Report Number: ICRR0024236

1. Project Data

Project ID	Project Name
P149620	MZ-Agriculture NRM Project
Country	**Practice Area(Lead)**
Mozambique	Agriculture and Food

L/C/TF Number(s)	Closing Date (Original)	Total Project Cost (USD)
IDA-58550,IDA-D1190,IDA-D5020	31-Oct-2021	92,260,714.97
Bank Approval Date	**Closing Date (Actual)**	
30-Jun-2016	31-Oct-2023	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	40,000,000.00	0.00
Revised Commitment	93,724,977.10	0.00
Actual	92,260,714.97	0.00

Prepared by	Reviewed by	ICR Review Coordinator	Group
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2. Project Objectives and Components

a. Objectives

The Financing Agreement (page 4) states that the project's development objective (PDO) is "to integrate rural households into sustainable agriculture and forest-based value chains in the project area and, in the event of an Eligible Crisis or Emergency, to provide immediate and effective response to said Eligible Crisis or Emergency."

The PAD (page 8) states more broadly that the objective is to "contribute to improving the livelihoods of targeted rural households and the sustainability of natural resources in the project area." There is no evidence in the ICR that the change in project objective was approved by the Board. Nevertheless, in line with IEG guidelines, the PDO stated in the Financing Agreement will be used in this review.

For this review, the PDO has been parsed into two subobjectives:

Subobjective 1: To integrate rural households into sustainable agriculture and forest-based value chains in the project area

Subobjective 2: To provide immediate and effective response in the event of an Eligible Crisis or Emergency

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

No

c. Will a split evaluation be undertaken?

No

d. Components

Part A: Agriculture and Forest-Based Value Chain Development (Appraised: US$58.00 million [original allocation: US$21.00 million; additional financing: US$37.00 million]; Actual: US$56.25 million

Increasing smallholder and SECF's participation in key agriculture and forest-based VCs in the Project Area including through:

(i) Support to Small Emerging Commercial Farmers (SECFs) and Micro, Small, and Medium Enterprise (MSME) agribusinesses to increase rural households' participation in Value Chain (VC) development and building capacity of other VC actors benefiting smallholders, including through carrying out of Training for SECF, MSMEs, farmers' organizations and the hiring of a service provider to support SECFs.

(ii) Support to SECFs and other key MSMEs agribusinesses to access credit, including through:

(a) implementing a matching grants "(Matching Grants)" scheme aimed at SECFs and MSME agribusinesses.

(b) implementing a partial credit guarantee fund ("PCG Fund") aimed at lowering the risk exposure of participating financial institutions to cover SECFs and MSME agribusinesses financing needs, including through the hiring of a Financial Service Provider (FSP) to act as the administrator of the PCG Fund; and

(c) implementing a weather-based agricultural index insurance scheme ("Index Insurance") for the purpose of providing weather-based insurance coverage in respect of weather risks impacting farmers' production.

(iii) Improvement of rural infrastructure in the Project Area including through:

(a) identification of key infrastructure bottlenecks in the Project Area;

(b) carrying out of preparatory studies to identify the most critical links in the feeder road network;

(c) rehabilitation and maintenance of critical rural roads needed to transport production to markets;

(d) carrying out of feasibility and design studies for ground and surface water to assess and prioritize the more relevant irrigation infrastructure needed to support the development of selected VCs; and

(e) rehabilitation and carrying out of priority irrigation schemes in the Project Area.

Part B: Securing Land Tenure Rights and Increasing Natural Resources Resilience (Appraised: US$22.00 million [original allocation: US$14.00 million; additional financing: US$8.00 million]; Actual: US$12.50 million)

Promotion of integrated landscape management; securing land tenure regularization at the community and individual levels; and restoration of critical natural habitats, in the Project Area including through:

(i) Supporting land tenure regularization, through:

(a) issuance of Land Use and Benefit Right (DUATs); and

(b) community land delimitation, including strengthening of Community Based Organizations (CBOs), Natural Resource Management Committees (CGRNs) and other community based informal associations.

(ii) Carrying out of Training of relevant staff at the Recipient's district and provincial level and provision of equipment within the Project Area.

(iii) Strengthening capacity on integrated landscape management, including through:

(a) consolidating Multi-Stakeholder Landscape Forum (MSLFs) at the Recipient's provincial level;

(b) promoting the use of spatial tools that can inform land use planning and addressing equipment needs for Provinces and Districts within the Project Area for integrated landscape management; and

(c) carrying out of Training to relevant Recipient's staff at provincial and district levels.

(iv) Restore degraded lands critical for the VCs in the Project Area through assisted natural regeneration and active planting with native and exotic species

Part C: Project Coordination and Management (Appraised: US$5 million; [original financing US$5.00 million; additional financing: US$5.00 million]; Actual: US$16.47 million

Support to the *Unidade de Gestdo de Fundos Internacionais* **(UGFI)** and provincial implementation units (PIUs), to oversee the implementation of the Project in each of the Provinces in the Project Area comprising support for Project coordination and management, including fiduciary and safeguards management, monitoring and evaluation, and communications.

Part D: Contingency Emergency Response (Appraised: US$10 million; [original financing US$0.00 million; additional financing: US$10.00 million]; Actual: US$10 million)

Support the Recipient in case of a potential disaster-recovery need by providing immediate response to an Eligible Crisis or Emergency.

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

Project Cost

The project was appraised to cost US$100 million; the actual cost was US$92.26 million

Financing

The project was financed through an IDA grant of US$26 million (IDA-D1190), IDA credit of US$14 million (IDA-58550), and a grant from the Crisis Response Window (CRW) of US$60 million (IDA-D5020).

Borrower Contribution

The borrower was not expected to contribute to the project.

Dates

The project was approved in June 2016 and became effective in November 2016. The mid-term review (MTR) was conducted in August 2018. The project closed as planned in October 2023.

Restructuring

August 2019: Additional financing (AF) to scale up the original project by extending it to areas affected by Tropical Cyclone Idai and to replenish the funds reallocated to the CERC following the activation of the Immediate Response Mechanism (IRM). The ICR states that the AF resulted in changes in the Results Framework, components and costs, loan closing dates, reallocation between disbursement categories, as well as disbursing and procurement arrangements as described below.

Changes to RF

The revision included the addition of a new PDO sub-indicator (SECFs, less than 35 years old) and upward revision of targets for four PDO indicators (i) number of direct project beneficiaries, ii) number of rural households integrated into sustainable agriculture and forestry VCs, and, of them, iii) total number of smallholder farm households, and iv) number of SECFs. The changes are summarized below.

PDO outcome indicators	**Targets**	
	Original	**Revised**
1. Direct project beneficiaries	201,000	250,000
2. Rural households integrated into sustainable agriculture and forestry value chains	30,150	40,250
2.1 Smallholder farm households	30,000	40,000
2.2 Small Emerging Commercial Farmers	150	250
2.2.1 SECFs less than 35 years old	-	100

3. Relevance of Objectives

Rationale

Country Context

Mozambique's economy performed strongly after the civil war in 1992; its Gross Domestic Product (GDP) grew at an average of 7.4 percent per annum between 1993 and 2013, compared to the average of 4.4 percent of SSA non-oil economies (PAD, para 1). However, the growth became less inclusive with weak links between growth and poverty reduction. The bottom 40 percent of the population, mostly rural, did not benefit nearly as much as the rest of the population from the growth that was driven by capital- and import-intensive mega-project investments which had limited linkages with the local economy (PAD, para 1). Despite the high growth rates that had been achieved, average per capita income in 2014 in Mozambique was only US$586, about a third of the Sub-Saharan Africa average.

Despite its positive economic prospects, Mozambique faced short-term economic difficulties, slowing down of growth and increasing fiscal risks (PAD, para 2). Its short-term challenge was to maintain macro-economic stability while pursuing diversification for inclusive growth through sectors, such as agriculture. Mozambique's considerable natural capital (36 million ha of arable and 40 million ha of natural forests) offered substantial potential to develop agriculture and forestry, but the potential remained underutilized with less than a quarter of the land suitable for agriculture cultivated and generating low yields. Inefficient and limited provision of agricultural services was among the key factors limiting production and productivity growth (ICR, para 4). However, providing services was a challenge because the agriculture sector is predominantly made up of nearly four million households typically practicing subsistence agriculture on average holdings not larger than 1.3 ha (PAD, para 11).

Country Strategy

The government that took office in 2015 adopted a Five-Year Government Plan 2015-19 (PQG) which emphasized rural development through promotion of agriculture and forestry with focus on the central and northern provinces (PAD, para 6). The PDO was relevant to Integrated Sustainable Rural Development Program (2015-2019), which focused on five priorities including secure land user rights, sustainable forest management, and an Operational Plan for Agrarian Development (PODA) 2015-2019, which aimed to increase food security and income generation of rural producers (ICR, para 4). The PDO remains relevant as the SUSTENTA program (integrating family farms into value chains) developed by the government in 2020, aims to increase agricultural income for one million smallholders to bring them above the poverty line by 2025.

Bank Strategy

The PDO was consistent with the Country Partnership Framework or CPF (FY16-21) of the World Bank, which emphasized increasing agricultural productivity, rural development, and spatial planning to achieve sustainable poverty reduction under the Focus Area One "promoting Diversified Growth and Enhanced Productivity" (ICR, para 5). The PDO remained relevant to the World Bank's CPF (FY23-27) which included green job creation as Higher-level Outcome 2 and sustainable growth in selected natural resources sectors as Objective 4 (ICR, para 23).

However, there were shortcomings. The PDO was pitched at a level that was insufficient to effectively illustrate the transformation expected through project support. The PDO to integrate rural households into sustainable agriculture and forest-based value chains in the project area was pitched at an intermediate outcome level that was only a small step towards sustainably increasing their incomes. The ICR noted that the key indicator to measure achievement of the PDO was “rural households integrated into sustainable agriculture and forest-based value chain”. This was measured by counting the rural households that benefited from services provided by small and emerging commercial farmers (SECFs) rather than tracing the ability of these farmers to effectively market and sell their crops, thus improving household level net incomes. Without following through with what 'integration' meant, it is not possible to assess the project’s contribution to reducing poverty amongst rural households.

Summary: Mozambique’s economy performed strongly following the end of civil war but weak links between growth and poverty reduction made it less inclusive, only marginally benefiting the 40 percent of the population that lived in rural areas. Abundant natural resources offered considerable potential to develop agriculture and forestry, but it was underutilized because of the practice of low productivity subsistence agriculture by smallholders who made up the bulk of the rural producers. Integration of rural households into sustainable agriculture and forest-based value chains, which would encourage them to produce surpluses to increase their incomes, was, therefore, a highly relevant strategy for lifting smallholder farmers out of a cycle of perpetual subsistence farming, but any productivity improvements must be linked to changes and indicators that link these improvements to increased incomes. The PDO and its key outcome indicator were pitched at an intermediate results level rather than reflecting the outcomes from the integration of smallholders into sustained and remunerative value chains. The relevance of the project’s PDO to the challenges facing smallholder agriculture is, therefore, rated Substantial, though marginally so.

Rating
Substantial

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1
Objective
To integrate rural households into sustainable agriculture and forest-based value chains in the project area.

Rationale
Theory of Change (ToC)

The ToC, implicit in project design and articulated retrospectively in the ICR (para 6), is built on the premise that a network of SECFs and MSMEs can help rural households integrate into agriculture and forest-based value chains (VCs); it states that project inputs/activities, such as (i) providing training and technical assistance, (ii) provision of access to finance to SECFs and rural Micro, Small and Medium Enterprises (MSMEs) and (iii) overcoming infrastructure constraints, producing outputs, such as support to MSME agribusinesses, value chain development business plans implemented by SECFs, and areas provided with irrigation and drainage would lead to the integration of smallholders into selected value chains, but without any indicators measuring the outcomes for smallholders involved in value chain development activities.

Additionally, activities/inputs, such as (i) securing land tenure for communities engaged in agriculture and forestry through the issue of community delimitation certificates; and (ii) promoting the adoption of sustainable land use practices, producing outputs, such as land parcels benefiting from the recording of user rights, would enable rural households to participate more easily in VC development activities and contribute to sustainable management of landscapes, which is implied but not explicitly stated in the PDO.

The ToC change envisaged in this project was plausible if several critical assumptions could be met, namely: (i) an adequate number of SECFs and MSMEs with the intention of scaling up their operations and capable of contributing to invest in business plans could be identified, (ii) the SECFs and MSMEs implement their business plans and offer production and marketing services to smallholders, and (iii) available agricultural technologies enable the smallholders they support to increase their crop yields.

Key evidence needed to demonstrate the success of the ToC include the number of rural households integrated into sustainable value chains (defined in the PAD as households that are able to market their agriculture and forest-based outputs sustainably year after year in the project area because of the project (Annex 1B, p. 45)).

Outputs

Support to SECFs and MSMEs

- 58 SME agribusinesses were supported, exceeding the target of 50
- 58 SME agribusinesses implemented approved VCD business plans, exceeding the target of 50
- 462 VCD business plans were implemented by SECF, exceeding the revised target of 250
- 128,257 benefited from weather-based crop insurance, exceeding the target of 40,000

Infrastructure

- 34 ha were provided with irrigation and drainage services, falling short of the target of 250 ha
- 343 km of roads were maintained, falling short of the target 1,050 km

Land records

- 355 community delimitation certificates were issued, exceeding the target of 270
- 307,402 land parcels benefited from the recording of their use or ownership rights, exceeding the target of 150,00
- Of them, 159,849 belonged to females, exceeding the target of 90,000
- 84.70 percent of the recipients were satisfied with land administration services, exceeding the target of 75 percent

Landscape management

- Sustainable landscape management practices were adopted on 104,808 ha, exceeding the target of 22,000 ha

- Participatory multistakeholder landscape forums (MSLFs) completed 62.38 percent of the activities agreed in the Strategic Actions Plans (SAPs), falling short of the target of 80 percent
- 2,862 ha were restored or re/forested, exceeding the target of 2,000 ha
- 71.2 percent of the meetings of MSLFs were with participation of forum representatives above the 70 percent threshold, falling short of the target of 80 percent
- 1,442,461 ha were supported by community land use plans, exceeding the target of 405,000

Achievements

Households integrated

- 76,050 rural households were integrated into sustainable agriculture and forest-based chains in the targeted landscape, exceeding the revised target of 30,150
- Of them, 76,050 were female smallholder farm households, exceeding the revised target of 30,150
- Of them, 462 were SECFs, exceeding the revised target of 250
- Of them, 76,050 were smallholder farm households, exceeding the revised target of 40,250
- Of them, 141 were SECF less than 35 years old, exceeding the revised target of 100
- Of them 33 were women SECF less than 35-year-old, exceeding the revised target of 30

However, based on a sample survey of participating PAs, the project's Impact Evaluation (published after release of the ICR) noted inter alia that only 36.4 percent of all PAs were satisfied with agricultural marketing support (p. 26). Also, credit for inputs and agricultural marketing were the services least accessed by smallholders.

Yields increased

- Maize yields of smallholder farms were 2.61 tons per ha, exceeding the target of 2.5 tons per ha (baseline: 1.5 tons per ha)
- Sesame yields of smallholders were 1.03 tons per ha, exceeding the target of 1.0 ton per ha (baseline: 0.8 tons per ha)
- Beans yields of small holders were 1.00 ton per ha, falling short of the target of 1.50 tons per ha (baseline: 1.1 tons per ha)
- Soya yields of smallholders were 2.41, exceeding the target of 2.00 tons per ha (baseline: 1.5 tons per ha)

However, the impact evaluation, which does not offer an average yield for all the districts, instead determined average yields achieved by smallholders and SECFs for four project provinces excluding Cabo Delgado. In all four provinces crop yields of SECFs exceeded those of the smallholders and the control group based on data from Mozambique's Integrated Agricultural Survey of 2020 but fell short of achieving the yield targets established by the project.

Direct beneficiaries

- 380,042 people benefited directly from the project, exceeding the revised target of 201,000
- Of them, 40 percent were female, falling short of the target of 50 percent

Support from SECFs and MSMEs

- 37,331 smallholder farmers implemented VC development activities and/or were being served by SECFs, falling short of the target of 40,000
- 85.4 percent of smallholders were satisfied with services provided by SECFs, exceeding the target of 75 percent

Technology adoption

- 37,828 clients adopted an improved agricultural technology promoted by the project, exceeding the target of 20,000
- Of them, 10,457 were female, exceeding the target of 8,000

The impact evaluation assessed that only 69 % of SECFs and 41% of smallholders adopted "some" technologies. Seeds was one of the important technologies supplied by the SECFs, but more than 75% of the smallholders used traditional seeds. The level of adoption, however, increased over 2020 baseline.

The key indicator to measure the achievement was the number of rural households that were integrated into sustainable agriculture and forest-based value chains. More than the targeted number of households were integrated. The project measured it as all rural households that benefited from services provided by SECFs. However, the impact evaluation suggests that not all the households that received the services were integrated into markets. Market access was one of the services provided least effectively by SECFs.

The integration reported in the ICR could have resulted from project activities as hypothesized. The project exceeded the targets in supporting the business plans for SECFs and MSMEs. They in turn offered services to rural households. For example, MSMEs linked 50 percent of the beneficiary households to markets (ICR, para 34). Overall, rural households were satisfied with the services they received to a greater extent than targeted, but the level of their satisfaction with different services varied.

The ICR reports that smallholders adopted improved agricultural technologies promoted by the project to a degree greater than expected. And on average smallholder farmers reached/served by project-supported SECFs increased their yields in three of the four priority value chains to an extent greater than targeted. The impact evaluation, however, suggests that both the level of technology adoption and average yields achieved failed to achieve the targets.

The project fell short of the target in building supporting infrastructure, feeder roads and irrigation. However, overall, more than the targeted number of farmers stated that they benefited directly from project activities,

The project exceeded the targets for recording of use-rights of land parcels, the issue of community delimitation certificates, and in supporting the promotion of landscape management practices.

In a section titled "Poverty Reduction and Shared Prosperity" the ICR states that "The revenue generated from the landscape interventions has improved the livelihoods of the targeted beneficiaries, particularly in terms of the agricultural incomes of the smallholder involved in soybeans, sesame, beans, and maize. This suggests a positive impact on economic outcomes and potentially shared prosperity among the beneficiaries. The beneficiary assessment conducted by the project in July 2023 shows a high level of beneficiary satisfaction and social investments because of increased income" (para 51). However, the ICR does not offer any evidence of revenue generated or improved livelihoods among project beneficiaries. Moreover, there is absence of a baseline for market orientation or integration. For example, the ICR notes that in Manica province, which accounted for 38 percent of the direct beneficiaries, farmers had long experience of market orientation (ICR, para 29 and Table 4) which raises the question of the attribution of achievements to this project again.

Summary. According to the ICR, the project almost fully achieved its stated first subobjective of integrating smallholder farmers into market value chains in a few of Mozambique's provinces where the incidence of poverty is high. More than the targeted number of farmers were integrated into selected value chains. The results could be attributed to project activities, but the ICR provides no supporting counterfactuals, nor does it provide evidence of what this integration resulted in. The project exceeded the targets in supporting the businesses of SECFs and MSMEs who in turn provided the services that enabled the beneficiary households to increase yields and be integrated through value chains into markets. But again, the evidence base here is weak and without evidence of activity within and through the value chains, it is difficult to have confidence that the relationships lead to increased commercial activity. The project fell short in improving the rural infrastructure but, as anticipated, strengthened the tenure rights of individuals and communities, and also promoted the adoption of improved natural resource management practices.

On the other hand, the impact evaluation concluded from a sample survey of participating smallholders that almost all of them used the SECFs to obtain seeds and other agricultural inputs. But only 58 percent of smallholders availed themselves of technical innovations, predominantly certified seeds and fertilizers. Smallholders were recorded as being generally satisfied with the services provided by the SECFs. Contrary to the ICR, the impact evaluation concluded that, although yields for the four focus crops increased above their baselines and exceeded the control group levels at the project's close, none of them reached the target yield levels established in the PAD. It was notable, however, that the impact evaluation concluded (based on focus group discussions) that only 47 percent of smallholder participants considered market access as an important element in the services available to them.

Overall, the efficacy with which the project's first sub-objective was achieved is rated substantial, but with moderate shortcomings.

Rating
Substantial

OBJECTIVE 2
Objective
To provide immediate and effective response in the event of an Eligible Crisis or Emergency

Rationale
ToC

The ToC offered by the ICR does not include this part of the project's objective, activities and results chain. The funds were used to supply seeds to households that were devastated by Cyclone Idai. Supplying seeds to households that are prone to climate shocks or have lost their crops because of climate events is a widely accepted effective measure to restore agricultural production capacity. The activities of the component were expected to contribute to accelerating the restoration of the production capacity and livelihoods of the targeted households (Project Paper. Annex 5, para 9).

Outputs and outcomes

According to the Project Paper for the Additional Financing the project responded immediately to the crisis. On April 5, 2019, the Government requested activation of the IDA Immediate Response Mechanism and on April 18, 2019, the Africa Region Vice-presidency approved an amount of US$55 million, including a reallocation of US$10 million to the Contingent Emergency Response Component (CERC) of the SUSTENTA Project to provide support to an agricultural recovery plan to restore livelihoods in the country's central provinces in the aftermath of Cyclone Idai.

The component was fully disbursed through a contract with the Food and Agriculture Organization of the United Nations (FAO), which was expected to be completed by October 2019. The effort aimed to reach over 150,000 farming and pastoral households in the provinces of Manica, Sofala, Tete and Zambézia, which suffered some of the heaviest damage from the Cyclone. The beneficiaries were also among Mozambique's most vulnerable households (Project paper, para 11).

On effectiveness, the ICR does not offer any information on implementation of the activity by the FAO or evidence of the outcomes because of the lack of pertinent information on the household level effects (ICR, Annex 4, para 10).

Summary: This activity supplied seeds to farming and pastoral households in three of the provinces that suffered some of the heaviest fallout from cyclone Idai in early 2019. The project responded immediately to the request from the government. In the absence of information on the effectiveness of this component, the efficacy with which this second subobjective was achieved is rated Modest.

Rating
Modest

OVERALL EFFICACY

Rationale
The ToC hypothesized that supporting a network of SECFs and MSMEs with training and access to finance would be an avenue to provide services to smallholders to enable them to adopt improved technologies, improve yields and integrate into selected agricultural and forest-based market value chains. Further, building support infrastructure, strengthening tenure rights of individuals and communities, and promoting improved management of landscapes would enable rural households to more easily integrate into market value chains and make the value chain development more sustainable. The project succeeded in its objective of integrating a targeted number of rural smallholders into the business and marketing activities of the SECF and SMEs of various scale, but without documenting any net benefits to smallholders. The resultant integration could have been attributable to project activities, as the project supported a network of value chain actors as planned and they in turn offered services to the beneficiaries as expected, which the ICR asserts

enabled the rural households to gain access to input and market value chains. However, there was no counterfactual analysis in the ICR. On the other hand, the Impact Evaluation concluded, on the basis of sample surveys and focus group discussions, that only 36.4 percent of SECFs were accessing and marketing smallholder production. At the same time only 47 percent of smallholders considered marketing services offered by SECFs as important. Additional benefits claimed in the ICR were increases in yields for three of four crops supported by the project, but without evidence on the attribution of the increases to the project's activities. The Impact Evaluation assessed that, although crop yields increased in the project areas during implementation, none of the crops achieved the target yield levels established by the PAD. The project also fell short in building the modest supporting rural roads and irrigation infrastructure planned for the project in the PAD. The project used CERC funds to respond immediately to a crisis in Mozambique caused by Cyclone Idai, but in the absence of evidence on the effectiveness of the response, the efficacy with which this objective was achieved is rated modest.

This review concluded that the overall Efficacy with which the project’s stated objective was achieved is rated Substantial, but with moderate shortcomings.

Overall Efficacy Rating

Substantial

5. Efficiency

At appraisal, annual cash flows were estimated as the difference between with and without scenarios based on available value chain studies. The analysis yielded an EIRR of 21 percent over an unusual 50-year period (PAD, para 91). In the analysis, 68, 1, and 31 percent of the returns came from net benefits at the farm level, net benefits from post-harvest improvements, and improvements in carbon balance (PAD, Annex 6, Table 7).

The analysis redone when additional financing was brought into the project yielded an estimated EIRR of 19.2 percent over 50 years and 23.6 percent over 50 years when carbon benefits were added (Restructuring Paper, para 20).

The analysis at the end of the project applied the same methodology but used a range of assumptions in farm budgets, updated prices and actual project costs. The analysis yielded an EIRR of 20.6 percent over 50 years (ICR, para 41). Given the unusual assumed 50-year life of the project, the ICR estimated the final project internal rate of return at 18.9 percent for an assumed life of 20 years..

Summary. The EIRR estimated at the end of the project is close to the EIRR estimated at appraisal. While the project was implemented with delays due to additional financing and reached 52 percent more beneficiaries than targeted, there was a 125 percent increase in total funding, and project coordination and management costs increased considerably from 12.5 percent to 18.3 percent of total project costs excluding the Contingency Emergency Response. On the other hand, the ICR states that "The cost per assisted person was as low as US$250, which is comparatively efficient when compared with other similar projects" (para 42). Given the uncertainties about the actual benefits to smallholders, the large increase in the project cost, and the delays, the efficiency of this project is rated marginally 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	✓	21.00	0 ☐ Not Applicable
ICR Estimate	✓	20.60	0 ☐ Not Applicable

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

6. Outcome

Although there was considerable potential to develop agriculture and forestry to benefit the rural poor who hadn't benefited from the rapid GDP growth Mozambique experienced following the civil war, agriculture was characterized by subsistence farming, handicapped by inefficient and limited provision of agricultural services, including access to markets. The PDO was, pitched at an intermediate results level, and substantially relevant to the country's strategy to increase incomes of smallholder households and the World Bank's strategy to support growth in natural resources sectors as it sought to achieve these objectives by integrating smallholders into selected agriculture and forest-based value chains. The project succeeded in integrating smallholders into value chains by supporting a network of SECFs and MSMEs, who in turn provided the services necessary for smallholders to increase their productivity and commercialize their operations. The project also fell short of the target in building supporting infrastructure, feeder roads and irrigation. The project had, however, used the CERC funds to respond immediately to a crisis, but the ICR lacked evidence on its effectiveness. The overall efficacy was therefore assessed to be substantial with moderate shortcomings. The project was also assessed as having been implemented with marginally substantial efficiency. The EIRR estimated at the end of the project using estimated benefits and actual expenditures was similar to the EIRR estimated at appraisal, but the project was implemented with delays, reaching more smallholder households than planned but at considerable additional cost. Since the project's relevance, efficacy and efficiency all had moderate shortcomings the overall outcome of this project is rated moderately satisfactory.

a. **Outcome Rating**
Moderately Satisfactory

7. Risk to Development Outcome

The ICR identifies two risks to development outcomes (paras 69 and 70)

Institutional risk

Whether the Ministry of Agriculture and Rural Development (MADER) and the National Sustainable Development Fund (FNDS) will retain the technical capacity to adapt the models and approaches to deliver services, developed with support and supervision from external development partners, into their own structures over medium to long term poses a risk. The project built the technical and operational capacity of the two organizations to manage programs and created the conditions necessary for them to continue supporting smallholder producers even after the project's closing. Strong leadership within FNDS and the Project Implementation Unit (PIU) was critical to the project's success; however, their future replacement may dilute that leadership. Insufficient budget allocations are also likely to threaten service delivery to smallholders in the future.

Enterprise risk

Diminished access to credit for SECFs and MSMEs poses a risk to maintaining development outcomes. Local financial institutions were reluctant to lend to these enterprises; consequently, grants from the project covered as much as 75 percent of the investments made by the SECFs and SMEs, and the Partial Risk Guarantee was exhausted supporting just five SMEs (ICR, para 73). Unless the two groups are financially viable, they may not be able to attract the access to credit needed to sustain these enterprises.

8. Assessment of Bank Performance

a. Quality-at-Entry

The project design met the strategic objectives of the government articulated in "Program Estela" (2015-2019) and the National Agricultural Development Plan (2015-2019) to increase food security and income of rural producers. The theory of change underlying the design, that a network of SECFs and MSMEs, supported by the project with technical assistance and access to finance, could support rural households integrate into selected value chains, was drawn from experiences in many countries (PAD, para 52). The project included activities that could be expected to achieve its objective; it also included activities to strengthen tenure rights, build the necessary infrastructure, and promote landscape management practices to facilitate the desired transformation of smallholder agriculture and ensure that it would be done sustainably.

The M&E was elaborate with as many as 25 indicators and gender-based disaggregation of three PDO level and two intermediate level indicators. But the indicators were not designed appropriately to capture core outcomes and test the ToC. Several PDO indicators measured project outputs and some of the Intermediate outcome indicators should have been among the outcome indicators. However, none of the indicators assessed the extent to which the value chains were profitable for smallholders and therefore likely to be sustainable.

Implementation would later reveal that the mechanisms included in the design to link financial institutions with private enterprises were not adequate to incentivize the financial institutions to lend to the agricultural enterprises. Although this failure did not affect the efficacy of the project, the project could not develop access to credit as it intended to sustain the development outcomes.

Considering these moderate shortcomings in M&E and access to finance, and despite a design based on principles proven in other countries, the project's Quality-at-Entry was only Moderately Satisfactory.

Quality-at-Entry Rating
Moderately Satisfactory

b. Quality of supervision

The World Bank team conducted the required two missions annually, 17 in all, during seven years of implementation. The teams included the required capabilities, except for expertise in M&E (ICR, para 66). Although four task team leaders supervised implementation over a seven-year period, the presence of one person in the Bank project team throughout the period provided some continuity.

Supervision fell short when the project was extended to areas affected by tropical cyclone Idai with additional funding. The implementing organization could not meet the goods and business plans of SECFs in a timely manner, and violations of procedures occurred in financing the business plans (ICR, para 67). The World Bank team revised the procedures to curtail mismanagement, but it was not successful in building the capacity required to implement the project over a larger area.

Summary: The design, with a set of activities adequate to achieve the desired outcomes, was appropriate to meet the strategic objectives of the country. It was based on elements of theory of change that had been proven in other countries. The M&E was elaborate, but it was not well structured to test the ToC without appropriate categorization of outputs and outcomes. The mechanisms in the design to incentivize financial institutions to extend credit to agricultural enterprises would turn out to be ineffective. The World Bank team intervened during supervision when it observed cases of violations of procedures when the project area was expanded. Because of minor shortcomings in quality at entry, although the World Bank team was proactive in addressing the situations that arose, the Overall Bank Performance is rated Moderately Satisfactory.

Quality of Supervision Rating
Satisfactory

Overall Bank Performance Rating
Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The M&E design was built on a large number of indicators, 25 in all. The design was adequate to capture project outputs and some of the outcomes not directly relevant to the PDO; however, it wasn't organized in an appropriate way to test the ToC. Although they were all measurable, one of the six PDO indicators, "Rural households integrated into …value chains," only adequately captured the process towards an outcome implied in the PDO. In an exchange on November 4, 2024, the project team explained to IEG that "the indicator was measured by counting all rural households that benefited from emerging commercial farmers (SECFs). And it included households that had access to financing (both in value and in kind) and production contracts between SECFs and smallholder farmers or between SECFs and final buyers/processors. Consequently, these farmers were able to market their production." But illustrating impact requires evidence that net incomes for these households increased, or at a minimum, evidence of sales volumes into the value chains. Without this information, the PDO indicator was intermediate. A number of the remaining PDO indicators were also output based (ICR, paras 57).

Some of the intermediate indicators such as the yields of four selected crops, could have been more appropriate among the PDO indicators although yield improvements of these crops were not included in the project's PDO, but undoubtedly necessary for farmers to produce a surplus to trade through the selected value chains.

b. M&E Implementation

A dedicated project M&E office in the FNDS implemented M&E activities, regularly reporting on results indicators which were geo-referenced and geo-tagged (ICR, para 58). The project commissioned an independent survey of beneficiaries to collect evidence on qualitative indicators.

The ICR notes that the indicators on project beneficiaries' satisfaction with services provided by the project were provided after the MTR. That information, if provided on time, could have helped further, especially at MTR, to bring more reflections on additional changes in project design, activity implementation and institutional arrangements

c. M&E Utilization

According to the ICR the M&E system informed project management, progress reports, and technical missions of the World Bank team (para 59).

Summary: The M&E was designed with a large number of indicators to capture the project outputs and outcomes (crop yields), but the monitoring was not well structured to test the links in the ToC because the indicators were not appropriately categorized into PDO and intermediate indicators. The key PDO indicator was intermediate results oriented. The design was implemented as planned, but the project's restructuring in August 2019 was not used as an opportunity to bring clarity to the indicators. This is disappointing in a country with a strong historical record of World Bank supported agriculture-based projects. M&E quality is therefore rated Modest.

M&E Quality Rating
Modest

10. Other Issues

a. Safeguards
The project, classified as Category B, triggered several environmental safeguard policies including Environmental Assessment OP/BP 4.01, Forests OP/BP 4.36, Natural Habitats OP/BP 4.04, Pest Management OP/BP 4.09, Safety of Dams OP/BP 4.37, and Involuntary Resettlement 4.12.

The ICR states that “An Environmental Assessment (EA), Pest Management Plan, and Environmental and Social Management Framework (ESMF) were developed and disclosed in compliance with national regulations and World Bank standards” (para 62). The ESMF provided guidelines for identifying, appraising, and monitoring activities, categorizing subprojects, and ensuring stakeholder engagement and grievance redress. A dedicated team monitored compliance, and a robust Grievance Redress Mechanism (GRM) was in place.

Despite environmental assessments, households expanding their agricultural fields posed risks of deforestation and habitat disruption. The mitigation efforts promoted sustainable practices and ecosystem restoration. Additional measures taken included improving coordination among technicians and creating clear guidelines to prevent habitat conversion. Most subprojects were categorized as B, with some as C, and detailed Environmental and Social Management Plans (ESMPs) were made publicly accessible. The GRM effectively resolved all grievances, and the Bank's E&S team provided ongoing training and support to ensure compliance.

The overall safeguards rating at the end of the project was 'Moderately Satisfactory' (ICR, para 62)

b. Fiduciary Compliance
Financial Management (FM)

According to the ICR the project’s financial management performance was generally adequate (para 63). Interim Financial Reports (IFRs) were often submitted on time, but there were notable lapses, such as delays in recording the financial transactions in the accounting system. Although audit reports and management letters were usually submitted past the deadlines, they were found to be satisfactory on all material matters. FM received a "Satisfactory" rating upon the project's completion.

Procurement As stated in the ICR “The assessment at appraisal of the procurement capacity of MITADER concluded that the procurement risk was Substantial. The International Funds Management Unit (UGFI)/FNDS was newly created. It had the basic minimum procurement staffing in place (Procurement Officer and Procurement Assistant), with limited exposure to the World Bank’s fiduciary procedures and no experience in complex procurement cases and selection of consulting services – its experience was limited to Shopping and Single-Source Selection. Risk mitigation measures that were established included: (i) hiring of a Senior Procurement Specialist within the first 9 months following effectiveness to provide inhouse and on-the-job training to colleagues for a period of up to six months; (ii) participation of procurement staff in Bank-related procurement training, before project effectiveness; and (iii) preparation of a Procurement Operations Manual, a key part of the Project Implementation Manual to guide implementation of project procurement activities. With these mitigation measures, the residual procurement risk for the Project became “Moderate” (para 64). The ICR does not mention any cases of mis-procurement in this project.

c. Unintended impacts (Positive or Negative)

The ICR notes several unintended outcomes of the project (Para 52 and annex 6). Key among them were:

- The project inspired the Ministry of Agriculture to prepare the SUSTENTA National Program incorporating some key elements of the project.
- SECFs innovated to effectively support the smallholder farmers (SFs). Because they were small-scale farmers themselves, they did not have the capacity to transact with many SFs as required by their business plans. They, therefore, identified small-scale contact farmers (PAC) for groups of 25 to 30 SFs through whom they offered services, aggregated outputs, and made financial transactions. They compensated the PACs in kind or by offering their services at more favorable prices.
- The support to SECFs was also used to attract youth into agriculture. The FNDS introduced a program to attract youth by opening up a new financing window for young SECFs and training them, including by putting them through an incubation program.

d. Other

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11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Moderately Satisfactory	Shortcomings in the project's relevance of objectives and efficacy
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	
Quality of M&E	Modest	Modest	
Quality of ICR	---	Modest	

12. Lessons

The ICR presented five lessons. Two of them that are likely to be widely applicable are presented below with edits. In addition, IEG notes an additional lesson illustrative of the shortcomings in the project design.

A network of small emerging commercial farmers and small or medium agricultural enterprises can be potentially utilized to deliver support to smallholders to enable them to integrate into existing value chains. Although the performance of the model needs to be evaluated in depth, in this project, it was effective in delivering services to small-scale farmers, and the farmers' organizations found it to be an effective platform for interactions to obtain information necessary to improve productivity and gain access to markets for their surplus production.

Although matching grant mechanisms are useful instruments for financing farmers' purchase of equipment and other modern inputs, the incentive mechanisms built into a project to encourage financial institutions to provide credit to small-scale agricultural enterprises need to be carefully negotiated. In this project, only one financial institution provided support to small and emerging commercial farmers at the beginning of the project, at a subsidized interest rate of 5 percent. Most commercial banks did not participate in a co-financing mechanism because of their perception of the risks associated with small-to-medium scale farming despite the establishment in this project of a partial risk guarantee mechanism. All the project's financial resources allocated to the partial risk guarantee were used in supporting only 5 SMEs. The small-scale emerging commercial farmers also found the usual interest rates offered by commercial banks (over 27 percent) to be too high to be viable for their enterprises. The lesson is that a solution needs to be found to reduce the costs and risks for commercial banks of lending to remote small-scale borrowers, negotiate the solution with the banks during project appraisal, and incorporate the solution in the project's design.

In addition to the above, IEG also notes that **without objectives that sufficiently engage with the expected transformation expected in households transitioning into more commercial opportunities, the tracking of success becomes too heavily aligned to participation**. Productivity improvement is a useful proxy for farmers utilizing project support, but it does not effectively illustrate the degree to which they've increased household incomes or transitioned to an amplified value chain model.

13. Assessment Recommended?

Yes

Please Explain

In the course of exchanges with IEG the Bank project team has referred to this project as a flagship operation in support of the Mozambique government's agricultural development policy. A careful project performance assessment report at the earliest opportunity may benefit both the government and the Bank to enhance the performance of future iterations of this potentially important project concept to the benefit of numerous smallholder farmers. Such an assessment would also assess the sustainability aspect of the project's PDO which could not be reasonably tested until after the project closed

14. Comments on Quality of ICR

The report provides an adequate overview of the project activities and outcomes, meeting the requirements. The report uses credible information, which comes primarily from the project's M&E; the information is provided in adequate detail in tables. The report is also candid in noting many deficiencies and reflecting them in its rating of important aspects of the project. The report is succinct and internally consistent with a few exceptions.

However, there are several shortcomings in the ICR. The report could have taken a better approach to examining efficacy. Rather than using the ToC to guide its analysis, the report examines whether the targets for the PDO indicators have been met, while noting that some of them were not appropriate. The result of this approach is insufficient justification and a lack of outcome orientation through linking of outputs to outcomes; and inconsistencies in the text: for example, the PDO indicators listed in page 3 are different from those listed in Annex A. With respect to the analysis of efficiency, the heavy reliance on assumptions about project benefits underlined the need to baseline and beneficiary surveys to assess additional project benefits, as well as the establishment of control groups to assess counterfactuals.

The ICR also does not include any assessment of the administration or impact of the US$10 million expenditure on the Contingency Emergency Response Component (CERC). It briefly notes that the CERC funds were transferred to FAO for immediate relief (Annex 4, para 10) and that they were used to buy seeds (ICR, para 21). The Bank’s project team, in an exchange on October 16, 2024, informed IEG that due to difficulties in obtaining pertinent information on the household-level effects of the seeds and inputs distributed under the emergency response, no information on the CERC was included in the benefit stream for the project's analysis of efficiency, and that constraints related to the length of the ICR further limited the inclusion of other details on the CERC.

Overall, the Quality of the ICR is rated Modest.

a. Quality of ICR Rating

Modest