Report Number: ICRR0023124

1. Project Data

Project ID	Project Name
P121495	BR MST Tocantins Integrated Sust. Reg.
Country	**Practice Area(Lead)**
Brazil	Transport

L/C/TF Number(s)	Closing Date (Original)	Total Project Cost (USD)
IBRD-81850	31-Mar-2019	281,024,658.01
Bank Approval Date	**Closing Date (Actual)**	
26-Jul-2012	31-Dec-2021	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	300,000,000.00	0.00
Revised Commitment	281,024,658.01	0.00
Actual	281,024,658.01	0.00

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2. Project Objectives and Components

a. Objectives

The Project Development Objective (PDO) as stated in the Loan Agreement (Schedule 1, page 6) and in the Project Appraisal Document (PAD, page 4) is **" to foster improved effectiveness of road transport and enhanced efficiency of selected public services, in support of the Borrower's integrated and territorially balanced development agenda".**

The PAD (page 4) adds that the objective was to be achieved through fostering: (i) improved accessibility of populations to employment opportunities, services, resources and markets and enhanced connectivity to the

State's territories and productive regions; and (ii) institutional strengthening to contribute to modernize public service delivery and management, promote local economic activities, strengthen environmental management and improve education.

The PDO is parsed as follows for this review:

PDO 1: To foster improved effectiveness of road transport in support of the Borrower's integrated and territorially balanced development agenda.

PDO 2: To enhance efficiency of selected public services, in support of the Borrower's integrated and territorially balanced development agenda.

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

No

c. Will a split evaluation be undertaken?

No

d. Components

There were three components (PAD, pages 5 - 7).

1. Improving effectiveness of rural transport. The estimated cost at appraisal was US$304.00 million. The actual cost was US$236.50 million. The large difference between the appraisal estimates and actual cost was due to the cancellation of counterpart funding (discussed in section 2e). This component planned to finance activities aimed at improving accessibility to the remote populations of the State of Tocantins (SoT).

There were four sub-components: (i) improving transport conditions on the selected municipal roads through eliminating about 2,600 critical spots by constructing concrete hydraulic structures (bridges and culverts) and municipal feeder roads; (ii) rehabilitating about 1,500 kilometers (Km) of the paved roads through performance-based (CREMA) contracts (contracts that combine road rehabilitation and routine road maintenance); (iii) improving safety conditions on unpaved roads through (a) eliminating critical spots on the unpaved roads; and (b) surfacing about 50 km of unpaved roads to facilitate access to the national trunk road; and (iv) the institutional strengthening of the Infrastructure Secretariat (SEINFRA) in transport planning, management, logistics and road safety.

2. Enhanced efficiency of public services. The estimated cost at appraisal was US$62.25 million. The actual cost was US$47.75 million. The difference between the appraisal estimates and the actual cost was due to the cancellation of counterpart funding. This component financed capacity building activities. There were four sub-components:

a. Modernization of the State of Tocantin's (SoT) administration. This sub-component planned to support the SoT's Planning and Public Management Secretariat (SEPLAN) to improve public sector efficiency through: (i) introducing results-based management methodology; (ii) decentralizing administrative services to regions and strengthening the municipalities' capacities; (iii) improving the land use planning processes and natural resource management policies; and (iv) improving work conditions of civil servants through rehabilitating public premises in accordance with the criteria set forth in the Operational Manual.

b. Fostering local and regional development. This sub-component planned to support pilot activities aimed at promoting rural businesses in selected regions through: (i) Technical Assistance (TA) to the SoT's Agriculture, Livestock and Agricultural Development Secretariat (SEAGRO) for promoting agribusiness sector to the subsistence producers; (ii) TA to the SoT's Environmental and Sustainable Development Secretariat (SEMADE) for preparing a renewable energy policy; and (iii) TA to the SoT's Planning and Public Management Secretariat (SEPLAN) for developing ecotourism.

c. Improvement of environmental management. This sub-component planned to support the SoT's Environmental and Sustainable Development Secretariat (SEMADES) through: (i) TA for improving the environmental licensing system, monitoring and enforcement activities, and its water rights registration system; (ii) financing studies for evaluating public policies for conservation and sustainable use of natural resources and developing biodiversity; and (iii) financing and piloting activities on water management.

d. Improvement of the quality, relevance and returns in the education system. This sub-component planned to support the SoT's Education Secretariat (SEDUC) through pilot activities in municipalities through: (i) supporting the selected municipalities in providing quality care child development; (ii) improving education quality and providing targeted teacher training; and (iii) improving the returns to schooling through supplementary courses in upper secondary schools and improved education materials.

3. Project Management. The estimated cost at appraisal was US$8.00 million. The actual cost was US$5.00 million. This component planned to finance support for project management.

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

Project cost. The estimated cost at appraisal was US$375.00 million. The actual cost was US$289.25 million. The difference between the appraisal estimate and the actual cost was due to the cancellation of counterpart funding and exchange rate changes during implementation (discussed below).

Project financing. The project was financed by an IBRD loan of US$300.00 million. US$289.25 million was disbursed. US$10.00 million of the loan was cancelled.

Borrower contribution. The Borrower contribution was planned at US$75.00 million at appraisal. The team clarified that their actual contribution was US$5.00 million.

Dates. The project was approved on July 26, 2012, became effective on February 14, 2013, and was to close on March 31, 2019. However, the project closed 33 months behind schedule on December 31, 2021.

Other changes. There were three Level 2 restructurings during the project lifetime.

The main change was made through **the first project restructuring on January 11, 2017.** The project envisioned US$75.00 million by way of counterpart funding. Due to the economic crisis in 2014, the SoT could not provide the funding. This resulted in suspension of many contracts the following year. This restructuring eliminated counterpart funding. Despite the elimination of counterpart funding, the project scope was not altered, as the Brazilian Real (B$) was much weaker than estimated at appraisal. This enabled financing for the planned activities with the loan.

Through **the second restructuring on February 13, 2019,** the closing date was extended by 21 months from March 31, 2019, to December 31, 2020, to accommodate the prior delays.

The main changes made through **the third restructuring on December 23, 2020,** are as follows:

- The closing date was extended by a year from December 31, 2020, to December 31, 2021, for completing the activities that were delayed following the restrictions in the wake of the COVID - 19 pandemic.
- New activities were added to strengthen the expected outcomes in the wake of the COVID - 19 pandemic.
- US$10.00 million of the IBRD loan allocated for some activities was cancelled as the activities were deemed to be unachievable by the closing date.
- Selected intermediate indicators were modified as the State was not able to measure some indicators because of methodological issues.

3. Relevance of Objectives

Rationale

Country and sector context. The State of Tocantins (SoT) created under the 1988 constitution, is one of Brazil's smallest and fastest growing state, with an average annual 7% growth in the years before appraisal. The State's economy was comprised mainly of agricultural products (20.8%) and agro-industries (23.6%) and most of its exports came from a limited range of agriculture-based goods. Overall accessibility and logistics were the major bottlenecks for diversifying exports, as the State's main production centers are located several hundred kilometers (km) away from its consumption centers.

Alongside this, the SoT's socio-economic indicators were below the national average. Its Gross Domestic Product (GDP) per capita at US$5,600 is 16th among Brazil's 26 states, and 11% of its population were below the poverty line. Access to early education was limited and the test scores in the State's primary and secondary schools were below the national average. The state is home to two vulnerable groups, including 13,100 indigenous people living in six main indigenous territories. As a recently created state, the State lacked systematic management strategies for managing human resources and developing results-based planning methodologies, exacerbated by ineffective coordination across its many agencies.

Alignment with the Government strategy. The SoT's four-year multiannual plan (Plano Pluri Annual, PPA) for 2012-2015 articulated the need for sustaining growth and fostering inclusiveness. The State strategy was to boost economic development through improving transport and logistics in an integrated fashion from local to feeder roads and to the main transport corridors. On the social and environmental front, the strategy aimed at decentralization and empowerment of rural population. The SoT's development agenda articulated in the PPA for 2020 - 2023 reiterated the need for promoting regional development through improving infrastructure, logistics, water access and promoting ecotourism. The project objectives were aligned with the State's PPA.

Alignment with the Bank strategy. At appraisal, the PDO was aligned with all the four strategic objectives of the Country Partnership Strategy (CPS) for 2011 - 2015: (i) increasing efficiency of public investments; (ii) improving quality and expanding delivery of public services to low-income households; (iii) promoting regional development through infrastructure investments and supporting the private sector in frontier areas; and (iv) improving management of natural resources for biodiversity conservation. The PDO continue to be aligned with three focus areas of the current Bank's Country Partnership Framework (CPF) for 2018 - 2023: Focus Area two " fostering private sector investment and productivity growth" through "*mobilizing greater investment in infrastructure to improve service delivery";* Focus Area three " promoting inclusive and sustainable development " through "*promoting socio-economic development of small rural producers and vulnerable groups*"; and Focus Area one " promoting government effectiveness ' through " *increasing effectiveness of service delivery in education".*

Previous Bank experience. The Bank has financed two prior projects in SoT: (i) the Second State Highway Development Project, which focused on rehabilitating the main road network; (ii) the Tocantins Sustainable Regional Development Project, which focused on regional sustainable development. While this project was being prepared, the Bank also had an ongoing Sustainable Cerrado Initiative Project aimed at increasing biodiversity conservation.

This project aimed to scale-up the Bank's support to the SoT's sustainable development by supporting transport infrastructure investments and institutional strengthening activities aimed to improve the State's and regional development in a socially inclusive and environmentally friendly fashion. The intended project beneficiaries were the regional populations located in Western Tocantins which did not benefit under the previous Bank-financed project.

That said, this multisector project with six sectors (transport, agriculture, governance, environment, education and tourism) and more than 600 activities across eight executing agencies was overly ambitious, given the scarcity of qualified personnel and political instability in the new State. While transport infrastructure investments could conceivably contribute to agricultural development, there was little synergy between the various sectors supported by the project. The activities aimed to achieve outcomes of the States' development agenda without a proper calibration of its capacity. A more streamlined approach would have been appropriate given the weak implementation capacity of the state.

The PDO formulation was broad and pitched at a level that was high given the limited implementation capacity of the newly formed State. Therefore, the relevance of the PDO is rated **substantial**.

Rating

Substantial

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To foster improved effectiveness of road transport in support of the Borrower's integrated and territorially balanced development agenda.

Rationale

Theory of change. Infrastructure investments (such as eliminating critical spots on municipal feeder roads, rehabilitating paved roads with CREMA contracts and surfacing unpaved roads) together with the institutional strengthening of the Infrastructure Secretariat for transport planning, logistics management and road safety were expected to improve the road condition. These activities were expected to contribute to improve accessibility of the remote populations in the State to employment opportunities, services and markets, and to the long-term outcome of the State's integrated and territorially balanced development agenda. The causal links between activities, outputs and outcomes were logical and the intended outcomes were monitorable. The theory of change assumes that (i) there will be citizens engagement to select the municipal roads to be improved, and (ii) companies will have adequate capacity to perform CREMA contracts.

Outputs (ICR, pages 17 - 18 and page 56).

- 2,250 km of the road network in Western Tocantins were rehabilitated under CREMA contracts. This surpassed the target of 1,500 km.
- 5,500 km of municipal feeder roads were provided with all season access to trunk corridors through fixing 22 critical spots with bridges and culverts and paving 60 km of roads. This exceeded the target of 20 critical spots and 50 km of roads respectively.
- Road safety interventions were incorporated in design of unpaved roads (such as signaling over 480 km of roads).
- TA was provided to the Road Agency (AGETO) in transport planning, procurement, environmental safeguards and road safety.

Outcomes. (ICR, pages 17 -19 and 46 - 47).

The outputs described above were expected to: (i) increase the percentage of the State road network in good condition (with an International Roughness Index of less than 3.5); (ii) increase the vehicle km travelled on the State's paved roads; and (iii) increase the share of the rural population with access to an all-season road measured by the Rural Access Index (RAI) (the share of rural population living within two km of an all-season road).

- The percentage of the State's road network in good condition increased from 9% at the baseline in 2012, to 100% at project closure as targeted.
- The number of vehicles per km travelled on the State paved roads increased from 260,000 to 5,750,000 km, substantially exceeding the target of 2,320,000 km.
- The share of rural population in Western Tocantins with access to an all-season road went up from 85% at the baseline to 100%, exceeding the target of 92%.

Given that the outcomes were either realized or exceeded, efficacy of this PDO is rated as **substantial**.

Rating
Substantial

OBJECTIVE 2

Objective
To enhance efficiency of selected public services, in support of the Borrower's integrated and territorially balanced development agenda.

Rationale
Theory of change. The activities in this component supported diverse sectors such as the state administration, local development, environmental management and education.

- Activities aimed at institutional strengthening of the Planning and Management Secretariat (SEPLAN) (introducing results-based methodology, municipalities' capacity building), were expected to modernize the State's administration.
- Activities aimed at institutional strengthening of the Agriculture, Livestock and Agricultural Development Secretariat (SEAGRO), were expected to promote local development. Activities aimed at institutional strengthening of the Environmental and Sustainable Development Secretariat (SEDUC) for conducting pilots on conservation and sustainable use of natural resources and water resource management, were expected to improve SEDUC's management.
- Activities such as developing education municipal plans for childhood development and identifying strengths and weaknesses in the quality of teaching in schools were expected to improve the institutional strengthening of the Education Secretariat (SEDUC).

The activities together were expected to increase the efficiency of public service delivery in the State, and thereby to the long-term development outcome of supporting the State's integrated and territorially balanced development agenda. The theory of change explicitly assumes a stable political environment and that the state has enough skilled personnel to conduct pilots.

One shortcoming with the theory of change is the lack of synergy between the sectors supported by the project. While transport infrastructure investments aimed at increasing access to the remote populations can be expected to help in increasing agricultural production, the link between the various sectors supported by the project is tenuous. Moreover, the activities supported by the project were output-oriented and there were no concrete key outcome indicators for monitoring project performance.

Modernization of the State Administration.

Outputs (ICR, pages 19 - 25).

- 617 public servants in 31 state units (secretariats, agencies and Institutes) were trained on strategic planning, monitoring and evaluation and human resources management for introducing results-based methodologies. There were no targets for this indicator.
- **At the state level.** The Government signed five results-based agreements with selected state agencies: (i) the Secretariat of Housing and Urban Development; (ii) the Secretariat of Health; (iii) the State Police Department; (iv) the Tocantins Land Institute; and (v) the Agriculture Defense Agency.

The agreements specified indicators, baselines and targets to be realized over four years. However, the results were not monitored due to the shortcomings in monitoring arrangements.

- **At the municipal level**. The project aimed to enhance the municipalities' capacities to adequately maintain the local feeder road network through the formation of intermunicipal consortia. As this approach proved to be fruitless, it was replaced by the signing of direct cooperation agreements between SoT and the municipalities for road maintenance activities. The cooperation agreements between the state and the municipalities were however not signed by the municipalities when the project closed.

Outcomes.

The project activities were output oriented. It is unclear the extent to which the outputs contributed to modernizing the state administration.

Fostering local development. Activities in this sub-component aimed to support agricultural and tourism development in the State.

Outputs (ICR, pages 19 - 25).

- The project supported the upgrading of 213 local subsistence farmers to market farming through building small farmers' skills on agricultural techniques and commercialization of activities (such as through packaging) and supporting their integration into the Government food-purchase programs). This exceeded the target of 120.
- The Secretariat supported the livestock program through acquiring and distributing genetic material to improve herd quality. 239 small cattle ranchers benefitted from this program. Targets were not specified for this indicator.
- Seven selected municipalities were provided with seven equipment for constructing slaughterhouses. Though the project did not originally aim to mobilize private financing directly, at the time of the 2020 restructuring the SoT decided that the partially completed slaughterhouses were to be redesigned and awarded to the private sector as concessions, modelling the successful case of other Brazilian states. The slaughterhouses were not completed when the project closed. According to the information provided by the team, out of the six, one slaughterhouse has been finalized by the private sector to date.
- The project supported the community-based sustainable tourism program in the Jalapao region through capacity building on business management, hospitality and gastronomy while highlighting the appeal of the community's cultural heritage. This program benefitted 197 members of the traditional Quilombola communities of Mumbuca and Prata. No targets were specified for this indicator.

Outcomes.

The activities were output oriented, and it is not clear the extent to which the project activities aided in realizing the outcome of fostering local development.

Environmental Management.

Outputs. (ICR, pages 22 - 23).

- New Information Technology (IT) systems were provided by the State Environmental Secretariat (SEMARH) and its operational affiliate - the Tocantins Nature Institute (Naturatins) to reduce the average time for issuing environmental licenses.
- With project support, the State adopted four instruments from the Brazilian Forestry Code (Law 12,651 of 2012) for enforcing environmental legislation. The four instruments were: (i) Rural Environmental Cadaster (CAD); (ii) Degraded Areas Recovery Program (PRA); (iii) Framework for monitoring and control of deforestation and wildfires; and (iv) Natural capital management tool.
- A native seedlings production site for reforestation was constructed with a capacity for 100 to 200 thousand seedlings per year to support the recovery of degraded areas.
- The project sponsored a pilot to improve environmental monitoring and enforcement by using drones.
- Three water management pilots were completed in the selected state river basins. The river basin plans were adopted as part of the National Water Resources Policy.

Outcomes.

The average time taken by Naturatins to issue environmental licenses was reduced from 100 days at the baseline to 36 days at project closure, exceeding the target of 40 days.

Improvement of Education Services.

Outputs (ICR, pages 23 - 24).

- The Education Secretariat (SEDUC) trained six municipalities to develop early childhood components in their education program. The six municipalities adopted municipal education plans featuring early childhood development. There were no targets for this indicator.
- The project's flagship education program, called the Road to Knowledge (PEC) was implemented in the lagging regions as targeted. This program aimed to improve the quality of educational services and facilities in ten state-run schools located along a high-traffic, long-haulage federal highway targeted by the project. The schools were selected for the high degree of child and teenage vulnerability in the communities they served. The ICR (page 24) noted that previous diagnostic pointed to a high incidence of children and teenagers being coopted to prostitution, drug trafficking and other violence hazards, associated with the heavy volumes of long-haul traffic along BR -153. The ten selected schools incorporated gender-related activities aimed at preventing women and girls from victim to sexual exploitation and abuse. In total, 3640 students benefited from these interventions. 150 teachers were trained, representing 85% of the target (slightly short of the target of 90%).

Outcome.

There is no concrete evidence that the project contributed to the improvement of education services.

Rating
Modest

OVERALL EFFICACY

Rationale

The project supported activities in five sectors (transport, environment, education, public administration and local development). There is sufficient evidence that the project activities contributed to realizing PDO 1 (to foster improved effectiveness of road transport). However, the project supported only output-oriented activities with regard to PDO 2 (enhancing efficiency of selected public services). Given that there is little evidence of the extent to which the project contributed to enhance the efficiency of selected public services, overall efficacy on a four-point scale is a weak substantial.

Overall Efficacy Rating

Substantial

5. Efficiency

Economic Analysis. An economic analysis was conducted for infrastructure investments in municipal feeder roads and for paved roads using CREMA contracts. These activities accounted for 78% of the project cost.

Municipal feeder roads. The methodology for the municipal roads network was a producer surplus approach in which the main benefits were assumed to come from increased agricultural production due to the improved access. The Net Present Value (NPV) at 12% discount rate at closure was US$98.00 million, as compared to the NPV of US$48.00 million at appraisal. The ex-post Economic Internal Rate of Return (EIRR) was 95.1%, as compared to the ex-ante EIRR of 22.4%. The rather striking difference between the ex-post EIRR and the ex-ante EIRR was due to two factors: (i) the project's actual cost on feeder roads was 60% of the appraisal estimate, due to a lower-than-expected number of critical spots on the municipal feeder roads that were required to provide year-around accessibility; and (ii) the original growth forecasts for agricultural activities were conservative. For instance, the initial estimate for planted area increase was 40% "with the project", whereas the actual planted area increased by 263% in the targeted municipalities. In addition, the actual increase in selected crops production was 304% as compared to the forecast of 85%, due partly to the price increases in core commodities.

Paved roads with CREMA contracts. The economic analysis for the paved roads was conducted with the Highway Development Management (HDM -4) model. The methodology entailed a consumer surplus approach, and the project benefits were assumed to come from transport cost and travel time savings. For the CREMA roads, the initial goal was rehabilitation of 1,500 km of roads. The project however rehabilitated 2,250 km of roads. The NPV at 12% discount rate was US$176.0 million at appraisal and the ex-ante EIRR was 25%. The ICR (paragraph 65) notes that the economic analysis for this sub-component was not conducted at closure as it was not possible to access specific data and configurations used in the analysis at appraisal.

Administrative and operational issues during implementation. The cancellation of US$75.00 million by way of counterpart funding contributed to delays in the initial years. However, the cancellation did not undermine the project scope, as the cancellation was offset by the significant depreciation of the B$ relative to the US$ during implementation.

Implementation progress was very slow, with only 15.7% of the loan disbursed by the Mid-Term Review in November 2015. These delays were due to a combination of factors, including slow preparation of project documents and the procurement policies of the State - partly caused by the multi-sectoral nature of the project and weak implementation capacities of some of the state agencies. Delays in counterpart funding contributed to delays in implementing the institutional strengthening activities. The delays in the initial years exacerbated by factors over which the project had no control such as frequent changes in political leadership and the physical restrictions following the COVID-19 pandemic contributed to the time overruns. Few activities and safeguard commitments remained incomplete (discussed in section 10) and at closure US$10.00 million of the undisbursed loan was cancelled.

In sum, efficiency is rated as weak **substantial**, due to the administrative inefficiency.

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	✓	22.40	0 ☑ Not Applicable
ICR Estimate	✓	95.10	0 ☑ Not Applicable

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

6. Outcome

The relevance of the PDO to the Government and the Bank strategy is rated as substantial. Efficiency is weak substantial, due to the administrative inefficiency. Overall efficacy is also a weak substantial. While the outcomes in the transport sector were substantially achieved, it is unclear the extent to which the project activities aided in the efficiency of selected public services. Taking these into account, overall outcome is rated as moderately satisfactory in the IEG's six-point rating scale.

a. Outcome Rating

Moderately Satisfactory

7. Risk to Development Outcome

Government commitment risk. There is moderate risk to the sustainability of development outcomes pertaining to road maintenance arrangements. Though this project aided in mainstreaming CREMA schemes for ensuring the quality of roads, the (ICR, paragraph 129) notes that the continuation of network coverage depends on State budget appropriations which have to be secured every year. Furthermore, it is unclear whether the municipalities have the capacity to maintain the local feeder roads improved under the project. This is particularly so, given that the envisioned mitigation measures of establishing intermunicipal consortia for road maintenance or direct agreements between the State and the municipalities did not succeed in this project.

Climate change risk. There is modest risk to the sustainability of development outcomes due to climate change conditions. The hazard to road assets from extreme weather events and the consequent disruption of transport connectivity, represent risks to the sustainability of outcomes. The ICR (paragraph 130) notes that damages relative to erosive processes had already materialized during the final year of implementation and required remedial works that remain to be completed as a post-closing commitment.

Political risk. There is risk that the institutional improvements of the project could be reversed due to political uncertainties and turnover of civil staff.

8. Assessment of Bank Performance

a. Quality-at-Entry

The Bank prepared this project based on the experiences from the previous Bank financed projects in SoT. Lessons incorporated included: (i) while the previous projects supported laying the foundation for growth, this project responded to the broader challenges of a maturing state, such as combining infrastructure investments at the state and municipal levels, and institutional strengthening of the state's secretariats; (ii) fostering results-based approach; and (iii) an implementation time frame of six years to mitigate the potential negative impacts of political changes (PAD, paragraphs 29 - 31). The project was based on sound analytical work such as the preliminary results from the project's evaluation at preparation, which formed the basis for the cost-benefit analyses and the Bank's diagnostic work that informed programs and activities for component two activities.

The implementation arrangements made at appraisal proved to be appropriate during implementation. The Secretariat of Planning and Public Management Modernization (SEPLAN) was overall in charge of coordination. The Project Management Unit (UGP) was in charge of implementation. The UGP had executed Bank-financed projects and its staff were familiar with Bank procedures (PAD, paragraph 24).

The preparation team identified several risks at appraisal, such as design risk with a multisector project and sustainability risk. Mitigation measures incorporated at design included, hiring qualified staff to supervise procurement and safeguards-related issues, upfront implementation readiness of the road investment component and the reliance on a strong institutional champion, SEPLAN. With mitigation measures, the overall risk was rated as moderate at appraisal (PAD, paragraph 31). Appropriate arrangements were made at appraisal for safeguards and fiduciary compliance (discussed in section 10).

There were significant shortcomings at Quality-at-Entry. One, the multisector project involving six sectors was overly ambitious in the context of a new state. The project activities overstretched the State's capacity to coordinate the activities of the different sector activities with limited synergies. Two, although infrastructure investments can contribute to limit gender gaps, the design did not consider this important element. The gender-based activities were included during implementation at State request. Three, the induced environmental impacts (such as the lasting environmental damage from land-use change induced by road investments) were not adequately considered at design. The ICR (paragraph 119) provides an example of the Manuel Alvers bridge and notes that the ease of river crossing after the bridge opens is most likely to attract additional population and lead to increased agricultural land and deforestation. And four, there were significant M&E design shortcomings with no relevant indicators at outcome level to measure achievements under PDO 2 (discussed in section 9).

Quality-at-Entry Rating

Moderately Unsatisfactory

b. Quality of supervision

The continuity of leadership was more or less maintained with two Task Team Leaders (TTLs) during the lifetime of the project. Supervision missions were held twice year. However, field visits were completely interrupted from March 2020 to the end of the project due to COVID-19 pandemic. During this period, the Bank relied on virtual missions. The supervision team adjusted to the State's needs by including road safety and gender-related activities and rehabilitation of additional roads under CREMA contracts. Given the delays in the initial years of the project due to the lack of counterpart funding, the supervision team reallocated the loan among project activities and extended the closing date to counter the delays in the initial years of the project. The support provided by the team aided in fiduciary compliance (discussed in section 9).

One minor shortcoming was that the shortcomings in M&E design were not rectified during implementation.

Bank performance at Quality-at-Entry was moderately unsatisfactory and quality of supervision was satisfactory. Overall Bank performance is moderately satisfactory, given that overall outcome of the project was moderately satisfactory.

Quality of Supervision Rating

Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The theory of change, although sound to capture the complexities of a multi sectoral project, did not clearly articulate the synergies between sectors. The key outcome indicators for PDO 1 - the share of rural population with access to all-season roads, the percent of CREMA roads that were in good condition and vehicle km travelled in the roads - were straightforward, specific, relevant, with clearly calculation methodologies and hence monitorable. Given that road safety was an important sub-component one activities, there were no indicators to measure the extent to which the project contributed to road safety.

The PDO 2 was defined more generically to encompass activities across five different sectors. These indicators were more output-oriented than proper outcomes. Certain outcome-related aspects of component two activities were left out such as the actual achievement of results agreed between the SoT and the line secretariats. Indicators for component two outcomes fell short of capturing the extent to which the project activities contributed to local development such as to tourism development and the renewable energy policy to Environment and Sustainable Development Secretariat.

b. M&E Implementation

During the project restructurings, some of the indicators were modified in view of the data limitations of the implementing agency. However, no indicator was added to monitor road safety features, even though they became an important sub-component of component one activities. No effort was made to identify relevant indicators at outcome level under the second objective.

The PIU was in charge of coordinating M&E. The infrastructure secretariat was responsible for measuring and monitoring transport indicators while component two activities were monitored by the Planning Secretariat and the other implementing agencies. As a consequence of this decentralization, the PIU was only responsible for compiling the information and resubmitting it to the Bank. The PIU lacked incentives to closely monitor the data. The ICR (paragraph 101) acknowledges that the indicators were only measured when necessary and were occasionally of dubious quality.

c. M&E Utilization

The M&E framework was used for monitoring project performance. The information collected throughout the project allowed to monitor progress towards achievement of outcomes, especially in the transport component.

In sum, overall M&E is rated as modest in view of the shortcomings in M&E design and M&E implementation.

M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

The project was classified as a Category B (partial assessment) project under the World Bank safeguard policies. Eight safeguard policies were triggered at appraisal: Environmental Assessment (OP/BP 4.01); Natural Habitats (OP/BP 4.04); Forests (OP/BP 4.36); Pest Management (OP 4.09); Physical Cultural Resources (OP/BP 4.11); Indigenous Peoples (OP/BP 4.10); Involuntary Resettlement (OP/BP 4.12); and

Safety of Dams (OP/BP 4.37) (PAD, page vi). The following discussion of safeguards is based on the detailed discussion provided in the PAD (14 - 15) and the ICR (pages 39 - 40).

Environmental Assessment, Natural Habitats, Forest, Pest Management, and Safety of Dams. The project was not expected to have large scale and irreversible impacts. An Environmental and Social Impact Assessment (ESIA), an Environmental and Social Management Framework (ESMF) and Environmental Management Plans (EMPs) were prepared and publicly disclosed at appraisal to address environmental impacts and impacts on Natural Habitats, Forests, Physical Cultural Resources, and Safety of Dams. A Pest Management Framework was prepared to address the pest management safeguards.

The project compiled with the World Bank safeguard policies for most of the implementation period. However, the environmental assessment was downgraded to moderately unsatisfactory in 2021. This was due to the many environmental activities that were delayed or pending implementation. A Post Closing Action Plan was agreed between the Bank and the State to ensure completion when the project closed. The ICR notes that the project was in compliance with these safeguards when the project closed. The team also clarified that there were no issues with the safeguards on Natural Habitats, Forests, Pest Management and Safety of Dams.

Involuntary Resettlement and Indigenous Peoples, and . Land acquisition and involuntary resettlement were not expected. However, as localized impacts were possible, a Resettlement Policy Framework (RPF) was prepared and publicly-disclosed at appraisal. As the location of the municipal works and the impacts to indigenous peoples were unknown at appraisal, an Indigenous Peoples Planning Framework (IPPF) was prepared and publicly-disclosed.

The ICR noted that some activities on Indigenous Peoples were not complete when the project closed. The team clarified that Government was moving forward to relaunch the work to finish the work as soon as water falls allow the continuation of work. The team also clarified that the Government wants to prepare a new project, and project preparation work cannot start until the safeguards post closing Action plan is completed.

Physical Cultural Resources. The team clarified that there were no issues with the safeguards on Physical Cultural Resources.

b. Fiduciary Compliance

Financial Management. The Bank conducted a financial assessment of the Project Management Unit (UGP) at appraisal. UGP had executed Bank-financed projects and its staff were familiar with Bank policies. The assessment concluded that the arrangements were adequate, and the financial risk was rated as moderate at appraisal (PAD, pages 35 -36).

The ICR (paragraph 113) notes that financial management was satisfactory throughout the project due to the sound financial management arrangements and the qualified staff. The PIU complied with the terms of the loan agreement. There were no cases of ineligible expenses. The team clarified that the last audit report was received on September 14th, 2022, within the agreed deadline and that the external audits were unqualified.

Procurement. The Bank conducted a procurement assessment of the UGP, the Secretariat of Planning and Public Management (SEPLAN) and the Infrastructure Secretariat (SEINFRA) at appraisal. UGP had experience with executing Bank-financed projects. The assessment concluded that the overall procurement risk was moderate (PAD, page 44).

The ICR (paragraph 110) notes that the overall procurement performance was satisfactory. However, there were instances of procurement delays which were rectified with Bank support. The ICR also notes that there was a specific procurement shortcoming relating to the slaughterhouses' concession in 2019. The final audit of 2018 found no bidding documents for slaughterhouses. An investigation by the INT however found no integrity issues and that it was only a human error. The ICR does not report of any case of misprocurement.

c. Unintended impacts (Positive or Negative)

There were no unintended impacts.

d. Other

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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 lessons from the experience of implementing this project, with some adaptation of language.

1. If synergies between project components are carefully examined and articulated in multi sectoral projects, there is a higher potential for project success. An integrated approach to development that involves transport may exhibit potential for exploring synergies and building on mutually reinforcing benefits. In this project, while there were clearly synergies between transport infrastructure investments and developing agribusiness, the synergies between transport and public administration and education were tenuous at best.

2. A strong commitment of funding for road maintenance may help in ensuring sustainability of outcomes in road sector projects. In this project, performance-based (CREMA) contracts for paved roads embedded an assurance of adequate maintenance for five years. The lesson is that even longer contracts could address the maintenance commitment even further. This would however require stronger assurances of stable funding from road agencies.

3. Roads projects supporting rural accessibility have the potential for improving all season access through proactively addressing the effects of climate change. The lesson is that a program aiming to improve all season access of rural populations needs to consider in detail the adverse impacts of floods and landslides and incorporate erosion-prevention measures into road works design.

4. If a project design incorporates mechanisms for seeking upfront assurance of budget availability for counterpart funding activities, there is a higher possibility for smooth implementation without delays. This project faced difficulties in the initial years as the State faced difficulties in providing the counterpart funding.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR is well-written and clear. The theory of change provided in the ICR clearly articulates the causal links between activities, outputs and the intended outcomes. The analysis and evidence provided in the ICR is adequate to validate project performance. The ICR candidly acknowledges the issues that were encountered in implementing a multi-sector project in the newly created State. The ICR provides useful information in Annex eight on testimonials from project stakeholders and the photographs provided enables the reader to visualize the project's achievements. The ICR draws good lessons from the experience of implementing this project.

One minor shortcoming with the ICR is its length. The main body of the text at about 45 pages, which is almost three times the recommended length of 15 pages.

a. Quality of ICR Rating

Substantial