Report Number: ICRR0022904

1. Project Data

Project ID	Project Name
P120370	SA Trade & Trans Facilitation Project
Country	**Practice Area(Lead)**
Eastern and Southern Africa	Transport

L/C/TF Number(s)	Closing Date (Original)	Total Project Cost (USD)
IDA-52480,IDA-H8440	31-Dec-2018	175,403,013.20
Bank Approval Date	**Closing Date (Actual)**	
21-May-2013	31-Dec-2020	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	213,000,000.00	0.00
Revised Commitment	193,468,675.90	0.00
Actual	175,403,013.20	0.00

Prepared by	Reviewed by	ICR Review Coordinator	Group
Katharina Ferl	Peter Nigel Freeman	Victoria Alexeeva	IEGSD (Unit 4)

2. Project Objectives and Components

a. Objectives

According to the Project Appraisal Document (PAD) (p. iii) and the Financing Agreement of July 30, 2013 (p. 4), the objective of the project was “to facilitate the movement of goods and people along the Dar Corridor in Tanzania, whilst supporting improvements in the services for HIV/AIDS and road safety.”

The objective of the wider Southern Africa Trade and Transport Facilitation Program was to facilitate the movement of goods and people along the North-South Corridor (NSC), whilst supporting improvement in the services for HIV/AIDS and road safety.

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

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

Date of Board Approval
20-Dec-2018

c. Will a split evaluation be undertaken?
No

d. Components
The project included four components:

Component 1: Improvement of physical infrastructure (appraisal estimate US$185.0 million, actual US$159.96 million): This component was to finance three sub-components:

a. **The rehabilitation and upgrading of the 137.9 km Mafinga- Igawa road section of the Dar es Salaam corridor in Tanzania:** This sub-component was to rehabilitate and upgrade one of the remaining sections in poor condition on this corridor in Tanzania.
b. **The improvement of infrastructure and operations at the Songwe/Kasamulu border crossing on the Tanzania/Malawi border:** This component was to design and introduce enhancements at the Songwe/Kasamulu crossing to allow potential operation as a One-Stop Border Post (OSBP).
c. **The construction of a one-stop inspection station (OSIS) at Vigwaza and at two other locations in Tanzania:** This sub-component was to involve the construction of a consolidated rest stop, weigh bridge and checkpoint at Vigwaza, which was to serve the transit and long-distance traffic on both the Central and Dar es Salaam Corridors, and at two other locations on the Dar es Salaam Corridor.

During the Mid-Term Review (MTR) it was decided (due to cost overruns) to reallocate funds to finance the two undetermined OSIS, prepare feasibility and detailed engineering designs and tender documents for three stations instead (at Ruaha Mbuyuni in Iringa region, Makambako in Njombe region, and Mpemba in Mbeya region). An activity was added to finance the feasibility, detailed design and safeguards instruments for the rehabilitation of the corridor from Igawa to the Zambian border at Tunduma.

Component 2: Mitigation of social costs (appraisal estimate US$16.0 million, actual US$20.65 million): This component was to finance two sub-components:

a. **Road Safety Initiatives on the Corridor:** This sub-component was to finance: a) the undertaking of a Road Safety assessment to identify accident "black spots" along the Tanzanian portion of the corridor, the preliminary design of specific interventions to address them, reducing road traffic

crashes and their consequences for both mobile and resident populations; b) the undertaking of a management capacity review for the corridor and the identification of a 'safe corridor' management initiative; and c) the preparation of detailed designs, technical assistance, and implementation of measures along the Dar es Salaam Corridor in Tanzania.

b. **HIV/AIDS Initiatives on the Corridor:** This sub-component was to refurbish and extend priority lower-level health centers, both existing ones and at the OSISs, facilitate the purchase of essential equipment, such as CD 4 count machines (mobile devices to conduct CD 4 counts of HIV/Aids patients), and small incinerators for clinical waste, and provide technical assistance to develop the capacity of the staff in the local health centers, in HIV/AIDS awareness, counseling and testing, and the disposal of medical waste.

During the MTR an activity to develop an Emergency Medical Service (EMS) ad Trauma Care pilot was included. In order to provide trauma care for victims of road accidents along the corridor seven EMS first aid posts were rehabilitated and expanded, twelve ambulances, two rider vans, three supervision vehicles, and three medium fire/rescue vehicles were procured. Also, a call center to handle emergency calls was outfitted and training for staff was provided.

Component 3: Implementation assistance and additional institutional support (appraisal estimate US$9.0 million, actual US$9.81 million): This component was to finance: a) an update of the 2008 urban transport master plan for Dar es Salaam, focusing on identifying options to mitigate problems caused by increasing port traffic; b) a detailed diagnosis and identification of options to strengthen the transit procedures between the corridor countries, and potentially define and pilot a regional customs transit guarantee scheme with the objective of facilitating trade; c) the preparation of a diagnostic to identify policy constraints towards improved trade facilitation amongst the corridor countries, through an analysis of the Tripartite Agreements on trade facilitation, current bilateral agreements, and actual practice in corridor countries; d) provision of vehicles to the Traffic Police to enhance enforcement of traffic regulations and laws along the Dar es Salaam Corridor in Tanzania; e) improvement of the quality of the service delivered by customs brokers in Tanzania through capacity building, workshops and technical assistance; f) building of capacity and training to Tanzania National Roads Agency (TANROADS), Ministry of Transport (MoT), Ministry of Works (MoW), Tanzania Commission for AIDS (TACAIDS), and Ministry of Health and Social Welfare (MoHSW); and g) independent technical audit of all civil works undertaken through the project.

During the MTR the consultancy to update the urban transport master plan for Dar es Salaam was dropped. Instead, the development of a feasibility study and engineering designs for the Dar es Salaam bus rapod transit phase five was financed.

Component 4: Improved corridor management and monitoring (appraisal estimate US$3.0 million, actual US$2.89 million): This component was to finance the strengthening of the Dar es Salaam Corridor Committee (DCC) and the funding of its operating costs for a finite period, until a sustainable financing proposal has been introduced. This component was also to include the establishment of a Corridor Performance Monitoring System (CPMS), to enable the management and monitoring of performance on the corridor.

The corridor performance monitoring system was financed under component 3 instead of component 4. Also, when the Bank financing under component 4 ended, the DCC stopped operating. Several activities were dropped or implemented on a smaller scale including piloting of a customs guarantee scheme, piloting of a transit guarantee scheme, and provision of equipment for DCC.

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

Project Cost: The project was estimated to cost US$213.0 million. Actual cost was US$175.4 million. According to the ICR (p. 30), due to exchange rate fluctuations between SDR and the US$, the effective loan amount, which was Special Drawing Rights (SRD) 138.7 million (equivalent to US$210 million) at approval, was only US$198.2 million by project closure.

Financing: The project was financed through two IDA loans: i) IDA loan-52480 in the amount of US$210.0 million of which US$172.5 million was disbursed and; ii) IDA loan H8440 in the amount of US$3.0 million of which US$2.8 million was disbursed.

Borrower Contribution: The Borrower was not to make any contributions.

Dates: The project was restructured twice:

- On December 20, 2018 the project was restructured to: i) extend the closing date by 18 months (from December 31, 2018 to June 30, 2020) to allow for the completion of project activities; ii) revise the Results Framework to drop one PDO indicator and one associated intermediate outcome indicator following non-compliance with a conditional agreement (police road-blocks); add two intermediate outcome indicators and refine three indicators; iii) reallocate financing among disbursement categories in order to benefit from realized savings under some activities and address exchange rate fluctuations, and iv) adjust the project implementation schedule in line with the extension of the closing date.
- On June 4 2020, the project was restructured to extend the closing date by an additional six months from June 30, 2020 to December 31, 2020 to allow for the completion of various project activities which had been delayed as a result of the implementation of a new clearance process by the Minister of Finance and Planning (MoFP).

The PDO was not changed during the restructurings. Also, a split rating is not required since the indicator changes were intended to strengthen and clarify the Results Framework and did not decrease the scope of the project.

3. Relevance of Objectives

Rationale

According to the PAD (p. 8), at the time of appraisal, the Eastern and Southern Africa region had considerable potential for significant gains from deeper integration. The region included a variety of countries ranging from the continent's most advanced economy to some of the smallest and poorest.

Between 2000 and 2008 the region had experienced above global average rates of economic growth resulting from increasing global demand for primary commodities especially agricultural goods, copper

and other minerals. Imports included chemicals, mining parts and equipment, fertilizer, general consumer goods, etc.

However, intra-regional trade remained modest at only 13 percent of total trade in 2011. The countries of the region faced similar problems: relatively small/landlocked countries, geographic remoteness from the main global markets, high unemployment and poverty, low skilled employees, large informal sector, and overreliance of the export of primary commodities.

Improving the regional transport network was a necessary condition for improving competitiveness and regional and global economic integration. Especially, since high transport prices/costs, including time, were major obstacle to increasing trade and economic growth.

One of the most critical trade networks for the region was the broader North-South Corridor (NSC), which extended some 3,900 km from Dar es Salaam in Tanzania to Durban in South Africa. The corridor encompassed both road and rail networks, and maritime and inland water ports. The northern part of the North – South corridor is called the Dar es Salaam corridor. While the region had physically continuous road and rail networks, which were linked to maritime and inland ports, infrastructure was often poor or incomplete, inadequately maintained. Also, the region experienced limitations in organizations, management, and coordination, particularly at the ports, border crossings, and railways resulting in transport costs along the corridor being some of the highest in the world.

Road transport along transit corridors had been identified as a major factor in the spread of Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS). Transport workers, their spouses, and sexual partners were seen as particularly vulnerable groups at high risk of HIV/AIDS. The Tanzania Commission for AIDS (TACAIDS), the national responsible for a multisectoral response to the HIV/AIDS epidemic, identified the need for improved HIV mitigation activities along the Dar es Salaam corridor where the rate of infection in some regions were among the highest and fastest increasing in the country.

Furthermore, according to the PAD (p. 7), the number of fatalities from road traffic crashes had increased by six percent annually on average since 2000 in Tanzania. As a result, the government of Tanzania passed the National Road Safety Policy to reduce road deaths by at least 25 percent between 2008 and 2015.

The objective of the project was in line with Tanzania's five-year National Strategy 2016/17-2020/21 which emphasized the need to improve infrastructure for road transport and facilitation on transit traffic. Also, the strategy stresses the importance of addressing HIV/AIDS and strengthening the country's overall health system. Also, the objective of the project was in line with the Bank's Country Partnership Framework (FY18-FY22) and its focus area "capture Tanzania's potential as a maritime gateway and regional trade hub" and to "enhance transport, energy, and digital connectivity for improved services to rural areas". Also, the objective of the project supported the CPS' focus area 2 "boost human capital and social inclusion using a lifecycle approach". This project, the Southern Africa Trade and Transport Facilitation Program – Adaptable Program Lending 1 (SATTFP-APL1), was the first in what was to be a series of projects supporting the overall improvement of trade flows in the Eastern and Southern Africa Region.

Taking everything together, the project's relevance of objectives was High.

Rating
High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective
To facilitate the movement of goods and people along the Dar Corridor in Tanzania.

Rationale
Theory of Change: The project's theory of change envisioned that project outputs such as rehabilitating and upgrading of the Mafinga-Igawa road section, improving infrastructure and operations at the Songwe/Kasamulu border crossing as well as constructing one-stop inspection station at Vigwaza and two other locations were to facilitate the movement of goods and people along the road corridor. Furthermore, it envisioned that project outputs such as technical assistance to improve trade flows and providing vehicles to traffic police for enforcement along the corridor, providing start-up funding for the Dar es Salaam Corridor Committee (DCC), and establishing a Corridor Performance Monitoring System were also to contribute to the facilitation of movement of goods and people. The measured outcomes included reduced vehicle costs and travel time reduction for trucks and transit.

The project made the following assumptions: i) agreement is signed between corridor countries to establish a sustainable funding mechanism for DCC; ii) police to reduce road blocks in place as a condition to receive vehicles; iii) improvements in Mafinga-Igawa and other road segments are maintained over time; iv) improvements in social costs will be higher than counterpart potential risk from increased trade and traffic. Some of these assumptions did not materialize, resulting in non-achievement of some expected outcomes, even when the core activities were completed as planned.

Outputs:

- 138 kilometers of non-rural road were constructed, achieving the target of 138 kilometers.
- The percentage of roads in good and fair condition as a share of the Dar Corridor length in Tanzania (731 kilometers out of 928 kilometers to Tunduma) increased from 77 percent in 2012 to 92 percent in 2020, achieving the target of 92 percent.
- The Corridor Performance Monitoring System (CPMS) was developed, achieving the target of introducing a CPMS. The CPMS was to be based in the DCC Dar el Salaam Corridor Committee (DCC). The DCC was legally established before project approval through an agreement by the corridor countries. However, the DCC stopped its functions once the project's grant funding expired. As a result, the CPMS was developed but was not implemented. Therefore, the indicator of "improved corridor management and performance monitoring (yes/no)" was not completely achieved. Also, the target of introducing a sustainable funding mechanism for DCC was not achieved.
- The One Sop Border Post (OSBP) at Songwe-Kasumulu border crossing was not completely established, therefore, the target was not achieved. According to the ICR (p. 45), the OSBP was

completed only partially (50 to 60 percent) due to delays caused by protracted review processes and Covid-19.

- A One Stop Rest Stops along the Dar es Salaam Corridor in Tanzania was not fully completed when the project closed. Therefore, the target was not achieved.

Outcomes:

- As a result of the improved condition of the Dar Corridor, vehicles operating costs (VOCs) along the improved section were reduced by 17.7 percent (from US$0.68 per vehicle-kilometer to US$0.51 per vehicle-kilometer), which was substantially better than estimated during project preparation.
- The time required for trucks to cross the Songwe/Kasumulu border crossing into Malawi increased from 24 hours in 2012 to 72 hours in 2020, not achieving the target of 12 hours. The ICR (p. 18) stated that the target was not achieved as civil works were still ongoing for the Vigwaza One-Stop Inspection Station (OSIS) as well as the One-Stop Border Post (OSBP) at Songwe/Kasumulu. Also, Covid-19 protocols were put in place that might have slowed down border crossing.
- The average time from ship readiness to unload to final destination for an imported container increased from seven days to 15 days, not achieving the target of five days. According to the ICR (p. 41), the language of this indicator was changed during the restructuring without an associated change to the baseline and target. Originally, the indicator measured the time from “departure from the gate to Kasumulo on the corridor”. The revised indicator included that trip but also the time between “ship readiness to unload” and the container leaving the port gate, an average time of 11 days when the project closed. The ICR stated that if the indicator would have been measured against the original description and target, the target would have been achieved with a time of 4.5 days from departure from the port gate to Kasumulu.
- The time it takes a container to transit the corridor within Tanzania decreased from a seven days at appraisal to two days at project closure as measured by the Tanzania Revenue Authority. However, as stated above, due to an increase in wait time at the border as a result of the ongoing construction of the OBSP, much of this improvement is currently eroded.
- Even though the total time required at police road blocks along the Dar corridor in Tanzania decreased from five hours in 2012 to two hours in 2020, this result cannot be attributed to project activities since the activity that could have contributed to the reduction (purchase of police vehicles while reducing number of police checkpoints) was dropped due to concerns by the police.
- The freight volume (measured in Twenty Foot Equivalent Unit – TEU) in the targeted corridor increased from 35,000 TEU per year at appraisal to 81,478 at project closure, achieving the target of 70,000 TEU. Average daily traffic increased by 159 percent at the Makambako Counting Station, which is located in the middle of the rehabilitated corridor. The movement of trucks increased by 80 percent at Makambako during the assessed period, indicating a significant increase in movement of goods along the corridor.
- The project did not measure through indicators included in its Results Framework if the movement of people was also increased along the corridor. According to the ICR (p. 20), traffic increased from 134 buses per day in 2011 to 188 buses in 2020. During the same time the number of mini bases decreased from 151 to 73 vehicles.

The project did not achieve the targets of three out of six PDO indicators. Also, the project was not able to ensure the sustainability of the DCC, which would have been critical for the full implementation of CPMSS. Also, the project did not measure if a critical part of the objective “the movement of people” was achieved.

Taking everything together, the achievement of this objective was Modest.

Rating
Modest

OBJECTIVE 2
Objective
To support improvements in the services for HIV/AIDS.

Rationale
Theory of Change: The project's theory of change envisioned that project outputs such as refurbishing and extending health centers along the corridor as well as providing technical assistance for health center staff on HIV/AIDS and other issues were to result in the objective of improving services for HIV/AIDS.

Outputs:

- Five health centers and HIV clinics on the NSC corridor were improved, not achieving the target of 20 clinics.
- 487 medical personnel was trained in health centers and HIV clinics on the NSC corridor, surpassing the target of 60 medical personnel.

Outcomes:

- 7,425 people had access to a basic package of health, nutrition, or reproductive health services, surpassing the target of 3,000 people. 40 percent of the beneficiaries were female, not achieving the target of 50 percent.

The project was not able to achieve its key activity under this objective: the improvement of 20 health centers. According to the ICR (p. 20), some anecdotal evidence, which was collected during stakeholder interviews, indicated that the capacity for HIV/Aids services along the corridor might have been negatively impacted by the health clinics not being available for use during construction. Taking everything together, the achievement of the objective was Modest.

Rating
Modest

OBJECTIVE 3
Objective
To support improvements in road safety.

Rationale

Theory of Change: The project's theory of change envisioned that project outputs such as undertaking a road safety assessment, conducting a management capacity review of the corridor for road safety was to result in the above stated objective.

Outputs:

- 1,776 lane-kilometers were subject to a road safety assessment, surpassing the original target of 1,000 lane kilometers and the revised target of 1,500 lane kilometers.
- 40 customs brokers received training, surpassing the target of 20 custom brokers.
- The project financed a road safety assessment that assessed 750 kilometers of the corridor. The assessment identified 32 spots, which warranted measures and eight spots were identified as very high risk. Interventions at these eight spots included revising junction layouts, addition of safety barriers, formalization of pedestrian crossing, improved signage, improved street lighting etc.
- In 2016, the project stakeholders requested the implementation of a pilot for Emergency Medical Services (EMS) between the Dar es Salaam and Morogoro corridor section. The aim was to improve post-crash care of three hospitals and four health centers, providing ambulances and fire rescue trucks, implementing a communication system linking the various EMS elements, and developing a dispatch center located at Muhimbili National Hospital. However, when the project closed none of the EMS sites was fully functional. At the time of the ICR, four locations had been completed and three other locations and the dispatch center remained under construction.

Outcomes:

The project was not able to reduce the number of eight accidents black spots on Dar Corridor in Tanzania. According to the Bank team (February 28, 2022), the blackspot activities were scattered across the entire country. As a result, grouping these blackspot activities was not possible and the project could not attract any reputable bids.

The project was not able to achieve a reduction in the number of accident blackspots, which was a key activity under this objective. Therefore, the achievement of the objective was Modest.

Rating
Modest

OVERALL EFFICACY

Rationale
The overall efficacy rating is Modest, as the achievement of all three objectives is rated Modest.

Overall Efficacy Rating	Primary Reason
Modest	Low achievement

5. Efficiency

Economic efficiency:

The PAD (p. 24) conducted a benefit cost analysis for the rehabilitation and upgrading of the Mafinga - Igawa Section of the Dar es Salaam Corridor in Tanzania in Component 1, reflecting that this sub-component was to account for 76 percent of total project costs.

The proposed activity was a seven-meter-wide carriageway, with a two meter paved shoulder on either side. Two alternative pavement designs were considered in the economic analysis: a) alternative 1: milling and replacing of the existing asphalt wearing course, scarifying the base to 200 mm, before replacing with 200 mm cement stabilized sub-base, a dense bituminous macadam base of 200 mm, followed by a 50 mm wearing course of asphalt concrete; and b) alternative 2: placing a 150 mm cement stabilized sub-base on the existing pavement, with a crushed stone base of 150 mm, followed by a 50 mm wearing course of asphalt concrete.

The PAD applied the Highway Development and Management Model, Version 4 (HDM-4), using the conventional approach of comparing the estimated road users and agency benefits and costs in the "do-something" scenario, when the new road is rehabilitated, against the "do-minimum" scenario, involving the status quo, and the continuation of the current maintenance regime. The analysis calculated a Net Present Value (NPV) for Alternative 2, using a 12 percent discount rate, of US$358 million with an Economic Internal Rate of Return (EIRR) of 40.1 percent for the section.

The PAD also conducted a benefit-cost analysis for the construction of three one-stop inspection stations (OSIS). The economic benefits of the construction were identified as the following: ii) saving in crew time costs for transit traffic; b) saving in the value of cargo time for transit traffic, which is assumed at US$15 per TEU or per truckload per day; and c) pro rata reduction in the total amount of money paid to the traffic police, consistent with the reduction in the number of checkpoints. Using a discount rate of 12 percent, the economic analysis calculated a NPV of 1.71 million, an EIRR of 13.1 percent and a benefit-cost ratio of 1.37. For both components, the NPV was US$363 million with an EIRR of 53.2 percent, indicating that the project was a worthwhile investment.

The ICR (p. 24) performed the same benefit-cost analysis for the Mafinga-Igawa road rehabilitation as the PAD. The ICR calculated a NPV of US$342.7 million and an EIRR of 47.3 percent, which was close to the values calculated in the PAD. Although the EIRR was high, it was mainly a result of being based on the road construction. The ICR did not conduct an economic analysis of the OSIS and OSBP as these activities were not completed.

Operational efficiency:

The project experienced several implementation delays due to: i) lack of resources to finance the operation of DCC; ii) implementation of a new clearance process by the Ministry of Finance and Planning (MoFP); iii) change of design of the Mafinga-Igawa road to better account for projected demand; iv) design of some activities such as the OSBP only when project was already implemented; v) challenging contracting and supervision due to the length of the corridor; vi) limited capacity at TANROADS, the implementing agency; and vii) Covid-19 pandemic impacting the availability of supplies, and labor as well as reducing or delaying traffic along the corridor.

As a result, despite two project extensions totaling two years, several activities remained only partially completed when the project closed. These activities included the OSIS, the OSBP, the EMS pilot, 15 of the 20

health centers and the eight black spots improvements. Since project activities cannot be completed after project closure, a total of US$17.9 million of already disbursed Bank financing had to be refunded.

Even though the economic analysis indicated that the project was a worthwhile investment, most project activities related to the second and third PDO were not completed. As a result, the project's efficiency is rated Modest.

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	✓	53.20	94.40 ☐ Not Applicable
ICR Estimate	✓	47.30	78.00 ☐ Not Applicable

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

6. Outcome

Relevance of the objective was High. Efficacy was Modest due to low achievement under all three objectives, and Efficiency was Modest due to operational inefficiencies. Taking everything together, the project's overall outcome rating is Moderately Unsatisfactory.

a. Outcome Rating

Moderately Unsatisfactory

7. Risk to Development Outcome

The project risks to development outcome can be classified into the following broad categories:

Government commitment: According to the ICR (p. 38), the government of Tanzania remains committed to the project's objectives as demonstrated through ensuring that the country's roads are being maintained as well as continuing to implement unfinished project activities through its own financing. However, other corridor countries did not seem as committed. By mid-2017 it had been agreed by senior leadership of all corridor countries to implement a levy of US$0.30 on all transit consignments to corridor countries in order to

fund the operations of DCC. However, the levy was never signed and when the Bank financing expired, there were no resource to fund DCC's operations resulting in all staff being let go and operations being stopped.

Financing: As stated above, the government continues to finish incomplete project activities by mobilizing its own financing. Also, according to the ICR (p. 37). the sustainability of the Mafinga-Igawa road, the core investment of the project, is supported by the Tanzania's Road Fund, which provides stable revenues through collecting fuel levies and other road user fees. The fund uses these resources to ensure sustainable maintenance of the road network.

8. Assessment of Bank Performance

a. Quality-at-Entry

According to the ICR (p. 27), the project scope was based on a needs-assessment along the overall corridor length. Key issues that needed to be addressed included: trade facilitation, road safety, and the prevention of spreading HIV/AIDS.

The project design was complex and included a regional coordination between the countries of the North-South Corridor (NSC), especially Zambia, Malawi, Democratic Republic of the Congo (DRC) and Tanzania. Furthermore, the project design included a multi-sectoral approach and was innovative by mitigating the social costs of corridor expansion. The cross-sectoral cooperation was also complex including many government agencies such as the Tanzania Commission for Aids (TACAIDS), the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC), the Ministry of Home Affairs, and the DCC.

According to the PAD (p. 22), the Bank team identified the following risks as Substantial: i) the multi-country, and multi-sectoral approach of the project; ii) weak capacity in the implementing agency; and iii) weak governance in the implementing agency. The Bank tried to mitigate these risks by building consensus among the different stakeholders, providing technical assistance and training to the implementing agency. Even though the mitigation measures were adequate, they were not sufficient resulting in implementation delays and the stop of DCC's operations. The Bank team did not foresee the risk of the Ministry of Finance and Planning (MoFP) implementing a new clearance process, resulting in the stalling of works for many activities, and eventually not allowing for the completion of project activities.

The ICR (p. 27) stated that the civil work activities to be implemented were at different levels of readiness when the project was approved. While the feasibility, design and safeguards instruments for the Mafinga-Igawa road, the largest project activity had been prepared under a different Bank project, other project activities had largely not been designed when the project was appraised resulting in implementation delays. Also, according to the ICR (p. 29), the Mafinga-Igawa road design was changed during implementation since the initial design was found to be below standard, inconsistent with road usage, and based on incorrect data. Furthermore, the design of the One-Stop Border Post (OSBP) took three times longer as planned and included much more extensive services than originally budgeted resulting in delays and only part of the full design being implemented. Furthermore, no real agreement was reached with the traffic police regarding road blocks or the commitment to establish a funding mechanism to maintain the DCC. The Bank had not developed a back up plan should these negotiations fail.

The Results Framework had several shortcomings (see section 9a for more details).

Quality-at-Entry Rating
Moderately Unsatisfactory

b. Quality of supervision
According to the ICR (p. 36), the Bank team conducted bi-annual supervision missions and provided additional assistance when implementation bottlenecks came up. The Bank team worked closely with the government and tried to address implementation issues rather than cancelling weakly performing activities. Furthermore, the project benefitted from a low turnover in the Bank team (with only two Task Team Leaders during an 11-year period).

The Bank team remained flexible throughout implementation. For example, when project stakeholders wanted to incorporate Emergency Medical Services (EMS), the Bank approved a relocation of financing and also cooperated with the UK's Department for International Development to finance an impact evaluation of the EMS pilot system.

The Bank team restructured the project twice. Revisions to the Results Framework resulted in confusion since the wording of some indicators was revised, while the targets and the baseline remained the same even though they would have needed to be adjusted too (see section 9 for more details). Also, the Bank team's reporting on implementation progress was rather optimistic providing a rating of Satisfactory throughout much of the implementation period and only being downgraded to Moderately Satisfactory in December 2019 and remaining so until project closure. In addition, the project closed with moderately unsatisfactory rating for safeguards, and it is not clear how the Bank addressed the issue of fatalities related to contractors and ensured that such accidents did not repeat.

Quality of Supervision Rating
Moderately Unsatisfactory

Overall Bank Performance Rating
Moderately Unsatisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design
The project's theory of change and how activities were to result in the intended outcomes were overall clear, but not all the assumptions materialized and several causal linkages were not sufficiently substantiated. For example, while all the roads were constructed as planned, some related outcomes were not achieved; the outcome required at police road blocks was achieved, while the Bank-related activity was dropped.

The Results Framework had several shortcomings such as: i) all indicators reflected the movement of goods and did not measure the movement of people as stated in the PDO statement; ii) some indicators were not sufficiently clear and resulted in the project measuring something different than stated in the Results Framework. For example, PDO indicator 3 “reduction in total time required at police road blocks along the Dar corridor in Tanzania” was measured as “total time required at police road blocks along the Dar corridor in Tanzania”. Also, PDO indicator 4 “reduction in total time required for trucks to cross the Songwe/Kasumulu border crossing into Malawi” was measured as “time required for trucks to cross the Songwe/Kasumulu border crossing into Malawi”. Also, PDO indicator 1 “average time from ship readiness to unload to final destination for an imported container, on the corridor targeted by the project” was overly complex and measured the trip, the time between ship readiness to unload and the container leaving the port gate.

According to the PAD (p. 20), TANROADS was to prepare half yearly progress reports, with contributions from other stakeholders, and forward these to IDA, via the Steering Committee in the Ministry of Works (MoW), within 45 days from the end of the reporting period. These reports were to include information on physical progress of the various sub-projects and tracking of indicators included in the Results Framework. The reports were also to contain a summary of the status of the implementation of the Environmental and Social Management Plans (ESMPs) and Resettlement Action Plans (RAPs) in respect of the improvement of the physical infrastructure.

b. M&E Implementation

The project’s Results Framework was revised in December 2018. While some definitions of indicators were improved, others were made less clear. For example, original PDO indicator 1 ”reduction in average journey time for an imported container (TEU) from departure from port gate in Dar es Salaam to Kasumulu on the corridor” was revised to “average time from ship readiness to unload to final destination for an imported container on the corridor targeted by the project”. However, the original wording of the indicator only included the part of the journey from the port gate to the border. The revised wording included a much longer process including unloading from the ship, clearance, loading onto a truck, the journey from the port to the border crossing at Kasumulu, and the customs process at the border check point. Even though the process measured by the revised PDO indicator was much more extensive, the baseline and the target were not revised accordingly.

According to the ICR (p. 32), the indicators were not continuously monitored and updated throughout project implementation. Since the DCC stopped operating, corridor performance indicators were only assessed at project appraisal and closing through a survey. Furthermore, the unclear definition of some indicators and change in the Bank and project team, resulted in lack of clarity in regard to exact definition and methodology to be applied. Also, the project was not able to implement the Corridor Performance Monitoring System (CPMS) that the DCC was expected to use to report on corridor performance including traffic volumes, journey times along the corridor, and time spent at roadblocks or the border crossing).

According to the Bank team (February 28, 2022), the data collected by TANROADS was generally found to be adequate, readily available and with reasonable quality. However, other entities encountered difficulties to collect data relevant for the project.

c. M&E Utilization

According to the ICR (p. 32), while the Results Framework was used to track progress in implementing outputs, it was not used to inform decision making.

M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

The project was classified as category B and triggered the Bank's safeguard policies OP/BP 4.01 (Environmental Assessment), OP/BP 4.12 (Involuntary Resettlement), OP/BP 4.04 (Natural Habitats), OP/BP 4.36 (Forests), OP/BP 4.11 (Physical Cultural Resources), OP/BP 4.12 (Involuntary Resettlement).

According to the ICR (p. 33) Environmental and Social Impact Assessments (ESIAs) were performed on all sub-projects under components 1 and 2 including major civil works. The ESIAs concluded that all potential impacts could be mitigated through the implementation of Environmental and Social Management Plans (ESMPs).

The project faced several safeguard related issues: i) a contractor dumped debris in the wetlands which blocked water flow. Once the implementing agency and the Bank identified this issue, it was quickly addressed; ii) along the road corridor, pre-existing erosion started to threaten road construction. The project addressed this issue by hiring a geologist to conduct an assessment; iii) diversion roads built during construction of the road segment were not effectively attended which resulted in significant erosion affecting over 20 kilometers along the corridor.

According to the ICR (p. 34), when the project closed, not all safeguard related issue had been resolved. Resettlement Action Plans (RAP) were prepared for project activities potentially requiring displacement. The Bank continued to ensure that the project activities complied with safeguard policy OP/BP 4.12. However, at one of the black spot improvement locations, works started without the preparation of safeguard instruments by TANROADS and approval by the Bank even though people had to be displaced. The ICR (p. 34) stated that the Bank will continue to monitor activities until all RAP issues were addressed.

During project implementation, there were 24 fatalities along the Mafinga-Ogawa road, mainly due to road crashes. Out of these fatalities, two were related to contractors' employees or involved contractors' employees and/or equipment. A road safety assessment was conducted to improve the safety performance of the road over the long-term.

When the project closed, the overall safeguards rating was Moderately Unsatisfactory.

b. Fiduciary Compliance

Financial Management:

TANROADS was responsible for the project's financial management. According to the ICR (p. 35) the project's financial management performance was satisfactory throughout implementation. While financial management was reported on a regular basis it was at times delayed to low staffing levels at the internal auditing unit. The external auditor's opinion was unqualified.

Procurement:

According to the ICR (p. 28), during the last two years of project implementation, the MoFP implemented a new clearance procedure, which required all payments for development partner funded activities to go through a centralized system. All payments had to be cleared by the Ministry of Works and Transport and the MoFP. Due to lack of familiarity with this process by users throughout the government, payments to project contractors stopped. This caused significant delays in the delivery of critical project activities such as health clinics, the black spot improvements, the OSBP, OSIS, and the EMS pilot. These delays required the second implementation period extension and eventually led to the inability of completing several project activities.

According to the ICR (p. 29), procurement processes were complex given the length of the corridor. For the blackspot improvement TANROADS had to conduct a second procurement process splitting the eight locations into two geographically lots of four since no bids were received for the initial call since contractors were concerned about the magnitude of the work.

c. Unintended impacts (Positive or Negative)

NA

d. Other

NA

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Unsatisfactory	Moderately Unsatisfactory	
Bank Performance	Moderately Satisfactory	Moderately Unsatisfactory	Risk mitigation efforts not sufficient, project readiness resulting in implementation delays, design issues for some activities, weaknesses in Results

			Framework as well as overoptimistic implementation progress reporting, and safeguards issues, which affected the supervision rating.
Quality of M&E	Modest	Modest	
Quality of ICR	---	Substantial	

12. Lessons

The ICR (p. 38-40) included several useful lessons learned, which were adapted by IEG:

- **Regional projects requiring international agreements for a successful implementation benefit from a plan B in case no agreement is being reached**. In this project, even though the partner countries on the NSC had reached an initial agreement on establishing a levy on transit along the corridor to ensure the funding of the DCC, no official agreement had been signed when the project was approved. Implementing the project with a stop gap funding mechanism put the project at high risk and ended up negatively impacting project implementation.
- **Ensuring sufficient capacity at the implementing agency, especially when the same agency implements multiple Bank projects, is critical**. In this project, TANROADS was able to increase its capacity throughout implementation. However, with multiple Bank projects being implemented at the same time, TONROAD's capacity remained stretched.
- **A corridor project with multi-sectoral components can have a large impact. However, project implementation can be complex and requires adequate capacity at the implementing agency and intense Bank supervision.** This project went far beyond a typical roads project including health aspects as a key aspect in its design and raising road safety to the PDO level. Due to the complexity of the project, several stakeholders and the implementing agency lacking experience in health-related projects, implementation faced several challenges.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR provided an adequate overview of project preparation and implementation; it was sufficiently outcome driven and appropriately candid. It also included an adequate Economic analysis. The ICR provided a wide variety of useful lessons learned, which can be applied for future Bank projects in this area. The project's theory of change was adequately stated. However, the ICR would have benefited from stating which safeguard policies the project triggered and how they were mitigated. Also, the ICR did not state that the overall safeguard

policy rating at project closing was Moderately Unsatisfactory. Furthermore, the ICR did not discuss how the Bank addressed the issue of fatalities related to contractors and ensured that such accidents will not happen in the future. Taking everything together, the quality of the ICR is rated Substantial.

a. Quality of ICR Rating

Substantial