

Women-led businesses in Mozambique's energy sector

Challenges and opportunities



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About the paper

Recent developments in Mozambique's energy sector present opportunities for investments in the country and for the integration of women-led businesses (WLBs) in the energy sector as suppliers of goods and services.

This report identifies five key challenges WLBs face in supplying the energy sector and other auxiliary value chains. While the participation of WLBs in these value chains remains limited, upcoming field development phases of two projects offer considerable potential for their integration into these value chains. This paper offers recommendations to address these obstacles, such as upskilling, better access to finance and buyer connections, and gender mainstreaming in policies.

Publisher: International Trade Centre

Title: Women-led businesses in Mozambique's energy sector: Challenges and Opportunities

Publication date and place: Geneva, March 2024

Page count: 40

Language: English

Citation: International Trade Centre (2024). Women-led businesses in Mozambique's energy sector: Challenges and Opportunities. ITC, Geneva.

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ITC is the joint agency of the World Trade Organization and the United Nations.

Acknowledgements

The International Trade Centre (ITC) expresses its gratitude to those who have contributed to the production of this publication.

Epifania Langa, International Consultant (ITC), developed and prepared the report under the guidance of Barbara Oliveira Ramos and Edison Yap (both ITC) and the British High Commission in Mozambique.

Jennifer Freedman edited the report and Mario Parra provided graphic design.

This report was prepared by the SheTrades Commonwealth+ Programme, which was implemented by ITC with financial support from UK International Development from the UK government.

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Executive summary

The discovery of vast reserves of natural gas in Mozambique's Rovuma Basin have made the energy sector even more relevant for the country's economic development. Investments in the energy sector can be used to promote economic linkages within the economy, industrial development and diversification, especially through upstream linkages with local small and medium-sized enterprises (SMEs).

They can also help reduce gender disparities in Mozambique by encouraging women-led businesses (WLBs) to participate in the energy sector as suppliers of goods and services.

Using primary and secondary data, this report analyses the challenges Mozambican WLBs face in producing goods and services and as potential suppliers to the energy sector and other auxiliary value chains. It also explores the opportunities. Primary data were collected via 65 semi-structured interviews with key stakeholders – including government, development partners and business associations – as well as 45 interviews with WLBs in the provinces of Maputo, Cabo Delgado and Inhambane. The participation of WLBs as suppliers in the energy sector is very limited: most of those

interviewed have not entered these value chains, and those that do supply or have supplied goods or services are at the low end of the value chain. WLBs tend to provide support or auxiliary services, such as catering, cleaning, gardening, hospitality, waste management and human resources management. A few are emerging in technical sectors such as construction and industrial equipment, which have great potential for relatively higher value added and employment creation.

The study found considerable great potential for WLBs to participate in the value chain due to the upcoming field development phase of two projects worth more than \$20 billion each, namely the TotalEnergies-led and ExxonMobil-led projects in Cabo Delgado as well as an existing and new gas plant being developed by Sasol in Inhambane. The mining industry also offers market opportunities. Nevertheless, WLBs in Mozambique struggle to materialize opportunities. The study identified five main obstacles facing WLBs already in the industry and those seeking to enter this and other local, regional and global value chains. These are:

- tough technical and managerial requirements
- tough financial requirements
- limited access to markets
- regulatory barriers
- gender-based challenges

While all Mozambican SMEs must deal with these issues, they are particularly daunting for WLBs due to gender disparities – women have relatively lower education levels, own fewer assets and have less access to information than men. Furthermore, men dominate the energy sector and sociocultural norms encourage discrimination against WLBs.

Interviewees identified insufficient technical capacity as the top challenge. The oil and gas value chain is highly specialized in terms of required technical skills. This creates entry barriers for Mozambican WLBs, which have limited skills and little experience in the energy sector. WLBs that are already integrated in the value chain must invest in international certifications – for example, in quality and safety management – to consolidate their presence in the sector and expand markets. Few WLBs in Mozambique have the finances and productive and organizational structures needed to support these certifications.

WLBs that were interviewed said finances were the second-biggest constraint. High interest rates and a limited range of financial products prevent most of these firms from addressing their financial needs. Furthermore, financial education is low – especially among start-ups – and most WLBs use their own financial resources for business operations and investments. This makes it extremely difficult for them to enter financially demanding national and global sectors such as energy.

Indeed, existing and potential suppliers face serious liquidity constraints as they must advance capital from their own funds to deliver goods and services and wait long periods for payments.

The study finds that WLBs have limited access to markets, information and business development services. Market opportunities in Cabo Delgado have been reduced due to the COVID-19 pandemic, Tropical Cyclone Kenneth and the escalation of the conflict by non-state armed groups, increasing the vulnerability of WLBs. Legal and regulatory instruments to integrate WLBs in Mozambique's oil and gas industry, particularly measures explicitly targeting WLBs, are absent. Women-led businesses have called for stronger laws to expand the opportunities for local SMEs, including WLBs.

This report offers recommendations to address all five challenges:

- To upgrade technical and managerial capabilities, WLBs need opportunities to acquire skills and technical knowledge in specialized and specific areas of the energy sector, including through training and joint ventures with other WLBs, original equipment manufacturers and Tier 2 contractors.
- Finance must be expanded in both scale and scope to cover the needs of WLBs, from start-ups to growing firms looking to consolidate their presence as suppliers in the oil and gas industry.
- Creating new market opportunities for WLBs will require mapping the concrete capacities and gaps of WLBs across the country and then implementing matchmaking services in partnership with large buyers.
- Strengthening regulatory mechanisms in the energy sector will ensure the broader participation of local SMEs, including WLBs.
- Gender mainstreaming is essential in the energy sector. Gender-based goals need to be introduced in regulations and initiatives to boost the participation of national SMEs.

01



CHAPTER 01

Introduction

The energy sector is among the most promising industries in Mozambique as the discovery of an estimated 277 trillion cubic feet (tcf) of natural gas reserves in the 2010s means the country will be one of the 10 biggest natural gas producers in the world and the second largest in Africa, after Nigeria.⁰¹ Mozambique's energy potential also includes hydropower, coal reserves, heavy sands, titanium, graphite and ores.

The natural gas reserves have made the energy sector vital for economic development in the country. Investing in energy can promote economic linkages, industrial development and diversification, particularly through upstream linkages with local small and medium-sized enterprises (SMEs). Such linkages offer opportunities to increase and diversify production, improve skills, capacities and standards, and encourage technological upgrading, leading to the development of a more diversified economic structure and the promotion of employment.⁰²

Nevertheless, past studies based on the experience of the mining industry (aluminium and coal) argued that upstream linkages with local suppliers are limited in scale and scope due to weak technical and financial capacity, limited market information and lack of access to finance, among others.⁰³ Indeed, micro and small firms with low capabilities comprise most of Mozambique's private sector.

Of 43,026 companies surveyed by the National Institute of Statistics in 2015, 74% were microenterprises (fewer than 4 workers), 19% were small companies (5 to 49 workers) and only 4% were medium-sized firms (50 to 99 workers).⁰⁴ Most of these businesses operated

in retail commerce (59%), followed by hospitality (9.6%), manufacturing (6.7%) and construction (4.5%).⁰⁵

Little research has been done on women entrepreneurship in Mozambique. A 2008 study found that 74% of female respondents operated individually owned firms, operating in multiple-sector businesses for survival in the informal sector.⁰⁶ Women-led businesses (WLBs) are generally active in retail commerce, hospitality, entertainment and personal services.⁰⁷ Gender inequality in Mozambique is acute, with the country ranking 127th out of 162 countries in the Gender Inequality Index.⁰⁸ Furthermore, only 6% of women are wage workers, compared to 24% of men.⁰⁹

Very little is known about the participation of WLBs in the oil and gas (O&G) and other extractive industries in Mozambique. The existing literature on these issues focuses either on women entrepreneurship or the integration of local SMEs in the Mozambican extractive sector, without bringing the topics together.

01 *Banco de Moçambique (2020). Proposta De Modelo De Fundo Soberano Para Moçambique.*

02 *Morris, M. L., Kaplinsky, R., & Kaplan, D. E. (2012). One thing leads to another: Promoting industrialisation by making the most of the commodity boom in Sub-Saharan Africa. Centre for Social Science Research [u.a.].*

03 *Castel-Branco & Goldin, 2003; Langa & Mandlate, 2015; Buur & Monjane, 2017.*

04 *INE (2017), Empresas em Moçambique: Resultados do segundo censo nacional (2014-2015). Maputo: Instituto Nacional de Estatística.*

05 *Ibid.*

06 *International Labour Organization (2011). The Enabling environment for women in growth enterprises in Mozambique. Southern Africa: International Labour Organization.*

07 <https://www.worldbank.org/en/news/opinion/2021/03/08/time-for-bold-action-to-advance-gender-parity-in-mozambique>

08 *Ibid.*

09 *Ibid.*

Objectives

Within this context, this study aims to identify challenges and opportunities and make recommendations for the integration and upgrading of Mozambican WLBs as suppliers to the O&G sector and auxiliary value chains. Specifically, the study seeks to:

- I. Analyse the O&G sector in Mozambique and map actors and opportunities for potential suppliers;
- II. Examine the characteristics of WLBs' participation in the O&G and auxiliary value chains;
- III. Identify challenges and offer recommendations to increase the participation of WLBs in the O&G and auxiliary value chains.

Methodology

Desk-based research and primary data collection were used to develop the study. First, desk research was carried out to identify and review publicly available data and reports. Then primary data were collected through semi-structured interviews with key stakeholders and focus group discussions with stakeholder groups in-person and virtually in the provinces of Maputo, Cabo Delgado, Inhambane and Nampula.

A total of 65 interviews were conducted,¹⁰ covering a wide range of stakeholders, namely:

- I. 45 WLBs in various sectors in Cabo Delgado, Maputo and Inhambane, of which 14 WLBs are suppliers in the oil and gas value chain
- II. 4 women's business associations
- III. 3 businesses associations
- IV. 7 government institutions
- V. 2 international oil companies in the O&G industry
- VI. 1 international company in the mining sector
- VII. 3 donors and development partners

The report has six sections. Following this introduction, the second section presents an overview of Mozambique's O&G value chain, including the level of integration of WLBs in the value chain. The third examines the opportunities for greater participation of WLBs in the O&G and auxiliary value chains. The fourth section explores the challenges WLBs face. The fifth section looks at existing initiatives for integrating WLBs in the O&G and auxiliary value chains, and the sixth presents conclusions and recommendations.

¹⁰ See Annex 2 for a list of participants.

02

CHAPTER 02

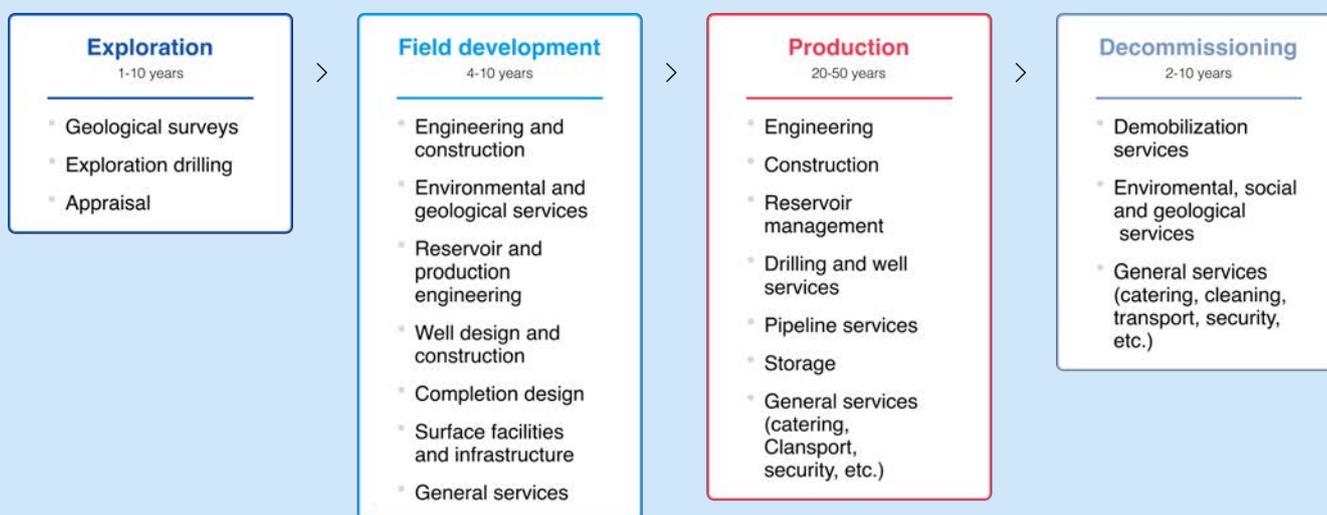
Overview of the industry and WLBs' integration

The oil and gas value chain

The linkages established with local businesses and the degree of added value generated locally by these linkages depend greatly on the type of commodity in question (Morris et al., 2011). This subsection analyses the oil and gas value chain, specifically the natural gas value chain, which is the resource being exploited in Mozambique, before discussing the state of the domestic industry.

Figure 1 shows the life cycle of an O&G project. Suppliers of goods and services to the industry play a key role at each stage of the value chain. O&G projects generally have four stages: (i) exploration, (ii) field development, (iii) production and transportation, and (iv) decommissioning.

Figure 01: Life cycle of an O&G project



Source: Darko (2014), INE (2023), Urazaliyeva and Brun (2017).

Vertically integrated international oil companies (IOCs) and national oil companies (NOCs) generally undertake exploration, which involves identifying and characterizing the oil resources through exploration and appraisal drilling, surveying and field evaluation. At the exploration phase, core suppliers provide specialized geophysical, geochemical, geological, environmental and engineering services, including drilling services and well construction. During field development, the site is prepared for production. This involves drilling equipment and services as well as the construction of supporting infrastructure, equipment, pipelines, installations and systems necessary to treat, transport and store natural gas. Therefore, many

specialized and general services are mobilized at this stage.

The production stage involves bringing the gas to the surface, treating, storing and transporting it, and maintaining and repairing the wells, machinery and equipment. The final phase of a O&G project is the closure of the wells and removal of the plant and supporting infrastructure.

The core products and services required for both the field development and production stages include drilling and well equipment and services; engineering services (petroleum, drilling, production, electrical, mechanical, marine and civil); equipment (rigs, pumps, compressors,

pipes, valves, generators, ships and platforms) and supplies (cement, muds, fluids, polymers, chemicals).¹¹ General services or support services include catering, camp and facilities management, transportation and logistics services, recruitment and training, and medical and legal services.

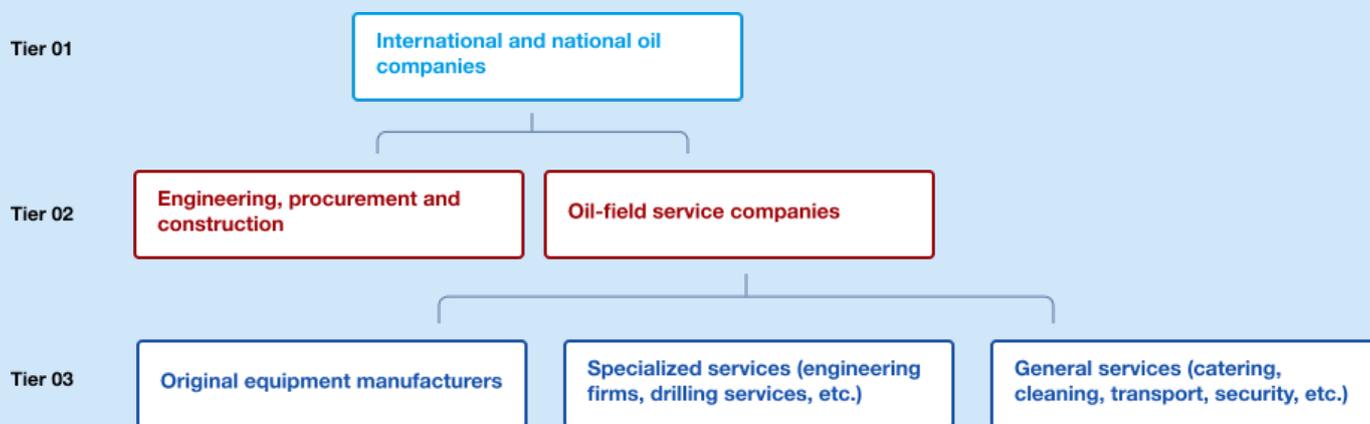
The O&G industry is a very capital-intensive industry, which favours the established, integrated companies with access to technological, financial and human resources.¹² The governance of the O&G value chain is generally divided into three tiers (Figure 2).

Tier 1 actors are vertically integrated IOCs and NOCs, which are responsible for project development and management.

Tier 2 actors are oilfield service companies (OSCs) and engineering, procurement and construction companies (EPCs). Oil companies hire EPCs to construct the project during the field development phase as they are specialized multinationals with strategic partnerships and direct relationships established with IOCs. In turn, they are responsible for subcontracting suppliers in the third level.

Tier 3 actors are suppliers of equipment, materials and services. They include specialized suppliers such as original equipment manufacturers and suppliers of general professional services such as accounting, legal, catering and site management.

Figure 02: Value chain governance structure in the O&G industry



Source: Adapted from Urazaliyeva and Brun (2017).

11 Urazaliyeva, A., and Brun, L. (2017). *The Oil and Gas Services Value Chain in Kazakhstan*. Duke Global Value Chains Center and National Analytical Center, Nazarbayev University, Kazakhstan.

12 *Ibid.*

Mozambique's oil and gas industry

The potential of the oil and gas industry in Mozambique soared with the discovery of vast natural gas reserves in the Rovuma Basin in the 2010s. However, exploration dates back to the early 20th century, though production only began in 2004 with the billion-dollar Pande-Temane project led by South Africa's Sasol in Inhambane Province in southern Mozambique, following the confirmation of natural gas reserves estimated at more than 3.5 tcf.¹³

The project, which includes a pipeline that runs from the gas fields in Pande-Temane to Sasol's Secunda plant in South Africa, was the only project producing natural gas in Mozambique until 2021.

Figure 3 shows the evolution of natural gas exports between 2004 and 2022. The value of natural gas exports grew from nearly \$34 million in 2004 to about \$293 million in 2021, driven by the Sasol project. In 2022, with the start of production and exports by Eni's Coral South project, the value of exports jumped to \$571 million.

Figure 4 shows that natural gas represented just 6% of total exports in 2022, though production and exports are expected to rise considerably in the coming years, once approved projects begin production. Also, other projects are exploring natural gas resources in the country and new exploration and production projects are slated for approval in 2025.¹⁴

Figure 03: Natural gas added 6% to total exports in 2022 vs 2% in 2004

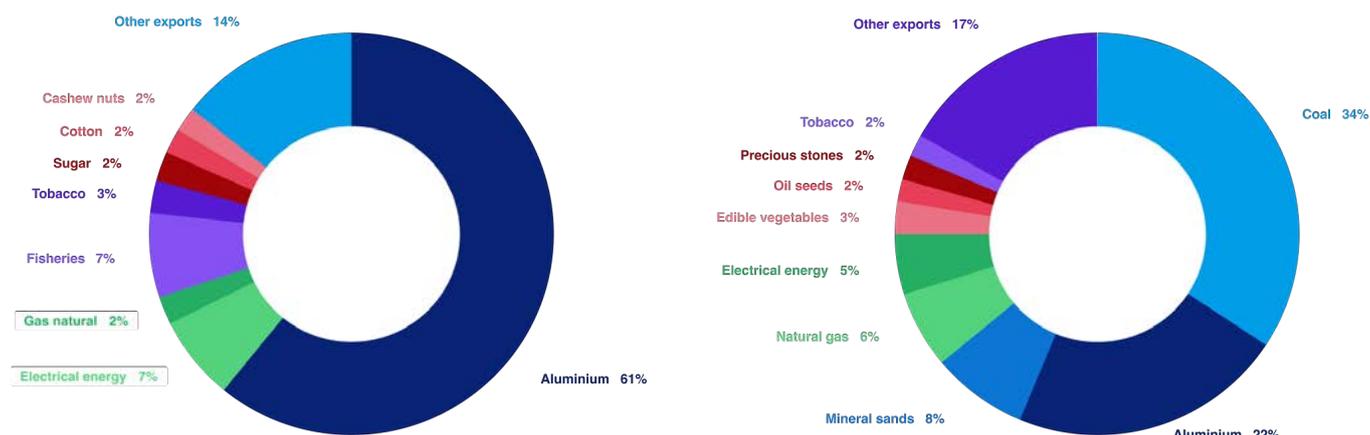


Source: TradeMap (2023)

13 Republic of Mozambique (2014). *Natural Gas Master Plan*, Council of Ministers.

14 <https://www.inp.gov.mz/pt/Noticias/28-09-2023-MOCAMBIQUE-VAI-APROVAR-NOVOS-PROJECTOS-DE-PESQUISA-E-PRODUCAO-DE-HIDROCARBONETOS>

Figure 04: Natural gas added 6% to total exports in 2022 vs 2% in 2004



*Note: First pie chart shows data from 2004, second from 2022.

Source: TradeMap (2023)

Mozambique entered a new era of natural gas investments in the north of the country in the 2010s, when vast reserves were confirmed in the Rovuma Basin. The discovery proved the existence of natural gas reserves of 124 tcf,¹⁵ which would place Mozambique among the top 10 natural gas producers in the world by the end of the 2020s.¹⁶

Indeed, many of the world's leading energy companies have invested in Mozambique's natural gas reserves: France's TotalEnergies, United States-based ExxonMobil, Italy's ENI, Portugal's Galp, Republic of Korea's KOGAS, China National Petroleum Corporation, China National Oil and Gas Exploration Development Company, Japan's Mitsui and India's ONGC Videsh.

Investments in Mozambique's O&G sector amounted to \$18.1 billion in 2017–21,¹⁷ mainly for field development (88.7% and 85.1% of total expenditure in 2021 and 2020, respectively).¹⁸

The main projects in the Rovuma Basin:

- **The Coral-Sul FLNG (led by ENI, ExxonMobil and CNPC)** – offshore liquefied natural gas (LNG) project, located in the southern part of Area 4 of the Rovuma Basin, with a gas field estimated to hold 15.7 tcf.¹⁹ The project's final investment decision of \$7 billion was made in 2017 and production and exports began in 2022. The investors are the joint venture Mozambique Rovuma Venture comprising Eni, ExxonMobil and China National Oil and Gas Exploration and Development Company (70%), Empresa Nacional de Hidrocarbonetos or ENH (10%), KOGAS (10%) and Galp (10%).
- **The Mozambique LNG project (led by TotalEnergies, formerly Anadarko)** – onshore LNG project in Area 1 of the Rovuma Basin with an estimated 65 tcf of recoverable natural gas and a final investment decision of \$20 billion made in 2019.²⁰ TotalEnergies declared

¹⁵ *Ibid.*

¹⁶ Wilkenfeld, Y. (2022, September 1). *East Africa's natural gas outlook*. GIS Reports. <https://www.gisreportsonline.com/r/east-africa-natural-gas/>

¹⁷ National Institute of Statistics (2022). *Estatística de Investimento em petróleo e gás em Moçambique 2017-2021*. Maputo: Instituto Nacional de Estatística.

¹⁸ (18) *Ibid*

¹⁹ <https://www.inp.gov.mz/en/Exploration-Production/Projectos-em-Vigor/Coral-Sul-FLNG-Project>

²⁰ [https://mzlng.totalenergies.co.mz/en/about-mozambique-liquefied-natural-gas-project#:~:text=About%20the%20project&text=For%20now%2C%20our%20plans%20for,tonnes%20per%20annum%20\(MTPA\).](https://mzlng.totalenergies.co.mz/en/about-mozambique-liquefied-natural-gas-project#:~:text=About%20the%20project&text=For%20now%2C%20our%20plans%20for,tonnes%20per%20annum%20(MTPA).)

force majeure²¹ in April 2021, suspending field development, due to the escalation of armed conflict in Cabo Delgado Province.²² TotalEnergies owns 26.5% of participating interest alongside ENH (15%), Mitsui (20%), ONGC (10%), Beas (10%), BPRL (10%) and PTTEP (8.5%).

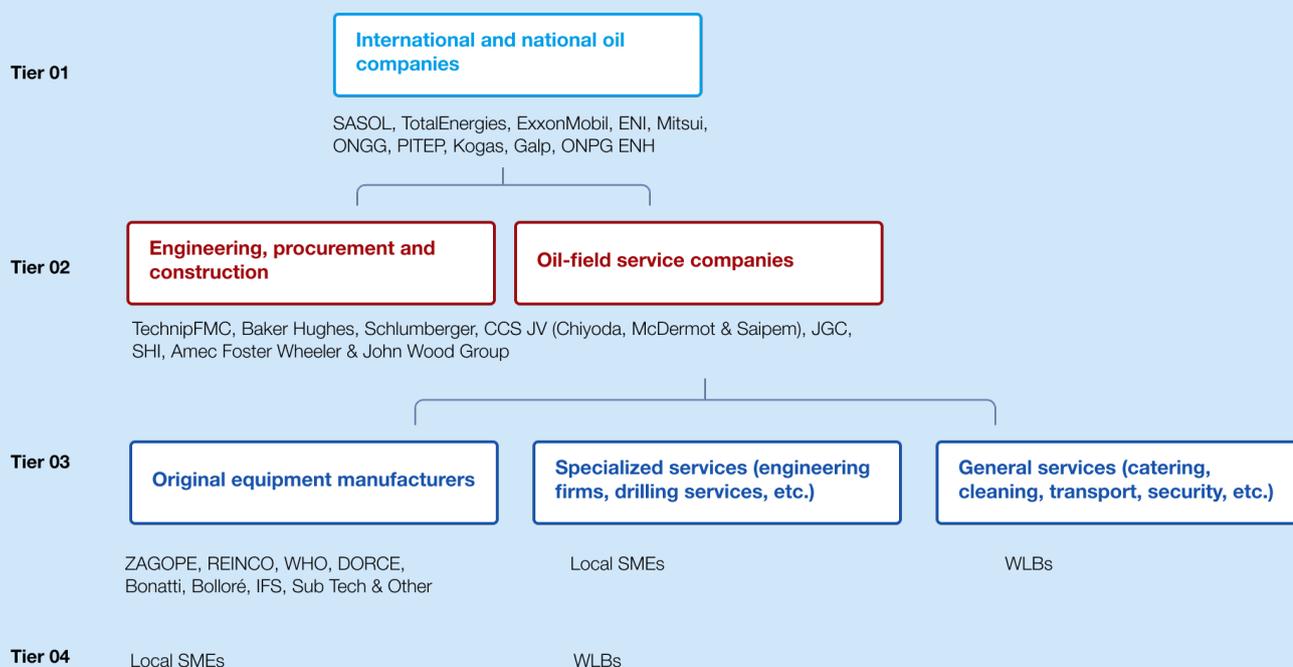
- **The Rovuma LNG project, Area 4 (led by ENI and ExxonMobil)** – onshore and offshore project in Area 4 of the Rovuma Basin, with estimated annual production of 15.2 million tons and investment worth \$23.6 billion.²³ However, a final investment decision has not been reached due to the ongoing conflict in Cabo Delgado Province. The investors are the joint venture Mozambique Rovuma Venture (70%), ENH (10%), KOGAS (10%) and Galp (10%).

Figure 5 shows the key players in the O&G industry in Mozambique by tier levels. TotalEnergies and ExxonMobil as well as Mozambique’s NOC ENH lead in Tier 1 while OSCs and EPCs from various countries dominate Tier 2; these include United-Kingdom-based TechnipFMC and Amec Foster Wheeler, United States-based Baker Hughes, Schlumberger and McDermot, Italy’s Saipem and Japan’s Chiyoda.

Leaders on the Tier 3 level include international engineering and construction firms such as France’s Bolloré, Italy’s Bonatti and South Africa’s WBHO as well as Mozambican SMEs that can secure contracts directly with EPCs and OSCs; they represent a small minority in this group providing general professional services. WLBs make up an even smaller proportion of local SMEs on the third level.

Most Mozambican suppliers are on the Tier 4 level as they are subcontracted by Tier 3 subcontractors. Similarly, WLBs are a minority within this group.

Figure 05: Value chain governance structure in the O&G industry in Mozambique



Source: Adapted from National Center for Microeconomics (2017) and interviews.

21 Unforeseeable circumstances that prevent completion of a contract.

22 <https://totalenergies.com/media/news/press-releases/total-declares-force-majeure-mozambique-lng-project>

23 <https://www.inp.gov.mz/pt/Pesquisa-Producao/Projectos-em-Vigor/Projecto-Rovuma-LNG>

British businesses in the O&G sector in Mozambique

United Kingdom-based companies operating at the Tier 2 level in Mozambique's O&G industry include TechnipFMC, Amec Foster Wheeler and John Wood Group.

- TechnipFMC is a global EPC contractor in the energy sector that was awarded an EPC contract for the Rovuma LNG project, in a consortium with JGC of Japan and Fluor of the United States.
- Amec Foster Wheeler, an engineering and project management firm in the energy sector, is part of the John Wood Group. Amec has delivered many projects for Sasol in Mozambique, including the construction of Sasol's original facility in the early 2000s. Recently, it was awarded a design and engineering contract for the field development phase of Sasol's new project in the Temane area in Inhambane Province.

Source: <https://www.woodplc.com/news/latest-news-articles/2016/amec-foster-wheeler-wins-sasol-contract-in-mozambique>;
<https://www.technipfmc.com/en/investors/financial-news-releases/press-release/technipfmc-jgc-and-fluor-consortium-awarded-a-contract-for-the-rovuma-lng-project-in-mozambique/>

2.3 Women-led businesses in the O&G and auxiliary value chains

This section analyses the extent to which WLBs²⁴ participate in Mozambique's O&G value chain and other domestic, regional and global value chains. It should be noted that identifying Mozambican suppliers to the O&G industry is tough because supplier lists are generally unavailable and few domestic companies supply the industry. It is even more difficult to identify WLBs in the value chain.

- I. The 45 WLBs interviewed for this study are active in the following sectors:
- II. Catering services (16 firms)
- III. Agribusiness (three firms)
- IV. Gardening services (three firms)
- V. Civil works and infrastructure maintenance (three firms)
- VI. Cleaning services (two firms)
- VII. Administrative and human resources management services (two firms)
- VIII. Procurement and logistics services (two firms)
- IX. Mechanical, electrical and instrumentation

²⁴ *Women-led businesses are defined as a 'business that is at least 25 % owned by one or more women, whose management and control lie with one or more women, which has at least one-third of the board of directors comprised of women, where a board exists, where a woman is a signatory of the business's legal documents and financial accounts, and which is operated independently from businesses that are neither led nor owned by women', based on the International Organization for Standardization (ISO) International Workshop Agreement 34. For more information see <https://www.iso.org/standard/79585.html>.*

- industrial equipment and consumables (two firms)
- X. Transport services (two firms)
- XI. Poultry farming (two firms)
- XII. Waste management (one firm)
- XIII. Health and safety equipment, consultancy and training services (one firm)
- XIV. SME training and capacity building (one firm)
- XV. Media services (one firm)
- XVI. Publishing (one firm)
- XVII. Education (one firm)
- XVIII. Wood and furniture (one firm)
- XIX. Beauty services (one firm)

As already mentioned, WLBs supplying goods and services are found at the bottom of the O&G value chain – that is, mainly at the fourth level, operating as subcontractors to Tier 3 contractors. A few of these firms directly supply Tier 2 level firms such as EPCs. At both levels, most WLBs interviewed provide a wide range of supporting or general services (such as catering, administrative and gardening services) and an emerging minority supply mechanical and electrical industrial equipment.

Only 14 (31%) of the interviewed WLBs had provided goods or services in the O&G value chain. These businesses are located in Maputo (six firms), Cabo Delgado (five firms) and Inhambane (three firms). The range of products and services they provided is listed below:

- I. Catering services (three firms)
- II. Administrative and human resources management services (two firms)
- III. Mechanical, electrical and instrumentation industrial equipment and consumables (two firms)
- IV. Transport services (one firm)

- V. Gardening services (one firm)
- VI. Waste management (one firm)
- VII. Civil works and infrastructure maintenance (one firm)
- VIII. Procurement and logistics services (one firm)
- IX. Health and safety equipment, consultancy and training services (one firm)
- X. SME training and capacity building (one firm)

The WLBs that now supply (or previously supplied) the O&G value chain operate in the same sectors as other WLBs that are seeking opportunities in the industry. The study identified no established linkages in agribusiness, education, wood and furniture, media, publishing and beauty services. This is mainly because goods and services can be integrated indirectly in the value chain through other SMEs and WLBs. For example, foods from agribusinesses are distributed through supermarkets and retailers, making it difficult to trace whether they reach the O&G value chain, for instance through WLBs providing catering services.

The 14 WLBs supplying the value chain have been active for 2–20 years, with an average of 9 years of experience. They have 4–30 permanent workers, with an average of 12 workers. Nevertheless, all WLBs frequently use temporary workers for larger projects.

Most of the linkages established in the O&G industry started between 2016 and 2018. However, there are exceptional cases, which include one WLB that has provided services to Sasol since 2011 and WLBs that have existed for no more than four years. The WLBs integrated in the value chain are stable businesses with clients outside the energy sector and all plan to expand and diversify.

For example, the WLBs based in Maputo plan to expand to Cabo Delgado and Inhambane and to diversify their portfolio to include new services.

One WLB in catering intends to open a small factory to produce frozen food packages, while another plans to open a restaurant. Another example is from a human resources consultant that plans to introduce in-person training services.

All interviewed WLBs depend greatly on imported inputs, except human capital, with very limited local value addition. In specialized areas such as industrial equipment, consumables as well as non-specialized supplies including

personal protective equipment are imported from global markets including South Africa and China.

Strengthening linkages with local markets for inputs could add value and jobs. For instance, catering firms could be linked with local producers or associations in agribusiness and poultry farming. Similarly, in the construction sector, there is great potential for locally produced construction materials, including wool-based products.



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CHAPTER 03

Opportunities for WLBs in the O&G and auxiliary value chains

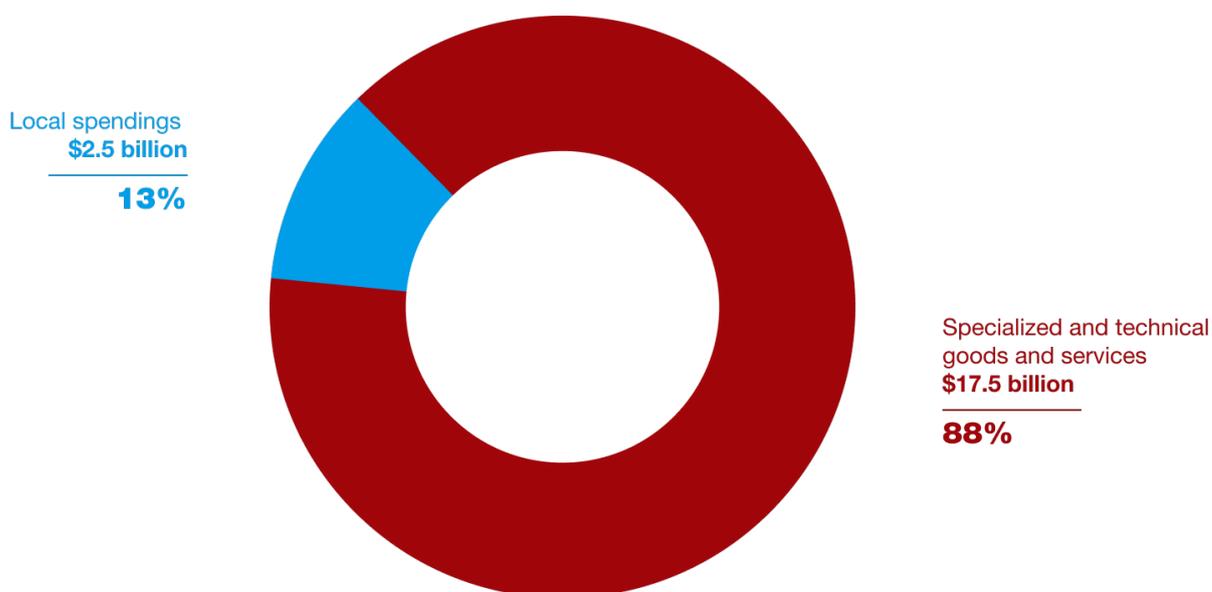
The expected 2024 start of the field development phase of the Mozambique LNG and Rovuma LNG projects – when most opportunities for local suppliers are created – has escalated expectations about opportunities for local SMEs, including WLBs. The opportunities in the field development phase (generally 4-10 years) are estimated to be 10 times greater than in the operational period.²⁵

Sasol’s Pande-Temane project recently approved a local content plan for 2021–24 (described in detail in Annex 1) under which opportunities for local suppliers will expand from 30% to 71% of total operational expenditure, reflected in progressive increases in local spending for each financial year. Figure 7 shows that Sasol’s local expenditure grew by \$17 million in three years and interviews with the company indicate that more opportunities will open up for SMEs, particularly WLBs.

3.1 Demand for local goods and services

The \$20 billion TotalEnergies-led Mozambique LNG is expected to acquire \$2.5 billion of goods and services from Mozambican-owned or registered suppliers.²⁶ This suggests that local procurement for the \$23.6 billion ExxonMobil-led Rovuma LNG project could reach nearly \$3 billion.

Figure 06: Mozambique LNG will spend \$2.5 billion locally

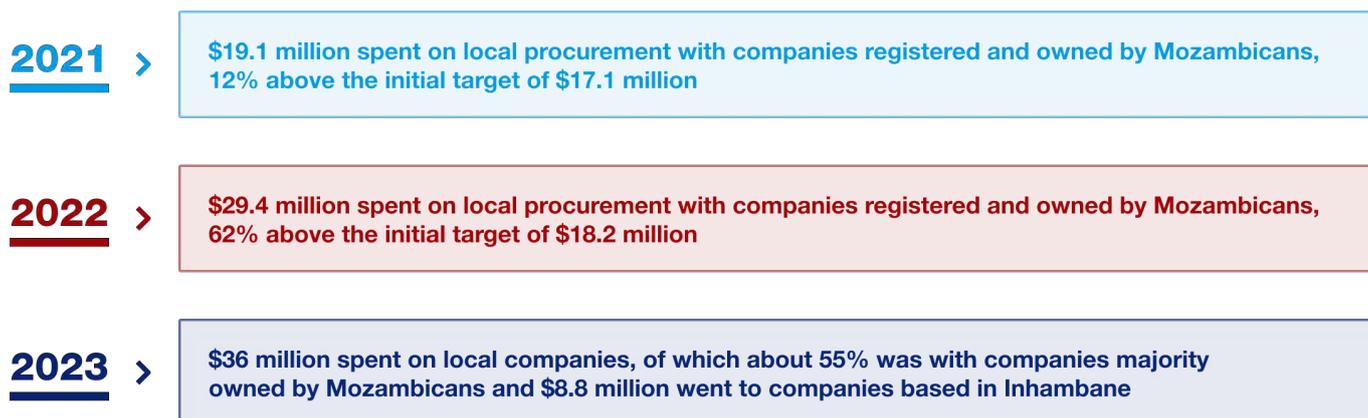


Source: TotalEnergies (2020).

25 Genesis Analytics and International Capital Corporation (2014a). *Demand and Opportunity Assessment and Analysis: Linkages in Mozambique*. Mozambique: Associação de Comércio e Indústria & Skoll Foundation.

26 <https://mzlng.totalenergies.co.mz/en/press-releases/total-shares-more-business-opportunities-cabo-delgado>

Figure 07: Sasol exceeded targets on spending for local and services



*Note: Sasol's financial year runs from July to June.

Other value chains in Mozambique's extractive sector – such as coal, aluminium, mineral sands, ruby and graphite – also offer opportunities. For instance, Gemfields's ruby mining and Syrah's graphite mining in Cabo Delgado Province and Kenmare's mineral sands project in Nampula Province offer opportunities for WLBs in northern Mozambique.

Table 1 shows Kenmare's operational spending in 2021 and 2022 on its mineral sands project in the Moma district. The project spent more than \$177 million on local procurement (excluding fuel and electricity) in 2022 as opportunities expanded for businesses in the district and across the province. Interviews with Kenmare confirmed there are opportunities to expand local procurement at the provincial and regional levels and to substitute part of the spending on international firms, which exceeded \$100 million in 2022.

Table 01: Kenmare boosted local spending on mineral sands project

Spending categories	2021 total spend (\$)	2022 total spend (\$)	Change
Local districts	4.526.664	10.515.947	132%
Rest of Nampula Province	14.939.411	20.420.181	37%
Rest of Mozambique excluding fuel and electricity	48.93.702	45.59.025	-7%
Total international firms	105.215.069	100.94.211	-4%
Total operating expenses for procurement excluding fuel and electricity	173.615.846	177.480.363	2%

Source: Kenmare (2023).

3.2 How to diversify and upgrade capabilities in the O&G and auxiliary value chains

Buyers in the natural gas sector are looking for (i) general services; (ii) construction and electrical engineering and materials; (iii) capital equipment and (iv) consumables. Table 2 lists the key goods and services for each of these categories. Within this scope, three sectors offer greater opportunities for upgrading capabilities and adding local value as well as diversifying products and markets to other value chains in and beyond the extractive sector. These are agroprocessing, construction and carpentry, and industrial equipment and services.

Table 02: What goods and services does the natural gas sector need?

General services	Construction and electrical engineering and materials	Capital equipment	Capital equipment and consumables/support
Catering and food supplies	Civil works and maintenance	Capital equipment maintenance and repairs	Crates, pallets, pans
Cleaning/janitorial services	Construction raw materials	Mechanical and instrumentation equipment	Furniture
Consulting (e.g. labour broking, work permit management)	Carpeting and floor coverings	Welding and metalworking services	IT equipment
Freight, transport and logistics	Earthworks	Vehicle maintenance	Office supplies and equipment
Landscaping	Low-voltage electrical maintenance	Industrial cleaning services	Personal protective equipment
General maintenance and repairs	Painting and corrosion protection	Plumbing and electrical equipment	Signage

Source: International Capital Corporation and interviews.

As already noted, the agroprocessing sector offers opportunities to create linkages from women-led food production, supermarkets and retailers to WLBs offering hospitality and catering services to the O&G industry and other value chains.

WLBs are mostly found in the catering sector, which (as discussed below) offers an opportunity to strengthen linkages with agribusiness firms and agricultural production.

For instance, before TotalEnergies declared force majeure in 2021,²⁷ 6,600 people worked at the field development site, which corresponded to around 19,800 meals a day. The two main O&G projects are expected to create a total of 30,000 jobs during their construction phases, which would increase food demand to more than 90,000 meals a day just for direct workers.²⁸

²⁷ <https://mzlng.totalenergies.co.mz/en/local-content>

²⁸ The World Bank (2019:9), *Economic Linkages for Diversification Project. Mozambique.*

General services	Construction and electrical engineering and materials	Capital equipment	Capital equipment and consumables/support
<i>Communication services</i>	<i>Road marking and signage</i>	<i>Spare parts</i>	<i>Tools</i>
<i>Medical services</i>	<i>Roofing and waterproofing</i>		<i>Uniforms</i>
<i>Legal services</i>	<i>Sewerage, stormwater and drainage</i>		<i>Fuel</i>
<i>Recruitment and training</i>			
<i>Mailing and courier services</i>	<i>Pre-fabricated construction materials</i>		
<i>Pest control</i>	<i>Piping</i>		
<i>Printing and photography</i>	<i>Pre-fabricated housing, doors and windows</i>		
<i>Security</i>	<i>Security fencing, gates and paving</i>		
<i>Translation services</i>	<i>Air conditioning maintenance</i>		
<i>Waste recycling and management</i>			
<i>Laundry services</i>			

Agroprocessing also offers opportunities to involve WLBs in regional and global food value chains, notably in British markets. Products of interest to regional and global food value chains range from flours (including gluten-free flours) and fruit-based products such as juices to dried fruits, processed nuts, edible oils, salt and soaps.

In addition, food production provides opportunities to enter the poultry and fishery value chains. The implementation of O&G projects will create direct and indirect demand for poultry meat and eggs. O&G projects are being developed in coastal regions, with enormous potential to create business for WLBs in the fisheries sector through aquaculture production, processing and retailing.

Construction and construction materials production offer potential to upgrade capabilities and expand the range of products and markets for WLBs, with relatively higher value addition locally. There are opportunities for WLBs to move from the current scenario, where firms

in the sector provide small civil works such as infrastructure maintenance and site clearance, to larger projects such as construction of facilities and housing. Moreover, there is potential to add value upstream of the construction value chain through local production of materials including bricks, pavers and curbs.

The carpentry, wood-based products and furniture sector also offers opportunities in multiple value chains in Mozambique, while also adding value locally. Wood-based products include materials serving as inputs for the construction sector, such as logs and lumber to pre-fabricated windows, doors, chairs and other wooden furniture.

Another area with potential for upgrading and product diversification is industrial equipment. WLBs in this sector provide imported industrial equipment with no value added. This means there is potential to offer specialized services such as repairs and maintenance services for the equipment provided. This would enable these firms to expand services to the wider pool of industrial clients in the country and capture

04

CHAPTER 04

Challenges for WLBs in the energy sector and auxiliary value chains

higher value through service provision while also upgrading industrial capabilities.

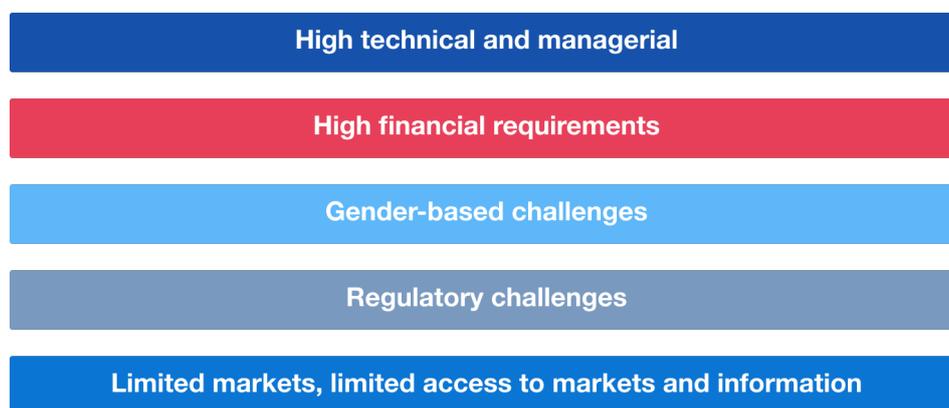
This chapter examines the challenges confronting WLBs integrated in the energy sector and those seeking to enter this and other local, regional and global value chains. These challenges, in order of importance, are:

- high technical and managerial capabilities needed to enter value chains
- tough financial requirements
- limited markets and limited access to markets and information

- regulatory challenges
- gender-based challenges

Gender inequalities imply that WLBs struggle more with these issues than men-led businesses. This chapter explores how WLBs are disadvantaged and how each barrier affects those firms integrated in the value chain as suppliers. Regulatory challenges apply exclusively to WLBs integrated in the O&G value chain, while the other four categories apply to all WLBs. It should be noted that different elements of each challenge affect WLBs differently, depending on their maturity and whether a linkage with a large buyer in the energy or mining

Figure 08: What barriers do women-led businesses face to enter value chains?



Source: Author, based on interviews.

sector has been established.

4.1 High technical and managerial requirements

As noted earlier, the energy sector is highly specialized and requires strong technical and managerial capabilities, making it the most mentioned challenge by interviewees. Several

reasons explain why WLBs have low technical capacity, especially compared to men-owned businesses.

In many developing countries, women are less educated than men. While primary schooling has advanced considerably, secondary and tertiary education enrolment for girls and women is still limited.

This is particularly true when it comes to science, technology, engineering and mathematics, which are key in the energy sector.²⁹

29 African Natural Resources Center (n.d.). 'Women's economic empowerment in oil and gas industries in Africa: Policy Tool Series.' African Development Bank.



Women and girls generally do not have equal access to education due to cultural norms that prioritize educating boys, housework and family care obligations as well as early marriage and pregnancy.³⁰ As a result, WLBs typically provide services with low skills requirements.

Businesses seeking to establish linkages in the sector often believe that to become suppliers, they need to have internationally accepted certifications to prove technical capacity. However, interviews with IOCs revealed that this is not the case for most of the opportunities available to SMEs and WLBs in Mozambique.

Certification requirements depend on the scope of work – there are areas where, for example, safety, health and environmental management certifications are a benefit to win tenders, such as in construction, engineering services and catering. This does not necessarily mean

acquiring ISO certification – companies can opt for cheaper options, such as having documented internal procedures of their management, health and safety processes.

Still, developing these internal procedures requires hiring consultants and establishing organizational and management structures and processes that are able to satisfy the requirements of large buyers.

Having the technical capacity to deliver the required services with the quality desired and within the established time-frame is more important than international certifications. In other words, a company can have internationally certified quality management standards (ISO 9001:2015), which demonstrates that production processes are organized and optimized for efficiency, but this does not ensure that it can deliver what was requested and on time.

30 *Ibid.*

What demonstrates ability to deliver is a portfolio of similar completed projects – that is, proven experience in the sector. Indeed, the services demanded by large buyers often require expanding the initial capacity of businesses, which is challenging for WLBs. For example, one IOC that was interviewed reported that while an average construction firm can have four projects per year, its project demanded 14 projects per quarter, which is a huge jump in technical, organizational and financial capacity for Mozambican SMEs.

International certification becomes a critical asset to expand markets and diversify clients once a company has some experience in the sector. Indeed, WLBs that are integrated in the O&G value chain reported that acquiring the ISO 9001 certification on quality management enabled them to consolidate their business and attract more clients in the energy and mining sectors.

WLBs seeking to operate in highly technical and specialized areas such as the energy sector must invest substantially to acquire technical knowledge and skills in science, technology, engineering and maths through training and experience. Curbs on women's access to education, including higher and technical education, contribute to their marginal presence in technical sectors in the O&G industry in Mozambique. The shortage of skilled workers makes it harder to enter technically demanding value chains.

During interviews, WLBs offering construction, industrial equipment and procurement services underlined the difficulties SMEs face to find suitable and experienced human capital at an affordable cost.

Interviewees from the private sector highlighted that both higher technical education and technical and vocational education and training (TVET) are

critical. The education system ignored these areas for a long time, however, so qualified technical and TVET workers are scarce. IFPELAC – the largest TVET centre in Mozambique, with delegations in all provinces except for Manica – provides public TVET training, but the number of graduates is still below the desired level.³¹

There are few private training centres, and they tend to focus on soft skills due to the cost of investing in technical training, including buying equipment and training teachers. These constraints become more acute as businesses grow, which limits their ability to expand in the medium and long term.

Tough financial requirements

Mozambican WLBs rank financial requirements as the second-biggest obstacle. All WLBs interviewed have limited access to affordable credit and financial products to support their operations, enter the energy sector and auxiliary value chains, and to fulfil the financial requirements when opportunities arise in the sector.

The financial condition of WLBs is typically more precarious than that of men-owned businesses because their economic performance tends to be weaker – they are less profitable, grow more slowly, have higher closure rates and use less external finance.³² Indeed, poverty levels are higher among women.³³

Women also start their firms with fewer productive assets than other businesses, which makes it harder for them to qualify for financial products. For instance, in certain contexts, sociocultural norms do not allow women to

31 *Ibid*

32 Carranza, E., Dhakal, C., and Love, I. (2018). *Female Entrepreneurs: How and Why Are They Different?* Jobs Working Paper no. 20. World Bank.

33 *African Natural Resources Center, op. cit.*

inherit or have control over assets such as land, and women often do not have bank accounts in their names.³⁴ Women also have lower levels of financial education.

Interest rates in Mozambique are high and loan requirements surpass the capacity of most SMEs. Indeed, the average commercial interest rates in Mozambique range 25%–28%, with commercial banks demanding more than 100% in collateral. This excludes the vast majority of SMEs from access to finance.³⁵ Insurance products could help reduce the interest rates, but the insurance sector is very small and underdeveloped in Mozambique, with penetration of just 1% and total annual premiums of \$20 million.³⁶

The primary source of money for all WLBs interviewed was their company's own funds. This hinders their growth and their efforts to entering capital-intensive value chains such as the O&G industry or regional and global value chains.

WLBs supplying multinationals in the energy sector face severe liquidity problems as they must advance capital from their own funds to deliver goods and services and wait more than 30–45 days for payment. Many said they typically wait 60–90 days and one reported receiving two payments after 107 days and 143 days, respectively. This is a serious barrier for suppliers as these delays negatively affect their cash flow, including their ability to pay recurring expenses, especially if more than two purchase orders are issued.

Fewer than 5% of the WLBs interviewed use invoice discounting or short-term loans to manage cash flow demands. These WLBs integrated in the O&G value chain. Banks still require a consolidated financial record for such financial products, which are more flexible than medium- to long-term loans.



34 Carranza et al., *op. cit.*

35 The World Bank (2019), *Economic Linkages for Diversification Project. Mozambique.*

36 World Bank & Alliance for Financial Inclusion (2019) *Mid-Term Review of the Mozambique National Financial Inclusion Strategy 2016 – 2022.*

Delayed payments by large buyers in the energy sector increase interest rates, which further limits financial capacity. WLBs that experienced delayed payments had suffered additional discounts from the bank by the time the payments were made. The remaining resources were only sufficient to cover recurring expenses in the following months, especially if the contract was not regular.

The lack of affordable finance sources, aggravated by payment delays among WLBs in the O&G value chain, limits financial resources for investments – for instance, in technical capacity and certifications. Firms must pay \$10,000 to \$15,000 for the quality management certification ISO 9001:2015 – in addition to the in-house investments that may be required to set up new organizational systems in the company.

This is a major financial and time commitment for firms, considering that the average annual business volume for most micro and small businesses in Mozambique is below \$7,000.³⁷ Acquiring certification requires enormous internal effort without any guarantee of future contracts. It takes up to two years, including diagnostic and monitoring audits, depending on the starting point of the company.

Limited markets, access to markets, information and business development services

The third-biggest obstacle for WLBs is access to markets, opportunities and information about the O&G value chain and auxiliary value chains. WLBs in Mozambique generally struggle to identify their target markets and market opportunities and to gather sufficient information to inform strategic planning and investment. Lower education levels and sociocultural norms mean WLBs struggle to access information about possible jobs and business opportunities, markets, networks and the connections needed to advance their businesses.³⁸

Historically, market opportunities in the O&G industry and in Cabo Delgado Province have been highly volatile and limited. Armed conflict in the province that broke out in October 2017 has left thousands dead, cause physical and financial devastation, and displaced more than a million people.³⁹ The ongoing conflict has reduced the



(C)Shutterstock.com

37 INE (2017), *Empresas em Moçambique: Resultados do segundo censo nacional (2014-2015)*. Maputo: Instituto Nacional de Estatística.

38 African Natural Resources Center, *op. cit.*

39 <https://reliefweb.int/report/mozambique/acaps-thematic-report-mozambique-impact-five-year-conflict-cabo-delgado-07-july-2023>

size of markets and boosted SMEs' operational costs as certain markets and inputs in the province have become inaccessible.

In April 2019, Tropical Cyclone Kenneth hit Cabo Delgado and Nampula provinces, further debilitating infrastructure, services and businesses. The COVID-19 pandemic further crimped economic activities nationally and globally in 2020 and 2021.

Escalation of the conflict in Cabo Delgado prompted TotalEnergies to put its project on hold in April 2021, and operations have yet to resume. WLBs that had invested in this market suffered financial losses and temporarily suspended activities. The Exxon-led Rovuma LNG project has not yet reach a final investment decision, also due to insecurity in the region. Preliminary work is being undertaken for the resumption of TotalEnergies' activities and Exxon's final investment decision, but the context has restricted the scale and scope of market opportunities.⁴⁰

IOCs' supply management policies require potential suppliers to register on their internal databases, supplying an extensive and onerous list of documentation so they can be assessed. WLBs said it was extremely difficult to understand and gather the required documentation, but also to using the platforms, because they are in English.

Some WLBs that successfully registered in supplier databases said they had not received any feedback or market opportunities through the platform in more than two years. They believe there is no interest in providing opportunities to local SMEs, especially those owned or led by women, or that local WLBs do not have the required capacity.

This situation is made worse by the fact that WLBs often lack knowledge of how the O&G value chain operates, so they often seek opportunities directly with IOCs, rather than with Tier 2 or Tier 3 contractors. WLBs that were interviewed said the procurement departments of IOCs are not accessible or able to guide or assist WLBs.

WLBs reported that IOCs share more information about the type of goods and services they need and the documentation required to bid. However, they say this information is fairly general and there is little specific and detailed technical information on demand patterns over the medium and long term to allow for investment planning, partnership development and network building. Indeed, all IOCs and major mining projects submit local content plans to the government, but these are not shared with SMEs.

While networks of businesswomen could act as platforms to disseminate information, lobby and build partnerships, there are few such networks and they operate irregularly, especially in Cabo Delgado. Many WLBs in the province observed an absence of cooperation, information exchange and partnerships among WLBs, business networks and events. Furthermore, business development services for WLBs in all sectors, providing detailed market research, competitiveness analysis, business advisory, marketing and mentoring are costly and inadequate.⁴¹

Market access challenges for WLBs outside the energy sector include identifying potential markets and establishing contacts – for example, with local supermarkets in the case of WLBs in agribusiness, or fine-tuning marketing strategies for those in media, publishing and transport.

During interviews, WLBs seeking to join regional

40 *TotalEnergies has said it hopes to resume construction by mid-2024. See <https://ingprime.com/africa/ceo-totalenergies-hopes-to-resume-mozambique-lng-construction-by-mid-2024/104366/>. ExxonMobil said in February that it expects to reach a final investment decision in 2025. See <https://www.upstreamonline.com/ing/exxonmobil-targets-2025-go-ahead-for-mozambique-liquefaction-project/2-1-1597887>*

41 *International Capital Corporation (2014). Demand and Opportunity Assessment and Analysis: Business Service in Mozambique. Mozambique: Associação de Comércio, Indústria e Serviços & Skoll Foundation.*

and/or global chains frequently mentioned export and trade assistance to navigate international market opportunities and trade regulations. Only a few of these businesses had benefited from business training provided by IOCs, government institutions, private actors or development partners, as detailed in Chapter 5.

Regulatory challenges

Some survey respondents called for a stronger regulatory framework governing linkages between local suppliers and the O&G industry to increase opportunities to local SMEs, including WLBs. Efforts to integrate SMEs in the industry are deemed insufficient due to constraints on technical and financial capacity.

The main instrument to integrate SMEs in the O&G value chain is Decree-Law 2/2014. It says Mozambican-owned companies should be given preferential treatment and, when the goods or services they provide are of similar quality and do not cost more than 10% (including taxes) more than those provided by a foreign firm, the Mozambican-own company should be given preference.⁴² A company is considered Mozambican when a Mozambican citizen owns at least 51% of its capital.

An important element in this regulation pertains to the share of Mozambican ownership in the company as preferential treatment increases based on how much capital is owned by nationals. Government authorities said in interviews that 100% women-owned Mozambican businesses are also given preference, but this is not mentioned in the legislation and or corroborated by interviews with IOCs and WLBs.

Based on these provisions, IOCs must submit

their local content plans to the industry regulator, the National Institute of Petroleum (INP). The Ministry of Energy and Mineral Resources (MIREME) and INP meet regularly with IOCs to monitor the implementation of their local content plans, which include local procurement budgets for specific project phases and the budget allocation for Mozambican companies. IOCs are required to advertise tenders in newspapers, online and through their own supplier platforms, and INP monitors major tenders.

MIREME is in the early stages of designing a local content policy and strategy that is expected to reinforce the participation of local suppliers in the value chain of extractive projects in the country. The government sees the policy as an opportunity to explicitly mainstream gender in the local content governance framework in Mozambique. Sasol is also in the early stages of designing a strategy to include women in its supply chain, illustrating that interest among IOCs in gender mainstreaming is also growing.

In addition, MIREME leads the Multi-Sectoral Group on Local Content, which acts as a coordination platform for all initiatives aimed at increasing the participation of domestic firms in large projects.⁴³

Gender-based challenges

WLBs also reported gender-based barriers during interviews. As previously mentioned, gender disparities disadvantage WLBs in the market and sociocultural gender norms play a key role in the marginalization of WLBs. Men are typically seen as the breadwinners, while women are expected to stay at home and care for the

42 República de Moçambique (2014). *Decreto-Lei 2/2014 de 2 de Dezembro. que estabelece o Regime jurídico e contratual especial aplicável aos projectos de gás natural liquefeito das Áreas 1 e 4 da Bacia do Rovuma. Boletim da República: I Série, Número 96.*

43 This group includes INP, the National Institute of Mines, the Ministry of Industry and Commerce, the Ministry of Labour and Social Security, the Secretary of State for Youth and Employment, the Secretary of State for Professional and Technical Education, the Institute for Professional and Vocational Training IFPELAC, the Institute for Small and Medium Enterprises, IOCs and ENH.

children.⁴⁴ Just 5.8% of Mozambican women held paying jobs in 2018, compared to 23.7% of men.⁴⁵

This means businesswomen struggle to balance their many responsibilities, especially as additional support is often not available. Moreover, the O&G industry as well as other extractive industries are male-dominated industries, tending to create an environment that excludes women and WLBs.⁴⁶

Women entrepreneurs are often treated with less respect than businessmen and not taken

seriously by prospective clients, banks and service providers. Some men refuse to negotiate with women. This means WLBs constantly have to prove their capabilities. During public events or business meetings, they are often the last to be given opportunities to speak.

In Cabo Delgado and Inhambane provinces, the absence of strong networks of women or women's business associations contributes to the absence of role models to whom other businesswomen could look for inspiration. Networks that expose young female entrepreneurs to successful WLBs are scarce in these provinces and generally ineffective.



44 <https://www.technoserve.org/blog/how-one-woman-is-challenging-gender-roles-in-mozambique/>

45 World Bank's Gender Data Portal, 2018.

46 International Finance Corporation (2018), *Women Owned Businesses and the Supply Chain*. Washington-U.S.A: International Finance corporation & Umbrella Facility for Gender Equality.

CHAPTER 05

Initiatives to create opportunities in the O&G value chain

Different stakeholders have developed initiatives to improve access to opportunities in the O&G value chain and in auxiliary value chains. Initiatives being implemented to promote the participation of local suppliers in the O&G and in auxiliary value chains include:

- I. **Local content initiatives** by operators in the industry such as TotalEnergies and Sasol's supplier development programmes, ENH's LINKAR project focusing on national suppliers in the O&G industry and MozUp's training centre;
- II. **Government-led initiatives** such as MIREME's certification programme, the Institute for the Promotion of Small and Medium Enterprises' MOZ YWEB project targeting youth- and women-led businesses in the extractive sector, and the Ministry of Economy and Finance's CONECTA project targeting SMEs supplying to the extractive sector in central and northern Mozambique, in partnership with development partners such as the African Development Bank and the World Bank;
- III. **Private sector-led initiatives** such as the Association of Local Content of Mozambique and IdeaLab's FEMTECH programme, which provides business development services to women;
- IV. **Development partner-led initiatives** such as the World Bank's WE-FI providing financial solutions to WLBs, the United Nations Industrial Development Organization's (UNIDO) export competitiveness project PROMOVE Comércio and the Multi-Stakeholder Platform for the North of Mozambique.

As detailed in Annex 1, the most common areas targeted by these initiatives are improving access to markets; information and business development services; entrepreneurship training; business management skills; financial management; ISO certification; and access to finance and insurance products. Among the initiatives analysed, UNIDO's is the only one focusing on export trade, international competitiveness and the improvement of government industrial services for certification.

However, interviewees were concerned about the number of businesses covered by the initiatives: 25 to 125 SMEs (except for the CONECTA programme, which targets 1,000 SMEs). This is far below what is needed – especially when it comes to addressing the financial needs of SMEs. Not all of the initiatives include explicit gender-mainstreaming targets and activities.

Finally, while the Multi-Stakeholder Platform and MIREME's Multi-Sectoral Group on Local Content have improved coordination among stakeholders, coordination among initiatives is still considered weak.

CHAPTER 06

Conclusions and recomendations

6.1 Conclusions

This study identified significant opportunities for Mozambican SMEs to participate in the O&G value chain, particularly during the eventual field development phases of the Mozambique LNG project and the Rovuma LNG project. It also observed market opportunities in current projects in the O&G sector, other extractive projects and with large buyers in the country. There are opportunities to add value and upgrade capabilities in agroprocessing, construction and materials, and industrial equipment services.

However, WLBs participate little in these sectors: most of those interviewed have not had opportunities to enter these value chains and the few that provide or have provided goods or services are at the bottom of the value chain as Tier 4 suppliers.

WLBs provide few specialized services to the industry. Rather, they offer supporting or auxiliary services such as catering, cleaning, gardening, hospitality, waste management and human resources management. Still, a handful of WLBs are emerging in technical sectors with great potential for higher value added, such as local procurement, construction and industrial equipment.

This study finds that most Mozambican WLBs operate in small and low-skilled markets without the technical and organizational structure, experience, quality and performance needed to become a supplier in the O&G value chain. Their financial capacity is also far below the capital investment and liquidity demands of the industry.

Access to cheap finance remains a key constraint for suppliers as well as WLBs outside the value chain. Commercial interest rates are high and require high levels of collateralization, making it prohibitive for micro and small companies. Most WLBs use personal and family financial resources to fund their operations, which limits their ability to invest in modern equipment, expand activities and upgrade capabilities.

Suppliers integrated in the value chain need financial support to manage high upfront costs and liquidity requirements resulting from providing services to a large client such as an operator or subcontractor in the O&G industry. This is further aggravated by long payment periods. These firms also need to invest in sophisticated equipment to upgrade their capabilities and in international certifications, which not only represent a large cost on their own, but also imply undertaking the required additional investments and effort to comply with international standards.

This situation is exacerbated by market volatility, a lack of relevant information and the limited availability of businesswomen's networks and business development services. This scenario is even more severe in the north of Mozambique, in Cabo Delgado Province. The private-sector space in Cabo Delgado is smaller and more fragile, largely due to armed conflict, Cyclone Kenneth and the COVID-19 pandemic.

The absence of a comprehensive regulatory framework on local content, such as a local content policy, is considered a critical regulatory barrier. Interviewees said the provisions in Decree-Law 2/2014 to promote local SMEs in the extractive value chains are insufficient for the effective integration of local SMEs, particularly WLBs. They said the cost and quality structure of local SMEs does not enable them to compete with foreign suppliers with a difference of less than 10% in cost and with the same quality.

Finally, sociocultural gender norms continue to restrict women's access to market opportunities, particularly in highly skilled and male-dominated industries such as the O&G industry. Indeed, the study underlined the gender-based challenges reflected in discrimination against WLBs and the difficulties in balancing business leadership with caretaking duties.

Some initiatives seek to integrate SMEs in the O&G and other extractive value chains as well as regional and global value chains. These initiatives target barriers to market access, business

development services, SME training and finance, but are limited in scope. The study finds that these initiatives need to focus more on gender

mainstreaming, international competitiveness and strategic coordination between actors.

6.2 Recommendations

Based on the study analysis and conclusions, the following recommendations are made:

a. Improve technical and managerial capabilities

- Create opportunities to acquire technical skills and knowledge nationally and abroad in specialized and industry-specific areas such as industrial agroprocessing, engineering construction and industrial equipment and services;
- Promote knowledge transfer through joint ventures among WLBs and between WLBs and original equipment manufacturers and Tier 2 contractors;
- Advocate for the unbundling of large contracts into smaller contracts to create opportunities for many small WLBs rather a few opportunities for large businesses, fitting the technical capacity of WLBs.

b. Expand access to finance

- Provide grants and seed fund for women-owned/led start-ups;
- Mobilize resources to establish guarantee funds that would allow for subsidized loans with low interest rates for WLBs;
- Disseminate information about financial products provided by commercial banks as well as additional financial support and credit lines funded by the government, development partners and private actors;
- Tailor specific financial and insurance products and services for WLBs in the O&G value chain aimed at investment and liquidity constraints – for example, financial endorsement letters by large buyers or clients to support WLBs' access to finance or using contracts as financial guarantees;
- Design tailored training programmes for WLBs in rural areas aimed at improving basic business skills and financial literacy;
- Promote SME- and WLBs-focused financial products and services;
- Undertake lobby and advocacy actions to accelerate payments to suppliers in the O&G value chain.

c. Strengthen market access, information and business development services

- Mobilize resources to map key characteristics of WLBs in Mozambique including sectors, size, turnover and clients;
- Create a database of WLBs providing goods and services to the O&G value chain and other extractive sectors in partnership with large buyers, development partners and private actors;
- Conduct business assessments in collaboration with IOCs, OSCs and EPCs to identify the

main gaps of WLB suppliers and create tailored training to address these gaps, with coaching, mentoring and monitoring components;

- Increase the scale and geographical coverage of SME training opportunities for WLBs;
- Increase business scaling and market diversification training for established WLBs, with coaching, mentoring and monitoring components;
- Support the attainment of national and international accreditation and certification;
- Disseminate relevant market information through business events.

d. Support the consolidation of WLB networks

- Strengthen businesswomen associations through capacity building and financial support;
- Promote events showcasing WLBs and role models and success stories;
- Encourage the establishment of WLB associations, particularly in agriculture and poultry farming, due to the great potential to create business opportunities for women on a larger scale from food production and retail to catering services in the energy sector.

e. Promote gender-mainstreaming in the O&G value chain and other extractive sectors

- Establish a verification or certification mechanism to attribute the 'women-led business' status according to international standards (ISO International Workshop Agreement 34) and promote it among large buyers, including the public sector and in the extractive sector;
- Promote the integration of gender-based goals in regulations and initiatives targeting SMEs' participation in the O&G value chain and auxiliary value chains;
- Advocate for gender-inclusive supply chains among IOCs, OSCs and EPCs in the O&G value chain;
- Organize events between actors in the O&G industry and other extractive industries and WLBs supplying goods and services to the industry;
- Provide technical assistance for the design and implementation of the local content policy and strategy, including gender-mainstreaming.



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Annex 1. Initiatives fostering SME participation in the O&G and auxiliary value chains

Project	Main objectives	Targeted location/sector
<p>ENH - LINKAR (Creating a Sustainable SME Supply Chain in the O&G Sector in Mozambique)</p> <p>Implemented by ENH, funded by the African Development Bank</p> <p>Budget: \$1.5 million possible extension to \$4 million</p> <p>Timeline: Late 2022–25</p>	Identify and support contract opportunities: Identify 125 SME contract opportunities (30% WLBs), including 25 partnership and/or joint venture opportunities	Country-level, suppliers in the O&G industry
	Promotion of business-to-business linkages and networking to help match SMEs to contracts	
	Facilitate to 30 SMEs' access to finance of \$3 million from financial institutions; provide SMEs with mentorship, technical advisory and access to finance	
	Provide technical assistance and in-depth advisory services to at least 150 SMEs	
	Help SMEs navigate buyer company procurement and tendering processes and access contracts in gas value chains and associated infrastructure projects;	
<p>MOZ YWEB (local content development project for youth-led and women-led micro, small and medium-sized enterprises (MSMEs))</p> <p>Implemented by IPEME, the Institute for the Promotion of Small and Medium Enterprises, funded by the African Development Bank</p> <p>Budget: \$1 million</p> <p>Timeline: November 2021–25</p>	Identify appropriate contract opportunities for 50 MSMEs, including 25 partnership and/or joint venture opportunities	<p>SMEs targeting local content and women-owned business in the natural resources sector</p> <p>Cabo Delgado</p> <p>Maputo Province</p> <p>Maputo City</p> <p>Tourism, manufacturing, agriculture, ICT, health and transport, emphasizing youth-led businesses and WLBs</p>
	Provide technical assistance and in-depth advisory services to at least 100 MSMEs, resulting in 50 MSMEs reaching the required levels of competitiveness	
	Offer MSMEs mentorship and coaching, technical advice, access to certification/accreditation and facilitate access to finance (loans, invoice discount, factoring, etc.) with financial institutions	
	Promote business-to-business and government-to-business linkages and networking to help match MSMEs to contracts and facilitate smart partnership opportunities, and help MSMEs navigate buyers' company procurement and tendering processes and access contracts	
	Capacity-building training in finance/accounting, marketing, human resources and business planning and entrepreneurship	
MIREME (certification programme)	ISO 9001:2015 certification programme for 50 SMEs	Suppliers in Cabo Delgado, Inhambane, Maputo and Sofala

Project	Main objectives	Targeted location/sector
Sasol (local content plan) Timeline: 2020–24	Increase the local procurement spending	Oil and gas suppliers operating in Inhambane
	Build the capacity of local companies through an enterprise and supplier development programme	
	Training: finance, financial management, human resources	
	Business cash flow support fund in partnership with BCI Bank started with \$250,000 and today has more than \$1 million	
	ISO 9001:2015 certification programme	
	Special programme to promote partnerships between foreign companies and Mozambican companies in partnership with AIMO, still at an early stage	
TotalEnergies (CAPACITA MOZ)	Develop the capacity of 100 companies based in Cabo Delgado	All locals in Cabo Delgado Province and SMEs
	13 SMEs in Cabo Delgado in ISO 9001:2015	
	Local content one-stop shop in Pemba to contribute for the promotion and enhancement of training and creating business opportunities for Mozambican entities and individuals	Oil and gas, hospitality and tourism
CONNECTA (economic linkages for diversification) Implemented by Ministry of Economy and Finance, funded by the World Bank Budget: \$100 million Timeline: 2022–27	Provide SMEs with the following skills: market orientation, financial management, socioemotional, regulatory and labour aspects, climate-resilient capabilities, gender centered-design, internships for internally displaced persons and additional coaching to those that do not reach stage 2 (target of 1,000 SMEs)	SMEs in sectors with potential for upstream linkages (half women-led, green industry) with focus in Cabo Delgado, Tete and Nampula
	Defend national interests in terms of local content, support the private sector, the government and the Multi-Sectoral Group on Local Content led by MIREME	
	Finance and markets: networking events, access to digital solutions, aggregation, pitch to challenges by large companies, matching grants for green technology; support in linking to credit facilities with partial credit guarantees and demand-side solutions (target 100 SMEs)	
	Quality: training on accessing new procurement markets, gap analyses on firms' quality, technical assistance to comply with quality standards, and certification processes (200 bottom-up + 100 top-down)	
	Capital: Competition for grants (500 MSMEs)	
Association of Local Content of Mozambique Since 2021	Defend national interests in terms of local content, support the private sector, the government and the Multi-Sectoral Group on Local Content	
	Improve access to finance and to insurance to enable financing opportunities for SMEs	
	Trade financing adviser services and business advisory	

Project	Main objectives	Targeted location/sector
<p>MSP - Multi-Stakeholder Platform for the North of Mozambique</p> <p>Funded by Kingdom of the Netherlands, African Development Bank, TotalEnergies, USAID, ExxonMobil</p> <p>Since 2019</p>	<p>Financial inclusion initiatives and programmes that facilitate the creation of an ecosystem conducive to the combination of catalytic capital and private capital to unlock financing for Mozambican SMEs</p> <p>Sponsorship of training centres or technical assistance programmes, both as a sectoral coordination of professional certification standards</p> <p>Facilitating interaction among stakeholders to support individual high-impact projects, as well as promote integrated development corridors (most notably the Pemba-Lichinga Corridor Working Group)</p>	Cabo Delgado Province
<p>MozUp</p> <p>Sponsors: ExxonMobil, Eni, CNPC, ENH, Galp and KOGAS</p> <p>Partners: MES, Absa, Ascending, EnergyWorks and MWE</p> <p>Since 2016</p>	<p>Training to give local SMEs with a deeper understanding of core topics and help them prepare for the requirements of participating in the LNG sector: local business analytics, supplier registration portal, advisory and consulting services, business training, business assessments, financial advisory services, networking, business connections and partnerships and mentoring</p>	Local businesses and SMEs
<p>FEMTECH</p> <p>Implemented by IDEALAB, funded by Embassy of the Kingdom of the Netherlands and RVO-Dutch Enterprise Agency</p> <p>Timeline: 2014–23</p>	<p>Support the business development of women entrepreneurs across the country, 10th edition having graduated 26 women in May 2023</p> <p>Integrate sessions led by business experts, where trainees learn subjects related to leadership, digital marketing, partnerships and negotiation, and sessions led by legal entities such as the Tax Authority, BAÚ, INAE and INSS</p> <p>Access to workshops, various work tools and business advisory sessions to structure the growth plan of their businesses</p>	<p>Women aged 25 and above who have had businesses in the market for at least two years.</p> <p>Country-level</p> <p>All sectors</p>
<p>WE-FI Women Entrepreneurs Finance Initiative</p> <p>Budget: \$2.7 million</p> <p>Timeline: 2018–23</p>	<p>Address financial and non-financial constraints faced by women-owned/led SMEs</p> <p>Mobilize more than \$1 billion in commercial and international financial institution finance for entities that give women entrepreneurs access to finance and insurance products, capacity building, networks and mentors, and opportunities to link with domestic and global markets</p> <p>Increase women-led SMEs' access to markets, finance and networks, and create linkages between these SMEs and corporates and investors</p> <p>Providing acceleration training to help women entrepreneurs acquire business skills and become more innovative and competitive in male-dominated business sectors</p>	WSMEs in Mozambique, all sectors

Project	Main objectives	Targeted location/sector
<p>PROMOVE Comércio - Building Competitiveness for Exports in Mozambique</p> <p>Implemented by UNIDO (€6.5 million of the total €12 million), funded by European Union</p> <p>Budget: €6.5 million</p> <p>Timeline: 2020–24</p>	<p>Good governance and core quality infrastructure services at the institutional level upgraded to ensure international recognition</p>	<p>SMEs</p> <p>Nampula, Zambézia and Maputo</p>
	<p>Increased technical competences of the conformity assessment service providers and ensuring international recognition as per the needs of the selected value chains with a focus on the provinces of Nampula, Zambezia and Maputo</p>	<p>Fishing and agribusiness</p>
	<p>Enhancing the capacity of SMEs to comply with export market requirements leading to business opportunities</p>	
	<p>Enhanced government knowledge on the legal and institutional framework required to apply EPA trade defence/safeguard articles</p>	

Annex 2. List of participants

No	Name of entity
1	Institute for the Promotion of Small and Medium Enterprises
2	MIREME – Ministry of Energy and Mineral Resources
3	Office of the Governor of Cabo Delgado
4	CORE – Centre for Entrepreneurial Orientation/Provincial Services for Industry and Commerce DPIC
5	Provincial Directorate for Economic Activities in Cabo Delgado
6	Centre for the Promotion of Economic Development (CPDE)
7	Pemba Incubator of Youth Entrepreneurship/INEP
8	Private Sector Association of Cabo Delgado (CEP)
9	APME Cabo Delgado
10	AMECADE Association of Women Entrepreneurs of Cabo Delgado
11	MWE – Mozambique Women in Energy
12	FSDMoc
13	FCDO
14	UNIDO
15	World Bank
16	MozUp
17	ENH-Linkar
18	Sasol
19	Total
20	Kenmare
21	Association of Local Content of Mozambique
22	APME
23	AMEEA
24	CTA
25	FEMME
26	MWE
27	Kuviala
28	RH Consultoria
29	IdeaLab
30	<i>Monte Verde</i>
31	<i>Palmares Construções e Serviços</i>
32	Kainda Consultoria

No	Name of entity
33	Usalama
34	RovumaTech
35	AM Support
36	Restaurante Golden Sea
37	FINANA
38	Kiki Catering
39	MJ Criações
40	NDEYANE
41	Cosini
42	Nweba
43	MISC
44	HSG Rent a Car
45	Tan Trade
46	Instituto Criança Pemba
47	Marisa Catering
48	Kendra Catering
49	Esplanada Sheila
50	EMussera Eventos
51	Zaina Catering
52	Fatima Catering
53	Viasse Catering
54	Ancha's Gluten Free
55	Chemila Nivale
56	Nadia Amaro
57	Micheila Machungo
58	Sumaiya Machude
59	Ermelinda Faustino
60	Yedaldete Cuambe
61	Imelda Almeida
62	Maissa Rasse
63	Olinda José
64	Lidia Combo

