Report Number: ICRR0021975

1. Project Data

Project ID	Project Name	
P083325	MZ-APL2 Roads & Bridges	
Country	**Practice Area(Lead)**	
Mozambique	Transport	
L/C/TF Number(s)	**Closing Date (Original)**	**Total Project Cost (USD)**
IDA-43080,IDA-48920,IDA-53460,IDA-56020,IDA-H9040,TF-15898,TF-15923,TF-17375	30-Jun-2011	270,618,311.17
Bank Approval Date	**Closing Date (Actual)**	
23-May-2007	31-Dec-2018	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	100,000,000.00	31,131,748.50
Revised Commitment	280,722,639.48	29,970,033.40
Actual	270,618,311.17	28,582,268.92

Prepared by	Reviewed by	ICR Review Coordinator	Group
Ranga Rajan Krishnamani	Kavita Mathur	Ramachandra Jammi	IEGSD (Unit 4)

2. Project Objectives and Components

a. Objectives

This was the second phase of the overall Roads and Bridges Management and Maintenance Program (RBMMP), aimed at stimulating growth and poverty reduction through improved road infrastructure, better sector policies and enhancing roads sector management. The program objective was to support the government in: (i) improving the coverage and conditions of roads and bridges; (ii) strengthen the institutional capacity to manage and administer the road sector; (iii) establish financing mechanisms for road maintenance; (iv) promote use of local resources in roads construction and management; and (v) improve road transport safety.

According to the Project Appraisal Document (PAD, page 3), the Project Development Objective (PDO) of the second phase of the Adaptable Program Lending (APL) was **"to improve access of the population to all-season roads through maintenance, rehabilitation and upgrading of the classified road network".**

The ICR (page 13) notes that the overall Program Objectives were mistakenly inserted into the original Financing Agreement as the Project Development Objective (PDOs). This error was corrected through a subsequent project restructuring on April 7, 2011.

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

Yes

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

No

c. Will a split evaluation be undertaken?

No

d. Components

The original project had three components (PAD, pages 11-12).

1. Overhead. The estimated cost at appraisal was US$69.6 million (of which the Road Fund and Development Partners (DPs), including IDA were to contribute US$45.2 million through the Pooled Fund (PF)). Following the cancellation of the PF arrangement (discussed under section 2e), the IDA financing for this component was estimated at US$21.7 million. The actual cost was US$38.6 million. There were three sub-components: (i) financing the administrative costs; (ii) capacity building of the National Roads Administration (ANE) at headquarters and in provinces and of the Road Fund (RF); and (iii) technical assistance for programs on road safety, axle load control and private sector development.

2. Maintenance. The estimated cost at appraisal was US$263.9 million (of which the RF and DPs, including the IDA were to contribute US$246.2 million). Following the cancellation of the PF, the IDA financing for this component was estimated at US$36.7 million. The actual cost was US$30.8 million. This component provided financing for maintenance of the paved and unpaved roads and emergency civil works (including emergency flood recovery works in Maputo, Gaza, Zambezia, Nampula, Niassa, Cabo Delgado and Tete provinces, following the project restructuring in 2012 (discussed in section 2e).

3. Investments. The estimated cost at appraisal was US$709.8 million (of which IDA was to contribute US$65.0 million). Following the cancellation of the PF approach, the IDA funding for this component was estimated at US$86.9 million. The actual cost of this component was US$86.9 million. There were three sub-components: (i) the rehabilitation and upgrading of the Jardim-Benefica section (7 km), the Xai-Xai - Chissibuca section (96 km), and the Massinga- Nhachengue section (57 km) of the national road network; (ii) the supervision of the civil works of the three roads; and (iii) the design of engineering plans.

These components were added through the project restructurings (discussed in section 2e).

4. Emergency related works in the Limpopo River Basin. The estimated cost was US$121.0 million to be financed through IDA funding. The actual cost was US$109.8 million. There were two sub-components: (i) funding immediate emergency works (including small emergency works such as spot interventions); and (ii) medium-term restoration/rehabilitation works (such as long-term technical solutions to be prepared under Design and Build methodology using Output and Performance-Based contracts).

5. Climate Resilient Rural Road Infrastructure. The estimated cost was US$15.7 million. The actual cost was US$14.63 million. There were two sub-components: (i) development of national technical design standards and specifications for climate resilient roads; and (ii) developing standards and maintenance approaches for the paved and unpaved classified road network and capacity building of local contractors and service providers.

6. Immediate Response Contingency Fund. No funds were allocated for this component. No costs were incurred for this component. This component aimed at establishing an immediate response mechanism to facilitate rapid financing for disaster response in the aftermath of a national disaster.

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

This project was originally designed as a Sector-wide Approach (SWAp), with common financing arrangements through a Pooled Fund (PF) with other Development Partners (DPs), common financial management and procurement procedures and a sector-wide monitoring and evaluation framework. The PF proved to be unworkable in practice and hence the project was restructured to reallocate the remaining IDA funding originally intended for the PF, to finance 100% of a subset of activities included in the SWAp. Consequently, the project included fewer activities although the remaining original activities were implemented by the government and other DPs under parallel financing.

Project cost. The estimated cost at appraisal was US$1,043.0 million (to be financed through RF, PF with DPs and IDA). Following the cancellation of the PF approach and with three Additional Financing approved for the project (discussed below), the revised cost estimate was US$282.0 (discussed above). The actual cost at closure was US$409.6 million (This included actual IDA disbursement of US$270.6 million and borrower contribution of US$139.0 million).

Project financing. The original project was financed by an IDA credit of US$100.0 million (including US$35.0 million to the PF and US$65.0 million in dedicated funding). The PF arrangement stipulated that IDA would exercise fiduciary oversight on the PF arrangement. However, some donors decided against the PF arrangement and the project was restructured in 2011 to focus only on the IDA financing for the project. The original IDA credit for the project was US$100.0 million. A total of US$182.0 million was approved through three Additional Financings (AFs). The first AF for US$41.0 million was approved on April 7, 2011; the second AF of US$67.2 was approved on December 3, 2013; and the third AF of US$73.6 million was approved on March 10, 2015. With this the total IDA Credit for the project was US$282.0 million. The amount disbursed was US$270.6 million.

Borrower contribution. The borrower contribution was estimated at US$139.0 million at appraisal. The actual contribution was as planned.

Dates. The original project became effective on October 5, 2007 and was scheduled to close on June 30, 2011. The project closing date was extended through various restructurings (explained below) and closed on December 31, 2018, with a 7.5 years delay.

Other changes. The project was restructured seven times during implementation. These changes were made through the first restructuring on April 7, 2011 with the first AF for the project.

- There was a financing gap due to cost overruns during implementation, due to the steep increase in input prices, especially oil. One large civil works project on the National Roads (the Massinga-Nhachengue road) was dropped, as a result of the government's decision not to use IDA funds for this road (this road was however eventually completed with government financing).
- As indicated above, with the PF arrangement proving to be unworkable, the remaining IDA funding originally intended for the PF was reallocated to finance 100% of a subset of activities included in the SWAp.
- The targets for the two key outcome indicators were revised upwards.
- The closing date was extended by 18 months from July 1, 2011 to December 31, 2012.

The following main changes were made through the second restructuring on November 2012.

- Funds were reallocated to emergency recovery road works in selected provinces in response to severe flooding (December 2011 to March 2012).
- The indicator of direct project beneficiaries was added.
- The closing date was extended by a year from December 31, 2012 to December 31, 2013 for completing emergency recovery road activities.

These changes were made through the third restructuring following the second AF on December 2013.

- Due to extreme flooding in the Limpopo River valley in January 2013, which severed many communities from the main road network, the second AF was approved.
- Some of the AF was to be used for developing climate resilient road design/construction standards.
- As the proportion of classified roads that were in good/fair condition had declined due to the flood damages, the target for this indicator was adjusted downwards (discussed in section 9b).
- The closing date was extended by 36 months from December 31, 2013 to December 31, 2016.

These changes were made through the fourth restructuring on March 2015 after the third AF for the project.

- AF was approved to close the financing gap for the medium-term reconstruction of Gaza province roads affected by the 2013 floods.
- The closing date was extended by a year from December 31, 2016 to December 31, 2017.

Through the sixth project restructuring on June 2016, the project funds were reallocated between disbursement categories.

The closing date was extended by a year from December 31, 2017 to December 31, 2018 through the seventh restructuring on August 2017, for completing the ongoing civil works activities.

Split rating. A split rating was not undertaken for the following reasons. Although the scope of activities under the project were revised during the project restructurings, there was no substantial change in the overall level of ambition of individual outputs. Subsequent changes to the project shifted some resources from systematic maintenance and road rehabilitation under the project to emergency works. The scope of the PDO remained relevant to the additional project activities. Further, although indicators were added to indicate changes in project design through the various restructurings, these changes were pitched at the intermediate level.

3. Relevance of Objectives

Rationale

Country context. Despite economic progress before appraisal that had contributed to reducing poverty, 50% of the population were still classified as poor. In the road sector, estimates suggested that while the classified road network (the national and regional roads) could provide potential access (measured as people living within two kilometers of any road in the network) to 40% of the rural population, due to the poor condition of roads, only 11% of rural dwellers had access to an all-season road. Investments to improve the road condition and extend coverage in rural areas was important in the country context.

Government strategy. At appraisal, the PDOs were consistent with the government program - *Programa do Governo para a Reduqzo da Pobreza Absoluta* (PARPA II), issued in 2006. This program established five goals for the road sector: (i) contribute to expansion of markets in the agricultural sector; (ii) ensure access to districts with economic potential; (iii) establish connectivity between major regions of the country and developing the main corridors; (iv) improve the capacity at the provincial and local level for managing and prioritizing roads civil works; and (v) improve the quality of the roads civil works, including construction, rehabilitation and maintenance. The PDOs were consistent with the revised Road Sector Strategy, developed in collaboration with road sector Development Partners (DPs) and the 2007-2009 Integrated Road Sector Program (PRISE). PRISE supported key aspects of the road strategy and underscored the need for sustaining the road network by incorporating maintenance into sector investment plans and capacity building of the implementing agencies. The PDOs continue to be relevant to the government strategy. The Government program and medium-term strategy articulated in its five-year development plan - *the Plano Quinquenal do Governo* (PQG) for 2015-2019, articulated the need for achieving inclusive growth through promoting employment and competitiveness, through development of economic and social infrastructure. The PDO was relevant to the Government's Road Sector Strategy for 2015-2019. The three strategic pillars of the strategy focused on maintenance of the existing road assets, improving interurban connectivity and enhancing rural mobility.

Alignment with the Bank strategy. The PDOs continue to be well-aligned with the Bank strategy. At appraisal, the PDOs were well-aligned with one of the three priorities of the Country Partnership Strategy (CPS) for 2008-2011: sustaining broad-based growth, through increasing mobility and enhancing the capacity to respond to natural disasters (CPS, page ii). During implementation, the PDOs were consistent with the two pillars of the Country Partnership Framework (CPF) for 2012-2015: Pillar one highlighted the need for improving competitiveness and employment through improved provision and management of the road infrastructure (CPF, page 32); and Pillar two highlighted the need for reducing vulnerability and increasing resilience adaptation to climate change and reduced risk of natural disasters.The PDOs are relevant to the two focus areas of the Bank's current CPF for 2017-2021. The first area of the CPF highlighted the need for promoting diversified growth and enhancing productivity through improving linkages between smallholders and agribusiness and improving access to national and regional markets for agriculture and forestry products (CPF, page 25); and the third area underscored the need for improving disaster risk management through improving climate risk management (CPF, page 25).

Previous Sector Experience: The Bank had some experience in the transport sector in Mozambique and this project was the second Adaptable Program Lending (APL) in the roads sector. The existing road network, although improved under phase 1 of the APL, still provided inadequate connectivity to promote development of the national economy. Maintaining road connectivity linking the country's north and south was still a priority from the perspective of economic growth and national unification, much more investment was urgently needed to improve road conditions and coverage in impoverished rural areas (ICR para 6).

Given that the road sector is one of the important sectors for sustaining growth with poverty reduction, relevance of the PDO is high.

Rating

High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To improve access of the population to all-season roads through maintenance, rehabilitation and upgrading of the classified road network.

Rationale

Theory of Change. The project activities combined road infrastructure investments with capacity building of the road agencies and the causal links between project activities, outputs and incomes were logical. Capacity building of the National Road Administration at headquarters and in the provinces and the Road Fund, along with technical assistance for programs such as road safety, axle load control and private sector development in the sector, were aimed at improving the capacity for managing the road assets. Rehabilitation and maintenance of the road segments of the national roads and the secondary roads that connected the provincial capitals to the national roads, can be expected to increase the share of the road network in good/fair condition and increase the percentage of rural population with access to all-season roads. The emergency recovery activities in affected areas (such as immediate emergency works, medium-term restoration works and developing climate-resilient standards) were aimed at restoring the road network that were damaged by floods events during implementation. While the key outcome indicators measured progress of the overall program that was financed by other development partners, this undermined an assessment of the Bank-financed activities.

Physical infrastructure

- Two sections of the national South-North corridor, totaling 103 km were rehabilitated and improved as targeted. The improvements included: (i) a 7 km dual carriageway asphalt concrete road along Jardim-Benfica Road (including median, surfaced shoulders, concrete block sidewalks, two footbridges, street lighting, geometric improvements at three junctions) and the use of barriers to mitigate traffic conflict; and (ii) a single carriageway of the Xai-Xai - Chissibuca concrete road of 96 km.
- 80% of the planned paved road maintenance program was completed, short of the revised target of 100%. 75% of the planned unpaved road maintenance was completed, short of the revised target of 100% (As indicated in section 2, Bank's support to this component was discontinued following the cancellation of the PF arrangement).
- Following the 2012 restructuring, Bank funds were allocated to emergency works in Maputo, Gaza, Zambezia, Nampula, Niassa, Cabo Delgado and Tete provinces. In total, 536 km of roads that were damaged by floods were rehabilitated. Also, protection works to box culverts and construction of drifts to improve climate resilience were carried out. Medium-term restoration works were prepared under the Design, Build and Transfer (DBT) methodology using Output and Performance-based contract for an additional 198.2 km of the road network.

Institutional Support

- Training was provided to eighty-five staff of the National Road Administration and the Road Fund in areas of planning, procurement, financial and project management.
- An update of the Geographic Information System (GIS) of the Highway Information and Management System was carried out.
- A survey of the condition of the 6,663 km of paved road network in Maputo, Gaza, Inhambane, Sofala, Manica, Tete, Zambezia, Nampula, Cabo Delgado and Niassa provinces was done.
- An assessment of Climate Vulnerability and Identification of Options for Building Climate Resilience into Lower Limpopo Roads Network in Gaza was completed as targeted for emergency recovery works.
- National road design standards and specifications that were suited to the geological situation of Mozambique were completed and capacity building programs for local contractors and service providers was conducted.
- A Flood Response System was established in the National Road Administration for effective implementation of emergency works approved under AF for the project.

Outcomes.

- The share of the total classified road network that was in good/fair condition increased from 64% at the baseline in June 2007 to 72% at project closure in December 31, 2018. This slightly exceeded the revised target of 71%.
- At appraisal in 2006, 11% of the rural population were within two km of an all-season road (Rural Accessibility Index (RAI)) and this was expected to increase to 17% in June 2011 (original closing date). During the first AF (April 2011), the baseline and end target were revised upwards to 25.7% and 32.7% respectively, due to an error in the methodology for measuring RAI. The outcome targets were further revised in November 2012, December 2013 and March 2015 to reflect improvements in RAI or

the impact of flooding as the case may be, and the final target of 40% was set in March 2015. In late 2016, Mozambique (one of the pilot countries) adopted a new spatial methodology to calculate RAI. Based on this, the percentage achieved at closure was 29.3% However, using the old methodology, the percentage of rural population within two km of all-season road was assessed at 40.9% as targeted.

- According to the latest survey in 2015, roads were accessible to 4.7 million beneficiaries, short of the original target of 6.6 million (this target was set 2012), of these 45% (2.1 million) were women beneficiaries.

Rating
Substantial

OVERALL EFFICACY

Rationale
The key outcomes were for the most part, realized. Given that the key outcome indicators measured progress of the overall program that was financed by the Bank with other development partners, the extent to which this project contributed the outcomes is difficult to be ascertained, it is reasonable to conclude that the project significantly contributed to realizing the outcomes.

Overall Efficacy Rating

Substantial

5. Efficiency

Economic analysis. A cost-benefit analysis was conducted at appraisal and at closure for national roads rehabilitation activities (Jardim-Benfica roads and Xai-Xai Chissibuca road segments), using the Bank's Highway Development and Management (HDM -4) model. These activities accounted for 44% and 42% of the cost at appraisal and actual cost respectively. The project benefits were assumed to come from reduction in road user costs in terms of vehicle operating costs and passenger travel times. The average ex post Economic Rate of Return (ERR) was 41% (26% for the Jardim-Benfica road and 56% for the Xai-Xai - Chissibuca road) as compared to the average ex ante ERR of 36% (54% for the Jardim Benfica road and 18% for the Xai-Xai - Chissibuca road). The ICR does not provide reasons as to why the ex-post ERR for Jardim-Benfica road was lower and that of; Xai-Xai – Chissibuca road higher than the ex-ante ERR.

An economic analysis of the seven medium-term restoration works earmarked under emergency works for the Gaza Province Roads, was conducted using the Roads Economic Decision Model (RED) for low-traffic volume roads. This component accounted for about 43% and 39% of the appraisal estimate and actual cost respectively. The average ex post ERR was 23% as compared to the ex ante EIRR of 32%. The ICR provides no reasons for why the average ex post ERR was lower than the ex ante ERR.

Administrative and Operational issues. At appraisal, the program was conceived with a pooling fund (PF) arrangement, with nineteen development partners, with joint approaches for financing, financial management and procurement procedures. The proposed arrangement stipulated that IDA would exercise fiduciary oversight on the PF arrangement through prior review of the procurement of contracts above certain thresholds. This arrangement proved to be unworkable and caused delays on the expected funds flow for the overall implementation of the program and the project had to be restructured in 2011 to focus on the IDA financing. There were cost overruns with the actual cost of national road rehabilitation activities increasing by over 60% relative to the appraisal estimate, due to the increase in input costs for fuel. This led the government decision not to use IDA funds for a road segment (This road was however eventually completed with government financing). There were delays in financial reporting and inadequate oversight in the initial years of the project, due to the difficulties in establishing an integrated financial management system. There were delays during implementation due a combination of factors, including frequent changes in leadership at the National Roads Administration and the Road Funds, delays associated with getting approval of contracts by the Administrative Tribunal and procurement delays and in the case of the medium-term restoration works, delays in finalizing the climate resilient designs and slow contractor mobilization. The delays were exacerbated by factors outside the project's control such as, security situation in parts of Inhambane and Sofala provinces and macroeconomic downturn which caused sharp reductions in public expenditure in the road sector, which in turn impacted road maintenance.

In sum, efficiency is modest, mainly in view of the administrative and operational inefficiencies.

Efficiency Rating

Modest

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 ☐ Not Applicable
ICR Estimate		0	0 ☐ Not Applicable

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

6. Outcome

Relevance of the PDO to the government and Bank strategy is high. Efficacy of the single objective - to improve access of the population to all-season roads through maintenance, rehabilitation and upgrading of the classified road network - is substantial, as the key outcomes were for the most part, realized. While it is difficult to ascertain the extent to which the outcomes could be attributed to the project given the complementary activities financed by other development partners, it is reasonable to conclude that the project significantly contributed to realizing the outcomes. Efficiency is modest, mainly in view of the administrative and operational inefficiencies during implementation. Taking these ratings into account, outcome is moderately satisfactory.

a. Outcome Rating

Moderately Satisfactory

7. Risk to Development Outcome

The main risks to development outcome are:

Macroeconomic risk resulting in lack of funding. There is a substantial risk that the road maintenance activities could be undermined due to lack of government funding due to macroeconomic factors. The ICR (paragraph 96) notes that funding for road maintenance has been declining in recent year, with maintenance expenditure on roads and bridges declining by 45% between 2015 and 2017.

Natural disaster risk. The project exposed ANE to methods for improving the climate resilience of the road network and supported the development of technical specifications for mainstreaming of climate resilience aspects into civil works design. However, there is substantial risk associated with natural disasters given the high vulnerability of Mozambique to flood disaster and that future emergencies may further cause diversion of road maintenance funding for emergency restoration works.

8. Assessment of Bank Performance

a. Quality-at-Entry

The design of the second phase incorporated lessons from the previous APL. The key lessons included: (i) strengthening implementation capacity of the National Roads Administration at the head office and in the provinces; and (ii) using locally available material (sand asphalt) for construction of roads. Several risks were identified at appraisal, including constrained implementation capacity of the National Roads Administration, risk of implementation delays arising from bureaucratic procurement approval processes, and financial management risks. Mitigation measures incorporated at design included: appointment of key managerial and technical staff and placing the main responsibility for financial management under the Road Fund (as most of the staff of the Road Fund were financial specialists). The implementation arrangements were appropriate, with clear delineation of responsibilities between the Ministry of Public Works and Housing (for strategic oversight), the Road Funds (for project implementation and financial responsibility) and the National Road Administration (for project execution). Given that many activities were financed under a Pooling Fund arrangement with Development Partners, the project was prepared in coordination with other donors. The arrangements made at appraisal for safeguards and fiduciary compliance were appropriate (discussed in section 10).

There were moderate shortcomings at Quality-at-Entry:

- The project underestimated the risks associated with the Pooling Fund arrangements. Although, there was buy-in from the Development Partners at the time of appraisal, especially with regard to the fact that IDA policies were to be used for governing the pooled funds, it proved to be challenging during implementation and resulted in implementation delays and the arrangement needed to be cancelled through project restructuring.
- The M&E design was focused more on the sector program, with few indicators at the project level and the capacity building efforts were not reflected in the results matrix. Using targets and indicators for the entire program made it difficult to assign attribution to the specific contributions of the IDA financing for the project (discussed in section 9a).

Quality-at-Entry Rating
Moderately Satisfactory

b. Quality of supervision

On average, two supervision missions per year were carried out over the project lifetime of twelve years. Following the recommendations of the Mid-Term Review held between March and September 2009, the team appropriately rescoped the project in the light of the failure of the pooled fund mechanism and associated delays in disbursements (ICR, paragraph 90). The Bank was responsive at the time of the cyclonic events of 2012 and 2013 and supervision team acted quickly and included emergency road works as well as climate resilient designs for future natural disaster. The reporting in the Implementation Status Results Reports was candid and provided the management sufficient opportunity to provide solutions within the general framework of the Bank's engagement. For example, as the second AF had already identified a funding gap, it made it relatively easy to access funds through the third AF once funds became available (ICR, paragraph 62). The proximity of the Bank's fiduciary staff helped in anticipating problems associated with the gaps in coordination and engagement and be proactive in assisting the government to resolve them (ICR, paragraph 62).

There were moderate shortcomings in supervision. One, despite the change in the scope of the project after the dropping of the pooled funding arrangements, the project kept the same PDO indicators of the sector program and did not directly link them to IDA funding, thus undermining monitoring of the project performance. Two, while the Bank did respond to the emergency and financed emergency works, during the latter years of implementation, the project veered away from development of priority road links to basic network restoration activities.

Quality of Supervision Rating
Moderately Satisfactory

Overall Bank Performance Rating
Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The M&E design was consistent with the broader road sector Performance Assessment Framework developed by the sector stakeholders. This was in line with the SWAp approach adopted by the development partners and the government. The two key sector outcome indictors - the increase in the percentage of roads in good/fair condition, and the increase in the percentage of rural population within two km of an all-season road, were appropriate for monitoring sector performance. There was no indicator for capacity building activities, although this was a substantial aspect of the project.

During the various restructuring, indicators to indicate the changes in project design were reflected. These were pitched at the intermediate indicator level. An indicator associated with measuring the number of direct project beneficiaries was added through the restructuring of the project in 2012. Following the approval of AFs, targets were modified to reflect the revised scope of the project.

The sector outcome indicators were however too broad to establish a direct linkage with IDA financing. The various restructuring missed the opportunity to drop the SWAp approach and revise the PDO indicators to ensure that they are linked to the funding provided This undermined the ability to monitor project performance. Following the cancellation of the pooled fund arrangement, the project focused on the outcomes to which IDA was accountable.

b. M&E Implementation

The M&E was executed by the specialized Reporting and Monitoring Unit (UMASE) of the Road Fund. The ICR (para 76) notes that the indicators were collected on a regular basis and disseminated through quarterly and semiannual progress reports.The output indicators served as signals on how the project was progressing towards achieving its targeted outputs. The indicators were revised following the AFs to reflect the revised scope of the project.

c. M&E Utilization

The M&E reports were discussed during the Joint Semi-Annual Review Meetings of PRISE (*Programa Integrado do Sector de Estradas* (Integrated Road Sector Program)) . The data and results from analyses were therefore embedded in the decision-making process. The M&E system was used to identify gaps and inform decision at the sector level.

M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

The project was classified as a Category B project under World Bank safeguard policies. Three safeguard policies were triggered at appraisal: Environmental Assessment (OP/BP 4.01); Cultural Property (OP 4.11); and Involuntary Resettlement (OP/BP 4.12) (PAD, page 24).

Environmental assessment. Environmental assessment for the three road sections financed by the project was conducted at appraisal. The assessment concluded that the environmental impacts of the project were expected to be limited in extent and of temporary duration. An Environmental Management Plan (EMP) was prepared at appraisal to address environmental issues during implementation (PAD, page 76). The ICR (paragraph 81) notes that throughout the project, environmental compliance was satisfactory, however, no details were provided.

Cultural Properties. This safeguard was triggered due to the presence of a mosque and two graves close to the project site. A strategy was developed at appraisal to either minimize or avoid any impact on these properties (PAD page 79). The ICR (para 80) notes that the restoration civil works did not include works located in, or in the vicinity of the recognized cultural heritages sites.

Involuntary Resettlement. A Resettlement Policy Framework and a Resettlement Action Plan (RAP) was developed and publicly-disclosed at appraisal to accommodate the displacement of individuals, their structures and their resettlement; and stipulated compensation for the Project Affected Persons (PAD, page 79). Provision was also made for ensuring that the grievances of project affected persons were addressed as soon as possible (PAD page 22). The ICR (paragraph 82) notes that project implementation was generally carried out in line with the resettlement policy framework and there was effective engagement with the project affected people throughout the project implementation period. The Environmental and Social Unit of ANE showed a strong performance in the implementation of the RAP. For the rehabilitation work, no land acquisition was required and there was no loss of other assets or crops. An external audit of the project concluded that the implementation of the RAP was satisfactory.

b. Fiduciary Compliance

Financial management. A financial assessment of the implementing agencies - the Roads Fund and the National Road Administration - was conducted and a Financial Management Action Plan was prepared at appraisal. The assessment concluded that the financial management arrangements were satisfactory, subject to the measures agreed on and documented in the Action Plan (PAD, page 59). The ICR (paragraph 84) notes that financial management performance was lagging in the initial years, due to a combination of factors, including: (a) delayed submission of project audit reports due to challenges relating to improving the financial management system of the Road Fund; and (b) complexity of the pooled funding arrangement. These issues were resolved, and the audit reports were submitted in a timely fashion since the third year of implementation. The ICR notes that audit opinions were unqualified throughout project implementation.

Procurement management. An assessment of the procurement capacities of the implementing agencies and a procurement plan was prepared at appraisal. The assessment concluded that the overall procurement risk was moderate (PAD, page 67). The ICR (paragraph 83) notes that an independent audit determined that ten contracts totaling about US$1,436 million had been declared as mis-procured and ineligible for payment, due primarily to lack of understanding of the requirements of pooled funding arrangements and governing guidelines. Of this amount, US$430,600 was allocated to IDA as ineligible.

The dropping of the pooled funding arrangement during the first AF meant that the entire project from then onwards was subject to IDA procurement procedures. The ICR notes that since then there were no procurement issues as ANE took steps to build capacity for procurement. For the emergency works, the Flood Response Team carried out procurement satisfactorily.

c. Unintended impacts (Positive or Negative)

---

d. Other

---

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	
Quality of M&E	Modest	Modest	
Quality of ICR	---	Substantial	

12. Lessons

The ICR draws the following main lessons from the experience of implementing this project, with some adaptation of language.

1. Commitment of partners to procedures and guidelines for management of joint arrangements (such as pooled funding) need to be secured prior to project appraisal. In this project, the application of Bank procurement guidelines by the Development Partners was too challenging, and the proposed pooled funding arrangement fell through as the other development partners could not agree to have IDA guidelines governing the pooled funding arrangement.

2 . Introduction of new methodologies and approaches should be accompanied by required resourcing to enable effective learning and capacity building. The introduction of Output and Performance Based Road Contract under Design Build and Transfer methodology, although new to Mozambique, was successfully implemented in this project on account of the steps taken to ensure effective learning. The establishment of a flood response team, a firm to provide technical assistance and additional supervision support in the field, established a cycle of learning that ensured project delivery.

3. Project designs should ensure that local regulations are accounted for during project preparation and negotiated prior to project approval. For example, the approval of contracts by the Administrative Tribunal was a case where the local regulation was being implemented at variance with the Financing Agreement. This issue had been reported during the implementation of the first phase of this project and government had undertaken to exercise greater oversight on the procedures to ensure no procurement delays. However, this assurance did not materialize, and contributed to procurement delays.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR is concise and well-written. It candidly discusses the problems associated with the pooled funding arrangement with other development partners. The ICR also provides a concise description of the way the project evolved in response to the natural disasters that struck Mozambique. The ICR is consistent with the guidelines and draws reasonably good lessons from implementing this project.

However, there were some shortcomings: (a) the description of the project cost provided in different parts of the text is somewhat confusing (although this may be due to the dropping of the pooled fund arrangement); (b) the ICR does not provide reasons for difference in ex-post and ex-ante ERR; (c) the discussion on the implementation of environmental and social safeguards is limited; and (d) does not provide reasons for why the measurement of direct beneficiaries was suspended due to issues related to methodology and whether there was a new survey done at closure.

a. **Quality of ICR Rating**
Substantial