650 hectares to establish its own plant. To date, Area 1 agreed to release 350 hectares, and 300 hectares remain under negotiation. The approved domestic gas projects require essential access to the sea. Under the Decree Law, the concessionaires were granted exclusive rights of access and operation of the maritime area in Palma Bay, reaching out from a 7,000-hectare site proposed for their liquefaction plants. However, they do not have exclusive access rights to the deepwater channel, which is part of the concession contract for the materials offloading facility within this maritime area inside the 18,000-hectare Afungi industrial park.

### Other experiences with downstream links in the gas sector

Mozambique can learn from the successes and failures of other experiences in the region. Those countries with experience include Tanzania, Equatorial Guinea, and Nigeria.

### Tanzania—downstream opportunities

Tanzania has been producing natural gas from its Songo fields since 2004, supplying electricity and power needed for industrial purposes. Switching to the lower-cost gas feedstock allowed a significant saving on fiscal subsidies (Ledesma 2013). In the past decade, explorations led to major commercial discoveries that are now beginning to be developed. As in Mozambique, natural gas is envisioned to be used for LNG export, power generation for the domestic market, and capitalization of downstream links, including fertilizer, compressed natural gas, and petrochemicals. However, the political decisions needed to weigh alternatives are still missing. As in Mozambique, prices are an issue in Tanzania. According to the view of private sector players interviewed for this report, the negotiations in Tanzania are at a very early stage, and the figures presented are far from viable for downstream processing industries.



### Equatorial Guinea—downstream opportunities

**Mozambique can learn from Equatorial Guinea’s experience in producing over 1 million tonnes a year of methanol.** Processing other derivatives, such as formaldehyde (whose demand is expected to increase in the short term and be fully dedicated to the export market) is being discussed in Equatorial Guinea. Formaldehyde is used to produce many final consumer goods, particularly resin used as wood adhesive in the plywood and particleboard industries. A formaldehyde resin plant could use current methanol production, is not expensive to build, and is scalable. Also, a complementary plywood plant would help capture the full value of the resin plant, and may have important synergies with the forestry sector (World Bank 2019a).

**Equatorial Guinea’s experience in ammonia plants, with over 3,000 tonnes of world-class ammonia being produced daily, is also worth noting.** Ammonia is a product derived from combining hydrogen (obtained from the conversion of natural gas or liquefied petroleum gas) and nitrogen. This is often integrated with urea, which is produced from ammonia and carbon dioxide. Production capacity in Equatorial Guinea is expected to increase in the next three years as a result of low natural gas prices in the United States, where many companies are upgrading their ammonia plants into new nitrogen plants.

### Nigeria—gas-to-power supply chain

**Nigeria can also serve as an example of a country envisioning the development of its own gas-to-power supply chain** (Peng and Poudineh 2017). In Nigeria, the largest weakness was the constant sabotage of gas transmission networks as a result of social unrest in the Niger Delta, causing technical failures and insolvency of the power distribution segments. Redressing instability and attacks in the northern and central regions of Mozambique continue to be of paramount importance to attract international investments and to guarantee the development of national industries.

## Recommendations

1. **Mozambique needs a new gas master plan.** It should analyze domestic demand and scenarios on the actual benefits of different downstream opportunities available. The vision should be established and the role of each player identified. This deliberation includes what the government is willing to do to support developing the sector. The pricing model needs to be clear. Once the pricing mechanism is established, the government will have a clearer view on realistic economic returns for downstream processing, and realize a cost-benefit analysis on the opportunity for establishing economic incentives to support domestic gas for diesel, power supply, or fertilizer.

2. **The gas master plan needs to take into account the most recent developments in the sector, including the prospects on prices but also the technological developments.** Advancements in SSLNG over the past decade mean that this could be a cheaper and more efficient solution than a pipeline to deliver gas to different demand centers. SSLNG could connect Pemba to Nacala, Quelimane, Beira, Inhassoro (connecting with Sasol), and Maputo, and then from each city could go by railways and roads to the interior. As discussed in section 3.5 on connectivity, SSLNG could then power generation plants for the country and for regional export. An evolving understanding of the climate crisis, and the extent to which emissions will need to be limited, should also inform the thinking. An overdependence on fossil fuel could leave the economy stranded.
3. **Mozambique needs a political champion driving its domestic gas strategy.** A political champion could clarify the country's objectives and coordinate government decisions to pursue them. The Decree Law nominates an aggregator to purchase gas for domestic gas processing. However, several details are still unclear with regard to ENH's role and responsibilities as aggregator; those details need to be addressed in order to approach the concessionaires' negotiations on pricing and gas supply from a stronger position.
4. **In addition to prices and agreements, the development of downstream opportunities will depend on broader constraints in the economy.** It is important to remove constraints and bottlenecks preventing such opportunities, including those relating to skills development, access to credit, energy supply, transport infrastructure, and business environment. The boost to extractive enterprises should be an opportunity to stimulate a network of gas-based industries that have the potential to generate incomes and jobs through a major structural transformation of the economy, particularly one focused on the industrial development of northern Mozambique (Oxford Economics 2016).
5. **Addressing conflict in Cabo Delgado will be critical for these investments.** In the absence of a stable and conflict-free environment in northern Mozambique, the investments in downstream opportunities are unlikely to occur. The Nigeria experience has shown that fragility and conflict are critical elements preventing the development of these additional opportunities. Gas exploration would still happen in most any scenario, but the industrial developments depend on more certainty to be viable.

## A.2. Financial Sector

### Current status

The Mozambique financial system entered this period of economic uncertainty created by the COVID-19 pandemic with weak policy buffers and preexisting financial sector vulnerabilities. Those include (a) a large share of bank assets and liabilities denominated in foreign currency; (b) weak creditworthiness of the sovereign, to which banks are highly exposed; and (c) weak prudential and crisis management frameworks. The deteriorating economic outlook will affect the financial sector, with the potential of spillovers to the real economy. Second-round effects will be exacerbated by these vulnerabilities.

The gains in financial intermediation of the first half of the 2010s in Mozambique were significantly reduced in 2017 following the economic slowdown and hidden debt episode. Those gains may continue to deteriorate given the impact of COVID-19. Financial sector assets in 2019 were equivalent to about 70 percent of GDP. Bank deposits stood at 45 percent of GDP, above the Sub-Saharan Africa average. Private credit to GDP has stabilized at 22 percent, slightly higher than the average and better than peers, but significantly lower than the average 32 percent in 2014–16. The reduction in private credit was accompanied by an increase in lending to the government and reserves at the central bank. Banks are primarily funded by deposits, with limited access to wholesale funding. Domestic resource mobilization is limited.

The banking sector remains highly concentrated despite a marginal reduction in concentration levels in the last few years (table A.1). Most assets are controlled by the three largest commercial banks (out of 19 banks) in the system (67 percent of banking assets as of Q2 2019), with a small reduction in market share since 2016. All but two banks are privately owned, mainly by foreign investors, primarily from Portugal and South Africa. Moza Banco merged with Banco Terra de Moçambique in September 2018. Further mergers are likely.

Bank profitability has been high and well above regional and income peers. Average return on equity stood at 23 percent in 2014–19. Returns have been supported mostly by high interest rate margins and fees and commissions, with no observed gains in efficiency. In 2019, the average cost-to-income ratio for banks was 59 percent (slightly higher than the average 57 percent in 2017–18).

Banks are exposed to high credit risks, particularly in the context of COVID-19, and despite some reduction in nonperforming loans (NPLs) in 2018–19. Exposure to underperforming SOEs is a key vulnerability. NPLs were high at 10 percent in 2019, above the expected median of regional and income peers. Five banks have NPL ratios above 20 percent of gross loans, although most of them have high provision levels. The coverage of prudential NPLs is very high (89 percent in 2019), reflecting the fact that most identified NPLs have been delinquent for more than 360 days.

Capital buffers have increased significantly since 2016 following higher prudential requirements, but they could be overestimated and are likely to be affected by the impact of COVID-19.<sup>122</sup> The industrywide capital adequacy ratio increased 20 percentage points to reach 29 percent in 2019, and the leverage ratio increased from 5 to 13 percent. This reflects high profit retention (including constraints in distributing dividends), a shift to lower-risk assets, and capital increases by some banks following higher minimum requirements.<sup>123</sup> In March 2020, the three systemically important banks had capital adequacy ratios of 24, 46, and 29 percent. Two small banks were short of the minimum capital.

After increases in 2017–18, average banking sector liquidity stabilized at a high level, but liquidity is not evenly distributed among banks. In 2019, the systemwide liquid asset ratio was 39 percent, and the loans-to-deposits ratio was 57 percent. However, there are several small banks with lower levels of liquidity. The volatility of the macrofinancial environment could rapidly affect liquidity, particularly as a quarter of banks' balance sheets are (on average) denominated in foreign exchange.

**TABLE A.1 BANKING SECTOR IN MOZAMBIQUE, 2014–19**

	2014	2015	2016	2017	2018	2019
Assets (% of GDP)	60.2	66.1	64.3	61.1	64.6	66.8
Loans (% of GDP)	35.1	31.3	32.0	26.9	22.9	n.a.
Deposits (% of GDP)	44.3	47.3	43.7	41.3	43.1	45.4
Capital (% of total assets)	8.4	8.3	5.2	9.8	11.4	12.7
Regulatory capital (% of RWA)	15.1	17.0	8.8	21.5	23.8	29.0
Lending rate (% average end of period)	14.8	14.9	21.2	27.8	23.0	19.0
Interest rate spread (%)	6.2	6.3	10.4	10.7	9.4	10.0
Return on equity (%)	22.2	20.4	10.1	32.0	29.8	24.9
NPLs (% of gross loans)	3.2	4.3	5.7	12.6	11.1	9.8

Source: Bank of Mozambique.

Note: NPL = nonperforming loan; RWA = risk-weighted assets; n.a. = not available.

**The insurance sector remains small.** Insurance penetration remains low, with premiums equivalent to 1.7 percent of GDP in 2019 (versus an average of 1.5 percent in 2014–18). Total sector assets were equivalent to 3.5 percent of GDP in 2018 and 2019, smaller than the 4.1 percent in 2015–17). There are 21 insurance companies, with the five largest accounting for 71 percent of premiums issued. The FinScope 2019 survey indicated that 11 percent of Mozambican adults had formal insurance, a significant increase from 5 percent in 2014. Most coverage is of general, nonlife, mandatory products (for example, third-party motor, workers compensation). Insurance companies have difficulties serving low-income customers profitably.

**Pension coverage is limited to formal sector workers and is extended to around 7 percent of the population as of 2014, lower than regional average.** Most pensioners are in the public-sponsored scheme. In 2018, pension sector assets (private, voluntary pension funds) were equivalent to 1.1 percent of GDP (average 0.6 percent of GDP in 2015–17). The Institute for Insurance Supervision of Mozambique (ISSM) supervises the sector.

**Capital markets remain small, although their contribution as sources of financing has expanded, and with that liquidity has increased.** Following new equity listings in 2019 and 2020—including the flotation of one of the largest SOEs (Hidroelétrica de Cahora Bassa) among thousands of new investors—11 companies now have shares listed on the Mozambique securities exchange (6 in 2018), in addition to 36 government bonds and 15 corporate bonds. In 2019, market capitalization slightly increased to 11 percent of GDP (from an average of 9 percent in 2016–18), reflecting issuance of more government bonds (which accounted for 61 percent of capitalization) and equities (35 percent). The bulk of corporate bonds is issued by banks. The turnover ratio increased to 8 percent of capitalization (4 percent in 2018). Bank of Mozambique is the regulator and supervisor of securities exchange.

**The microfinance sector remains very small.** There are more than 400 microcredit operators, with the top-tier institutions managing the majority of loans (by value) and borrowers (by number). The sector serves only about 0.4 clients per 1,000 adults. In 2018, the sector loan portfolio was estimated at 1.1 percent of GDP (average of 1.0 percent in 2013–17). There is limited supervision and no aggregate data of this sector. Many microfinance institutions are not commercially viable.

**The market for mobile money is expanding but is dominated by one operator.** The three mobile network operators have subsidiaries for mobile payments licensed and supervised by Bank of Mozambique. In mid-2018, mPesa reported 3.5 million active accounts defined as one transaction a month (174,000 for mKesh and 25,000 for eMola). The value of mobile money transactions has been increasing and reached 8 percent of GDP in 2018.

**Access to basic transaction accounts increased from less than a quarter of the adult population in 2015 to almost half of the adult population, with the opening of more than 4 million new accounts.** Levels of inclusion are worse for women and for the 40 percent poorest adults. Noteworthy accomplishments also include the growth in mobile money transactions and the expansion of financial access points, mostly mobile money agents (in 2019 there were 56,146 registered agents versus 43,125 in 2018). In 2019 there were almost twice as many mobile money accounts (535 accounts per 1,000 adults) as bank accounts (292 accounts per 1,000 adults).<sup>124</sup> However, ownership of accounts does not necessarily translate into usage: in 2018, most mobile money transactions were cash-in and cash-out operations (54 percent), while payments for goods and services and other domestic transfers represented 46 percent.

**The market for remittances is concentrated.** Exclusivity clauses limit the potential reach of an already limited network (World Bank 2016b). Only a few banks have active partnerships with money transfer operators. Two of the mobile money operators offer these services. The majority of the estimated 800,000 Mozambican migrants in South Africa send money to families through minibus drivers, with anecdotal evidence of fees of up to 20 percent of the remittance value. The average fee through formal channels is 4.6 percent on average.

**Financial intermediation in Mozambique is still dominated by brick-and-mortar business models.** There are no digital-only banks. Many districts have limited physical access points for financial services despite the increased use of agents, particularly by mobile money operators. Credit provision is dominated by banks with a lending model that relies significantly on fixed assets as collateral and does not make use of information that is becoming available with digital technologies. Most insurance underwriting makes little use of digital technologies as delivery channels. Cash is still the preferred medium of exchange and method of settling transactions and saving, particularly in rural areas.

**Full interoperability in retail payments is yet to be achieved.**<sup>125</sup> Mobile money payments are increasingly important, but the payment systems of the three operators are not linked between themselves, limiting efficiency of the retail payment system and preventing greater penetration of mobile wallets. Mobile money operators have expanded bilateral interoperability agreements with the largest banks. The regulatory framework for mobile money limits diversification of services.

**Credit information in Mozambique is underdeveloped.** Financial reporting and auditing practices are absent in most nonfinancial corporations, particularly SMEs. Mozambique scores only 4 out of 8 in the depth of its credit information system, and only 8 percent of its adult population is covered by a credit registry or bureau, compared with an average of 19 percent in Sub-Saharan Africa. Since 2019, Mozambique has had an operating private credit bureau that has been collecting information from banks. This is a positive development that will help complement existing credit information systems and offer nonbank financial information. However, hundreds of nonbank credit institutions have poor management information systems and are not yet connected to the bureau, limiting the credit bureau's effectiveness.

**The government is improving the frameworks for secured transactions and insolvency.** A new secured transactions law was enacted in 2019, and a movable collateral registry is expected to be launched in 2020. The framework for resolving insolvency in Mozambique is better than peer countries (86 out of 190 economies, according to the Doing Business 2020 report), but there has been limited practice and creditors still face major challenges in debt recovery (World Bank 2020a). The Insolvency Administrator Regulations were approved in 2019 but need to be complemented with capacity building for insolvency administrators.



### **Constraints in access to finance by private firms**

**Access to finance for micro, small, and medium enterprises and agriculture producers remains significantly constrained.** Although 2015 data show that micro, small, and medium enterprises contribute to 28 percent of GDP and account for 42 percent of formal employment, most (75 percent) are financially excluded. IFC estimated that the financing gap for such businesses in Mozambique was equivalent to 10 percent of GDP in 2017. Lending to agriculture also is very limited. In 2018, agriculture accounted for 23 percent of GDP, but credit to agriculture represented only 4 percent of lending (average of 12 percent in 2000–10).

**Slower economic activity and the high cost of credit have reduced the capacity of many borrowers to repay their debt, in a scenario of significantly reduced credit availability.** Domestic credit has been declining (annual real average of –12 percent in 2017–19), reflecting higher reserve requirements and banks' preference for highly liquid government securities. Construction and trade sectors have been particularly affected.

**Real lending rates remain very high for most of the private sector, despite some decrease in 2019 and 2020.** Commercial bank rates are lagging in response to the gradual decline in reference rates initiated by the central bank in mid-2017 (average retail rate for well-qualified borrowers was 17 percent in June 2020 versus 28 percent in 2017), but rates are still above the median among peers. The average interest rate spread remains high at 10 percent, much above the average of 6 percent in 2010–15 and regional and income peers. This large spread reflects high risks to lending, as well as structural issues such as lack of credit information, high collateral requirements, and high market power.

**Since 2016, the expansion of bank branches has not kept pace with population growth.** This could signal banks' strategic shift to mobile and other remote technologies but also their limited investment in branch expansion given macroeconomic challenges. Bank outreach has expanded modestly (about 25,000 adults per bank branch) and is concentrated in urban centers. ATM coverage declined slightly in 2019 (10 ATMs per 100,000 adults versus 11 ATMs per 100,000 adults in 2018, as presented in table A.2). The most disadvantaged provinces are in the north and center of the country.

**Despite regulatory measures to encourage financial inclusion, there are still some legal impediments.** Only 58 percent of adults in Mozambique have the required national identity card to validate identity when opening accounts, and the ratio is much lower in rural areas. Validation of addresses is often difficult. This makes it nearly impossible to comply with know-your-customer (KYC) regulations, which apply the same stringent requirements to both large and small transactions.

**TABLE A.2 CROSS-COUNTRY COMPARISON IN ACCESS TO FINANCE, 2019**

	<b>GNI PER CAPITA (US\$, ATLAS METHOD)</b>	<b>BORROWERS FROM COMMERCIAL BANKS (PER 1,000 ADULTS)</b>	<b>ACCOUNT OWNERSHIP (% ADULT POPULATION)</b>	<b>ATMS (PER 100,000 ADULTS)</b>
<b>Mozambique</b>	<b>480</b>	<b>72*</b>	<b>42*</b>	<b>11*</b>
Low-income countries	792	n.a.	35*	4*
Sub-Saharan Africa	1,550	31*	43*	6*
Guinea	950	12*	23*	2*
Guinea Bissau	820	n.a.	n.a.	5*
Madagascar	520	63*	18*	3*
Uganda	780	70*	59*	4

Sources: World Bank, World Development Indicators; and International Monetary Fund (IMF) Financial Access Survey (accessed August 19, 2020), <https://data.imf.org/?sk=E5DCAB7E-A5CA-4892-A6EA-598B5463A34C>.

Note: ATM = automated teller machine; GNI = gross national income.

\*. 2018 or latest data.

### Recommendations

1. **The introduction of risk-based customer due diligence (CDD) and anti-money-laundering framework would help expand the financial sector.** This framework would entail using CDD requirements proportionate to the characteristics and risks of each financial services (simplified CDD for low-risk accounts and transactions) and allowing the CDD to be performed by agents of financial institutions on digital platforms and thus not requiring paper documents.
2. **The government should accelerate digitization of its own payments, social transfers, disaster payments, and tax collections, including using related awareness and training programs.** This should include payments directly to, and collections from, mobile money accounts. Making digital payments directly to accounts enables integration of beneficiaries into the financial and economic systems.
3. **Ongoing government reforms to its framework for insolvency and secured transactions can help MSMEs to have higher access to capital.** Offerings of new financial products such as leasing and factoring will become more feasible.
4. **The establishment of a publicly funded universal risk-sharing facility could provide partial credit guarantees to firms that otherwise cannot secure credit, given the lack of assets that banks require as collateral.** Financial institutions in Mozambique currently have very limited access to credit risk-sharing facilities to unlock financing to higher-risk segments. Such a system would provide an opportunity to improve banks' risk perception of SMEs as they gain experience in this segment.

5. **Banking sector concentration provides opportunities for qualified investors to enter a market that is expected to have high growth rates when the current economic slowdown is reversed and exploration for natural gas begins.** Some banks still do not meet the new minimum capital requirements and some of them may face challenges in raising new capital from shareholders and instead seek to downgrade their license.
6. **Strengthening the insurance and pension sectors could help develop demand for long-term financial instruments.** The World Bank and other development partners are providing technical assistance to the government in deepening capital markets, including development of a secondary market and a yield curve to benchmark private debt.
7. **Mozambique could benefit from more investments in its national payment infrastructure to make it more reliable, transparent, and fully interoperable.** Investments in the national payment switch and in interoperability of mobile money operators and banks would help make electronic payments a more viable substitute for cash and support financial development. The national payments switch still has not integrated one of the largest banks. The 2018 blackouts of the card payment network underscored Sociedade Interbancária de Moçambique (SIMO's) high interdependence on an external service provider and raised concerns about the governance of the system. The regulator and the industry should continue the dialogue with market participants and agree on a set of rules to facilitate full interoperability, without undermining competition. All payment service providers should have equitable access to infrastructure services once they fulfill the requirements set by the Bank of Mozambique. A better national payment infrastructure would provide customers and merchants with more choice, enabling more competition between providers and the emergence of more valuable propositions for digital payments.
8. **The authorities could provide an environment conducive to experimentation with innovative services and remove obstacles to the use of more efficient technologies by financial institutions.** Mozambique has yet to see new business models that are emerging in other African countries, such as digital platforms or marketplaces for financial (and other) services, and digital banks. This environment entails (a) allowing regulated institutions to experiment with new products and services under oversight, with regulation following a need and proportionate risk-based approach; (b) streamlining the regulatory sandbox for fintech firms and other innovators to conduct live experiments of new solutions and business models in a controlled environment; and (c) creating a level playing field for all market participants. On the technology side, the authorities could facilitate system integration between fintech firms, and the national payment switch managed by SIMO. In addition, regulators could consider remote processes for basic financial transactions such as account opening and digital ID, which cost a fraction of the offline, paper-based processes. A growing trend is to move from on-site core banking systems to cloud-based ones hosted by a public or private provider. Existing regulation on cloud computing and storage could be revisited to allow for greater flexibility while safeguarding data integrity and consumer privacy.

9. **The government could strengthen its management framework for financial crises by enacting the draft Financial Institutions Law recently prepared by the Bank of Mozambique.** The proposed law improves the legal framework for bank resolution and enables the use of the deposit guarantee fund for resolving banks. This would bring Mozambique closer in line with international good practices. The authorities could also expand deposit insurance coverage, while including deposits held by legal entities and nonresidents, deposits denominated in foreign exchange option, and deposits in mobile money accounts.

### A.3. Forestry

#### **Why forests and the forestry sector matter**

Forestry-based activities can be an important contributor to Mozambique's economy and have great potential for generating much-needed jobs in rural areas. In 2018, the forestry sector contributed approximately US\$160 million to the country's GDP (representing 1.6 percent) and provided direct employment to about 17,000 people.<sup>126</sup> In acknowledgement of the sector's potential, the government's five-year program (2020–24) emphasizes rural development through the promotion of productive activities, including forestry (commercial plantations) and agriculture in the central and northern provinces.

**Mozambique is well positioned to tap into the growing markets for wood products given its climatic and soil conditions and land area.** An extensive area of land is considered suitable for forest plantations and its geographical location presents an advantage to access the key markets in Asia as well as to supply the markets of neighboring countries in Southern and Eastern Africa.

**Mozambique forests are home to important biodiversity hotspots with high levels of endemism.** The predominant forest, the Miombo woodlands, provides a variety of biophysical ecosystem goods and services, including carbon sequestration<sup>127</sup> and water regulation services, besides being an important source of food, fuel, medicine, and construction materials to local communities. The country contains the second-largest mangrove forest in Africa, covering around 357,000 hectares.<sup>128</sup> Mangroves are a type of coastal vegetation known to contain globally significant carbon pools, storing up to five times more carbon than typical tropical forests.

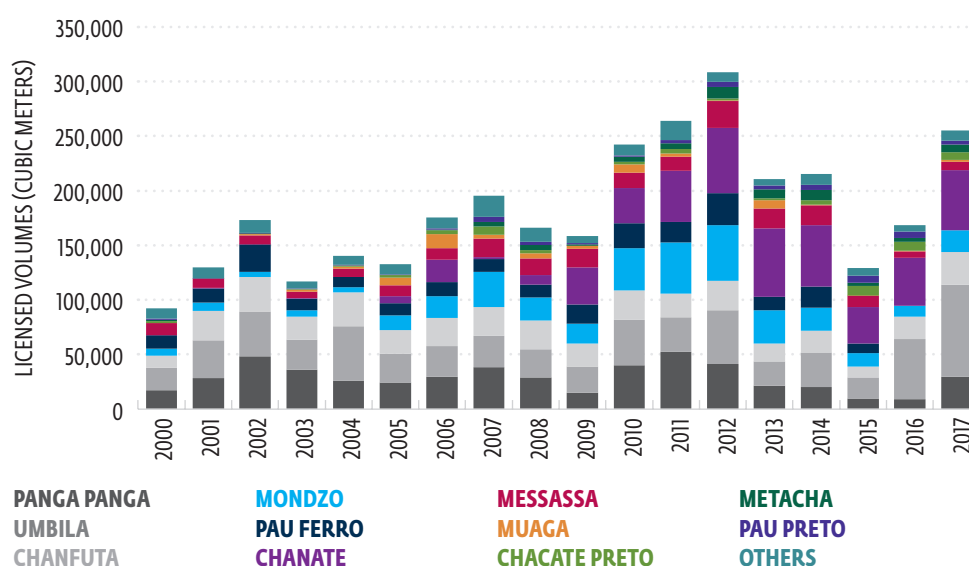
**Although Mozambique still has a considerable stock of natural forest, it needs to be sustainably managed.** Forests currently cover around 34 million hectares of the country's land area, representing around 43 percent of the territory, but they are rapidly being depleted. Although the annual deforestation rate of 0.79 percent, representing an annual loss of almost 267,000 hectares, is in line with global trends, this rate is on the rise (MITADER 2018). Deforestation is higher in the northern and central regions and mostly concentrated around urban centers and along roads. The deforestation rate inside forest reserves are three times those observed at the national level, showing that the protection in these areas is not effective.

### Current forestry use and development trends

Among the 120 commercial tree species found growing in Mozambique, only a few are harvested for commercial purposes. Umbila, Jambire/Panga-Panga, Chanfuta, Mondzo, Pau Ferro, Chanate, and Messassa are the most harvested commercial timber species (figure A.1), representing 90 percent of the total legal harvested volumes in Mozambique.

In 2018, Mozambique had nearly 78,000 hectares of planted forests, but the National Reforestation Strategy (2009) estimated that 3.5 million hectares are considered suitable for forest plantations. The need to accommodate the increasing demand for wood products (see case study 1, the box about Portucel) has led to the establishment of more plantations of nonnative tree species, particularly those of the genus *Eucalyptus* and *Pinus*, mainly in Manica, Niassa, and Zambezia provinces. Currently 21 companies are involved in large commercial forest plantations in Mozambique.<sup>129</sup>

**FIGURE A.1 TOTAL LICENSED VOLUMES IN MOZAMBIQUE, BY SHARE OF TREE SPECIES**



Source: Ministry of Land

Indústrias Florestais de Manica SARL (IFLOMA), formerly an SOE and now a public-private company with a major South African counterpart, is the oldest forest plantation company in Mozambique. IFLOMA has secured about 100,000 hectares in Sofala and Manica provinces. About half of these are suitable for planting, although only 15,000 hectares of eucalyptus and pine are already planted. The main products are sawn timber used for construction material and treated poles for the local market. IFLOMA is also a potential supplier for the Mozambique Tree Farming Group (MTF) chip mill (see case study 2).

**Construa, a national hardware retail network with over 20 outlets has recently bought Florestas do Niassa, in Niassa province.** Construa aims to integrate the wood supply from cutting to retailing and benefiting from transport efficiencies. This operation is a good example of how to make some of the most peripheral planted forests viable, as transport costs erode the value of round wood.

### CASE STUDY 1: THE PORTUCEL MOÇAMBIQUE PLANTATION FOREST

The Navigator Company is the leading European manufacturer of eucalyptus pulp and office paper, with a turnover of US\$1.8 billion. In Portugal, the company manages 112,000 hectares of forest certified by Program for the Endorsement of Forest Certification (PEFC) and by Forest Stewardship Council (FSC) and works with 5,500 small wood suppliers. The Navigator Company, along with IFC is investing in Mozambique, through Portucel Moçambique, to take advantage of growing markets in Asia and the existing soil and climate conditions.

The Portucel project is an integrated forestry and industrial operation to produce paper pulp. A forestry base of 160,000 hectares will produce 1.5 million tonnes of pulp for exportation, with an estimated value of over US\$1 billion. The total investment value is US\$2.5 billion, and about 8,000 jobs are expected to be generated. The project is being implemented in a phased approach, including an intermediary investment in a woodchip mill to process 1 million tonnes of wood (depending on 40,000 hectares of forest base), with expected exports amounting to US\$100 million. So far only US\$120 million has been invested in 13,500 hectares of plantation forest and in a state-of-the-art nursery with the capacity to produce 12 million plants per year. This operation is the first in the country to use clones whose choice followed an extensive research and development plan of trials. The first plantations (9,000 hectares) are close to reaching cutting stage

and showing good productivity with high mean annual increments.

In total, the company has obtained land use rights to 360,000 hectares equally split between the provinces of Manica and Zambezia. According to the terms agreed with the government, at least one-third of the area will not be used in forestry plantation and will be reserved for conservation purposes and agriculture production by the local communities. The plantations are being established under a mosaic approach without resettlement, based on voluntary land access in agreement with communities and individuals. This means that families and active agricultural land within the forestry areas are not moved, avoiding resettlement. To date the company has established 3,970 land use agreements that regulate the land use with families in the licensed areas. Portucel is implementing, with technical support from IFC, a community development program that reaches over 7,000 households, focusing on agriculture training and input support, access to water and energy, as well as support for income activities.

The company is reassessing the feasibility of the logistics and port access because the production areas in Zambezia province are located, by road, about 550 kilometers from the port of Nacala and 650 kilometers from the port of Beira, and rail connectivity is nonexistent.

Source: Interview with Portucel (February 2020).



## Opportunities

**There are opportunities for the private sector to tap into the growing global and regional markets for wood products.** Global demand for planted wood products is rapidly increasing, propelled by emerging and developing economies, especially for chips and pulp in Asia, pulp and logs in Latin America, and charcoal and logs in Africa. A tripling of demand is expected by 2050. Other projections forecast an increase of almost 200 percent for pulp by 2060.<sup>130</sup>

**Currently, the domestic timber supply is not sufficient to cover the needs of the domestic market, and the gap is growing.** This trend indicates the domestic potential, from natural forest products and commercial plantations, to supply a variety of wood products and reduce reliance on imports. Domestic markets with unmet demand include the expanding construction industry and the extension of the electrification grid. The state-owned electricity utility, EDM, has indicated that the size of the domestic market for electricity poles is approximately 30,000 poles annually. Rail sleepers is another example of timber products that the private sector could take advantage of.

**To broaden the current market and take full advantage of the growing demand for forestry products, local value addition is essential.** Achieving this will require the private sector to scale up investments—in equipment, technology, and skills—to improve primary and secondary wood transformation. Mozambique also has an opportunity in the production of quality furniture that is made from precious and first-class wood, as well as in paper and paper products.

### Opportunities specific to plantation forests

**Plantation forests are increasingly recognized for their important role in responding to the growing global demand for wood products.** Products include hardwood timber for furniture and construction timber, transmission poles, pulp, and even sustainable charcoal. Moreover, plantation investments can support rural economic diversification by providing employment for smallholders, including through outgrower arrangements.

**The vast areas of degraded forest land in the country provide much scope for further increasing planted areas.** The areas also offer opportunities for capturing funds from emerging markets in greenhouse gases. However, it is important to ensure that payments for ecosystem services do not lead the country to convert natural forests to fast-growing plantations.

**The increase in demand from Asia for fiber and woodchip products represents an important market for Mozambique to tap into.** The demand for fiber is forecast to increase significantly over the next five years, with traditional supply from South America, Australia, and Vietnam falling. Asian woodchip demand is forecast to outstrip supply by 2–3 million BDMT (bone dry metric tons) by 2023, which will strengthen fiber prices (SA Forestry 2019).

**Private sector investments in plantations could be diversified into other species such as bamboo.** Bamboo is a rapidly renewable material that can be harvested after three to five years. Bamboo is an excellent material to produce affordable furniture and some construction materials (such as parquet) with its lightweight structure, superior mechanical properties, and natural resistance.

### Opportunities specific to natural forests

The existence of diversified high-value commercial species means that there is fiscal space to expand the spectrum of tree species currently being harvested. Expanding the market with new species will require forest companies and public institutions to research and identify new applications for different species. An example is the Chanate, which is currently considered a first-class species because of high demand by the international market, whereas a few years ago it was used only for charcoal and fires.

The forest reserve network comprises 14 native forest reserves established to protect and safeguard timber stocks of valuable timber species in Mozambique. The system, covering approximately 528,000 hectares of forest, is currently poorly managed, and some studies suggest that timber production might be a viable objective for most of the reserves.

### Constraints

The main challenges hindering the development and expansion of commercial forest plantations are broad. They include access to land, challenges in developing partnerships with local communities, lack of availability of skilled rural labor, and lack of adequate infrastructure for transporting products at reasonable cost (World Bank 2021). Although Mozambique seems to possess comparative advantages in its lower nominal costs of labor and land, a closer analysis reveal that these are surpassed by more structural constraints.

Transportation links are still very weak across much of Mozambique, with consequently high transportation costs. Effective transport and ports are needed to ensuring the sustainability of the industry, including a dedicated processing and export facility at the ports. This lack links limits the ability of commercial forestry operations (of all types) to connect with potential markets. Preempting this difficulty, the Mozambique Tree Farming group is developing a dedicated harbor facility in the port of Beira (case study 2). High port fees (Nacala) and time-consuming procedures also contribute to increased costs. Most sawmills are based in the cities and are quite far from the cutting areas, thus increasing the transportation costs, as most of the residues are also being transported.

## CASE STUDY 2: MOZAMBIQUE TREE FARMING GROUP

A group of leading South African commercial timber farmers has set up a forestry project in central Mozambique that includes the establishment of plantations and the development of a timber exporting facility and a chip mill in the port of Beira. Mozambique Tree Farming group (MTF) has secured DUATs (land rights) for 10,000 hectares of land in Sofala and Manica provinces and has 3,000 hectares of Eucalyptus plantations established. A nursery with current capacity to produce 1 million seedlings per year is also in place.

Considered fundamental for the success of this project is the establishment of a dedicated harbor facility in Beira to serve as a regional plantation timber export hub, alongside the securing of land

with growth potential for commercial plantations in reasonable proximity to the port to limit transportation costs. Both road and rail will be used to haul MTF's and third parties' timber to the export facility using existing rail lines.

The first shipment of round logs from Beira took place in February 2020. The first consignment of 25,000 tonnes included timber harvested from damaged plantations of MTF and IFLOMA following Cyclone Idai in 2019. Site clearing for developing a state-of-the-art export facility at Beira has begun. The shareholders want to replicate the modern facilities for wood fiber export that exist in the South African ports of Richards Bay and Durban to compete internationally in scale and efficiency.

**The existing land tenure system and complex land use regulations represent a major constraint for the expansion of forest plantations.** The 1999 Forest and Wildlife Law and the 2002 regulations govern the forestry sector and provide clear guidelines on the issuing of concessions as well as simple licenses to harvest public timber. However, there are still very few legal guidelines related to planted forests. In 2012, new plantation legislation was passed (Decree 30/2012) defining the forest plantation regime, with the goal of promoting and guiding the establishment of forest plantations for commercial, industrial, energy, and conservation purposes. The Forest and Wildlife Law Regulations (Decree 12/2002) also stated that “the activity of planting forest species carried out by any singular or collective person, under the terms of this law, benefits from special incentives, to be defined by a specific diploma.” However, this diploma was never defined.

**The land acquisition and management process can easily lead to conflicts between the government, private investors, and communities.** According to the 2004 constitution and the 1997 Land Law, citizens and local communities have statutory recognition of their rights to use and benefit from the land they occupy (based on customary and good faith occupation). In situations of large-scale commercial investments, local communities can grant land use rights to third parties through formal leasing. However, the law presents a gap with respect to the legal representation of communities and the management of communal lands and natural resources. This gap is exacerbated in practice by weaknesses in community capacity, lack of clarity as to the scope of certain rights, as well as weaknesses in the land administration system, especially at the local levels. This might negatively affect the business plan of the investors.

Although the land fee value is not considered costly, all the accumulated charges, time, and administrative costs associated with the land process application are extremely onerous for the private sector. A comparative analysis shows that land use fees range between US\$0.30 and US\$1.00 –per hectare/year, reaching an average value of US\$30 per hectare/year because it also includes a compensation payment to communities, indirect costs of implementing community development projects, and other transaction costs.

Overall, the costs for establishing a timber plantation in Mozambique are relatively high (US\$2,000 per hectare) as a result of limited capacity and lack of optimized planting material. The typical worker in a forestry company in Mozambique has no previous work experience in forestry, resulting in high levels of absenteeism and low levels of productivity. As a result, estimates show that for plantation forestry in Mozambique, on average, one worker is needed per 20 hectares of planted area, compared with regional estimates where the average is one worker per 40 hectares (de Almeida and Delgado 2019).

Major threats to planted forests include forest fires and pests, and both are becoming worse with changing environmental conditions. Fires result from uncontrolled burning of bush for land preparation and hunting. Current changing environmental conditions, with extended dry seasons and high temperatures, can aggravate these problems. Also, some timber tree clones in Mozambique are highly susceptible to pests, such as the gall wasp that feeds on leaf sap.

Certification of forest operations is limited, with only one forest concession, Levas Flor, that has been certified through the Forest Stewardship Council (FSC). Portucel is undergoing the certification process. Certification is important to give the market confidence that wood sources are sustainable and legal, and it is necessary to gain access to different export markets and funding sources. For example, the certification of value-added products is fundamental to access the European Union market.

Education and training in forestry technology, entrepreneurship, business management and marketing are deficient (Sutton 2014). Additionally, there is a very limited pool of people trained to effectively carry out research and monitoring activities. Mozambique lacks tree breeders, and not much has been done to date in this regard. Four university-level forestry programs exist in Mozambique but no TVET programs are in place. This makes the planted forest sector less competitive when compared with other economies.

The forestry sector value chain (including sawmills and carpentry shops) also reveal signs of structural inadequacies at the enterprise level, affecting their capacity to promote value addition. These include deficient business organization, obsolete and primitive technologies, scarce qualified skilled labor, lack of marketing and commercialization of secondary processed products, outdated designs, low productivity and production, and insufficient capital. Moreover, difficult access to finance, under suitable terms, is a further deterrent for scaling up operations and upgrading technology because companies are forced to self-finance investments.

**Insecurity and political tensions have also affected forestry operations at large.**

Violent insurgencies taking place since the end of 2017 represent a barrier for timber extraction in Cabo Delgado and transportation to the sawmills and ports. Some forestry-related infrastructure and equipment were destroyed during the military conflicts that took place from 2014 to 2016 in central Mozambique, affecting the price of the operations throughout the value chain.

**Significant policy reforms and stronger law enforcement are needed to promote the sustainable management of forests in Mozambique.** Capacity is lacking within government and there is limited transparency in decision making. Many forest licenses are allocated, and forest products are traded through nontransparent processes.

**Furthermore, illegal timber harvesting and trade negatively affect the competitiveness of legal operators in the natural forestry sector.** According to a World Wildlife Fund study, the amount of illegally harvested timber that was exported to China during a 10-year period (2003–2013) is 5.7 times greater than the volume declared officially by Mozambican authorities. This illegal trade equals a loss in revenues of US\$540 million. Alarming, subsequent studies reveal that two years after that study (2014–16) Mozambique lost around US\$400 million. This also entails a significant loss to communities, which are entitled to 20 percent of forest concession fees.

## Recommendations

### Logistics

1. **Transport costs and connectivity issues currently determine the viability of establishing a forestry and wood processing industry.** For a chipping or pulping operation to be efficient, it must be located close to a transport hub that can provide cost-effective access to domestic or international buyers. The study indicates a need to design and optimize the logistics system to transport wood from certain consolidated locations to the export facility at the port. Generally, the study recommends the creation of the required infrastructure that would help the country access international markets, because these conditions are necessary for the sustainability of the forestry sector in Mozambique.

### Policy, land tenure, and concessions

2. **Very few legal guidelines relate to planted forests, and no legal guidelines are available to regulate operations through the value chain.** The government has recently approved the new forest policy (March 2020), and planted forests are one of the pillars. To catalyze investments in forest plantations, the law and regulations that will govern the sector must be defined.
3. **To address the land tenure insecurity, transparent administrative processes are needed.** Relationships between companies and communities are fragile and must be addressed during the company-community negotiations. Moreover, it is important to promote outgrower schemes with transparent and fair model contracts, and to formalize company-community partnerships.

4. **The government should develop adequate land use planning instruments and map areas with potential for planted forests.** This process entails prioritizing the mapping of areas with high potential for use as forest plantation close to the ports and propose the declaration of special development zones under the management of the new Ministry of Agriculture and Rural Development (MADER) to facilitate private sector investments.
5. **The government should consider the establishment of concessions, or PPPs, for the management and sustainable exploration of timber in certain forest reserves.** The intent would be to help protect existing forestry resources that are rapidly being depleted. Moreover, the identification and use of lesser known species also represent an opportunity to businesses while reducing pressure on precious wood species.
6. **A national forest forum, with strong private sector participation, should be institutionalized and used as a vehicle to promote communication and trainings.** Increased coordination between timber organizations and associations, research and academia, and training and technological centers can lead to the modernization of the sector.

#### Industrialization

7. **To promote in-country value addition to timber production, the low levels of mechanization and inadequate technology need to be reversed.** This can only be done through investments in technology (harvest, sawmill, and carpentry) and with capacity building. The government could support such innovation processes through matching grants.

#### Capacity

8. **To counteract the current inadequate research infrastructure, the development of a clonal program can pave the way to make material available for the planted forest sector.** Moreover, one way to advance this agenda is to implement a research and development program that includes cooperation between national and international research facilities and promotes vocational training on forestry practices for different stakeholders along the value chain.
9. **It is important to support the certification processes by working with the main certifying bodies, including Forest Stewardship Council (FSC) or Program for the Endorsement of Forest Certification (PEFC).**





#### A.4. Fisheries

##### Performance and trends

Mozambique's vast marine ecosystem and hydrographic network contain important fishery resources (crustaceans, marine and freshwater fish). At sea, the Exclusive Economic Zone covers 571,974 square kilometers along Mozambique's extensive coastline of about 2,700 kilometers (IOTC 2017). Inland, the most important fishery occurs in Cahora Bassa Dam, in Tete Province. The fisheries sector is composed of four subsectors: artisanal, semi-industrial, industrial, and aquaculture.<sup>131</sup>

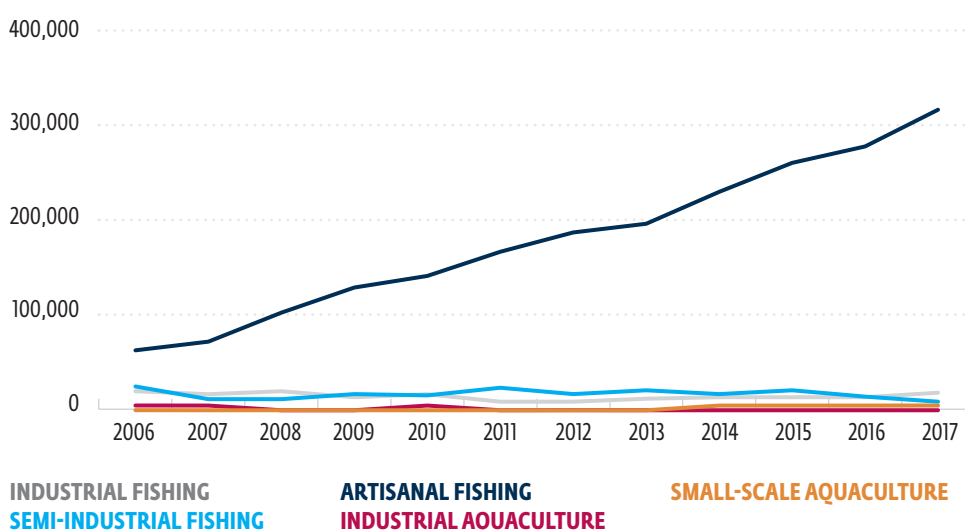
Despite a direct contribution to GDP of 2 percent, the social contribution of fisheries is considerable, and most of the country's production still depends on artisanal fishing. About 850,000 households rely on subsistence fisheries for food security and source of income as part of a livelihood strategy that is often integrated with agriculture.<sup>132</sup> In 2018, artisanal fishing represented 89 percent of total production of 397,262 tonnes (figure A.2). Although this figure may reflect improvements in data collection (survey data showed an increased between 2007 and 2012), it also reflects growth in the fishing effort.<sup>133</sup>

In the meantime, the industrial and semi-industrial subsectors have had to adapt to a reduction in stocks for main targeted fish—shallow-water shrimp and demersal, or deepwater, fish. Though the industrial subsector has managed to cope by turning to tuna and small pelagic fish (shallow-water species), semi-industrial fisheries are struggling the most, with some companies no longer operational (an exception being fishing for *Limnothrissa miodon*, a type of sardine known as kapenta). Additionally, the long-term sustainability of the small pelagic fisheries is uncertain because the status of the fish stock is unknown. Similar operations in the early 1990s put fish stocks at risk. These subsectors are estimated to currently employ over 5,000 people.<sup>134</sup>

While aquaculture is still in very early stages of development, the government is supporting it through the recent **Aquaculture Development Strategy and Action Plan (2020–29)**. In 2018, the aquaculture production for tilapia and shrimp was 3,245 tonnes (just about 1 percent of total fisheries production), with small-scale aquaculture being the largest contributor to production (75 percent). Private sector investments in this area are still limited, with four companies involved in tilapia production. These commercial operators rely on imports for feed, as there are also only four companies specialized in feed trade operating in the country. Since 2011, the shrimp aquaculture industry has been severely affected by an outbreak of white spot disease. The shrimp aquaculture industry is now being revitalized in Zambezia province by AquaPesca.

**FIGURE A.2 MOZAMBIQUE FISH PRODUCTION, 2006–17**

**Fish production (tonnes)**

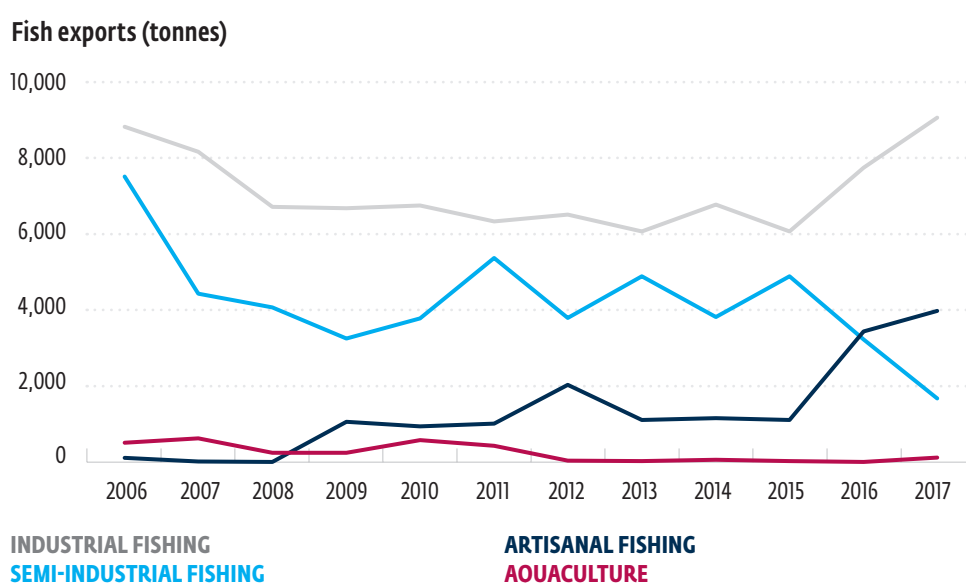


Source: Ministry of Sea, Inland Waters and Fisheries (MIMAIP) 2019b.

Quantities of fish exports have been stable at about 10,000–15,000 tonnes a year since 2006 (figure A.3). In the past five years, the share of industrial fishing has grown and semi-industrial fishing has declined. The European Union (EU) receives around 31 percent of wild-caught fish, with Portugal and Spain alone representing 86 percent of this market.<sup>135</sup> Of exports to Asia, those to China and Taiwan, China, represent 33 percent of total exports (from a base of around 20 tonnes in 2006 to approximately 5,000 tonnes in 2017).<sup>136</sup> The Southern African Development Community (SADC) also represents a relevant market (25 percent of exports) for kapenta.

However, the composition of value-added products among exports is increasing, resulting in the aggregate value of exports rising. Fisheries exports currently total about US\$90 million. To compensate for the dwindling shrimp stock, there is an overall increase in the production of other high-value crustaceans (lobsters and crabs) and fish. Mozambique's annual exports include prawns (US\$40.7 million), other crustaceans (US\$12.2 million), dried or salted fish (US\$9.1 million), and mollusks, mostly octopus (US\$2 million) (World Bank 2018a).

**FIGURE A.3 EXPORTS OF FISH PRODUCTS**



Source: MIMAIP 2019b.

### Opportunities

With exports representing only 5 percent of production, the scope for rebalancing from artisanal to semi-industrial and industrial fishing seems at first glance significant. But considering the different product markets and the need to maintain catch below the maximum sustainable yield (MSY), the transition needs to be smooth and will take time. Within the aquaculture subsector, there are more opportunities for investment in production.

Before the COVID-19 outbreak, the global, regional, and local demand for fisheries products was on the increase. Fish is also a key component of the Mozambican food basket, and rising imports show that domestic supply is not meeting local demand. The domestic market deficit of fish products is about 100,000 tonnes. Mozambique imports fish (mainly mackerel from Namibia) to supply its main cities (MIMAIP 2019b).

### Wild fish products

There is an opportunity for increased value-added if growth in professionalism is combined with the control of the number of people in fisheries, if losses are reduced, and if market access is increased. There is an opportunity to increase the professionalism of artisanal fisheries by providing access to better equipment and skills that can lead to increased areas of operation, but this would need to be combined with significant increased control of fisheries, in order to limit the catch to authorized players. In the absence of the latter, the production could put sustainability further at risk. In addition, the 20 percent losses of fish caught needs to be reduced. New markets need to be developed through artisanal fishers working together with industrial fleets and connecting with new exports and with more sophisticated markets, including Maputo.

Tuna stocks are managed by the Indian Ocean Tuna Commission (IOTC), and current catches are considered below MSY. A considerable number of tuna and tuna-like species are fished in a sustainable manner, with only yellowfin tuna and skipjack currently subject to catch restrictions.<sup>137</sup> Mozambique's 2013 Strategic Plan for Tuna Fisheries Development, 2014–19, aimed at promoting investments in fleet development (through joint ventures or chartering agreements), infrastructure development in ports for landing and processing, and skills development. Despite having expired, this strategic instrument remains relevant and continues to be used by the government to promote investments in the sector.

To further develop the fisheries sector, it is important to expand the existence of certain support services (for example, table A.3). Those services include (a) cold storage facilities and ice factories; (b) supply of fishing inputs, water, fuel, and lubricating oil; (c) power supply for vessels while in port; (d) repair and maintenance of vessels; (e) security services; (f) training and certification related to safety at sea; and (g) processing and packaging.<sup>138</sup>



**TABLE A.3 EXISTING INFRASTRUCTURE FOR FISHERIES, BY PROVINCE**

INFRASTRUCTURE/ PROVINCES	MPT	GZ	INB	SFL	MNC	TT	ZBZ	NPL	NS	CD	TOTAL
First sale markets	1	1	2	1	1	1	2	9	2	4	24
Retail markets	2			3			4	2		3	14
Processing plants industrial)	1			1							2
Processing plants (artisanal)										8	8
Ice factories	2		3	5		1	8	4	1	1	25
Refrigeration chambers	7		1	6			2			1	17
Fishing ports	1			1			1	1a			4
Naval shipyards	2			1			1				4
Warehouses	1										1
Labs (sanitary control)	1		1	1			1	2			6
<b>Total</b>	<b>18</b>	<b>1</b>	<b>7</b>	<b>19</b>	<b>1</b>	<b>2</b>	<b>19</b>	<b>18</b>	<b>3</b>	<b>17</b>	<b>105</b>

Source: MIMAIP 2015 – Macrodiagnóstico.

MPT: Maputo; GZ: Gaza; INB: Inhambane; SFL: Sofala; MNC: Manica; TT: Tete; ZBZ: Zambézia; NPL: Nampula; NS: Niassa; CD: Cabo Delgado.

a. The fishing port in Angoche (Nampula) is currently not operational, and the infrastructure was leased to a mining company. But the commercial port of Nacala is also used for fishing operations, especially by foreign large vessels for transshipment.

**An opportunity exists for further processing of bycatch products for the existing domestic market and the emerging export market, especially to China and Taiwan, China.** By catch, fish species caught incidentally by the industrial and semi-industrial fleets, typically have had low commercial value because of their size or lack of a regular market, but they are increasingly processed onboard for export or sale in the local markets. A processing industry inland would need sufficient raw material, which may come only from the artisanal sector. The current government policy of appointing mandatory landing sites and sanitary controls for artisanal fisheries is a further incentive for the creation of this industry. Processing plants would basically freeze or dry fish products to reduce postharvest losses (estimated to be more than 20 percent of the total artisanal catches), to store fish during the peak season, and to sell them during the slow season.

**Other emerging business opportunities await the private sector.** Efforts such as handling marine litter, developing appropriate infrastructure at ports, and reusing and recycling fuel and lubricants and other waste products would also benefit other sectors that rely on water transports, for example, oil and gas, maritime transportation, and recreational activities.



## Aquaculture

**The country's vast hydrographic network and long coastline offer good conditions for aquaculture development, both in continental and marine waters.** Aquaculture activity is still incipient and predominantly practiced in a scattered manner for subsistence. In the continental area, about 258,000 hectares of land with proper conditions for aquaculture development have been identified. In the coastal area alone, the potential for shrimp and seaweed production is estimated at 1.3 million tonnes per year (MIMAIP 2019a).

**Private investments in industrial aquaculture, especially the production and processing of tilapia, could help reduce the fish deficit in the domestic market while contributing to job creation.** Investments in production need to be complemented by developments in the processing industry and packaging. This would also help reduce postharvest losses.

**Large-scale quality feed production (including fingerlings) is needed.** The Centre for Research in Aquaculture (CEPAQ) produces mossambicus tilapia in the south of Mozambique.<sup>139</sup> To reduce logistic costs and diversify aquaculture production, including high-value products with increasing demand such as shrimp, crabs, and mussels, the government should make similar investments in other species, including marine species, and in other regions.<sup>140</sup>

## Constraints

Despite a global increase in demand for fish products, a number of factors affect the competitiveness of Mozambique's fisheries production compared with other regions, such as Latin America for deep-water shrimp and Asia for aquaculture.

**A key sector constraint is the risk of overexploitation of wild fish stocks.** The main fisheries resources (shrimp and demersal fisheries) are overexploited or fully exploited. Climate change and variability are also affecting fisheries globally, contributing to low productivity of wild fish stocks and reducing potential areas for aquaculture farming.

**To access wild fisheries resources, fishing rights can be granted only to Mozambican nationals.** The overall legal framework of the fisheries and aquaculture sector is established by the Fisheries Act (Law 22/2013), while the granting of fishing rights is governed by the Fishing Rights Granting and Fishing Licensing Regulation (Decree 60/2018). The Fisheries Act states that fishing rights for commercial fisheries are granted only for national companies, such as those whose majority shares are owned by Mozambican nationals. Although these regulations have been in force since 2018, no fishing rights have been issued to date because of eligibility issues. Many existing companies are not in compliance with the law, that is, almost the entire shallow-water shrimp fishery and about 50 percent of the semi-industrial kapenta fishery).<sup>141</sup>

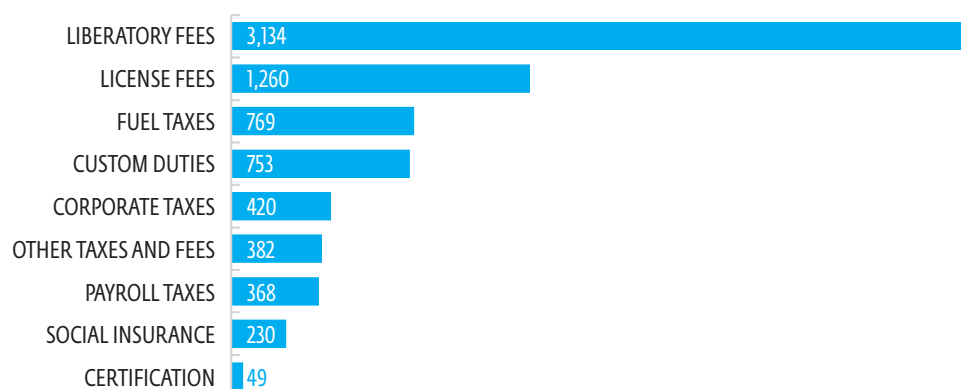
**While in theory the sector benefits from a number of fiscal incentives, in practice, these are not being applied.** To attract investments in the fisheries and aquaculture sector, Law 4/2009 states that investments in this sector are exempted from customs duties and value added taxes (VAT).<sup>142</sup> In the case of fisheries, to facilitate exports, onboard processing (and packaging) are exempted from VAT. In practice, VAT reimbursements generally take more than 12 months, affecting the cash flow of the businesses. Misinterpretation or lack of implementation of the VAT exemption on imports for onboard inputs further affects the sector's operational costs.



**The sector is burdened by a tight fiscal policy.** Information gathered by the industry indicates that foreign currency fees represent the highest taxes, followed by license fees, fuel taxes (with 50 percent reduction), and customs duties (figure A.4). A 2013 study indicates that taxes represent 7 percent of the total operational costs, which is a much higher share of income before taxes. As the cost on fuel represents 75 percent of the operational costs, the weight of taxes on fuel affects the cost structure for the shrimp fishery industry (MIMAIP 2019b). The fisheries industry also considers the costs of the services provided by the single electronic window system used for imports and exports and the scanning of goods in ports to be high.

**FIGURE A.4 TAXES PAID BY THE THREE MAIN PLAYERS IN 2017**

Annual taxes paid (US\$, thousands)



Source: Interviews with operators.

Note: Information released by three main companies.

**Most of the vessels operating in Mozambican waters are more than 25 years old.**

Maintenance is expensive and fuel consumption is even higher, further increasing the cost of operation and profitability of the industry. As in other economic sectors, fishing companies also struggle with access to investment capital and credit because of high interest rates.

**Skilled and qualified crew members are scarce.** For high-skill positions, such as captains and vessel machine engineers, fishing companies are hiring foreigners while most of the seafarers, working on semi-industrial and industrial fleets, have no formal training. Moreover, some of the key concerns of the fishing sector—hygiene and sanitation require technical skills and certifications—are not well addressed in the current national Maritime Labor Regulations, which is oriented to merchant ship seafarers. Maritime labor for the fisheries sector should be regulated by a specific legal instrument, as determined by national law and international conventions.



**Deficiencies in infrastructure, such as limited port and airport infrastructure and power supply, affect the entire value chain of fish and aquaculture production.** The only three operational fishing ports are in Beira, Maputo, and Quelimane cities (the commercial port of Nacala is used for fishing operations but is not a fishing port). Furthermore, most of the port services, such as pilotage, towage, ship lift, slipway, dry-dock, weighbridge, and property for lease, are obsolete or insufficient to address current demand. Thus operators are acquiring or hiring equipment, though they must still pay the port authorities for the services. Airport facilities also do not have adequate infrastructure to handle fisheries products. Flights from Mozambique do not connect with the main markets, increasing the operational costs (Zita 2019). Aquaculture projects also rely on the availability of other basic infrastructure, including roads and clean water.

**Finally, in aquaculture, a shortage of seeds and feed and the outbreak of farmed shrimp diseases have contributed to timid investments by the private sector.** The issue of quality feed at affordable prices is currently one of the main challenges for aquaculture development in Mozambique. The current supply of feed is not enough for large-scale production, and most of the start-ups find it hard to import feed.

## Recommendations

1. **A first step is for the government and the private sector to improve the existing public-private dialogue platform to discuss problems, priorities, and solutions.** Because a number of market failures relate to a lack of capacity and resources, support is needed for the establishment of public-private partnerships (PPPs) to develop, manage, and maintain the necessary infrastructure and facilities, especially in ports.
2. **Above all, the sector must ensure the long-term sustainability of the fisheries stocks and resources.** Technical measures and procedures to be implemented include (a) reinforcing closures mainly for shallow-water shrimp; (b) establishing zoning of fishing areas; (c) protecting endangered, threatened, and protected species; and (d) using effective bycatch management measures such as bycatch reduction devices (BRD) and turtle excluding devices (TED). In parallel, institutional capacity building, especially the ability to conduct research and surveillance, is essential to ensure that the allocation of fishing opportunities are based on currently available scientific information on the stock status, and to help cope with illegal, unreported, and unregulated fishing.
3. **For effective transition from mostly artisanal to semi-industrial and industrial production, there is a need to conduct various complementary reforms.** Those include increase the capacity to control fishing to limit fish catch, open up fishery licenses to non-nationals, integrate artisanal fishers in value chains with medium-scale operators, reduce fishing losses, and identify new markets where the value of the produce is higher (be it through composition or price paid). Combining these interventions in a coherent approach is nonetheless a difficult task.
4. **A revision of the existing Fisheries Law and Regulations is due and should be aligned with a more overarching vision and policy for the sector development.** Specifically, the regulations should contain reasonable provisions regarding eligibility for the granting of fishing rights that are also in line with international legislation and existing treaties ratified by Mozambique. In parallel, transparency on licensing, fishing agreements, and other regulatory procedures has to be ensured by the administrative authorities.
5. **A comparative study on the weight of taxation should be carried out to provide recommendations on how to reduce the high operating costs faced by the private sector.** In light of the license fees adjustment in 2018, upcoming certification costs, and fishing rights royalties, it is important to define a clear fiscal policy with regard to taxes on fuel, so that companies can effectively compete in the international market.



6. **Investments in aquaculture can be encouraged through easy access to land and other regulatory requirements.** The reservation of potential areas for aquaculture development is possible and requires the revision of Decree 35/2001, which approves the General Aquaculture Regulation. There is a need for provisions allowing the reservation of areas (land and aquatic) for aquaculture development through private sector investments. The same principle has been implemented by the tourism sector and is now being considered for forestry and agriculture.
7. **Capacity building is key to address the availability of a qualified workforce.** Synergies between government and the private sector need to be put in place to ensure that trainees from fishery schools have adequate skills, certifications, and job opportunities. In parallel, regulations on fisheries labor should be in line with the International Convention on Standards of Training, Certification and Watch Keeping for Fishing Vessel Personnel (STCW-F).

## APPENDIX B. OTHER CROSS-CUTTING CONSTRAINTS

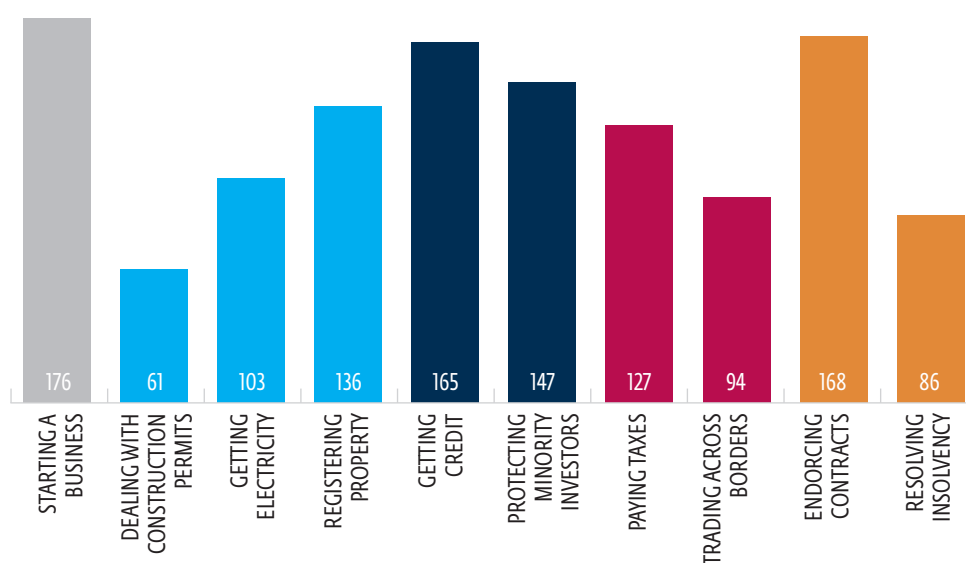
### B.1. Regulatory Environment (and Trade Policy)

Mozambique is ranked below most regional peers for ease of conducting business according to several international competitiveness indicators. The Fraser Institute/Cato Institute's Human Freedom Index 2019 identifies Mozambique as a relatively unfree economy, ranking 120 among 162 economies in the world and 24 out of 34 in Sub-Saharan Africa.<sup>143</sup> Likewise, the Heritage Foundation's Index of Economic Freedom 2020 (IEF) puts Mozambique 160 of freest economies in the world.<sup>144</sup> Mozambique is in the IEF's "mostly unfree" category out of 178 economies globally and is 37 in Sub-Saharan Africa out of 47 countries. Its overall score is well below the regional and world averages, and the primary obstacle is weak rule of law. Protection of private property, an honest and transparent judicial system, and a consistently applied intolerance of public corruption are needed for Mozambique to stimulate domestic growth or build investor confidence. At the same time, compared with last year, Mozambique's overall IEF score has increased by 1.9 points, reflecting an improvement in the fiscal health score. However, neither index includes measures of infrastructure quality, workforce education, or other roles of government crucial to attract investment. Mozambique is ranked 137 out of 141 economies by the World Economic Forum's Global Competitiveness Index.<sup>145</sup> Finally, out of 129 economies, Mozambique ranks 119 in the 2019 Global Innovation Index.<sup>146</sup> Policies to create and strengthen some of the crucial elements of a productive entrepreneurial ecosystem, one that encourages the innovation and application of new ideas and tools, are still absent.

The World Bank's Doing Business indicators place Mozambique in the third quarter of 190 economies globally, where it has consistently been since 2009. In Doing Business 2020, Mozambique ranks 138 out of 190 economies (and 20 in Sub-Saharan Africa, out of 48 economies). In the global index, Mozambique is behind Mauritius (13), Rwanda (38), Kenya (56), South Africa (84), Zambia (85), Botswana (87), Togo (97), Seychelles (100), Namibia (104), Malawi (109), Côte d'Ivoire (110), Uganda (116), Ghana (118), Eswatini (121), Lesotho (122), Senegal (123), Nigeria (131), Niger (132), and Cabo Verde (137). At the same time, Mozambique's Doing Business score improved from 52.8 in 2016 to 55.0 in 2020, indicating that its performance has been improving over time, getting closer to the best regulatory performance.<sup>147</sup>

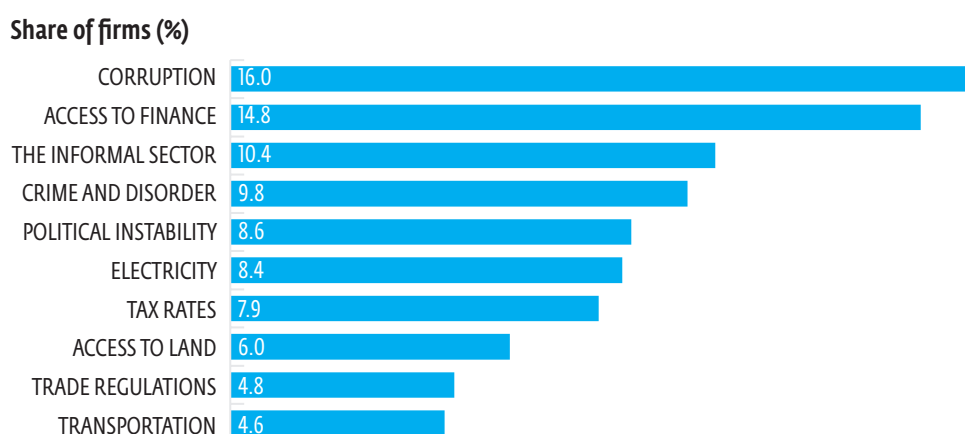
A snapshot of Mozambique's performance across 10 Doing Business indicators reveals an uneven pace of business regulatory reforms. Mozambique outperforms most regional economies on the indicator for dealing with construction permits (61 out of 190 economies) while it ranks in the bottom 15 on the ease of starting a business (figure B.1). A sustained, targeted, and well-coordinated reform agenda is essential to ensuring robust improvements in Mozambique's business regulatory environment. On another performance scale (figure B.2), the 2018 Enterprise Survey identified corruption, access to finance, and informality as the greatest obstacles to firms in Mozambique

**FIGURE B.1 MOZAMBIQUE'S PERFORMANCE ON THE DOING BUSINESS INDICATORS**



Source: Doing Business database.

**FIGURE B.2 RANKING OF THE TOP BUSINESS ENVIRONMENT OBSTACLES FOR FIRMS IN MOZAMBIQUE**



Source: Enterprise Survey database, <https://www.enterprisesurveys.org/en/data/exploreeconomies/2018/mozambique#2>.

**Recently, Mozambique made regulation of ongoing business operations easier in a number of areas.** Those operations include business licensing, which became easier in some sectors by allowing for a simple notification of activity (this applies to retail shops, for example); electricity access, by reducing the time and cost to get an electricity connection; and tax payment, reducing the mandatory carry-forward period before taxpayers can request a value added tax cash refund to four months (from 12 months). The government also approved major legal reforms that are expected to improve considerably the regulatory framework for business operations, including the partial review of the Commercial Code, a new Property Registration Code, the Secured Transactions and Collateral Registry Law and Regulations, and the Insolvency Administrators Statutes.

**However, those reforms that have been undertaken often have not resulted in substantive changes for businesses because they consistently lack implementation of legislation.** Doing Business in Mozambique 2019 highlights this constraint and recommends actions to improve the prospect that reforms will bear fruit, including facilitating public access to regulatory information, improving coordination within different agencies, increasing the capacity of public officials, and improving infrastructure capacity.<sup>148</sup> The report finds that no single Mozambican province dominates the indicator rankings across all areas benchmarked, leaving room for all locations to learn from each other's good practices. Compared globally, Mozambican locations' performance underperforms on the quality indexes. Regulatory quality depends greatly on national agencies and policies, but provincial and municipal governments also play a role, especially in accessibility of cadastral records and of information in property registries. If the country adopted the good practices already in place, Mozambique would jump more than 20 places in the global Doing Business ranking.



### Trade-related regulations

Mozambique is a founding member of the World Trade Organization (WTO) and grants most-favored nation (MFN) treatment to all its trading partners. It is a member of the SADC and has been party to the EU-SADC free trade agreement since December 2018. The EU-SADC Economic Partnership Agreement provides for asymmetric liberalization of goods and leaves the door open to enter future negotiations in a variety of areas, including services, investment, intellectual property rights, competition policy, and public procurement. Mozambique ratified the SADC Protocol on Trade in Services in 2012 and approved the SADC Protocol on Employment and Labor in 2014.

Mozambique is part of the APEI (Accelerated Program for Economic Integration), which aims to accelerate the implementation of reforms to reduce trade barriers. The initiative started in 2012 under the auspices of COMESA (Common Market for Eastern and Southern Africa) and SADC. The five member countries—Malawi, Mauritius, Mozambique, Seychelles, and Zambia—recognized the persistence of barriers to trade despite commitments to remove them through COMESA and SADC and agreed to collaborate and jointly accelerate implementation of such reforms. The program consists of a mix of country-specific reforms and bilateral and multicountry policy coordination.

The level of MFN tariffs has substantially decreased since 2006. The simple average MFN tariff went down from 18.7 percent in 2006 to 10.1 percent in 2012, where it remains. The MFN simple average for agricultural products is higher, at 13.8 percent, but these products represent only 11 percent of imports. The ad valorem tariff includes four nonzero bands: 2.5, 5.0, 7.5, and 20.0 percent. A 17.0 percent VAT applies on imports and domestically produced goods. Some goods are exempt from VAT. Exports are zero-rated, but the process for obtaining VAT refunds is slow.

Mozambique is responsible for 70 percent of SADC's transit traffic. To reduce delays in transit flows, since 2013 a larger number of low-risk products that are transshipped particularly frequently are now exempt from having to pay customs bond guarantees, facilitating their processing in transit. These products include tea, maize, sugars, and other key exports from Malawi. The customs authority is obliged to give priority to transit operations of certain goods, namely live animals, newspapers and magazines, medicine, certain hazardous materials, and perishable goods.

A number of complaints have been raised over the past years in the context of the COMESA-EAC-SADC regional nontariff barriers (NTB) reporting mechanism. Complaints relate to transport standards, the functioning of transit procedures, additional taxes and other charges, corruption, and the (nontransparent) application of procedures at borders. Generally, NTBs are moderately applied, mostly for security, health, and environmental reasons.

**Mozambique is the only country in the region still conducting preshipment inspection on a large number of goods.** Preshipment inspection applies to a positive list of products, which includes frozen poultry, flour, cooking oil, cement, chemicals and pharmaceutical products, matches, tires, and used vehicles. Traders complain that customs clearance can take one to two weeks; authorities claim 40 percent of imports are cleared within two days in Maputo, which handles 80 percent of the country's trade. (Customs does not release average release times, which are now mandatory under the WTO Trade Facilitation Agreement. A very high share of containers is scanned (up to 70 percent at Ressano Garcia) and physically inspected (estimated at 40 percent).

**While the introduction of an electronic customs and trade facilitation system was set up to curb corruption and reduce import procedures, significant progress is yet to be registered.** There are many procedures and documentary requirements that constrain trade, including controls on the repatriation of foreign exchange. Customs legislation and procedures are enshrined in about 45 legislative acts that would also need more harmonization. Notwithstanding, recent efforts in reducing NTBs have improved Mozambique's ranking in the trade openness pillar of the Global Competitive Index, climbing from 91 out of 144 economies in 2014 to 75 out of 140 countries in 2018.

**Mozambique made trading across borders easier.** It did so by streamlining the submission of documents for imports, improving infrastructure at the Ressano Garcia border crossing, and simplifying export document compliance. The time to export is lower than the average in Sub-Saharan Africa: 66.0 hours of border compliance versus the African average of 97.3 hours and 36.0 hours of documentary compliance versus African average of 72.8 hours. The time to import is relatively low at 9 hours of border compliance and 16 hours of documentary compliance. This is well below the Sub-Saharan Africa rate of 126.3 hours on border compliance and 97.7 hours on documentary compliance.

**Mozambique's barriers to trade in services remain moderate, according to the World Bank's Services Trade Restrictiveness Index (STRI).** Its policies affecting trade in services are significantly less restrictive than in most of its neighbors. Mozambique has an overall score of 18.6, with only Mauritius having less restrictive policies.

## B.2. Governance

**Governance and corruption are key challenges in Mozambique, with the state of governance in the country declining over the last decade.** According to the Worldwide Governance Indicators (WGI), in 2008 Mozambique recorded better scores compared with the regional average for Sub-Saharan Africa.<sup>149</sup> However, the country's scores along all the WGI indicators have declined, and Mozambique now lags behind the regional average (figure B.3). In 2018, the country had a lower score than many other peer countries in the region in three key indicators that control the ability of the government to implement good regulations:

- The **government effectiveness** indicator captures the perception of the quality of public services, the quality of the civil service, and the degree of its independence from political pressures. Mozambique ranks in the 17.79th percentile, which puts it behind Ethiopia (29.33), Ghana (46.15), Kenya (38.94), South Africa (66.35), Tanzania (21.15), and Zambia (33.17). Mozambique ranks higher than Zimbabwe (10.58).

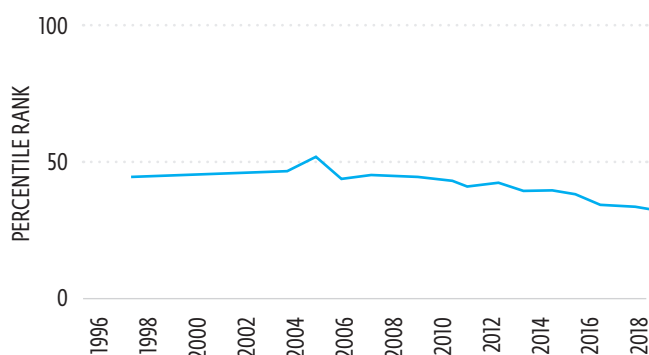
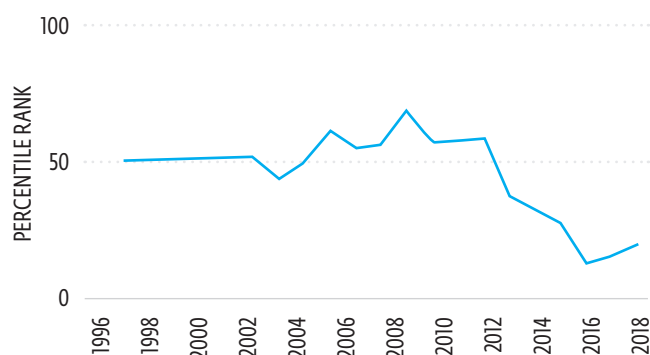
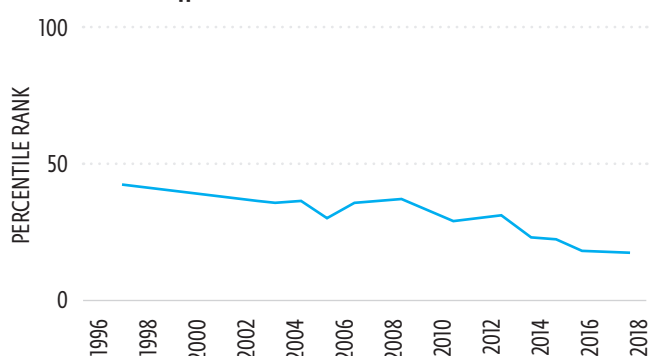
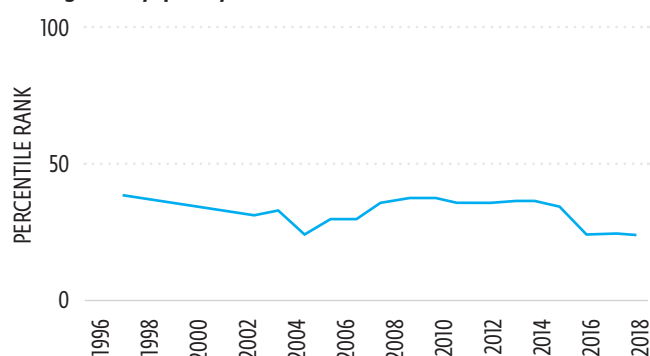
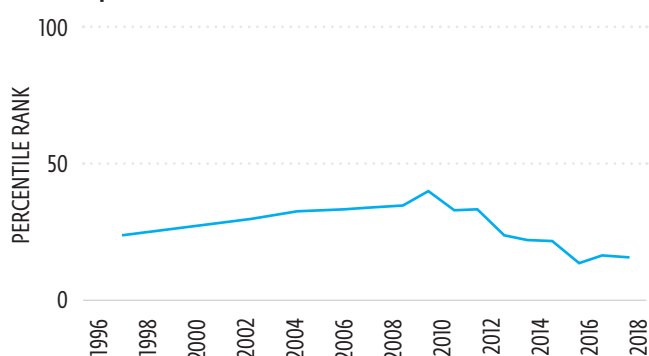
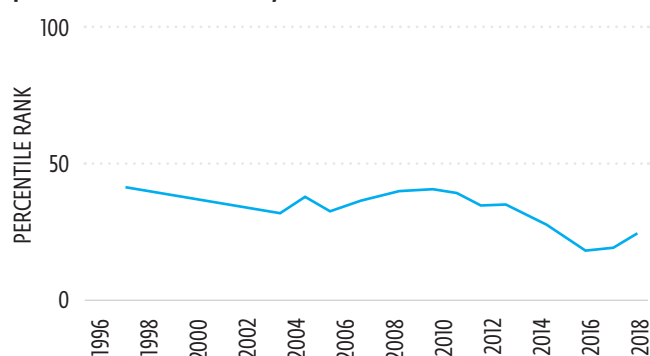
- The **regulatory quality** indicator captures the perception of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. Mozambique ranks in the 24.04th percentile, which again is behind Ghana (50.00), Kenya (43.75), South Africa (61.54), and Zambia (35.10). The country does better under this indicator; it is ahead of both Ethiopia (13.94) and Zimbabwe (4.33) and only five points behind Tanzania (29.33). Mozambique ranks 138 among 190 economies in the Doing Business 2020 report (World Bank 2020a).
- The **rule of law** indicator captures the perception of the extent to which public agents have confidence in and abide by the rules of society, in particular the quality of contract enforcement. Mozambique ranks in the 14.42th percentile, making it the worst indicator for the country, putting it behind Ghana (56.73), Kenya (37.98), South Africa (50.96), Tanzania (31.25), and Zambia (40.87). Mozambique is ahead of only Zimbabwe (8.17).

**Mozambique also performs poorly in all other measures of governance and corruption.** In Mo Ibrahim's Index of African Governance, it is 25 out of 54 economies, with the overall governance trend also showing an increasing pace of decline.

**Mozambique has become notably more corrupt in recent years, and corruption was chosen as the biggest obstacle for firms in the 2018 Enterprise Survey.** It was also the second-most-problematic factor in regard to doing business in the country, according to the Global Competitiveness Report (WEF 2019a). According to the Corruption Perception Index published by Transparency International, Mozambique's score fell from 31 in 2015, to 27 in 2016, to 25 in 2017, which is lower than the regional average for Sub-Saharan African economies (32.3).<sup>150</sup> In terms of ranking, Mozambique is 158 out of 180 economies.

**In particular, the Mozambican customs administration presents businesses with a high risk of corruption.** According to the Global Enabling Trade Report 2016, corruption is more pervasive when dealing with imports than with exports, owing to rent-seeking, NTBs, and burdensome import procedures. Complaints regarding the tariff classification of goods are handled by the taxation council, which reports to the tax authority.

**Although there are regulatory frameworks in place to address some aspects of governance and corruption, enforcement and implementation of these regulations remain a challenge.** A recent IMF diagnostic highlighted that over the past 15 years, the government has put in place institutional frameworks to address governance and corruption, across areas such as administration of justice and anti-money laundering/countering financing of terrorism (IMF 2019). However, implementation and enforcement of these regulations are a concern because of insufficient budgetary resources, limited capacity, and lack of external institutional oversight.

**FIGURE B.3 DECLINING TREND IN WORLDWIDE GOVERNANCE INDICATORS—MOZAMBIQUE****a. Voice and accountability****b. Political stability and absence of violence/terrorism****c. Government effectiveness****d. Regulatory quality****e. Rule of law****f. Voice and accountability**

Source: World Governance Indicators database, <https://info.worldbank.org/governance/wgi/Home/>.

**Fiscal governance remains poor as a result of persistent corruption, lack of transparency, and challenges in enforcement.** Revenue collection remains below potential as a result of rent-seeking practices around the high-profit businesses and extensive and complex VAT exemptions, which create room for evasion. Private companies also report significant delays in receiving VAT refunds. Public procurement remains inefficient, with only a third of both central and provincial procurement being awarded through open tendering procedures. Public investment continues to be affected by factors such as weak appraisal and monitoring capacity and delays in disbursements, among others (IMF 2019).

**The rule of law in the country is negatively affected by the insufficient judicial resources and manual recording systems.** Insufficient judicial resources result in extensive procedural delays. In addition to this, most court processing is done manually, which makes the system prone to errors and adds to delays.

**Recently, the government has taken some steps to improve the different aspects of governance.** In order to improve fiscal management, the government recently adopted a state-owned enterprise (SOE) law, to have a single entity oversee all the SOEs, and a decree on public debt management. A new system, e-SISTAFE, has also been developed as a unified system for revenue management. To strengthen the judiciary, commercial sections have been introduced in six provincial courts to rule on commercial issues like insolvency and bankruptcy. The government has also planned to improve transparency by increasing the availability of legal and organizational information (on government departments and key personnel), which would help improve compliance with conflicts of interest, asset declarations, and anti-money-laundering/countering financing of terrorism.

### B.3. Labor Regulations

**Mozambique ranks 138 out of 140 economies in the Labor Market Indicator of the 2019 Global Competitiveness Index (WEF 2019a).** Mozambique is well placed in terms of workers' rights and labor tax rates but performs poorly in terms of ease of hiring foreign labor, redundancy costs, female participation in the labor force, pay and productivity, and reliance on professional management.

**Labor market regulation may have contributed to halt the growth of the private sector.** According to standard international best practices, the following areas need Mozambique's consideration in its legislation: maximum duration of fixed-term contracts; duration of annual leave for a worker with at least one year of tenure; length of maternity leave; having a single national minimum wage; high severance pay; minimum period of seniority at a particular employer before a worker is entitled to severance pay; and lack of a benefit scheme that guarantees income protection to eligible unemployed workers.

**From a legislative and regulatory perspective, Mozambique contains three ingredients that restrict the labor environment, which are not attractive to new job creation:**

- Very restrictive labor regulations, with many specific items, depending on the industry and size of employer, the nature of the work performed, and the salary scale of the worker
- Excessively dispersed legislation, with many specific items depending on the industry and size of employer, the nature of the work performed, and the location of the work position
- An overload of regulatory obligations, with different sets of registrations, permits, approvals, again depending on the industry and size of the employer, the nature of the work performed, and the location of the work position

**The burden of regulatory obligations is worsened with the issuance of several internal orders, at both a central and a local level, that change the effective procedures and requirements.** Such internal orders are described by the private sector as common practices, forcing employers to adapt to unexpected requirements, some of which may not be difficult but definitively delay processes and increase the burden of regulatory obligations.

**The Mozambican Labor Law (Law 23/2007) is the main labor law in the country.** Furthermore, complementary legislation applies to certain types of employment agreements and other employment-related matters, such as the occupational accidents and illnesses regime (Decree 62/2013). In December 2016, a new regulation (Decree 37/2016) came into effect, related to the hiring of foreign citizens in Mozambique. The new rules introduce new cumbersome procedures to justify the hiring and renewal of foreign nationals based on the current quota system.<sup>151</sup>

**International conventions and treaties to which Mozambique is party, as well as collective bargaining instruments, are also sources of employment law.** Mozambique has ratified 18 International Labour Organization (ILO) conventions, including all eight fundamental conventions. According to Article 3 of the Labor Law, the following relationships are governed by special legislation: (a) domestic work, (b) work at home, (c) mining work, (d) port work, (e) maritime work, (f) rural work, (g) artistic work, (h) sport, (i) private security work, (j) contract work, (k) freelance work, and (l) work on a retainer basis.

**A new labor law has been under consultations over the past few years.** The main changes that are being discussed include eventual differentiation of fixed-term contracts according to size of the firm, reinforcement of paid family leave on top of annual leave, and increased severance pay from an already relatively high level.



**The labor law directly affects only a limited number of the workforce out of the total labor force.** ILO has estimated the total employed population in Mozambique in 2017 at 9.7 million, including 1.1 million employees directly affected by labor regulations (11.4 percent of the employed population); 0.4 million employers (4.1 percent); 4.9 million own-account workers (50.9 percent), and 3.2 million contributing family workers (33.6 percent).

**This section presents recommendations aimed at improving Mozambique labor regulations in the following areas.** Those include fixed-term contracts, annual leave, maternity leave, minimum wages, severance pay, and foreign labor.

### **Fixed-term contracts**

**In Mozambique, fixed-term employment contracts are only possible for temporary duties.** According to Labor Law Article 42, fixed-term contracts may be entered into for a period of up to two years, and this period may be renewed twice by agreement between the parties, without prejudice to the rules applicable to SMEs. A fixed-term employment contract shall be considered a permanent contract if it exceeds the maximum periods of duration or the number of renewals permitted. Importantly, SMEs are free to enter into fixed-term contracts during their first 10 years of activity.<sup>152</sup>

**As is the case with any other policy measure, liberalization of fixed-term contracts has its pros and cons.** Fixed-term employment makes labor markets more flexible; it allows companies to reap market opportunities by engaging in projects of short duration without bearing disproportionate personnel costs. This is especially important in labor markets like Mozambique's, where permanent employment is protected by strict regulations and high retrenchment costs.

**Mozambique should consider increasing the maximum duration of fixed-term contracts and allowing them for permanent tasks as well.** Overall, flexible contractual arrangements with respect to fixed-term contracts dominate in most economies. According to the Doing Business 2020 database, out of 202 economies, 131 (65 percent) allow fixed-term contracts for permanent tasks, or the duration is not regulated in labor law (figure B.4).<sup>153</sup> As for the maximum cumulative duration of a fixed-term employment relationship (including all renewals), 111 economies (55 percent) have no duration limits, and 24 allow fixed-term contracts for 60 months or longer (figure B.5).

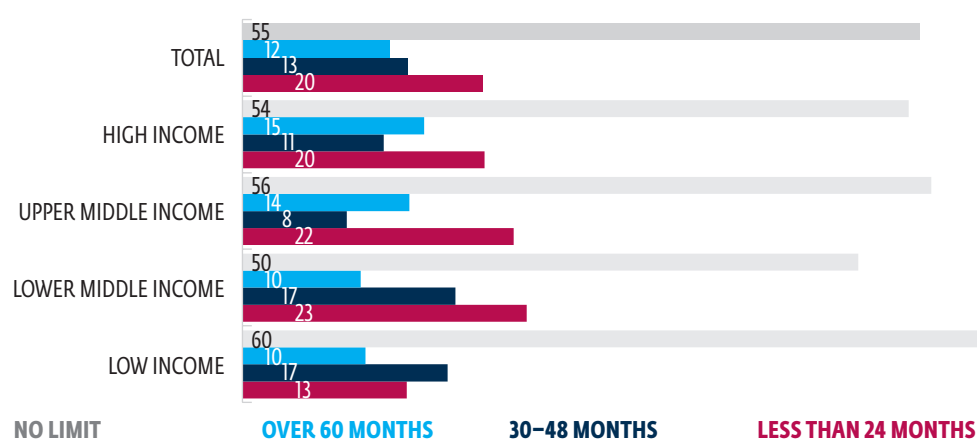
**FIGURE B.4 SHARE OF ECONOMIES IN WHICH FIXED-TERM CONTRACTS ARE ALLOWED FOR PERMANENT TASKS**



Source: World Bank Doing Business 2020 database.

**FIGURE B.5 MAXIMUM LENGTH OF FIXED-TERM CONTRACTS, INCLUDING RENEWALS**

Share of economies in each cohort (%)



Source: World Bank Doing Business 2020 database.

### Annual leave

In Mozambique, according to Article 99 of the labor law (duration of annual holidays), employees shall be entitled to the following periods of paid annual holidays:

- One day for every month of actual service, during the first year of service
- Two days for every month of actual service, during the second year of service
- Thirty consecutive days for every year of actual service, from the third year onward

Mozambique should consider extending the minimum duration of annual leave to 15 working days for a worker with at least one year of tenure, but limit the duration up to 24 working days (nonconsecutive) for workers with long job tenure. Annual leave above this threshold could be negotiated in collective agreement. In 2019, 64 economies (34 percent) had an annual leave entitlement of 14 working days or less,<sup>154</sup> for example, less than three working weeks, as suggested by the ILO as a minimum standard.

### Maternity leave

In Mozambique, female employees are entitled to 60 consecutive days of maternity leave. Leave may be initiated 20 days before the predicted delivery date. Among comparator countries, minimum length of maternity leave was 56 days in Malawi, but it was 84 days in Tanzania and Zambia, 98 days in Zimbabwe, and 120 days in South Africa.

Mozambique may want to consider gradually increasing minimum length of maternity leave to 98 calendar days. Basic standards regarding maternity leave entitlements are laid down in the ILO's Maternity Protection Convention No. 183 of 2000 and the Maternity Protection Recommendation No. 191. The convention calls for a period of maternity leave not less than 14 weeks, including six weeks compulsory leave after childbirth.

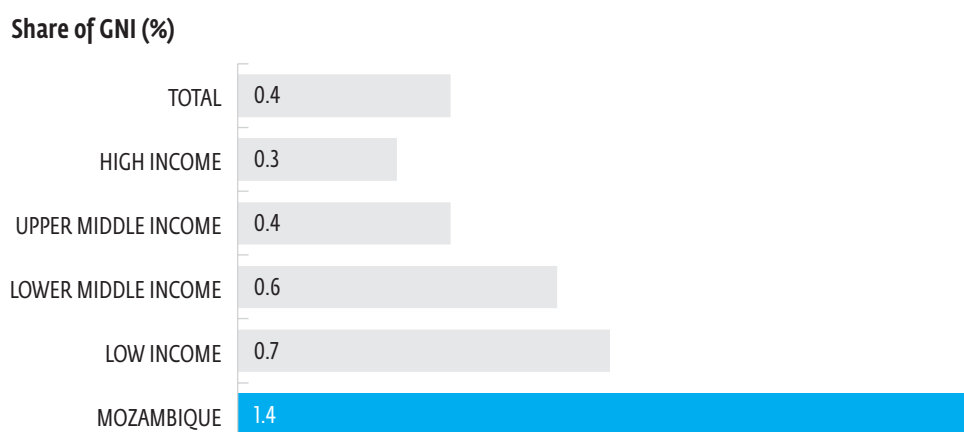
### Minimum wages

Statutory minimum wages are set in most economies, although level and scope of application vary widely.<sup>155</sup> In 45 percent of the economies, minimum wages are uniformly set at the national level, while in 43 percent of them they are set by sector or industry. Although minimum wages differentiated by segments of a country's labor market are common, these can increase administrative complexity, create enforcement challenges, and lead to wage discrimination.

**Minimum wages in Mozambique are determined by sector.**<sup>156</sup> Multiple minimum wages such as in Mozambique add administrative complexity and are only successful if an adequately robust system of oversight accompanies them. The General Survey on Minimum Wage Systems (ILO 2014) points out that “the more complex a minimum wage system is, and the more sectoral, occupational, and geographical rates it involves, the more difficult it is to monitor, particularly in countries where labor administration services have very limited resources.”

With multiple minimum wages, there is a risk that similar workers (for example, with the same occupation and skill levels) would be subject to varying minimum wage rates. This would affect the principle of equal treatment (equal remuneration for work of equal value). Furthermore, too many minimum wage levels make it difficult for workers and employers to determine which rates are applicable to them and might also affect the mobility of labor and capital. The general trend around the world is to reduce the number of differentiated minimum wage rates.

**FIGURE B.6 MINIMUM WAGE AS A SHARE OF GNI PER WORKER**



Source: World Bank 2020.

Note: GNI = gross national income.

**Mozambique should consider setting a single national minimum wage.** In Mozambique, in 2019, the ratio of minimum wage as a share of GNI per worker equaled 1.4, which is one of the highest ratios in the world (figure B.6). Among comparator countries, Zambia also has a high ratio of 1.0, but Malawi is at 0.6, South Africa is at 0.4, and Tanzania is at 0.3.

### Severance pay

Mozambique's severance pay for employees on a permanent employment agreement are as follows:<sup>157</sup>

- 30 days wages per year of service, if the employee's base wage is equivalent to one to seven times the national minimum wage;
- 15 days wages per year of service, if the employee's base wage is equivalent to eight to 10 times the national minimum wage;
- 10 days wages per year of service, if the employee's base wage is equivalent to 11 to 16 times the national minimum wage; or
- 3 days wages per year of service, if the employee's base wage is equivalent to more than 16 times the national minimum wage.

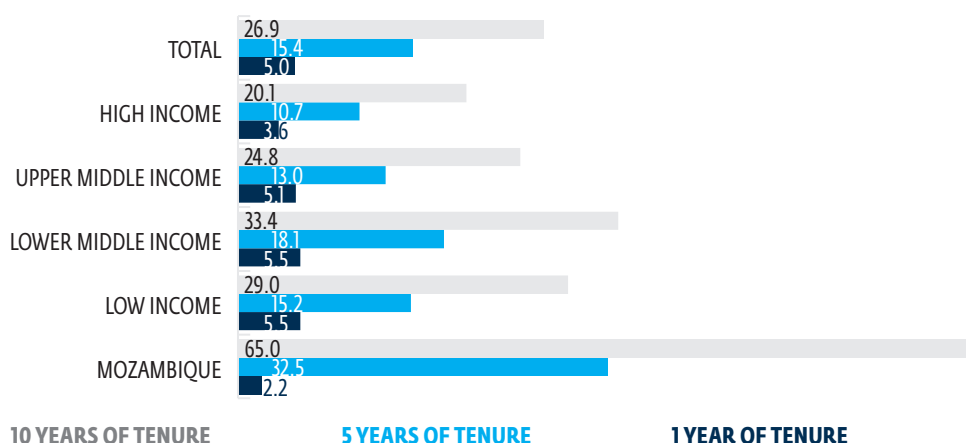
**In the 2020 Doing Business report (World Bank 2020a), Mozambique is ranked as one of the top 10 highest-paying economies with respect to retrenchment compensation.**

Severance payments set too high can dissuade formal job creation, as well as efficient labor reallocation, by discouraging employers from undertaking necessary restructuring. A total of 65 economies (32 percent) do not have statutory severance pay for redundancy dismissal after one year of job tenure; 40 (20 percent) still do not have access to statutory severance pay after five and 10 years of job tenure (World Bank 2020a). Altogether, labor legislation in at least 24 economies requests between six months and three years of job tenure at the employer before the worker is eligible for severance.

**Overall, enterprise restructuring costs involved in Mozambique are considerable.** This is a heavy burden on individual employers, especially in micro, small, and medium enterprises. The country should consider limiting some of these costs. Such reform would give employers greater flexibility in responding to market fluctuations through their workforce. If not, employers will be reluctant to hire workers and more inclined to operate in the informal sector.

**Mozambique may also want to establish a minimum period of seniority (a vesting period) before a worker is entitled to severance pay for dismissals.** It is recommended that severance payment be limited by a lower ceiling than currently stipulated, such as 12 to 24 months of job tenure.

**Mozambique may consider introducing an unemployment benefit scheme that guarantees income protection to eligible unemployed workers.** Such a scheme is usually combined with measures that support jobseekers returning to work. One difference between the two types of income support is that state unemployment benefits are pooled resources that are a form of social insurance, generally financed by payroll taxes. They reduce the burden for firms in difficult times. By provisioning a fund, resources are accumulated in good times and made available in difficult times. Mandatory severance pay comes from a single employer and therefore has no insurance pooling. Figure B.7 compares Mozambique's average statutory severance pay levels with that of other economies.

**FIGURE B.7 AVERAGE STATUTORY SEVERANCE PAY IN APPLICABLE ECONOMIES (IN SALARY WEEKS)**

Source: World Bank 2020a.

**Foreign labor**

**Mozambique has quotas on foreign workers across all sectors.** The quota depends on the size of the business. In accordance with paragraph 5 of Article 31 in conjunction with paragraph 1 of Article 34 of the Labor Law, quotas for hiring foreign workers are allocated according to the type of company as follows:

- 5 percent of all workers in large companies (more than 100 workers);
- 8 percent of all workers in medium-size companies (11–100 workers);
- 10 percent of all workers in small businesses (1–10 workers).

**In practice, businesses request exceptions regularly.** The Labor Law states that investment projects above approximately US\$210,000, and investment projects above 10,000 hectares can file for exceptions from the quotas. However, the regulation is silent as to the process and extent of that exception. Consultations with the private sector confirm that many companies are requiring such exemptions and usually also have them granted.<sup>158</sup> This indicates that the current quota regime is not applied to all equally.

**Investments that rely on efficiency and compete internationally are sensitive to difficulties in hiring foreign skilled labor.** The strict quota does not reflect the ever-changing demands of the market. While governments naturally try to increase job opportunities for nationals, especially in areas with conflict such as in Mozambique, a balance between enforcing strict economywide quotas and filling gaps in the supply of skilled labor is needed. Otherwise, such quotas quickly become a deterrent for FDI. This applies even more to investment in new sectors that would be needed for the diversification of the economy, but for which a trained local workforce is not yet available.



**Mozambique should consider revoking paragraph 5 of Article 34 of the Labor Law, eliminating quotas on foreign labor.** In the short run, it should at least move to a rule that establishes a proportional quota for all firms. The following criterion could be used for setting the quota: for every 10 national workers hired, companies enjoy the quota of one foreign worker. This aspect is also discussed under the investment policy chapter, suggesting flexibility can take into consideration economic needs and adaptation to particular sectoral needs.

**In addition, there is the need to simplify the process of receiving work permits for foreign labor within the quota.** The Ministry of Labor requires documents such as a list of employees and corresponding salary levels. The Ministry of Education requires transcripts from the employee's previous three schools independently of the level. The process includes obtaining confirmation of tax compliance for each work permit rather than on a general basis. These processes take time, which promotes a regime of corruption to accelerate work permits.

**Mozambique has no specific system to attract and retain foreign talents, or workers who are recognized in their fields of expertise.** The main system used to employ foreigners is based purely on the number of workers of the employer, irrespective of the skills and qualifications of both national workers and the foreign worker to be employed. This may increase the total number of employed people, but only on unqualified and poorly paid positions that do not require any skills. On the other hand, it may be difficult for companies that require mainly highly qualified personnel to invest in Mozambique, as it may be difficult to recruit both national and foreign highly qualified professionals.

#### **B.4. Land Policy Constraints**

**Mozambique has made significant progress over the past 20 years improving access to and security of land rights for all citizens.** This was achieved particularly by strengthening Mozambique's land-related policy and legal frameworks and the functioning of the land administration and management system. The country is widely regarded as having one of the most progressive land policies and legislative frameworks for sustainable and equitable land governance in Africa. According to the 1997 Land Law and the 2004 Constitution, citizens and local communities have statutory recognition of their rights to use and benefit from land they occupy (DUATs) based on customary and good faith occupation. Local communities can request that their boundaries be identified ("delimited") and recorded in the cadastre in agreement with neighboring communities, and that a certificate of the respective DUAT be issued by the state.

However, the law and regulations still present significant gaps with respect to the legal representation of communities and the management of communal lands and natural resources. These gaps are exacerbated in practice by the weaknesses in community capacity, lack of clarity of the scope of certain rights at the local level, and weaknesses in the land administration system, especially at the local levels. In June 2018, the Council of Ministers approved a new Real Property Register Code. The code regulates the registration of real property rights, which include all DUAT titles issued by the cadastral authorities. Among the changes introduced by the code are the mandatory registration of all property rights, the gradual introduction of a national digital information platform for registration, and the elimination of the territorial role of the various registries.

**A Land Information Management System was introduced in 2012 to promote access to, and use of, reliable land information by the public and by private parties.** In 2015, the government of Mozambique adopted the Terra Segura Program as part of the National Sustainable Development Program. The Terra Segura Program sets out an ambitious goal of regularizing 5 million individual DUATs and completing the delimitation of 4,000 communities' lands before 2020.

**Albeit fundamental, these reforms have yet to bring about the desired benefits.** Institutional weaknesses and the inability to perform basic land administration tasks, especially at the decentralized (district) level, including harnessing the available technologies to facilitate land regularization activities at large scale, have been a major obstacle to the implementation of the Land Law. The land sector's capacity to delimit communities and to issue and monitor DUAT titles to individuals in general and investors in particular remains extremely low. It is estimated that there are still more than 10 million land parcels, or about 90 percent of total occupations, for which land rights have not been formally registered by the state. One problem is that most of the country's systematic cartography maps are outdated and do not reflect the situation on the ground.

**The full potential of community delimitation as an approach to securing tenure and stimulating local economic development has yet to be realized.** The delimitation processes have not been implemented according to a common methodology, with different practices and standards applied in different parts of the country with mixed results. Insufficient attention has been paid to the building of institutional capacity at the community level. These challenges have resulted in an ineffective control of the process of occupation and distribution of land resources by public institutions and have contributed to an increased level of land-related conflicts. The challenges also have led to the expansion of the informal land market, which is particularly dynamic in growing urban centers and peri-urban areas.

## B.5. Macrofiscal Constraints

**Mozambique made significant progress in remedying its fiscal imbalances after the hidden debt crisis, but fiscal risks remain significant.** The situation limits the fiscal space for public investment, which in turn affects opportunities for the private sector in a country that is still very dependent on the state. The primary deficit declined from almost 6 percent in 2015 to just over 2 percent by 2018. However, the primary deficit is expected to widen to 5 percent in 2020, up from a prepandemic forecast of 1 percent. This gap is caused by an expected decline in revenue as firms experience the impact of lower domestic and global demand, and as COVID-19 tax relief measures for firms take effect. Expenditure needs are also expected to pick up as the authorities implement response measures estimated at 3.6 percent of GDP. Overall, the COVID-19 shock is expected to contribute to a fiscal gap of 5.5 percent and 2.5 percent of GDP, respectively, in 2020 and 2021. This situation occurs in a context of overindebtedness, affording little fiscal space for Mozambique to confront these costs.

**To close the fiscal gap, Mozambique will participate in the bilateral debt relief initiative, draw on donor budget support, and draw down saving from past capital gains receipts.** In addition, the government will seek to reprioritize the expenditure program and freeze the annual public sector pay increase in 2020. These steps follow a pre-pandemic effort to consolidate expenses, particularly the investment budget, following the 2016 debt crisis. Total spending fell from 33 percent to 31 percent of GDP from 2015 to 2018. In 2019, Cyclones Idai and Kenneth, election-related costs, and a growing wage bill added spending pressures. These costs were mitigated by donor support and one-off capital gains receipts received in the same year, bringing the primary balance to a surplus of 3.7 percent of GDP (–1.9 percent excluding capital gains). Fiscal space remains limited given a high debt burden, the significant reduction in external financing, and fiscal risks from underperforming SOEs.

**Although still elevated, public debt levels have declined since 2016.** Public sector debt is estimated to have declined from 127 percent of GDP at end-2016 to an estimated 108 percent by end-2019, and external debt declined from 104 percent to 89 percent, mainly because of the appreciation of the metical and reduced external borrowing. Public sector debt ratios are lower when the debt of the state-owned Empresa Nacional de Hidrocarbonetos (ENH) is excluded, declining from 119 percent to 99 percent of GDP between 2016 and 2019. Despite this, the debt burden is high, ratios of external and public debt service to revenue estimated at 14 percent and 32 percent, respectively, at end 2019. In addition, continued growth in domestic credit as a source of financing has kept the domestic growth on an increasing path. The stock of central government domestic debt reached an estimated 16.6 percent of GDP at the end of 2019, up from 11 percent of GDP in 2015.

**Mozambique remains in debt distress, but debt is assessed to be sustainable looking ahead** (box B.B1). Under the baseline scenario, external debt indicators breach the policy-relevant thresholds in the near and medium term. In particular, the present value of external public debt in terms of GDP is projected to remain above the prudent threshold over the medium term. However, the ratios are projected to drop below the threshold by 2029 as LNG production contributes to higher growth, exports, and fiscal revenues, after which they decline sharply. The analysis shows that the significant impact of LNG production on key macroeconomic indicators will help improve the debt sustainability ratios, both by reducing gross financing needs and by expanding the economy's debt-carrying capacity, providing the basis for the assessment of debt as being sustainable looking ahead. The fiscal framework would be further bolstered if Mozambique were to enter a program with the IMF. Steady progress in this regard will be important for placing the fiscal position on a stronger footing.

#### **BOX B.B1 MOZAMBIQUE'S LNG INVESTMENTS AND THEIR CONTRIBUTION TO DEBT SUSTAINABILITY**

Liquefied natural gas (LNG) production is expected to be an important catalyst for economic growth and fiscal space, and it is expected to support Mozambique's return to debt sustainability. Under a medium scenario, Mozambique's exports are expected to almost triple over the next 20 years. With this, government revenues would be 55 percent higher than under a no-LNG scenario over this period. Similarly, GDP would be 80 percent higher by 2040. It is a significant amount of resources with potential to transform the prospects of one of the poorest countries in the world. The significant impact of LNG production on key macroeconomic indicators will help improve the debt sustainability ratios, both by reducing gross financing needs and by expanding the economy's debt carrying capacity.

Mozambique's LNG prospects are not without risks. Important risks pertain to the expected influx of natural resource revenues toward the end of the decade, which will likely strain the government's weak macrofiscal management capacity. Effectively

using resource wealth poses several complex challenges: (a) pass-through of commodity price volatility, excessive revenue, and public expenditure growth can undermine macroeconomic stability and absorptive capacity, and (b) Dutch disease effects can erode competitiveness to the detriment of inclusive growth. Moreover, progress in transparency is critical if resource governance is to improve. Addressing these challenges will require adopting an appropriate fiscal framework underpinned by mechanisms to reinforce macroeconomic stability, maintain adequate levels of spending and savings, and insulate the budget from price and production shocks. It will also require reforms to close the gaps in the governance of natural resource management. It is important to manage these risks through measures to increase debt transparency, improve access to the financial records of the national hydrocarbons company, and improve fiscal risk management.

Source: CPSD team.

## APPENDIX C. OTHER TABLES AND FIGURES

**TABLE C.1. SECTORS WITH POTENTIAL FOR LOCAL SOURCING BY EXTRACTIVE INDUSTRIES**

### FOOD SUPPLY AND CATERING

#### **Agro-industries (including horticulture, poultry, meat); Catering services.**

Approximately 30,000 workers will be on sites during peak construction, amounting to over 90,000 meals per day just for direct workers, excluding families. There is a large opportunity for agro-industries to produce food and for catering companies to provide meals. Engineering, procurement, and construction (EPC) contractors will be seeking compliance with global health and safety standards, access to reliable food supply, and sufficient operational capacity to serve a group of this size. Catering companies may need to invest in strengthening their value chains to meet quantities and quality required. Catering typically relies on large numbers of basic-skilled and semiskilled jobs; therefore the opportunity to create jobs is large.

### BASIC CONSTRUCTION-RELATED SERVICES

#### **Construction site preparation; Basic electrical works; Concrete works.**

EPC contractors usually work with large international players for construction services, but various services are subcontracted. Local firms should seek to improve their quality certification systems in parallel with equipment upgrades and improved maintenance services in order to maximize subcontracting opportunities. Opportunities for local employment are high given the labor intensity of the tasks.

### INDIRECT PROFESSIONAL, ADMINISTRATIVE, AND SUPPORT SERVICES

#### **Security services; Cleaning services; Waste management services; Transport services; Some warehousing and storage services; Utilities.**

The professional services are easier to procure from local enterprises given the existing base of skills and firm capabilities. To fully benefit from these opportunities, local businesses will need to obtain the required quality certifications and ensure compliance with health, safety, security, and environmental standards. Given the dependency on labor-intensive and largely manual tasks, support services can generate a significant number of local jobs.

**TABLE C.2. STATUS OF A FEW MOZAMBIKAN SECTORS WITH POTENTIAL FOR UPSTREAM LINKAGES TO EXTRACTIVE INDUSTRIES**

SECTOR	DESCRIPTION
<b>Employment agencies</b>	<ul style="list-style-type: none"> <li>• Private employment agencies have as their main activity recruitment and selection. Additionally, they provide services of outsourcing, training, HR consultancy, behavioral training, market research, skills verification, marketing, etc.</li> <li>• The largest recruitment companies with local presence in Mozambique have the participation of international groups. These include Contact, Airswift-Embrace, and LINKUP. Their databases of workers are extensive. Job advertisements are made available on the respective agencies' website, online job platforms, newspapers, and other social networks. The potential candidates that recently graduated from technical and vocational education and training schools (TVETs) and universities in the country are sought to be included in these databases.</li> <li>• Some companies in the sector are certified, with emphasis on ISO 9001a and ISO 14001. Others are in the process of acquiring certifications to meet the requirements of oil and gas companies. The client portfolio of these employment agencies are mostly medium and large companies with emphasis on the financial and extractives sector. Some companies complain that they face unfair competition in the market, for example, players who do not follow the appropriate regulations</li> <li>• Mozambican agencies are prepared and have already started providing services in Cabo Delgado, especially for large companies, despite some factors such as insecurity in the province, weaknesses in mobile and internet access, lack of a skilled workforce in the province, and lack of a return on investment in training programs.</li> </ul>



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**Cleaning services and facility management**

- In Mozambique, cleaning and facility management companies have been installed for more than 35 years, providing services throughout the country.
  - Cleaning companies are mostly nationally owned, with extensive experience, specialized staff, and up-to-date equipment. They provide cleaning services in offices, private homes, events, factories, and public spaces including airports and stadiums. For example, Clean Africa is a Mozambican company that provides services to the Maputo international airport. Other services that can be provided by these companies are fumigation, gardening, laundry, floor treatment, distribution of accessories, and representation of products related to personal cleaning. Cleaning companies such as Help, Multiservices, and MHM (Mozambican Hygiene and Maintenance) provide other services, including outsourcing to receptionists and management of condominiums, among others. Some Mozambican companies in the cleaning sector have the national label denominated Made in Mozambique.
  - The companies specialized in the provision of facility management services in Mozambique mostly belong to international groups (mainly of Portuguese origin). The services include facilities management, building and facilities maintenance, environmental management, energy management, maintenance engineering solutions, IT and software solutions, and so on. Their areas of work include, for example, residential buildings, office and business parks, technological centers, shopping centers and retail parks, distribution chains, specialized retail store. Facility management companies mostly offer a complete service, and cleaning is done using outsourcing.
  - The clients are mostly medium and large companies in the financial, public, and extractives sectors and international organizations. Facility management companies that belong to large international groups have several quality certificates such as ISO 9001, ISO 14001, and OSHAS 18001. Their employees regularly participate in training and qualifications in the areas of installation and maintenance, handling of fluids and refrigeration, and others.
  - Companies in the sector acknowledge that some of the challenges in serving the extractive industries are that the level of demand for services is very high, the terms of reference are complex, the requirement for quality certificates is common, the quality of manpower is limited (they constantly have to be training), and the technical knowledge on maintenance has limitations. Another challenge in the provision of services (in Cabo Delgado) is the acquisition of basic work materials.
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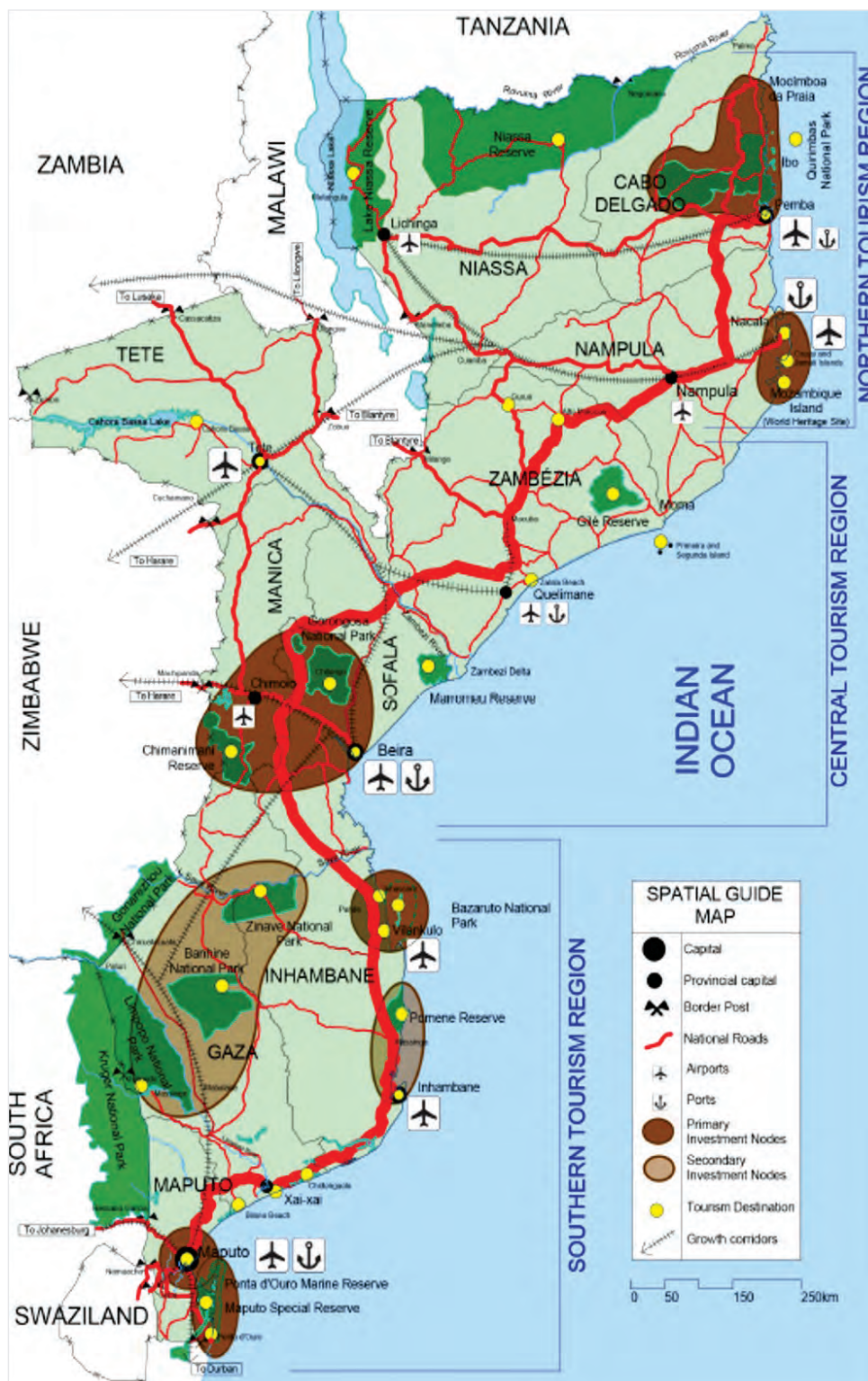
## Security services

- Mozambique has a small number of private security companies. Most are branches of international companies (registered as local companies) such as ARKHÊ Risk Solutions, while others are nationally owned with presence only in Mozambique, like Executive Protection. In general, security companies provide secure cash transportation, integrated security solutions, manned security, security risk surveys, alarm monitoring, armed response, CCTV (closed-circuit television) monitoring,, occupational health, fire risk management, and security services during events.
- In addition to the nascent gas sector, other traditional sectors have been procuring security services in Mozambique, such as the financial sector, mining, and international organizations like the United Nations. Some companies have already tapped into the growing market for security services in gas. Although ownership is often foreign, the security guards are typically hired and trained locally.
- Generally, international companies are larger, with a presence in many different countries, access to international standard best practices, and experience in the oil and gas sector. G4S, one of the pioneers in Mozambique, employs more than 11,000 people (mostly Mozambicans) and has representation in 122 economies of the world. In Mozambique, the company has operational offices in all provinces and provides all types of security services (including in offshore).
- An encouraging fact that points to a relative preparedness of the sector to supply the gas sector is the network and outreach of security companies. Indeed, they have the capacity to quickly mobilize hundreds of staff to provide manned security services (physical security guards), because they have a large database of specialized staff. Moreover, workers in security companies benefit from specialized trainings held in the security companies' training camps before starting to work. These companies strive generally to meet international best practices, although they do not necessarily have quality certifications.
- Despite their experience in serving international contractors, which positions security companies in Mozambique well to serve the new market, some of the smaller businesses face typical challenges of SMEs in Mozambique, ranging from general lack of management skills (such as operational management, cash shortages, and staff turnover) to problems related to the business environment. Moreover, both international and local companies seem to face challenges in accessing big tenders for large projects because of lack of certain types of certification (such as those required to use weapons), suggesting that quality standards is an area where efforts need to focus to tap into this growing market.

a. ISO 9001 covers quality management principles including a strong customer focus, the motivation and implication of top management, the process approach and continual improvement. ISO 14001 covers environmental management.

**FIGURE C.1. PRIORITY AREAS FOR TOURISM INVESTMENT (PATIS), SPDTM II**

**Spatial Guide Map - Phase I (2015 - 2019)**







**Maputo City:** Support and leverage MICE (meetings, incentives, conferences, and exhibitions) opportunities; develop the old fishing port as a tourism waterfront and major hub in the Baixa development plan; establish Maputo Tourism; expand the city tourism plan to include surrounding areas; launch a city cleanup and antilitter campaign; improve tourism signage and interpretation.

**Maputo Elephant Reserve—Ponta do Ouro:** Institute quality controls to improve Ponta do Ouro; redevelop Ponta Malongane site; develop ecotourism facilities in the reserve; devise a structural plan for Ponta do Ouro; upgrade access roads and parking at key tourism sites; develop sustainable waste management and sanitation system.

**Vilankulo-Bazaruto:** Implement Vilankulo tourism development plan; establish a functional local tourism forum; attract quality resort hotels; plan and differentiate access to islands; expand family entertainment; redevelop the marginal lands as resort area; develop Inhassoro ZIT (Tourism Interest Zone); leverage INATUR's (the body mandated to promote investment in ZITs) properties; expand Vilankulo runway; improve access and services to Inhassoro ZIT.

**Gorongosa-Chimanimani:** Package a variety of ecotourism experiences; develop visitor facilities, trails, and so on, in Chimanimani; support development of an upmarket lodge in Gorongosa; expand community support programs; recognize Gorongosa as a center of conservation excellence; establish a local tourism forum; improve and maintain Machipanda-Beira road.

**Nacala-Ilha de Moçambique:** Further improve Ilha Mozambique; further develop the diving industry; develop scenic tourism routes; develop a good road connection and services to Crusse and Jamali ZIT; improve transport from the new Nacala international airport.

**Pemba-Quirimbas:** Implement Wimbe beach redevelopment; improve historic Pemba; protect Quirimbas National Park; enforce land use plans; improve infrastructure.

TABLE C.3. SECTORS AND SUBSECTORS WITH SOE PRESENCE, 2019

	SECTORS WITH AT LEAST ONE NATIONAL, STATE, REGIONAL, OR PROVINCIAL CONTROL OF AT LEAST ONE FIRM	MARKET SHARE OF THE LARGEST SOE (%)	SHARES OWNED BY THE GOVT. IN THE LARGEST SOE (%)	NONEXHAUSTIVE LIST OF SOES IN THE SECTOR - EP (PUBLIC ENTERPRISES) AND S.A. (GOV. AS MAJORITY SHAREHOLDER)	PRESENCE OF PRIVATE PLAYERS
<b>Network and infrastructure in which economic regulation is necessary (including market segments with natural monopoly characteristics)</b>					
1	Water transportation infrastructure (ports/terminals)	50 < x < 90	100	Caminhos de Ferro de Moçambique–CFM, E.P.; PETROMOC S.A.; Silos e Terminal Granelheiro da Matola–STEMA, S.A.	Yes
2	Rail infrastructure	100	100	Caminhos de Ferro de Moçambique–CFM, E.P.	No
3	Electricity transmission	100	100	Electricidade de Moçambique–EDM, E.P.	No
4	Telecom backbone infrastructure	100	90	Moçambique Telecom–Tmcel, S.A.	No
5	Airport infrastructure	100	100	Aeroportos de Moçambique–ADM, E.P.	No
<b>Sectors in which private sector normally provides for services under pro-competition market regulation</b>					
6	Air transport services—international passenger/cargo transport	50 < x	96	Linhas Aéreas de Moçambique–LAM, S.A.	Yes
7	Air transport services—national	50 < x < 90	96	Linhas Aéreas de Moçambique–LAM, S.A.	Yes
8	Water transportation services (passenger/cargo)	N/A	100	Transmarítima S.A.	Yes
9	Mining	N/A	85	Empresa Moçambicana de Exploração Mineira–EMEM, S.A.	Yes
10	Oil and gas (import, upstream)	50 < x < 90	80	PETROMOC S.A.; Empresa Nacional e Hidrocarbonetos–ENH, E.P.	Yes
11	Oil and gas (pipeline infrastructure)	50 < x < 90	100	Companhia Pipeline Moçambique/Zimbabwe LDA	N/A
12	Oil and gas (wholesale and retail)	< 50	100	PETROMOC S.A.; Empresa Nacional e Hidrocarbonetos–ENH, E.P.	Yes
13	Electricity distribution	100	100	Electricidade de Moçambique–EDM, E.P.	No
14	Electricity imports/generation	50 < x < 90	85	Electricidade de Moçambique–EDM, E.P.; Hidroelétrica de Cahora Bassa–HCB, S.A.	Yes
15	Rail freight services	100	100	Caminhos de Ferro de Moçambique–CFM, E.P.	No
16	Telecom fixed line	100	90	Moçambique Telecom–Tmcel, S.A.	No

	SECTORS WITH AT LEAST ONE NATIONAL, STATE, REGIONAL, OR PROVINCIAL CONTROL OF AT LEAST ONE FIRM	MARKET SHARE OF THE LARGEST SOE (%)	SHARES OWNED BY THE GOVT. IN THE LARGEST SOE (%)	NONEXHAUSTIVE LIST OF SOES IN THE SECTOR - EP (PUBLIC ENTERPRISES) AND S.A. (GOV. AS MAJORITY SHAREHOLDER)	PRESENCE OF PRIVATE PLAYERS
17	Telecom mobile services	< 50	90	Moçambique Telecom–Tmcel, S.A.	Yes
18	Telecom internet services	< 50	90	Moçambique Telecom–Tmcel, S.A.	Yes
19	Post—basic letter services	> 90	100	Correios de Moçambique E.P.	No
20	Post—basic parcel services	> 90	100	Correios de Moçambique E.P.	No
21	Post—courier services	< 50	100	Correios de Moçambique E.P.	Yes
22	Financial services	< 50	100	Banco Nacional de Investimento–BNI, S.A.; Empresa Moçambicana de Seguros–EMOSE, S.A.	Yes
<b>Sectors in which private sector normally provides for services under unregulated market competition</b>					
23	Accommodation, food and beverage service activities (hotels, restaurants)	< 50	N/A	Instituto Nacional de Turismo	Yes
24	Agriculture, fishery, forestry	< 50	80	CAIC – Complexo Agroindustrial de Chockwe, S.A.; Empresa Moçambicana de Atum–EMATUM S.A.; EMOPESCA S.A.; Sementes de Moçambique–SEMOC, S.A.	Yes
25	Warehousing	N/A	100	Silos e Terminal Graneleiro da Matola - STEMA, S.A.	N/A
26	Irrigation	N/A	100	Hidráulica de Chokwe–HICP, E.P.; Regadio de Baixo Limpopo–RBL, E.P.	N/A
27	News and media (magazines); printing	N/A	100	Imprensa Nacional de Moçambique–INM, E.P.; Sociedade Notícias S.A.	Yes
28	Radio/TV broadcasting	< 50	100	Televisão de Moçambique–TVM, E.P.; Rádio Moçambique–RB, E.P.	Yes
29	Retail trade	< 50	100	Sociedade de Farmácias de Moçambique–FARMAC S.A.; PETROMOC S.A.	Yes
30	Real estate	N/A	100	Sociedade de Gestão Imobiliária S.A.–DOMUS	Yes
31	Construction	N/A	100	Sociedade de Gestão Imobiliária S.A.–DOMUS	Yes
32	Manufacture and import of pharmaceuticals	N/A	100	Sociedade Moçambicana de Medicamentos–SMM, S.A.; MEDIMOC S.A.	Yes

Sources: Data from IGEPE (2019) and IGEPE's website.

Note: SOE = state-owned enterprise.





## APPENDIX D. CPSD: REVIEW OF METHODOLOGY AND SELECTION OF SECTORS OF FOCUS

This CPSD involves a wide consultative process with government, private sector, and industry specialists. The aim is to both validate and refine the optimal interventions for delivering tangible results. The methodology used in Mozambique includes the following collaboration efforts:

- Consultations with private sector and government. By concept note, the team had interviewed a comprehensive set of private sector operators and associations. The pre-concept note mission involved meetings with most sectoral ministries to discuss opportunities, constraints, and areas of reform. A number of missions on technical areas of the sector and cross-cutting analysis were held in late 2019 and early 2020.
- A collaborative process involving IFC CCE, FCI, MTI, and other World Bank Group country teams, IFC sector teams, and World Bank Global Practices.
- An internal consultation process within the World Bank Group. A couple of workshops to discuss the concept note were held in February and April 2019, inviting technical teams from all WBG units with operations or interest in Mozambique. Similarly, workshops were held in early 2020 to discuss the story line, key cross-cutting constraints, and the various sectoral opportunities.

The CPSD uses a standard analytical approach to establish an action plan to support private sector growth and economic development. The assessment involves analyses in a small set of sectors and cross-cutting issues, providing in-depth understanding of what is needed in those areas to promote private sector development and economic impact. Sectors and issues for analyses were selected on the basis of their impact and the feasibility of reforms, on the basis of a scan of data and scoring across the following indicators:

A. **Impacts**

- a. Private sector firms directly affecting the poor
- b. Jobs
  - i. Job creation
  - ii. Creation of highly productive jobs
  - iii. Indirect job creation
- c. Investment and growth
  - i. Private investment potential
  - ii. Contribution to GDP
  - iii. Linkages to the rest of the economy and country

B. **Feasibility of reforms**

- a. Needed reforms implementable in time frame
- b. Political support for reforms

The team used information gathered from a scan of indicators for IFC sectors, complemented with additional information on reform potential, to score on each of the metrics.<sup>159</sup> The team selected the sectors and issues for analyses with the highest ratings in the combination of impacts and feasibility for reforms. The core and extended team discussed areas where the analyses could add value to existing studies in the sectors and cross-cutting issues. Such discussions were critical to qualitatively making final decisions. The process led to selecting the sectors and issues presented as having the most potential for affecting poverty, jobs, and growth, and having potential to implement those reforms within a reasonable time frame. This process was refined in the concept note review, with multiple engagements with management and various experts.

**TABLE D.1. AREAS OF IMPACT POTENTIAL FOR MOZAMBIQUE**

	SELECTED FOR ANALYSES UNDER CPSD	NOT SELECTED FOR ANALYSES
<b>Sectors</b>	1. Upstream linkages 1b. Downstream linkages 2. Agribusiness 3. Tourism 4. Forestry 5. Fisheries 6. Housing construction 7. Transport and logistics 8. Energy 9. Financial sector	10. Oil and gas 11. Mining 12. Other manufacturing 13. Retail 14. Other construction 15. Telecoms and ICT 16. Water 17. Education 18. Health
<b>Cross-cutting issues</b>	1. Skills 2. Investment policy and promotion 3. Market and competition policy 4. Regulatory environment and trade policy 5. Governance 6. Labor regulations 7. Land issues 8. Macroeconomic policy	9. Access to finance 10. Infrastructure

# NOTES

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- 1 Mozambique 2018 Enterprise Survey data (World Bank 2019e).
- 2 Idai was responsible for the deaths of 602 people in Mozambique and left about 130,000 displaced people. Kenneth caused 45 casualties.
- 3 The criteria for jobs included job creation, creation of high-productivity jobs, and indirect job creation. The growth criteria included private investment potential, contribution to GDP, and links to the rest of economy.
- 4 World Economic Forum, World Development Indicators, International Monetary Fund (IMF), International Labour Organization (ILO), *Doing Business*, World Bank Group Enterprise Surveys, Food and Agriculture Organization (FAO), among others.
- 5 *Ceteris paribus*, sectors and constraints with a low number of studies were more likely to be included, and vice versa.
- 6 The Montepuez ruby mine appears to be one of the largest taxpayers in the country, employing around 500 people locally.
- 7 A strong global position indicates that a country has a well-developed capability stock in a given sector: it possesses the skills and technologies required to be a globally competitive exporter. Leveraging Mozambique's capabilities as evidenced through export volumes would allow for the expansion of established industries (especially focusing on products with higher complexity) or of fast-growing supporting industries that have not yet been established (as defined by revealed comparative advantage). Industry complexity measures the capabilities needed to produce a product. If a product requires low capability, it is classified as less complex (generally a low-margin, volume product); high capability is a more complex product (generally higher margin, low competition, specialized).
- 8 World Bank calculations using Mozambique 2018 Enterprise Survey data (World Bank 2019e).
- 9 World Bank calculations using World Bank 2019e.
- 10 This decline indicates that the marginal productivity of new workers entering the services sector is below the average productivity level in the sector, with most of the people occupied in informal service jobs.
- 11 *Financial Times* database.
- 12 In addition, in 2015, Xtract Resources acquired the Manica gold deposit from Auroch Minerals for approximately US\$12.5 million. The deposit is estimated to have 923,000 ounces of gold. Tests have shown that the project can recover 74–78 percent of the gold.
- 13 In addition, the FDA incentivized block farming. Maintenance to machinery was assured by the equipment provider, including 1,000 working hours on maintenance costs for the CSA, and a WhatsApp group linking all CSA providers, FDA, the manufacturer, and the service provider, where any issues with the equipment were reported and the company had three days to answer. At each region (northern, central, and southern), FDA established a model CSA that included all the complementary services and provided financial services to participating farmers.
- 14 These include African Century's Matama in Niassa, Agromoz in Zambezia, and Quifel Hoyo Hoyo in Zambezia.
- 15 These projects include the World Bank-financed Catalytic Fund for Innovation and Demonstration (IDCF) and the Sustainable Irrigation Development Project.
- 16 Infrastructure and logistics limit the expansion of northern supply to the south (see the section on transport and logistics in chapter 3. This difficulty is underlined by the existence of occasional export of soya from Nacala despite the import dependency of the southern poultry industry).
- 17 In cotton, production has been organized in a concession model, with cotton ginners awarded specific geographical concessions. Within a concession, the ginner is the sole buyer, but it is also responsible for providing inputs and technical assistance to the cotton farmers. A minimum price is established each year under a formula supported by the government, the ginners, and the cotton farmers. In 2008, the government approved a document indicating that the sector should move toward liberalization within seven years. Since then, there has been no implementation of liberalization. In 2020, the government announced the intention to subsidize over 33 percent of the price paid to farmers during the year to accommodate for the losses caused by COVID-19.
- 18 FAOStat, 2018, <https://search.library.wisc.edu/database/UW112320>.
- 19 International Trade Centre is a UK Department for International Development (UKDFID)-supported initiative to attract investment from China for potential deals in pre-identified Mozambican value chains. The ITC has identified that critical gaps such as phytosanitary standards, cultural perceptions, and business skills must be addressed to secure more deals.
- 20 World Travel and Tourism Council (WTTC), Annual Research: Key Highlights for Kenya, Madagascar, Mozambique, and Tanzania, 2020.

- 21 Although the National Immigration Service does collect data on motive of visit, it is skewed by the fact that it is based on visa applications. Most business and conference tourists simply indicate that they are coming for holiday so as to avoid more stringent visa procedures.
- 22 UNWTO data 2018, 2020. The United Nations World Tourism Organization data on occupancy rates does not closely reflect occupancy data published by the National Institute of Statistics, likely because of challenges in data collection. For instance, only a small proportion of establishments report performance figures, and of those that do, it is suspected that many underreport performance for tax purposes.
- 23 There was a significant increase in capacity from 2010 to 2015, when the stock grew at an average annual rate of 8.6 percent. However, from 2015 to 2017, the average annual growth rate was just 0.5 percent. (Information provided by MICULTUR, 2020.)
- 24 Interviews with operators and tourism authorities, 2019–20.
- 25 World Bank 2018b describes more than 10,000 species, 10 percent of which are endemic or nearly endemic.
- 26 See, for example, <https://edition.cnn.com/interactive/travel/best-beaches/map/>.
- 27 This was made possible through the passing of the ZIT regulations (Decree 77/2009) that follows from the 2004 Tourism Law, which says that areas with special natural, cultural, or historical characteristics can be reserved for tourism development.
- 28 Interviewees also note increasing demand for MICE activities in Pemba, Cabo Delgado province. Interview with INATUR, January 2020, and interview with private sector operators, February 2020.
- 29 A Convention Bureau serves as the coordinating organization representing all stakeholders in the destination's business tourism sector with the mandate to implement the MICE strategy, brand and position the destination, provide support in attracting MICE events through coordinated sales and bidding activities, and facilitate overall industry growth through partnering with private sector. Interview with INATUR, January 2020.
- 30 Interviews with operators.
- 31 Insecurity associated with conflicts in the northern and central parts of the country has been harming the country's reputation in international markets, while also cutting off some key tourism routes, yet sector communication fails to address these issues.
- 32 In 2017, Mozambique opened its domestic air service network, allowing foreign airlines to operate domestic routes. Prices for domestic travel decreased in line with the entry of other carriers (including low-cost), but these routes have been discontinued. Today, Ethiopian Airlines is the only other airline operating domestically besides the country's flag carrier, Linhas Aéreas de Moçambique (LAM).
- 33 WEF 2019b; and interview with private sector operators, December 2019.
- 34 As well as visas on arrival, tourists can obtain visas in advance if Mozambique has diplomatic representation in their home country.
- 35 Immigration officials wanted to collect biometric data from cruise tourists in line with their practices for tourists arriving by land or air. However, this process was so long and cumbersome that it created a major backlog and most tourists were left with insufficient time to disembark.
- 36 Obtaining a tourism visa on arrival at an airport costs US\$50. If applying through diplomatic representation in the country of origin—which is encouraged, if representation exists—the cost varies by country. In the United States, for instance, obtaining a visa earlier can cost over US\$200. The reason for the significant difference in price is unclear. The World Bank is supporting the government in exploring possibilities for implementing an e-visa system.
- 37 The Escola Superior de Hotelaria e Turismo in Inhambane, the Hotel-escola do Instituto Industrial e Comercial de Pemba, and the Instituto de Formação Turística, Hoteleira e Aeroportuária. Interviews with operators.
- 38 Mozambique ranked 130 of 140 countries for the ease of hiring foreign labor in 2019 (WEF 2019b).
- 39 Centre for Affordable Housing Finance in Africa (CAHF) 2019. The costs for the 55 sq meter house are distributed as follows: land costs US\$308; infrastructure costs US\$4,259; construction costs US\$27,190; compliance costs US\$3,021; and other construction costs including finance US\$11,474. The costs of housing in Mozambique are double that of South Africa, Tanzania, and Zambia.
- 40 Based on interviews with private companies in the sector.
- 41 Owning formal titles of land tenure and adequate land registration systems benefit residents, real estate developers, and municipalities. Residents gain greater security to invest in properties, allowing them to access financial services using their properties as collateral. Real estate developers gain from new projects. And municipalities gain because the property registry offers the possibility of improving their income, through property taxes and urbanization taxes, which can be used for urban and housing development purposes, closing the benefits cycle of citizens and cities.
- 42 The World Bank's Greater Maputo Urban Poverty Study (2019i) showed that the Greater Maputo Area has some of the most inefficient land use on the continent, with 50 percent of new development taking place in low-density unserved areas.

- 43 To promote the local construction materials industry, the government has been putting import taxes on cement and clinker (the intermediate product that is used to produce cement) for a long time. In 1997, a cement import tariff of 12.5 percent was established to protect the national industry. In 2002, this rate was reduced to 10.5 percent, and in December 2008 the government decided to suspend the application of the surcharge for a period of two renewable years, as a way of minimizing the shortage and stabilizing the price of cement. In September 2017, the government decided to reintroduce the tariff on importation of Portland cements, from 10.5 percent to 20 percent. The clinker remains with an import tax of 7.5 percent.
- 44 Coal exports via Beira continue, primarily from another company, ICVL, at an estimated 1.75 million tons in 2018.
- 45 Presumably because this activity is considered to fall under postal services, which are licensed by this body. For more, see Neto 2017.
- 46 Jorge Marcos, "Retoma transporte ferroviário de carga entre Nacala-porto e Lichinga," *OPais*, June 6, 2017, <http://opais.sapo.mz/retoma-transporte-ferroviario-de-carga-entre-nacalaporto-e-lichinga>.
- 47 "Comboio de mercadorias para Lichinga retoma proxima semana," Portal do Governo de Moçambique, <https://www.portaldogoverno.gov.mz/index.php/por/Imprensa/Noticias/Comboio-de-mercadorias-para-Lichinga-retoma-proxima-semana>.
- 48 The transporters association of Sofala claims to have 373 goods road transport companies as members, who among them have over 5,000 trucks.
- 49 An example given by a transporter with operations in both countries is that on the route from Blantyre to Beira, the current rate offered by Malawian transporters is approximately US\$75/ton compared to US\$65/ton offered by Mozambican truckers.
- 50 Dália Langa, "Sector de transportes queixa-se de falta de oportunidades em Nampula," *OPais*, January 2, 2019, <http://opais.sapo.mz/sector-de-transportes-queixase-de-falta-de-oportunidades-em-nampula>.
- 51 "Heavy Lifting and Transport Specialist Moves Fleet into Mozambique," FTWonline, January 10, 2019, <https://www.ftwonline.co.za/article/heavy-lifting-and-transport-specialist-moves-fleet-mozambique>.
- 52 See <http://mozambique.tradeportal.gov.mz/en>.
- 53 According to a number of interviewees, CFM reports on performance to the MTC, and CFM also prepared internal reports to the ministry on performance of the Nacala concession.
- 54 A company was formed in the process of the award, MCNET, with participation by the state, the CTA, and a local company, Escopil.
- 55 Domestic peak demand at 911 MW is net of Mozal because Mozal's electricity demand (950 MW) is supplied with about 30 percent of reserve margin, which means the difference between the expected maximum available capacity and peak demand (World Bank 2019f).
- 56 Mozambique 2018 Enterprise Survey (World Bank 2019e). Some of the backup generators are a legacy of past power supply deficits, especially around 2013, which forced many SMEs to have alternative power generation.
- 57 The breakdown of electricity tariffs for business are as follows: (a) large low-voltage is US\$0.07/kWh, (b) medium voltage is US\$0.06/kWh, (c) medium voltage in agriculture is US\$0.04/kWh, and (d) high voltage is US\$0.06/kWh. Estimated from the tariff in the EDM's website as of February 26, 2020; average consumption in 2016 is from Quantum 2018.
- 58 The six-year rate of growth in demand is from World Bank 2019g. The year of the prices and the prices' nominal or real form are not reported in the Mozambique Energy for All project.
- 59 Domestic demand would be 6,772 MW, with 1,354 MW for export (10 percent wind and solar, 20 percent export). Ministry of Mineral Resources and Energy (MIREME) 2018.
- 60 MIREME 2018, ES-13 and 9-23.
- 61 World Bank 2019g. CTT uses a combined cycle gas turbine technology fueled by natural gas.
- 62 Interviews with experts.
- 63 EDM 2018. The date of the survey was not reported in the strategy.
- 64 MIREME 2018. Restrictions on transmission by the private sector are under Decree 43/2005, as noted in EDM 2018.
- 65 This within a total of 24.3 percent seventh-grade completion. Ministry of Education and Human Development. 2019.
- 66 A STEM curriculum focuses on science, technology, engineering, and mathematics.
- 67 These included Canada, Denmark, Germany, Italy, Portugal, Spain, and the Netherlands.
- 68 Competency-based training focuses on what the student can achieve in the workplace after completing the training.
- 69 COWI 2014. Also, employability is as high as 82 percent after one year among graduates from a GIZ (the German Corporation for International Cooperation) industrial maintenance program.
- 70 The rates are based on the self-evaluation report of UEM (Eduardo Mondlane University). Such rates are similar to University of Stellenbosch and Cape Town in South Africa (68 percent and 64 percent, respectively, of students in three-year bachelor courses graduate in six years).



- 71 The ICRG rating comprises 22 variables in three subcategories of risk: political, financial, and economic. The composite scores, ranging from 0 to 100, are broken down into categories from very low risk (80–100) to very high risk (0–49.9). Data from December 2019.
- 72 The Economist Intelligence Unit's Country Risk Model covers 131 countries, enabling the assessment of five dimensions of country risk: sovereign, currency, banking sector, political, and economic structure.
- 73 Mozambique Credendo profile (<https://www.credendo.com/country-risk/mozambique>) set lowest risk at a score of 1 and highest risk at the maximum score of 7. Mozambique ranks seventh on all political risk indicators (short, medium, and long term).
- 74 Five-year action plan for 2015–19 and the Action Plan for the Improvement of the Business Environment, 2019–21 (PAMAN—Plano de Acção para a Melhoria do Ambiente de Negócios).
- 75 APIEX memorandum 2020, 1.
- 76 Mining Law (Law 20/2014) and regulations (Decree 31/2015); Oil and Gas Law and regulation (Decree 63/2011).
- 77 Decree 60/2016.
- 78 Decree 43/2009.
- 79 Investment Law 3/93 Article 11, "All investments are deemed open to investment except those expressly reserved for the state or only initiated by the public sector"; Article 12, "The Ministerial Council will define and indicate the sectors that are reserved for the state or the public sector."
- 80 The APIEX website is <http://invest.apiex.gov.mz/invest/investing-in-mozambique/investment-laws/>, (accessed 25 January 2020). Other sources are at APIEX, *Leis e Regulamentos Relacionados com Investimento Directo Estrangeiro em Moçambique*, 2017, 23.
- 81 Law 3/93 Article 21.1: "For investments to benefit from the guarantees and the incentives offered by this law they will have to receive an authorization or approval from the relevant government entities."
- 82 Decree 43/2009 Article 10 and Article 12.
- 83 Reforms to remove screening have resulted in substantive growth of FDI inflows. Liberia, for example, abolished its economywide screening policy in 2010, reducing the number of sectors requiring screening, and saw an increase of US\$213 million FDI inflow for the following two years.
- 84 Law 19/1997 Article 1 and Article 11 on foreign land use rights and restrictions.
- 85 See, for example, Nikiéma 2014, 2. McKinsey Global Institute (2003) found that "import barriers and trade-related investment measures such as local content or joint venture requirements did not have clear positive impact, but did limit competition and protect subscale operations, thereby dampening productivity performance" (McKinsey Global Institute 2003, 2). Local content requirements created significant costs by protecting low-productivity players, but they were not necessary for the development of strong supplier industries. Finally, th[is] study found no compelling evidence in favor of joint venture requirements. Where joint ventures provided benefits, they tended to emerge naturally rather than through joint venture requirements.
- 86 fDi Markets, a service from the Financial Times capturing all announced FDI.
- 87 Transparency International Corruption Perceptions Index, 2019. The comparative ranks for the peer group are Ethiopia (96), Ghana (80), Kenya (137), South Africa (70), Tanzania (96), Zambia (113), and Zimbabwe (158).
- 88 SEZs are different from Industrial Free Zones, which are developed for investors who plan to export the majority of their products. SEZs are a more flexible regime and do not have export requirements.
- 89 Disclaimer: For the purpose of this note, the World Bank Group has reviewed, as part of the international investment agreements (IIAs) that Mozambique has in force, only 17 out of the 20 bilateral investment treaties the country has in force because the other legal texts were not made available. As such, the level of coverage by IIAs indicated in this note is to be seen as indicative.
- 90 WTO agreements (Article 3 of GATT, Article 17 of GATS, and Article 3 of TRIPS).
- 91 The Mozambique-Japan BIT defines in Article 1 an investor as "someone that seeks to make or has made an investment" and investment activities as activities ranging from the establishment, acquisition, expansion, and operation phase. The highlighted phases, under international law, are understood as granting preestablishment protection to all relevant guarantees under the agreement.
- 92 Article 4 of the Mozambique-United States BIT also grants this level of protection to foreign investors by saying that "this treatment extends to both the establishment and the post establishment of the investment."
- 93 See, for instance, the BITs with France (Art. 3), Germany (Art. 2), Italy (Art. 2.3), Mauritius (Art. 4.1), and the United Kingdom (Art. 2).
- 94 See Article 2.3 of the Italy-Mozambique BIT.
- 95 ICSID Case No. ARB/17/23 CMC Muratori Cementisti v. Mozambique.
- 96 Credendo, Country Risk Mozambique, <https://www.credendo.com/country-risk/mozambique> (accessed January 24, 2020).
- 97 PSR Group's International Country Risk Guide (ICRG), <https://www.prsgroup.com/explore-our-products/international-country-risk-guide/> (accessed January 24, 2020).

- 98 For many years what exactly constituted an indirect expropriation was left to the interpretation of arbitrators, but the Comprehensive Economic and Trade Agreement (CETA) between the European Union and Canada for the first time introduced a criterion to analyze an indirect expropriation. A case-by-case analysis is introduced to determine whether an indirect expropriation has taken place, by observing the economic impact, duration, and intent of the measure or series of measures taken by the government (CETA, Art. 8.12 and Annex 8-A.).
- 99 ICSID Case No. ARB (AF)/14/12, *Besserglik v. Mozambique*, October 28, 2019.
- 100 Out of a total of 7 (high risk), Credendo ranks Mozambique and Zimbabwe at 7; Ethiopia, Kenya, and Zambia at 6; Tanzania at 5; and South Africa at 4. <https://www.credendo.com/country-risk/mozambique> (accessed January 24, 2020). PSR Group's International Country Risk Guide (ICRG) indicator went down from 3 in 2015 to 2 in 2019.
- 101 Investment Law No. 3/93 Article 14; Decree 43/2009 Article 6.
- 102 Mozambique, at 168 of 190, ranks behind neighboring countries on the *Doing Business* indicator on enforcement of contracts: Malawi (149), Tanzania (71), South Africa (102), and Zambia (130).
- 103 In 2019 two ICSID cases were decided in favor of Mozambique, but legal fees still cost the government around US\$3.85 million. See ICSID cases ARB (AF)/14/12 and ARB/17/23.
- 104 The Hague Apostille Convention of 1961 facilitates legalization of foreign public documents between state parties where a government entity in the home country issues an Apostille—that is, a standardized certificate to authenticate the document.
- 105 In 2017, the revenues of the public enterprises EDM (Electricidade de Moçambique), CFM (Caminhos de Ferro de Moçambique), and ADM (Aeroportos de Moçambique); plus the revenues of the majority owned corporations Petromoc S.A., LAM S.A. (Linhas Aéreas de Moçambique), and Tmcel S.A. (Moçambique Telecom) amounted to Mt 76.5 billion as a share of GDP of Mt 840 billion. See IGEPE 2019.
- 106 According to Art. 3, Law 3/2018, *Lei das Empresas Públicas* (State-Owned Companies Law), Art. 3 on Public Enterprises, there are two types of SOEs in Mozambique: public enterprises (*empresas públicas*) and enterprises in which the state owns all or the majority of shares (*empresas exclusiva or maioritariamente investidas pelo estado*). The definition could be improved, considering it is possible to control companies even with minority shares, particularly when shares are spread among multiple owners.
- 107 These figures are only a proxy for the overall level of government participation in markets. The majority of SOEs are at the federal level; however, there are SOEs at the local level, and IGEPE has no mandate over them. Therefore, it is important for policies and strategies that are being developed at the federal level to inform policies at the local level as well.
- 108 Even though market shares alone are not enough to define market power, the extensive presence of SOEs with significant market participation indicates the necessity to look carefully into how the performance of these companies may be affecting market outcomes.
- 109 Several of these sectors, particularly given the size of the economy, will have natural monopoly characteristics, and in these circumstances it is common to have government investments in addition to regulation.
- 110 See Art. 2.3, Decree 1/2013, and Art. 40 of Law 3/2018.
- 111 The Law of Public Enterprises allows public servants to work for the SOEs while keeping their contracts with the government, creating the risk of interlocking directorates, conflicts of interest. (Art. 32).
- 112 Art. 34 and 35, 41–47, Law 10/2013.
- 113 This analysis focuses on downstream effects of gas production in Cabo Delgado. Opportunities for downstream processing in other extractives, including coal and other mining, exist but are not explored in this analysis.
- 114 The FID outlines that only 100 MMSCFD of Area 1 will be made available during the first phase.
- 115 See the Henry Hub natural gas prices on the Business Insider website, <https://markets.businessinsider.com/commodities/natural-gas-price>.
- 116 Shell committed to a US\$2 million security deposit that will be returned if the project makes an FID.
- 117 Yara paid a US\$1 million security deposit, which will be returned if the project makes an FID.
- 118 The International Gas Union defines small-scale liquefaction and regasification facilities as plants with a capacity of less than 1 MTPA (143.43 MMSCFD). See [http://www.igu.org/sites/default/files/node-page-field\\_file/SmallScaleLNG.pdf](http://www.igu.org/sites/default/files/node-page-field_file/SmallScaleLNG.pdf).
- 119 SSLNG utilities receive LNG transported by sea. From the SSLNG plant, the LNG can be used as a fuel for ships (LNG bunkering) or heavy-duty road transport, or it can be stored.
- 120 Sasol and the partners committed to invest US\$165 million in equity. Centrale Termica de Temane (CTT) will receive funding of up to \$200 million from the US International Development Finance Corporation and up to \$50 million from the OPEC Fund for International Development once loan agreements and other closing conditions are finalized. IFC is expected to provide the balance of the required debt financing and is in the process of finalizing its approvals.

- 121 The CTT power project is developed by the Temane Energy Consortium (Globeleq and Eleqtra, 64.6 percent of equity), with Sasol owning 15 percent and EDM, the remaining 20 percent. The partners committed US\$165 million to the project, and the remaining is project financed by development finance institutions and lending from commercial banks.
- 122 Headline capital buffers follow a Basel I regime and do not include operational and market risk charges.
- 123 In April 2017 the central bank increased the minimum capital requirement from US\$1.2 million to US\$28 million and the minimum capital adequacy requirements from 8 percent to 14 percent (which was gradually introduced until 2020).
- 124 The number of deposit accounts with commercial banks has been declining from its peak in 2016 (from 332 per 1,000 adults in 2016 to 292 in 2019), perhaps as a result of closures and mergers, as well as of improved reporting following the introduction of deposit insurance. However, this is still higher than the averages in Sub-Saharan Africa and low-income countries.
- 125 The national payment infrastructure of Mozambique consists of a system for settlement of large-value transactions, an electronic clearing house (CEL), and a national switch for smaller values. The CEL settles obligations arising from interbank transactions, check payments, government electronic fund transfers, automated teller machines (ATMs), and point-of-sale (POS) networks, and the stock exchange. The CEL operates on a deferred net settlement basis. The real-time gross settlement system is owned and operated by the central bank; participation is voluntary, but most banks are connected. The national card switch (Rede Ponto 24) is operated by the Sociedade Interbancária de Moçambique (SIMO), launched in 2012 and owned by the Bank of Mozambique (51 percent) and the banking sector (49 percent), which processes ATM and POS transactions. SIMO acquired Interbancos—which operated the switch—from a group of banks.
- 126 Of those, 14,000 jobs were from native forest and 3,000 jobs were in planted forests (1 person per 20 hectares). National Directorate of Forests 2019 and de Almeida and Delgado 2019.
- 127 Miombo forests constitute important reservoirs of carbon, sequestering it at a rate of 227 total carbon dioxide (tCO<sub>2</sub>) per hectare. The total above- and below-ground carbon stock in Mozambique is estimated at more than 4 billion tCO<sub>2</sub>.
- 128 National Land Use and Cover Map 2019 (Mapa Nacional de Uso e Cobertura de Terra 2019), produced by CENACARTA (National Cartography and Remote Sensing Centre).
- 129 Company profiles were derived from interviews with company executives conducted by Leonor Serzedelo de Almeida in 2017.
- 130 Elias and Boucher 2014.
- 131 The semi-industrial subsector is dominated by national capitals. Vessel lengths (length overall, or LOA) are between 10 and 20 meters, and target species are shallow-water shrimp (caught by trawlers) and demersal species (caught with a hand line). The industrial subsector is dominated by joint venture companies, employing advanced fishing technologies, with boats over 20 meters LOA and onboard processing systems. Target species are shallow-water shrimp, deepwater crustaceans, and tuna and tuna-like species. The production is almost entirely destined for the export market. However, part of the bycatch supplies local markets.
- 132 Data are from the National Institute of Statistics (INE), 2019, <http://www.ine.gov.mz/>.
- 133 Comparison data from the 2007 and 2012 surveys indicate an increase of about 14.3 percent and 24.8 percent, respectively, in the number of fishers and the amount of fishing gear.
- 134 The Fisheries Administration (ADNAP) provided this updated figure (February 2020), as part of a continued process of collecting data on jobs with support of the fishing and processing companies (data do not include the emerging small pelagic fisheries industry).
- 135 Ministry of Sea, Inland Waters and Fisheries (MIMAIP) 2019b. Fisheries Statistics Bulletin (2006–17). The 2017 data show that a total of approximately 4,000 tonnes were exported to Portugal and Spain: 2,607 tonnes of shallow-water shrimp, 920 tonnes of deepwater shrimp, and 487 tonnes of squid.
- 136 Approximately 5,000 tonnes are exported to China and Taiwan, China: 2,120 tonnes of live crabs, 1,692 tonnes of frozen fish, and 1,139 tonnes of shallow-water shrimp (MIMAIP 2019b).
- 137 The main tuna species caught in Mozambican waters are yellowfin, skipjack, albacore, and bigeye; the tuna-like species caught are kingfish, swordfish, and black marlin (IOTC 2019).
- 138 Draft report of the Aquaculture Development Strategy and Action Plan (MIMAIP 2019a).
- 139 CEPAQ was created in 2017 to produce quality seeds for aquaculture as well as to train scientists and aquaculture farmers. The center has a capacity to produce more than 1 million fingerlings annually.
- 140 Discussions with the National Institute for the Development of Fisheries and Aquaculture (IDEPA) and private sector.
- 141 To enforce the law, the regulation on granting fishing rights (Article 11) obliges noneligible companies to include in their application a shareholder's agreement committing to transfer shares, based on a business plan, to a Mozambican counterpart. This goes against the companies' constitutional rights (nonretroactivity of legal instruments) and international conventions on investments (that is, the Paris Treaty—Foreign Investment and Protection Agreement).
- 142 For goods classified in K category of the customs tariff.

- 143 For more details on these rankings, see the Human Freedom Index 2019, <https://www.fraserinstitute.org/sites/default/files/human-freedom-index-2019-rev.pdf>.
- 144 For more details, visit the Heritage Foundation's 2020 Index of Economic Freedom (<https://www.heritage.org/index/ranking?version=351>).
- 145 For more details on WEF ranking, visit the Global Competitiveness Report 2019, [http://www3.weforum.org/docs/WEF\\_TheGlobalCompetitivenessReport2019.pdf](http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf).
- 146 For more details on this ranking, visit <https://www.globalinnovationindex.org/gii-2019-report#>.
- 147 *Doing Business* presents results for two aggregate measures: the Ease of *Doing Business* score and the Ease of *Doing Business* ranking, which is based on the Ease of *Doing Business* score. The Ease of *Doing Business* ranking compares economies with one another; the Ease of *Doing Business* scores provide a benchmark for economies with respect to regulatory best practice, showing the proximity to the best regulatory performance on each *Doing Business* indicator.
- 148 The first subnational *Doing Business* study undertaken in Mozambique measures business regulations affecting small and medium enterprises in four areas (World Bank 2019b): (a) starting a business, (b) registering property, and (c) enforcing contracts in nine provinces (Cabo Delgado, Gaza, Inhambane, Manica, Nampula, Niassa, Sofala, Tete, and Zambezia) and the city of Maputo; and (d) trading across borders in three ports (Beira, Maputo, and Nacala) and one land border crossing (Ressano Garcia).
- 149 The World Governance Indicators (WGI) reports aggregate and individual governance indicators for over 200 countries and territories over the period 1996–2019, for six dimensions of governance: voice and accountability, political stability and absence of violence or terrorism, government effectiveness, regulatory quality, rule of law, and control of corruption. See <https://info.worldbank.org/governance/wgi/>.
- 150 See Transparency International's Corruption Perceptions Index, <https://www.transparency.org/en/cpi/2019>.
- 151 This regulation does not apply to the hiring of foreign citizens for the oil and gas and mining sectors, which are ruled by specific legislation.
- 152 When agreeing on a long-term fixed-term contract, an employer also takes the risk, because in case of layoffs, compensation payable to an employee on a fixed-term agreement correspond to the amount that would have been earned between the dismissal and the date on which the contract was due to terminate.
- 153 *Doing Business* 2020 (database), World Bank, Washington, DC, <https://www.doingbusiness.org/>.
- 154 *Doing Business* 2020 (database).
- 155 Of 202 economies in the 2020 *Doing Business* database, in 2020 28 countries lack a statutory minimum wage.
- 156 The yearly increase in minimum wages in Mozambique are subject to several factors, among them the country's economic performance in general and the performance of each economic sector during the same period. The update of the minimum wage takes into account the consumer price index and basket. According to Art. 108(5) of the Labor Law, the government, in consultation with the Consultative Commission on Employment, sets the national minimum wage. The commission is the so-called tripartite negotiation where three parties sit together for two months. The Confederation of Business Associations (Confederação das Associações Económicas; CTA) represents employers in the tripartite commission. Two of the trade union confederations in Mozambique that are present are OTM and CONSILMO.
- 157 There are two applicable systems in Mozambique for the calculation of the severance pay. According to the old system, severance pay for workers hired before November 1, 2007, is calculated according to Law 8/98 of July 20 (Old Labor Law), Art. 68: (a) between 3 and 6 months—45 days wages; (b) more than 6 months but less than 3 years—3 months wages; (c) more than 3 years—3 months wages for each period of 2 years or fraction thereof.
- 158 WBG interviews in December 2019 and findings of an APIEX workshop with investors supported by JICA.
- 159 World Economic Forum Global Competitiveness Index, World Development Indicators, IMF, ILO, *Doing Business*, Enterprise Surveys, FAO, among others.



## IFC

2121 Pennsylvania Avenue, N.W.  
Washington, D.C. 20433 U.S.A.

## CONTACTS

**Michelle Souto**

[msouto@ifc.org](mailto:msouto@ifc.org)

**Francisco Campos**

[fcampos@worldbank.org](mailto:fcampos@worldbank.org)

**Denny Mahalia Lewis-Bynoe**

[dlewisbynoe@ifc.org](mailto:dlewisbynoe@ifc.org)

[ifc.org](https://ifc.org)



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