



1. Project Data

Project ID P129847	Project Name Mozambique Mining and Gas TA Project		
Country Mozambique	Practice Area(Lead) Energy & Extractives		
L/C/TF Number(s) IDA-51990,IDA-D2390,TF-16113,TF-A8583	Closing Date (Original) 31-May-2020	Total Project Cost (USD) 79,560,076.50	
Bank Approval Date 28-Mar-2013	Closing Date (Actual) 31-Dec-2022		
	IBRD/IDA (USD)	Grants (USD)	
Original Commitment	50,000,000.00	9,424,036.90	
Revised Commitment	84,526,499.58	9,418,199.98	
Actual	79,560,076.50	8,436,705.92	
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2. Project Objectives and Components

a. Objectives

The Project Development Objective (PDO) was "to strengthen the capacity and governance systems of key institutions to manage the mining and hydrocarbon sectors in Mozambique" (Financing Agreement Schedule 1 dated October 21,2016 and Project Appraisal Document para. 28 dated March 1, 2013).

The PDO remained unchanged during project implementation. During restructurings, changes were made to some of the PDO indicators to increase clarity in the definitions and the original targets were increased under



an Additional Financing approved in 2017. The overall ambition of the Project increased under the Additional Financing.

For the ICRR, the PDO is parsed as follows:

Objective 1: To strengthen the capacity and governance systems of key institutions to manage the mining sector in Mozambique.

Objective 2: To strengthen the capacity and governance systems of key institutions to manage the hydrocarbons sector in Mozambique.

b. Were the project objectives/key associated outcome targets revised during implementation?

Yes

Did the Board approve the revised objectives/key associated outcome targets?

Yes

Date of Board Approval

01-Nov-2017

c. Will a split evaluation be undertaken?

No

d. Components

(Reference PAD paras. 29 to 36 and ICR paras. 12 to 18).

The project components at appraisal are indicated below. Changes made during implementation are discussed under Restructurings.

Component A: Mining Governance Capacity Building and Reform: (estimated cost appraisal US\$17.65 million; revised cost after Additional Financing US\$20.40 million; actual cost at completion US\$18.28 million). This component was to consist of the following seven subcomponents: A.1: Mining cadaster upgrading; (ii) A.2: Mining assets evaluation and tendering; (iii) A.3: Improving the capacity of the Government of Mozambique (GoM) to manage artisanal and small-scale mining; A.4: Capacity building of technical departments of the Ministry of Mineral Resources and Energy (MIREME); A.5: Geodata acquisition, interpretation, and promotion; A.6: Reinforcing state participation in mining concessions; and A.7: Transaction advisory services for large-scale mining operations and related infrastructure.

Component B: Natural Gas Capacity Building and Governance Reform: (estimated cost at appraisal US\$11.05 million; revised cost after Additional Financing US\$30.62 million; actual cost at completion US\$23.50 million). This component was to consist of the following four subcomponents: B.1: Strengthening MIREME's capacity to support governance reforms; B.2: Capacity building and governance reform support for the National Institute of Petroleum (INP); B.3: Capacity building and technical support for the National Hydrocarbon Company (ENH); and B.4 Transaction advisory services for negotiating gas operations and related infrastructure.



Component C: Cross-cutting Mining/ Natural Gas Capacity Building and Reforms: (estimated cost at appraisal US\$9.95 million; revised cost after Additional Financing US\$19.90 million; actual cost at completion US\$23.25 million). This component was to consist of the following seven subcomponents: C.1: Legal and regulatory framework for mining and hydrocarbons; C.2: Support to the General Inspectorate for health and safety and regulatory enforcement; C.3: Support to the National Directorate of Planning and Development under MIREME; C.4: Strengthening and establishment of staff positions, capacity and infrastructure in MIREME and its agencies; C.5: Revenue generation and management; C.6: Enhancing environmental and social management in the mining and natural gas industries; and C.7: Support for implementation of the Extractive Industries Transparency Initiative (EITI) and capacity building in civil society organizations.

Component D: Cross-Sectoral Reforms: (estimated cost at appraisal US\$0.80 million; revised cost after Additional Financing US\$3.75 million; actual cost at completion US\$4.97 million). This component was to consist of the following three subcomponents: D.1: Strengthening the recipient's Cross Sector Platform; D.2: Strengthening upstream and downstream linkages in mining and gas production; and D.3: Framework for oil spill preparedness and response capacity.

Component E: Project Management and Coordination: (estimated cost at appraisal US\$4.90 million; revised cost after Additional Financing US\$8.99 million; actual cost at completion US\$9.16 million). This component was to support MIREME in managing and coordinating the Project and building its capacity for procurement, financial management, safeguards, and monitoring and evaluation (M&E) through provision of technical advisory services, training, supporting equipment, and coverage of operating costs.

Project Preparation Facility (PPF): (estimated budget US\$3 million; actual provision US\$0.60 million). The Project included a Project Preparation Advance (PPA) to set up the Project Management Unit (PMU) and provide it with the necessary equipment.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project Cost: At appraisal, the total project cost was estimated at US\$58.15 million. At the Additional Financing in 2017, the estimated cost was increased to US\$92.67 million; the actual cost at completion was US\$88.71 million. (based on ICR Data Sheet). The difference between the estimated and actual costs was mainly due to exchange rate changes.

Financing: At appraisal, the Project was financed by an IDA credit of US\$50 million. At the Additional Financing in 2017, the IDA financing was increased to US\$86.40 million. At completion, the actual amount disbursed was US\$79.56 million. (based on ICR Data Sheet).

Co-Financing: At appraisal, the United Kingdom Department for International Development (DFID) was to provide grant financing of US\$8.15 million. Complementary to the Additional Financing in 2017, DFID provided an additional grant of US\$1 million. At completion, the allocated amounts had been contributed in full.

Dates: The Project was approved on March 28, 2013. The planned effectiveness date was July 1, 2013; the Project became effective on August 22, 2013. The planned closing date was May 31, 2020. The actual



closing date was December 31, 2022. The extension of the closing date was to allow for completion of activities added under the Additional Financing and those delayed due to the COVID pandemic.

Mid-Term Review (MTR): An MTR was carried out in August 2016. The findings of the MTR informed the restructuring, including the Additional Financing, in November 2017.

Restructurings: The Project underwent three restructurings as follows:

First Restructuring: (November 2017, disbursed amount US\$32.39 million). This was a Level 1 restructuring including Additional Financing in the amount of US\$28 million. The Additional Financing was to provide funding for scaling up some of the activities and to compensate for the effects of exchange rate losses between the US dollar and the SDR (Special Drawing Rights). The closing date was extended from May 31, 2020 to December 31, 2021 to allow for completion of the expanded activities.

Second Restructuring: (May 24, 2021, disbursed amount US\$62.59 million). This was a Level 2 restructuring under which some changes were made to the Results Framework to provide greater clarity in definitions and the closing date was extended by one year to December 31, 2022 to allow completion of activities impacted by the COVID pandemic.

Third Restructuring: (April 29, 2023, disbursed amount US\$79.36 million): This was a Level 2 restructuring to allow reallocation between disbursement categories to enable a fuller utilization of the available funds.

3. Relevance of Objectives

Rationale

(Reference PAD paras. 1 to 16 and ICR paras. 1 to 8).

Country and Sector Context: At the time of appraisal in 2013, Mozambique's abundant natural resources presented a transformative opportunity to promote inclusive and resilient development. The extractives sector in Mozambique accounted for about 5 percent of the country's Gross Domestic Product (GDP), primarily from natural gas production. Mozambique had been successful in attracting foreign investment in several extractives industry megaprojects, mainly in mining (aluminum, coal and mineral sands) and natural gas production. However, while these investments did result in some benefits to communities in the vicinity of the projects, they did not translate overall into significant poverty reduction. The absence of adequate systems to collect, manage, and allocate taxes and royalties was a major impediment. To address these issues, the Government of Mozambique (GoM) implemented major reforms in 2006 and 2007, including adoption of a Mining Law and new fiscal laws for the mining and petroleum sectors. The GoM's strategy was to integrate large-scale investments into the country's overall development target, particularly with the aim of maximizing local employment, local procurement, and targeting of pro-poor growth. In regard to natural gas production, with the discovery of massive amounts of natural gas (confirming volumes of over 1,000 trillion cubic feet), Mozambique was on the verge of a major expansion of its natural gas sector to world-class scale. Potential benefits included substantial export revenues and developing a domestic gas market for power production. The mining sector was growing with the discovery of large high-quality reserves in titanium and heavy mineral sands. In addition, artisanal and small-scale mining (ASM), mainly gold, gemstones, tantalum and small-scale quarrying for construction, provided livelihood in rural areas



directly for an estimated 150,000 miners and indirectly for over half a million people. However, most ASM operations were unlicensed, poorly supervised, and typically environmentally and socially unsustainable. (ICR paras. 1 to 4).

Prior to 2016, Mozambique's economy was growing rapidly at about 7 percent per year, but growth slowed down significantly thereafter due to the impact of two main factors: (i) a hidden debt crisis arising from previously undisclosed liabilities and (ii) insurgency in the northern region of Cabo Delgado which contained substantial gas resources. The hidden debt crisis revealed institutional weaknesses in governance and policy. To address these, the GoM introduced new reforms, and institutional and regulatory changes. The World Bank Group (WBG) support to the GoM focused on providing further technical assistance towards strengthening the governance, regulatory, and institutional framework.

Institutional Context: While Mozambique had a legal, regulatory and contractual framework for management of its extractives sector, many reforms were still ongoing, and weaknesses in institutional and technical capacity were constraints to effective implementation and monitoring of mining and gas operations. To address these issues, a functional diagnosis of the principal GoM agency involved - Ministry of Mineral Resources and Energy - MIREME - including its departments the National Institute of Petroleum (INP) and the National Petroleum Company (ENH) - was carried out in 2012 prior to project effectiveness. The diagnosis identified actions required to develop a comprehensive approach to sector management and informed further institutional reforms. The World Bank's support under the Mining and Gas Technical assistance Project (MAGTAP) focused on strengthening the capacity and governance systems of key institutions in Mozambique to manage two important and growing sectors - mining and hydrocarbons - as well as integrating them into the broader economy.

Alignment with Country Partnership Strategy/Framework: At appraisal in 2013, the PDO was consistent with the CPS for FY2012 to 2014 in effect at the time and the PDO remained consistent with the CPF for FY2023 to 2027 prevailing at project closure. Under the CPS for FY2012 to 2015, the PDO, with its focus on strengthening institutional and governance capacity in two key sectors, was aligned with the CPS's foundational pillar 'Governance and Public Sector Capacity'. After the disclosure of the hidden debt crisis in 2016, the WBG increased the emphasis on providing technical assistance for strengthening governance, regulations, and institutional capacity and effectiveness. At project closing in 2023, the PDO was aligned with CPF's objective of supporting Mozambique to build a climate-resilient economy and adopt smart policies for low carbon growth and with its High-Level Outcome 2 (HLO 2) - Inclusive Green Job Creation. The CPF confirms that, through its ongoing and planned support, the World Bank Group (WBG) will continue to help enhance the sustainability of investments in non-renewable natural resources in the power sector, including natural gas, and in the mining sector. The CPF proposes that Mozambique needs to develop plans to transition out of coal extraction and exports given the decline in financing for coal and restrictions on coal in international markets. In regard to mineral resources, the CPF underlines the potential to shift attention to minerals central to the energy transition which offer greater long-term demand and economic value. (ICR paras. 25 and 26).

Alignment with National Priorities: At appraisal in 2013, the PDO was aligned with the national priorities in effect at the time and it remains aligned with the national priorities at project closure. The PDO was aligned with the GoM's development strategy under the 'Action Plan for Poverty Reduction (PARP) for 2011 to 2014. The strategy identified the potential of natural resources (including mining and gas) as a source of growth and for contributing to maximizing the social and economic benefits to the population. At project closure in 2023, the PDO was aligned with the priorities in the GoM's Five-Year Development Plan for 2020 to 2024 and the National Development Strategy for 2015 to 2035. The priorities include 'sustainable



management of natural and environmental resources'. The strategic objectives include 'sustainable extraction of minerals and hydrocarbons'.

Prior Bank Experience: While the WBG had been engaged in financing projects and carrying out sector work in Mozambique, the Project was the World Bank's first engagement in the mining and natural gas sectors in Mozambique. For the Project, the World Bank drew upon its experience in carrying out projects in these sectors in other countries.

Relevance of Project Development Objectives: Given the context described above, the PDO was consistent, and remained consistent, with the priorities in the national programs and the WBG CPS/CPF prevailing at appraisal and at project closure. The PDO was appropriately pitched reflecting the GoM's priorities and the implementation capacities of the agencies involved. Although factors like the hidden debt crisis and the insurgency in northern Mozambique had an adverse impact, including the delays in realization of the anticipated private investments in the Liquefied Natural Gas (LNG) sector, the Project's objectives of institutional and governance strengthening remain relevant for realization of such investments in future.

Rating

High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To strengthen the capacity and governance systems of key institutions to manage the mining sector in Mozambique.

Rationale

Theory of Change (TOC): While the PAD did not articulate a specific TOC, the ICR includes a diagrammatic presentation of the TOC drawn from the project design and implementation experience. The overall TOC was that, to improve management of the mining and hydrocarbon sectors, it was necessary to strengthen the capacity and governance systems in the key institutions involved. Furthermore, for better integration of the mining and gas sectors in the broader economy in Mozambique, it was necessary to put in place the relevant coordination mechanisms and integration platforms. In regard to Objective 1 (mining sector), some reforms had already been initiated since 2006, but it was necessary to put in place required second-generation reforms that would (i) enable greater transparency in licensing with efficient processing procedures; (ii) strengthen institutional capacity to assess proposed projects leading to increased revenues; (iii) complete geophysical surveying of prospective areas and provide public access to the information; and (iv) develop and implement an Artisanal and Small-Scale Mining (ASM) Development Program Strategy. The Project would provide inputs through financing of technical advisory services, training and supporting facilities and equipment. The main resulting outputs would include: (i) improved procedures in licensing; (ii) expanded aerial geophysical surveys of prospective areas; (iii) development and implementation of an ASM



Development Program Strategy; (iv) procedures for improved revenue management; (v) creation of environmental guidelines for small-scale and large-scale mining and onshore and offshore gas operations including upgrading of the Environmental Impact assessment and Environmental Licensing Process. The intermediate outcomes would be (i) greater transparency in licensing; (ii) increased capacity for revenue management; (iii) strengthened technical capacity for environmental and social management; (iv) increased capacity of mine inspectors to issue critical evaluation reports and make appropriate recommendations to mine owners; and (v) increased number of companies complying with basic health and safety standards in mines. The longer-term outcome would be increased benefits to the economy through more efficient and effective operations in the mining sector. For better integration of the mining and gas sectors in the broader economy, the Project would provide inputs through technical advisory services and training that would result in outputs including: (i) development of a Local Content Law; (ii) an Operational Strategic Plan for 2019-2021; (iii) creation of partnerships to prepare digital platforms for capacity building and assistance and increasing transparency and providing information on work opportunities; and (iv) creation of a platform to utilize data from interested Medium, Small and Microenterprises (MSMEs) for identifying goods and services supply opportunities. These outputs would encourage greater participation of upstream and downstream enterprises in expanding the benefits from the mining and gas sector investments.

While the ICR provided a diagrammatic presentation of the TOC, greater clarity could have been provided in the causal links and full results chain. In regard to Objective 1, the Results Framework (RF) included five PDO Indicators supported by eight Intermediate Results Indicators (IRIs). The original definitions of some of these indicators lacked clarity and were revised in the course of the restructurings. After the revisions, the indicators were relevant and measurable for assessing achievement of the PDOs.

Key assumptions underlying the overall results chain were that (i) the improved practices and techniques promoted by the Project would be accepted and utilized by the targeted beneficiaries; and (ii) the concerned government agencies would more effectively cooperate among themselves, and adequately internalize and implement the improved technologies and approaches supported by the Project.

Intermediate Results Indicators (IRIs): (as reported in the ICR Annex 1 - Results Framework).

- Mining cadaster procedures updated (baseline - no; target - yes; actual - yes; target achieved).
- Mineral information system upgraded with new geodata for strategic areas (baseline - no; target - yes; actual - yes; target achieved).
- Number of ASM associations/cooperatives funded by the state budget (baseline 63; original target 89; revise target 50; actual 107; target exceeded).
- Number of Artisanal Mining Passes and Small-Scale Mining Certificates issued in accordance with regulations (baseline 0; target 200; actual 73; target substantially underachieved).
- Procedures for tendering and evaluation of mineral assets developed (baseline - no; target - yes; actual - no; target not achieved).
- Number of ASMs who have received target training (baseline 0; targeted 2,000; actual - 240; target substantially underachieved).
- Health, Safety and Environmental regulations, including standards and monitoring procedures updated (baseline - no; target - yes; actual - yes; target achieved).
- Local law enforcement and judicial personnel trained on mining law and regulations under the Project (baseline 0; target 200; actual 397; target exceeded).



PDO Indicators (as reported in ICR Annex 1 - Results Framework and paras. 31 to 35).

- Mining cadastral database and geographic information system (GIS) accessible online for public information (baseline - no; target - yes; actual - yes; target achieved). The configuration was completed, and the system is online. Access to the system is public and it allows consultation to visualize access areas, mining titles and upload of documents.
- Mines and quarries construction projects and gas construction projects subject to technical inspections in line with international industry standards (baseline 0; target 15; actual 15; target achieved). While the target was achieved, most of the inspections have been done in quarries in the south side of the country due to national budget constraints.
- Mining operations subject to annual cost and fiscal audits in compliance with established fiscal regime (baseline 0; target 15; achieved 21; target exceeded).
- Regular health, safety and environmental monitoring and control inspections to mines and gas projects in line with regulations for compliance and monitoring (baseline 0; target 50; actual 550; target substantially exceeded). The target was substantially exceeded due to the fact that filed visits were made to both large and small mining companies. Additionally, the number of operating companies was higher than anticipated.
- Environmental and Social Impact Assessments (ESIAs) and Social Impact Assessments (SIAs) carried out for mining (LSM and ASM) and gas (baseline - no; target - yes; actual - yes; target achieved).

Outcomes: Objective 1 in regard to strengthening the institutional and governance capacity of the key GoM institutions to manage the mining sector was substantially achieved. The Project interventions supported reforms including improved regulations, systematic handling of information, and greater transparency and accountability. As indicated above, targets were met or exceeded for all the PDO indicators. Upgrades were made to the mining cadaster system, geodata collection and interpretation, and capacity building provided through training and technical advisory services, including for assessment of mineral assets and carrying out commercial transactions. However, in regard to ASM, targets were substantially underachieved for some of the IRIs. Also, progress was slower than expected in regard to reforms and capacity building in ASM which suffered delays due to funds having to be temporarily reallocated to address urgent needs during negotiations of contracts in the Liquefied Natural Gas (LNG) sector. Although the ASM strategy was completed in 2019 and implementation had started. (ICR para. 33).

The ICRR rates the efficacy in achievement of Objective 1 as Substantial with moderate shortcomings.

Rating

Substantial

OBJECTIVE 2

Objective

To strengthen the capacity and governance systems of key institutions to manage the hydrocarbons sector in Mozambique.

Rationale



Theory of Change: The overall TOC relevant to both Objectives 1 and 2 was provided earlier under Objective 1. In regard to Objective 2 (hydrocarbons sector), the Project would provide inputs through financing of technical advisory services, training, and supporting facilities and equipment. The main resulting outputs would include: (i) passage of a Decree Law for an LNG project that would pave the way for future LNG projects; (ii) completion of negotiations for several agreements for LNG development in four key areas; (iii) one Final Investment Decision (FID) completed and arrangements put in place for future FIDs; (iv) skill-based human development in ENH; (v) acquisition of special software for ENH to analyze reservoirs and make projections; and (vi) preparation of a Strategic Social and Environmental Assessment. The intermediate outcomes would be (i) strengthened staff skills and capacity in MIREME and ENH; (ii) improved procedures for contractual assessment and negotiations; (iii) greater transparency in regard to all contracts being made public in accordance with the regulations; and (iv) putting in place improved environmental and social safeguards guidelines. The longer-term outcome would be greater efficiency and effectiveness in the hydrocarbons sector with benefits for the economy.

The adequacy of the TOC, PDO indicators, IRIs, as well as the key assumptions have been discussed earlier under Objective 1.

Intermediate Results Indicators (IRIs): (as reported in ICR Annex 1 - Results Framework).

- Number of studies carried out for assessing economic and financial feasibility of gas infrastructure (baseline 0; target 5; actual 5; target achieved).
- Emergency response procedures for INP developed (baseline - no; target - yes; actual - no; target not achieved).
- Staff of gas sector management institutions trained to manage, regulate and monitor the sector (baseline 0; original target 140; revised target 100; actual 196; target exceeded).
- Tools and mechanisms to attract financing for the State participation are in place (baseline - no; target - yes, actual - yes; target achieved).
- A regional office in the North has been equipped and is operational to undertake health and safety, and environmental inspections of gas operations (baseline - no; target - yes; actual - yes; target achieved).
- Computerized Environmental and Social Management Information System developed (baseline - no; target - yes; actual - no; target not achieved). This proved to be not possible because of differing systems within the entities involved.
- SESA Action Plan implementation is tracked regularly with the participation of the stakeholders through the public consultation and feedback mechanism (baseline - no; target - yes; actual - yes; target achieved).

PDO Indicators: (as reported in ICR Annex 1 - Results Framework and paras. 31 to 39).

- Number of gas project developments subject to technical inspections in line with international industry standards (baseline 0; target 10; actual 17; target substantially exceeded).
- Number of gas operations subject to annual cost and fiscal audits in compliance with established fiscal regime (baseline 0; target 10; actual 6; target underachieved).
- Number of new mining/gas infrastructure concessionary contracts negotiated in line with international industry standards (baseline 0; target 15; actual 15; target achieved).



- Number of gas projects subject to regular technical inspections in line with international industry standards (baseline 0%; target 45%; actual 0%; target not achieved).

Outcomes: Objective 2 in regard to strengthening the institutional and governance capacity of the key institutions to manage the hydrocarbons sector was substantially achieved with moderate shortcomings. Institutional and governance capacity was strengthened in the relevant institutions to identify and oversee viable investments while monitoring that safeguards and safety criteria are met in accordance with international standards. The Project's interventions and assistance provided in regard to strategic, technical, legal, financial and marketing aspects helped the institutions to better advise and support the GoM's negotiations under more beneficial fiscal terms and conditions; develop Mozambique's oil and gas portfolio; design a unifying national extractives policy and roadmap for further development of the sector; strengthen the regulatory authority (INP) for oil and gas; develop well-defined Financial Investment Models; and formulate appropriate contract models. Additionally, a skills-based human resources program was established in INP to ensure sustainability of the institutional strengthening gains. In regard to the PDO indicators, as discussed above, targets for two of the four indicators were met or exceeded. However, targets were not met for the remaining two indicators (technical inspections and cost/fiscal audits) mainly due to the GoM's budgetary constraints in meeting the high operational costs to cover the trips to the north side of Mozambique, which limited the activities to only the south of the country. (ICR Results Framework).

The ICRR rates the efficacy in achievement of Objective 2 as Substantial with moderate shortcomings.

Rating
Substantial

OVERALL EFFICACY

Rationale

As discussed earlier in Section 4, the Project substantially achieved (with moderate shortcomings) the targeted outcomes under Objectives 1 and 2. In addition, the GoM's overall capacity for better integrating the mining and gas sectors into the broader economy in Mozambique was strengthened through a number of actions supporting inter-ministerial cooperation and developing strong economic links across sectors. The outputs of these actions included establishing frameworks for (i) building a production and distribution system for affordable indigenously produced gas for the country; (ii) management of oil spills and providing emergency response through the development of appropriate standards and procedures; and (iii) a national extractives industry local content program.

Based on the foregoing, the overall efficacy is rated Substantial.

Overall Efficacy Rating



Substantial

5. Efficiency

(Reference PAD paras. 56 to 60 and ICR paras. 48 and 49).

Economic Efficiency

At Appraisal: No cost-benefit economic analysis was carried out at appraisal since, as a technical assistance project, the Project's activities focused on capacity building, making it difficult to attribute and quantify benefits.

Post-Completion: While no post-completion cost-benefit economic analysis was carried out, the ICR (para. 49) reports, based on certain assumptions, that the financial benefits could amount to as much as US\$1.4 billion at a discount rate of 2 percent (which is low). On this basis, it opines that the MAGTAP investment of US\$87 million was well-justified.

Rating of Economic Efficiency: Given the lack of relevant quantitative information, the ICRR does not rate the economic efficiency of the Project.

Implementation Efficiency

Project Cost: The Project was carried out within the estimated cost at appraisal and the Additional Financing. Compared to the total appraised cost of US\$87.20 million, the actual cost reported at completion was US\$85.54 million - 99 percent of project funds after exchange rate fluctuations were disbursed. Most planned project activities, including under the Additional Financing, were completed by project completion.

Project Duration: The Project was implemented over a period of 117 months (9.8 years) compared to the original estimate of 86 months (7.2 years). The closing date was extended twice by a total of 31 months (2.5 years) to allow for completion of the expanded activities under the Additional Financing and those affected by the COVID pandemic.

Implementation Cost: At appraisal, project management costs were estimated at US\$4.9 million (8% of the total project cost). At completion, the project management costs were estimated at US\$9.16 million (11% of the total project cost). The increase was due to the expanded activities after Additional financing and the impacts of the COVID pandemic, which included a 25 percent drop in revenues for extractive activities due to border closures.

Rating of Implementation Efficiency: Substantial

Efficiency Rating

Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:



	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 <input type="checkbox"/> Not Applicable
ICR Estimate		0	0 <input type="checkbox"/> Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

The Project's outcome is rated on the basis of (i) Relevance of Project Development Objectives (PDOs), (ii) Efficacy, and (iii) Efficiency.

As discussed in Section 3, the Relevance of the PDOs is rated High as the PDOs were well-aligned with, and continued to remain well-aligned with, the priorities in the national programs and the World Bank Group's (WBG) Country Partnership Strategy/Framework.

As discussed in Section 4, the Project's efficacy is rated Substantial. The Project substantially achieved (with moderate shortcomings) its targeted outcomes for both PDOs. In addition, the achievement of the PDOs was supported by the carrying out of measures and actions for strengthening cross-sector coordination and integrating the mining and gas sectors in Mozambique's broader economy, which further contributed to achievement of the two PDOs.

As discussed in Section 5, the Project's Efficiency is rated Substantial. While economic efficiency is not rated for lack of relevant information, the Project's implementation efficiency is rated Substantial.

Rating: Based on the above, the Project's outcome is rated Satisfactory.

a. Outcome Rating

Satisfactory

7. Risk to Development Outcome

(Reference ICR paras. 79 to 82).

Institutional Risks: These are rated Moderate. While the Project contributed to strengthening institutional and governance capacity in the key institutions involved, the institutions will need to continue to further internalize the improvements and remain committed to implement the reforms. This will require appropriate attention and oversight from the GoM, particularly in regard to inter-agency coordination and cooperation.

Financial Risks: These are rated Moderate. During the implementation of the Project, the GoM's budgetary constraints affected the implementation of some activities, particularly those related to ASM



development. Adequate and timely financial budgetary support from the GoM would be essential for effective functioning of the institutions involved.

Political and Governance Risks: These are rated Moderate. Project implementation was affected by the impacts of the hidden debt crisis in 2016 and the insurgency in Cabo Delgado. The GoM, with the support of the WBG, has taken measures to address the institutional, governance, and regulatory weaknesses revealed by the hidden debt crisis. In regard to the insurgency in Cabo Delgado, an agreement was reached and has been holding to date.

8. Assessment of Bank Performance

a. Quality-at-Entry

(Reference ICR para. 75).

The strategic relevance and PDOs were well aligned, and continue to be well aligned, with the priorities in the national programs and the WBG Country Assistance Strategy/Partnership Framework. A theory of change, including causal links and the full results chain, were not included in the PAD (it was not a requirement at the time). There were shortcomings in the design of the Results Framework, including lack of clarity in definitions of some of the PDO indicators and IRIs which had to be addressed during project restructurings. Poverty, resilience, environmental and social aspects were adequately covered. Implementation risks were adequately identified along with mitigation measures. Recognizing the multi-agency, multi-stakeholder nature of the Project, the Project design provided for a Steering Committee in which the main beneficiaries were involved. Attention was given to appropriately staffing and equipping the Project Management Unit (PMU).

Quality-at-Entry Rating

Moderately Satisfactory

b. Quality of supervision

(Reference ICR para. 76).

During the Project's implementation period of nearly 10 years, the Bank's supervision team carried out 16 supervision missions. The missions were adequately staffed with the required specialists. Advisory services of external experts were used as necessary. The team provided guidance and support to the PMU and agencies as needed, including enabling the hiring of external experts where required to provide information on new approaches, technologies, institutional set-up, and governance systems for the extractives sector. An MTR was carried out in August 2016 and the findings were utilized during project restructurings, including the Additional Financing. However, significant weaknesses in the design of the Results Framework were addressed relatively late during implementation. This area should have received attention earlier given that the ICR itself has rated the quality of the Project's Monitoring and Evaluation (M&E) system as Modest due to the weak M&E function of the PMU during the greater part of project



implementation. (ICR para. 67). The supervision team's Back-to-Office reporting and filing of ISRs was done in a timely manner. However, the ISRs reported the Project's Development Outcomes (DO) and Implementation Progress (IP) ratings as Satisfactory over the entire implementation period which may not have been entirely candid given the significant implementation issues that emerged from time to time.

Quality of Supervision Rating

Moderately Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

(Reference ICR paras. 63 to 67).

There were significant weaknesses in the design of the Results Framework including lack of clarity in definition of some of the indicators which impacted systematic function of the M&E function. (ICR para. 63). This constrained monitoring of the Project's outputs and outcomes.

b. M&E Implementation

The ICR acknowledges that the lack of a systematic M&E function during a significant part of the Project was a barrier to proper monitoring of the Project's outcomes. The PMU lacked proper staff for a long period of time and was unable to take on a more proactive role in monitoring outputs and outcomes of the Project. With the recruitment of a qualified local M&E specialist within the PMU in 2021, and coaching by World Bank specialists, the capacity of the PMU was strengthened in the final stage of the Project to systematically track the results chain and monitor outputs and outcomes. (ICR para. 64).

c. M&E Utilization

The ICR reports that, with the recruitment of an international M&E expert was hired to support the local M&E specialist in the PMU during the last phase of the Project's implementation. As a result, the quality of the M&E reporting reached an acceptable level towards project closing. (ICR paras. 66 and 67).

Rating for the ICRR: Although the quality of M&E reporting improved and reached acceptable levels in the two years prior to Project closing, it was weak during the greater part of Project implementation. The M&E quality is therefore rated Modest.



M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

Environmental and Social Safeguards

(Reference ICR paras. 68 to 72).

At appraisal, the Project was designated Category B (Partial assessment). The safeguard policies triggered were: Environmental Assessment (EA) OP/BP 4.01 and Involuntary resettlement (IR) OP/BP 4.12.

Environmental: A Strategic Social and Environmental Assessment (SESA) was prepared and approved by the Council of Ministers in October 2017. A Grievance Redress Mechanism (GRM) was created and operationalized. Implementation of the SESA was delayed due to inter-agency coordination challenges. While several significant outputs were completed, some of the activities and deliverables were canceled due to insufficient time. The SESA Working Group was not maintained after the closing of the Project which may impact completion of the SESA after completion of the Project. (ICR paras. 69 to 71). The ICR does not report on any other environmental related issues.

Social: There was no land acquisition leading to involuntary resettlement and/or restrictions to access or livelihoods. However, given the importance of resettlement issues in the context of the mining sector, OP 4.12 was triggered. The GoM developed a regulation on involuntary resettlement. An Involuntary Resettlement Decree was created in 2012 but criticized by stakeholders as having numerous weaknesses. The Project provided technical assistance and advisory services to the GoM to help improve the Decree. (ICR para. 72). The ICR does not report any IR related social issues or complaints.

b. Fiduciary Compliance

(Reference ICR paras. 73 to 74).

Financial Management (FM): The ICR reports that the FM and disbursement arrangements were satisfactory. The PMU submitted Interim Financial Reports (IFRs) on time and with acceptable quality. However, some difficulties were experienced with respect to the closing activities, such as processing of eligible expenditures and submission of the final audit, due to the dissolution of the PMU after project closing on December 31, 2023. (ICR para. 73).

Procurement: The ICR reports that procurement performance was generally satisfactory during project implementation. Procurement risk was rated high during appraisal, and to mitigate the risk, two qualified consultants (mining and gas) were recruited by the PMU at the start of implementation. However, the ICR reports (Annex 4) that the single person employed by the PMU to cover procurement matters was



overwhelmed by the volume of work involved. The procurement plan for the Project was prepared at the start of implementation and updated periodically. There were delays in carrying out some of the procurement activities due to complexity of some of the sector-specific activities; involvement of multiple agencies; and the time required to comply with national procedures. (ICR para. 74). The ICR does not report any case of mis-procurement or non-compliance.

c. Unintended impacts (Positive or Negative)

The ICR does not report any significant unintended impacts.

d. Other

(Reference ICR paras. 51 to 52).

Gender: The Project was not gender-tagged. The number of women participating in training (30 percent) lagged behind the target (40 percent). (ICR para. 51).

Institutional Strengthening: This was a key aspect under the Project as discussed earlier in Sections 2 and 4.

Poverty Reduction and Shared Prosperity: While not directly targeting poverty reduction, the Project included measures and actions to increase local content in the subprojects and activities supported through the Project which, in turn, lead to sharing of the economic benefits among local entities and the population.

Mobilizing Private Sector Financing: The Project did not engage in activities related to mobilizing private capital but some of the activities could encourage greater participation from the private sector by (i) increasing transparency in licensing; (ii) generation of good quality geodata to inform and attract private investors; and (iii) support advancing of large-scale LNG projects towards feasibility or investment stage. (ICR para. 52).

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	
Bank Performance	Satisfactory	Moderately Satisfactory	IEG rates Quality at Entry and Supervision as Moderately Satisfactory due to some shortcomings.
Quality of M&E	Modest	Modest	



Quality of ICR --- Substantial

12. Lessons

(Reference ICR paras. 83 to 87).

The ICR lists a number of lessons drawn from the Project's experience which have relevance for similar projects carried out in comparable environments. From these, with some adaptation, IEG draws the following lessons:

Flexible and adaptive project design is desirable to capture emerging trends and national priorities. The relatively simple design of the component structure allowed the opportunity at the Additional Financing to make critical adjustments and restructuring to improve decisions and practices by learning from outcomes of the previous actions. This was particularly evident in the case of development of a domestic gas infrastructure which required introducing relevant policy changes and strengthening interconnectivity between GoM agencies.

Uptake of project outputs is directly dependent on national priorities, particularly where the outputs or outcomes depend upon parliamentary processes. During the implementation of the Project, a shift in attention to developing bills for the energy sector delayed preparation of bills for the petroleum and mining sectors.

Procurement proved to be challenging due to the complexity of the Project with many beneficiaries and activities. The lesson learnt is to allocate sufficient supervision time in projects of this complexity as well as to continue to have frequent contact with the PMU through online correspondence and calls.

Too rapid dissolution of the PMU after project closing can create challenges for completing fiduciary activities. In the case of the Project, proper completion of the financial management activities, including closing of the books, was adversely affected by the premature dissolution of the PMU. It is important to build a time buffer between the conclusion of the last procurement activity and the closing date.

Proper planning is required, to the extent possible, in arranging for the transition of Task Team Leaders (TTLs) in the World Bank supervision team to prevent disruptions and shorten the learning curve for the new incoming TTL. This includes early identification, knowledge transfer, structured handover, a shadowing period, and full access to relevant documentation and reports. This would reduce the burden on the PMU and allocate additional time to facilitate the takeover.

13. Assessment Recommended?

No



14. Comments on Quality of ICR

The ICR is generally well-written, candid, and follows the OPCS's ICR guidelines (except in regard to length - 29 pages instead of the recommended 15 pages or less). While it presents a diagrammatic theory of change, the causal links and full results chain could have been more clearly articulated in regard to outputs and outcomes. The analysis is generally evidence based but constrained by some weaknesses in the M&E system particularly in regard to constraints in reporting of some results from the north part of the country due to the insurgency situation prevailing during a part of the implementation period. One significant area where the ICR does not provide adequate information is in regard to the impact on the Project from the disclosures of the hidden debt crisis in 2016 which contributed to a substantial reduction in the growth of the Mozambique economy. The ICR provides some lessons learned from the Project's experience that have broader relevance for similar projects executed in comparable environments.

The ICRR rates the quality of the ICR as Substantial with some shortcomings.

a. Quality of ICR Rating

Substantial