1. Project Data

<table>
<thead>
<tr>
<th>Project ID</th>
<th>Project Name</th>
<th>Country</th>
<th>Practice Area(Lead)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P079736</td>
<td>3A-CEMAC Transp Transit Facil (FY07)</td>
<td>Central Africa</td>
<td>Transport</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L/C/TF Number(s)</th>
<th>Closing Date (Original)</th>
<th>Total Project Cost (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDA-43370,IDA-46590,IDA-49870,IDA-51460,IDA-H3140,IDA-H3150,IDA-H5220,IDA-H7980,TF-10978</td>
<td>31-Jan-2013</td>
<td>492,579,301.49</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bank Approval Date</th>
<th>Closing Date (Actual)</th>
<th>IBRD/IDA (USD)</th>
<th>Grants (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>26-Jun-2007</td>
<td>28-Feb-2021</td>
<td>201,000,000.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>201,000,000.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>492,594,635.08</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Prepared by: Ranga Rajan Krishnamani  
Reviewed by: Peter Nigel Freeman  
ICR Review Coordinator: Victoria Alexeeva  
Group: IEGSD (Unit 4)

2. Project Objectives and Components

a. Objectives

The Project Development Objective (PDO) was, as stated in the Financing Agreement dated September 14, 2007 (Schedule 1, page 7) and the Project Appraisal Document (PAD, page ix):

Original PDO.
"To facilitate regional trade among the member states and improve the Central African Republic's (CAR), the Republic of Cameroon's and the Republic of Chad's access to world markets through: (1) improving the implementation of the Central African Economic and Monetary Community (CEMAC) customs union; and (2) reducing physical and nonphysical barriers along the Douala - Ndjamea and Douala - Bangui corridor."

Revised PDO.

The PDO was reformulated during the first Additional Financing (AF) on January 29, 2010 to read as follows:

"To facilitate regional trade among the member states and improve the CAR's, the Republic of Cameroon's and the Republic of Chad's access to world markets."

The revised PDO was maintained through the second and third AFs until project closure. It kept the intent of the objectives of the original PDO but did not describe how they were to be achieved. This review is accordingly based on the following PDOs.

1. To facilitate regional trade among the CEMAC member states.

2. To improve the CAR's, the Republic of Cameroon's and the Republic of Chad's access to world markets.

The AFs were to accommodate cost overruns and increased project scope. This review concurs with the assertion made in the ICR that changes to the outcome reflect better measurement of the project's achievements and not narrowing of its ambition. Therefore, this review is not based on a split rating of objectives.

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
   29-Jan-2010

c. Will a split evaluation be undertaken?
   No

d. Components
   This project was financed by the Bank with parallel financing from other donors (discussed below). The ICR (page 69) notes that the amount disbursed by other donors was unavailable when the project closed. Therefore, the figures for the actual cost of each component and the total project cost reflect the Bank's contribution between appraisal and closing.

   There were three components (PAD, page 8).
1. Roads and Railways Infrastructure Improvement. The estimated total project cost at appraisal was US$604.3 million (of this US$171.1 million was Bank-financed). The actual Bank financing for this component with the AFs was US$452.1 million. This component planned to finance works on the corridors linking N'Djamena (Chad) and Bangui (CAR) to Douala port (Cameroon). There were two subcomponents.

a. Road infrastructure improvement. Activities in this component were: (i) rehabilitating roads in Cameroon (85 kilometers (km), Chad (562km) and CAR (614 km); (ii) pluriannual performance-based, road maintenance in Chad; (iii) periodic maintenance of works in CAR; (iv) road studies and environmental and social management measures in the three countries; and (v) harmonizing and enforcing axle load control policies. The scope of this component was expanded substantially with new road rehabilitations in Northern Cameroon and CAR as a result of the AFs.

b. Railway infrastructure improvements in Cameroon. Activities in this subcomponent were: (i) renewal of rail tracks on the Batchenga - Ka’a rail section; (ii) support for rolling stock renewal; and (iii) implementation of environmental and social safeguards.

2. Transit and Transport Facilitation investments. The estimated cost at appraisal was US$47.8 million (of which, US$16.4 was Bank-financed). The actual Bank financing for this component was US$35.3 million. This component was planned to finance and support transit and transport facilitation interventions on the corridors.

Activities in this component were: (i) information technology investments in the Douala port platform to interconnect the actors in the port clearance process; (ii) investments in equipment for safety and security, technical assistance and computerization of the port; (iv) design and construction of sea/road intermodal interfaces in Ngaoundere in Cameroon; and (v) building a road station in Bouar. The scope of this component was expanded through the AF.

3. Customs and Transport Sector Institutional Strengthening and Capacity Building. The estimated cost at appraisal was US$27.5 million (of which US$13.6 was financed by the Bank). The actual Bank financing for this component with the AF’s was US$13.4 million. This component planned to finance institutional support for trade facilitation institutions at the regional level. There were three sub-components.

a. CEMAC Customs Union (CU) and national customs strengthening. CU refers to an agreement, established through trade pacts between two or more countries to remove trade barriers and lower or eliminate tariffs. Activities in this subcomponent were: (i) capacity building; (ii) developing risk analysis tools; and (iii) finalizing the installation of Automated System for Customs Data (ASYCUDA) in remote border posts.

b. Institutional support for transport facilitation institutions. Activities in this subcomponent were: (i) computerization and information technology linkages of major sector stakeholders; (iii) sector studies related to monitoring and evaluation of the transport system, sector strategies and implementing regional instruments at the country level; (iii) financing operating costs.

c. Management of the project. Activities in this subcomponent included technical assistance to the implementing entities in the three countries.
e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

**Project cost.** The estimated cost at appraisal was US$679.7 million. The actual final project cost was not available at closing.

**Project financing.** Total IDA credits/grants of US$201.0 million financed the project (US$147.10 million IDA credit to Cameroon, US$30.00 million grant to Chad and US$24.00 IDA grant to CAR). The Bank approved three AFs for the project. The final actual amount disbursed by the Bank was US$500.93 million (US$301.07 million to Cameroon, US$28.36 million to Chad, and US$171.50 million to CAR). About US$107.9 of the Bank financing was cancelled (this included US$78.5 million IDA credit to Cameroon and US$29.4 million to CAR).

There was parallel financing for complementary activities by the African Development Bank (AfDB), the European Commission (EC), the French Development Agency (AFD), and the CEMAC Secretariat.

**Recipient contribution.** The recipient contributions were planned at US$75.3 million at appraisal. Their actual contribution totaled US$85.6 million.

**Dates.** The Bank approved the project on June 26, 2007, and the project became effective on December 5, 2007, with an original closing date of January 31, 2013. The Bank approved three AFs for the project, which closed on February 28, 2021.

Changes made through the three AFs and eight project restructurings (including one Level 1 restructuring) listed in sequential order are as follows.

The changes made through the **first AF approved in November 2009**.

- The AF covered a financing gap of US$70.0 million for Cameroon and US$48.0 million for CAR, due to the higher- than-expected bid prices and funding shortfall from other donors.
- expanded the scope of road rehabilitation activities in Northern Cameroon and CAR.
- extended the closing date by two years (from January 31, 2013, to January 31, 2015), for completing the scaled-up activities.

The changes made through the **second AF approved in June 2011** are as follows.

- scaled up further project activities in Cameroon (rehabilitation of additional roads, reconstructing one key bridge in Northern Cameroon and road safety features), and revised the targets in view of the increased scope of project activities.
- extended the closing date by a year (from January 31, 2015, to January 31, 2016), for completing the scaled up activities.

The Bank supported the following changes **through the first Level 2 restructuring on October 2011**.

- The Government of Spain financed the "Plan Africa" when the Bank approved the second AF for the project. This plan financed an activity that was included in the second AF. This freed IDA funds, which were reallocated for funding additional road activities in Cameroon.
- reallocated funds from the "unallocated category" to improve roads and railway interventions.
The changes made through the **third AF approved for the project in July 2012.**

- The AF was intended to close a financing gap due to the cost overruns in CAR.
- scaled up road rehabilitation and trade facilitation investments in CAR (strengthening border customs services, computerization and implementation of a strategic customs plan, transit arrangements, strengthening CEMAC CU and financing studies pertaining to transport and transit conditions along the corridor). Targets were revised to reflect the increase in project scope.

The Bank supported the following changes through the **second Level 2 restructuring for the project in January 2016.**

- extended the closing date by three years from January 31, 2016, to January 31, 2019 for completing the ongoing activities in CAR.
- introduced specific implementation arrangements in Cameroon (discussed below).
- reallocated credit and grant proceeds in the three countries.

The **third Level 2 restructuring in December 2016**, reallocated credits and grant proceeds in the three countries.

The Bank made the following change through the **first Level 1 restructuring on October 2017.**

- The Bank changed the implementation arrangements for completing the rehabilitation works for a 205 km of road section of critical regional importance that was situated in a military conflict area in the Far North Cameroonian region. This change entailed the works to be executed on this road segment by the Army Corps of Engineers (ACE) under an Output-Based Disbursement Force Account Arrangement.

The **fourth level 2 restructuring in October 2017**, adjusted Cameroon's IDA credits and disbursements to allow for an advance payment to the Cameroonian ACE.

The Bank supported the following changes through the **fifth Level 2 restructuring in April 2018.**

- reallocated Chad’s initial grant to financing strategic studies, as two project works activities were no longer feasible due to the worsening fiscal situation in Chad.
- amended the results framework to reflect the changes described above.

The Bank supported the following change through the **sixth Level 2 restructuring in June 2018.**

- extended the closing date by 17 months in all three countries from January 31, 2019, to June 30, 2020, for completing the ongoing activities.

The Bank supported the following changes through the **seventh Level 2 restructuring in June 2020.**

- extended the closing date to the CAR component by eight months from June 30, 2020, to February 28, 2021, for completing the ongoing activities, that had been delayed due to the security situation.
- cancelled about US$78.5 of the undisbursed amount of the IDA credit to Cameroon.
The Bank cancelled an undisbursed amount of US$29.4 million for CAR through the eighth Level 2 restructuring in February 2020, as this amount was not utilizable, due to the prevailing conflict situation in the wake of the political turmoil of the December 2020 Presidential Elections.

3. Relevance of Objectives

Rationale

Regional context. The CEMAC countries in addition to Cameroon, Chad, and CAR, include the Republic of Congo, Equatorial Guinea and Gabon. Chad and CAR are landlocked, and their access to external markets is mainly through the N'Djamena - Douala and the Bangui - Douala international corridors, which link N'djamena and Bangui to Douala port by roads and railways.

At the time of appraisal, the security situation in Western CAR and Southwest Chad was acknowledged as volatile, with armed groups posing threats to goods in transit, and it was expected that there would be security considerations in Northern Cameroon. All through the implementation period, the security situation in the participating countries deteriorated due to factors such as, Boko Harem terrorist attacks, kidnapping of contractor’s employees, rebel attacks in Bangui and N'djamena, significant constraints on supervision activities and the assistance of special security arrangements in Northern Cameroon.

Intra-regional trade among CEMAC countries is less than 5% of the total trade. This is due to a combination of factors, including in addition to dominance of extractive oil, forestry, mineral and agricultural commodities in the countries’ trade mix, insufficient road infrastructure (CEMAC is one of the few regions on the continent where no state capital is linked to another capital by a paved road), high transport costs and delays in transporting goods to the landlocked countries, inefficient customs operations and transit arrangements, volatile security situation in western CAR, northern Cameroon, and southwestern Chad, and large number of legal and illegal road blocks and check points at border-crossing points. Consequently, the project activities aimed to secure surface links by road and rail to the two landlocked countries, while tackling on a regional scale the inefficiencies along the transport logistics chain, and endeavoring to achieve more effective implementation of the CU.

Regional and country strategies. The PDOs was aligned at appraisal with the CEMAC’s Trade and Transport program adopted in March 2006. This program comprised the following pillars: (i) implementing a regional institutional framework; (ii) harmonizing national regulations; (iii) providing regional interconnectivity of customs information technology systems; and (iv) implementing a trade and transport facilitation project on the transport corridors. The project design of the trade and transit components was aligned with the CEMAC countries Poverty Reduction Strategy papers. The New Partnership for Africa’s development identified the Cameroon - Chad and Cameroon - CAR corridor as short run infrastructure regional priorities.

The PDOs continue to be relevant to the regional strategy to date. The CEMAC Regional Economic Program for 2010 - 2025 underscored the need for establishing the common market, trade facilitation and building physical infrastructure for integration. The PDOs were also relevant to the proposed African Continental Free Agreement (May 30, 2019).
**Bank strategy.** At appraisal, the PDOs were well-aligned with the Bank's Regional Integration Assistance Strategy (RIAS) for Central Africa. The strategy underscored the need for supporting CEMAC region in the areas of regional integration through improving the CU, and trade and transport facilitation initiatives at the regional level. At the country level, the PDOs were aligned with the Interim Strategy Notes of Cameroon and Chad at appraisal. There was no Interim Strategy Note for CAR at that time.

The PDOs continue to be highly relevant to the Bank's regional strategy and the strategy for the participating countries. The Regional Integration and Cooperation strategy for 2018-2023, highlighted the need for: (i) developing regional infrastructure along the economically important trunk regional roads; and (ii) building human capital and connectivity. At the country level, the most recent Country Partnership Framework (CPF) for Chad for 2017-2020 reaffirmed the need to improve Chad's access to regional trade through the CEMAC Transport and Trade Facilitation Project. The focus area two of the CPF for 2017-2022 articulated the need for building resilient infrastructure for promoting inclusive growth. This focus area specifically articulated the need for reducing road transport cost between Douala and N'djamena, increasing rail freight between Douala and Ngoundere, and reducing dwell time in Douala port. The CPF for CAR is currently under preparation by the Bank.

**Prior Bank experience.** The Bank has financed previous projects at the country level in Cameroon, Chad and CAR. This was however the first of its kind regional project in Central Africa involving three countries. The project adhered to the Bank’s criteria for regional projects (having activities in more than one country). The project activities included tackling both hard infrastructure constraints (such as rehabilitation of the road and rail infrastructure), and soft infrastructure trade-facilitation aspects (such as customs activities aimed at expediting the freight movement from the Douala port to final destinations in Chad and CAR).

These activities were aimed at the development outcome of: (i) boosting interregional trade; and more important by, (ii) increasing landlocked Chad's and CAR's access to external markets through the Douala port. Given the clear links with development outcomes, the project reach was appropriate. Therefore, the relevance of the PDO is assessed as High.

**Rating**

High

4. Achievement of Objectives (Efficacy)

**OBJECTIVE 1**

**Objective**
To facilitate regional trade among the member states.

**Rationale**

**Theory of Change.** The outputs of activities such as, paving existing gravel roads, periodic maintenance, rehabilitating roads on selected sections of the Douala-N'Djamena and Doula-Bangui corridors, harmonizing and enforcing axle load policies at the regional level, and rehabilitating critical rail infrastructure, were expected to improve the crucial transport links between the participating countries. These activities along with
the outputs of trade facilitation interventions (such as simplifying customs procedures, strengthening national customs activities and interconnection of the customs systems between countries and implementing a new CEMAC transit regime, were expected to facilitate freight movement between countries, and thereby increase the scope for regional trade. The causal links between the project activities, their outputs and outcomes were logical, and the intended outcomes were fairly monitorable.

**Outputs (ICR, pages 16 - 20, and ICR Annex 9).**

*The following activities were completed as targeted.*

- The computerized single window (Guichet Unique pour le Commerce Exteriour, GUCE) was established. 65 trade clearance procedures were automated. Computer systems and equipment were provided to GUCE and employees were trained to use the e-GUCE platforms. Technical support was provided for deploying the e-GUCE at three border posts in Cameroon. With these changes, the cargo operators and transporters from CAR and Chad had an option to carry out transactions remotely without having to travel to Douala as was the case before the extension of e-GUCE services.

- Preparatory studies were completed for implementing interconnection under the CEMAC Trade and Transport Facilitation Program, and Information and Technology (IT) was provided to one customs post in Chad, two in CAR, and five in Cameroon.

- Customs officers and other transit actors in Chad and CAR were trained on the new transit regime.

- The three countries started publishing customs statistics publicly on their website.

- Seven bridges were rehabilitated (five in Cameroon and two in CAR). This exceeded the target of five bridges.

- In the rail sector, the Batchenka - Ka’a railway section (175 km) had been completed when the project closed. 12 railway bridges (including the Edea bridge) were rehabilitated, and light signals were installed at four level crossings. The availability of CAMRAIL’s locomotives increased from 76.90% at the baseline to 82.50%, exceeding the target of 80%. Forty commercial wagons were delivered. These results enabled: (i) restarting passenger traffic between Yaoundé and Douala: and (ii) improving the flow of traffic on critical sections of the network. The project also contributed to improving Cameroon railways financial results. The "ratio of staff costs to traffic revenues" decreased from 27.6% at the baseline to 24.4%, exceeding the target of 24%, and the debt service ratio of CAMRAIL increased to 1.60 relative to the target of 1.40.

- The time to release the customs bond from Douala port decreased from 63 days at the baseline in February 1, 2007, to 11 days when the project closed, easily exceeding the target of 30 days. The ICR (paragraph 27) acknowledges, however, that the performance on customs bond release was not solely attributable to project activities, but also due to the decision of Cameroon customs to release the bond once the cargo tracking system report confirmed that the shipment had crossed the border without any incident along the corridor. (In the past, Cameroon customs would only release the bond once the original document was signed by the destination customs and returned to the original customs office in Douala port, a process that required at least two months).

- The percentage of transit documents electronically transmitted by the Cameroonian customs to CAR and Chad increased to 50% as targeted. The ICR (paragraph 55) acknowledges that although the indicator was achieved, customs declaration is to date not electronically shared between national customs, as the CAR and Chad customs could only read the data transmitted by Cameroon customs, but not process documents.
These activities were not completed as targeted.

- The CEMAC new transit regime was not operationalized to use the ASYCUDA customs clearance procedures.
- The logistics platform for transit goods in Douala port, the upgrading of the multimodal logistics platform in Ngaoundere, the feasibility platform within Douala Port, and the geotechnical studies were not undertaken. The non-completion of these activities resulted in no improvement on the operational and transactional dwell times on the Douala port (discussed under the second objective).
- The activity associated with harmonization and enforcement of axle load control policies at the regional level was not completed.

Outcomes.

The activities described above were intended to facilitate regional trade among the CEMAC member countries by ensuring electronic transmission of data for goods in transit to Chad and CAR from the Douala port.

- 100% of customs operations for goods in transit were carried out electronically in Garoua Boulai, Kouserri, Douala and Moundou in Cameroon.

In sum, the indicators were output oriented and there is no credible evidence towards the intended outcome of facilitating regional trade among the member states. Further, given that several activities were not completed, the efficacy of this PDO is assessed as modest.

Rating
Modest

OBJECTIVE 2
Objective
To improve the CAR's, the Republic of Cameroons and the Republic of Chad's access to world markets.

Rationale

Theory of Change. In addition to the activities described above, activities such as communication between stakeholders on the port community, IT interfacing, installing port safety features, strengthening CEMAC CU and national customs and institutional support for trade facilitation, were aimed at improving the performance of the Douala port, and thereby improve CAR's and Chad's access to world markets through the port. The causal links between project activities, their outputs and outcomes were logical, and the intended outcomes monitorable.

The intended outcomes were predicated on the following assumptions: (i) the conflict zones in CAR and Chad would continue to be far from the project corridors; (ii) strong political commitment of the governments especially with respect to enforcing customs reforms; (iii) availability of qualified contractors for all types of works; and (iv) availability of donor funding for other sections along the two corridors.
Outputs.

In addition to the activities described above, the following activities were relevant to this objective.

- The IT master plan was completed at the Douala port as targeted.
- The project constructed socio-community related infrastructures along the localities crossed by the road works (such as, construction of thirty-three classrooms, 1,800 meters of protective walls for existing schools, twenty-two toilets and twenty-five water boreholes along the along the Ngaoundere - Garoua section in Cameroon (ICR, paragraph 56).
- The project funded road safety features. These included: (i) a diagnostic study of emergency services and assistance to victims of traffic accidents, a traffic accident database, and a road safety information system in Cameroon; (ii) awareness campaigns on road safety, a road safety database, training the staff working on the database, and the piloting of a communication campaign for the road safety week in Chad; and (iii) elaborating a road safety action plan, and awareness and preventive actions on road safety in CAR (ICR, paragraph 58).

The output of the following activities were below the targets.

- A total of 322 km of roads were rehabilitated on the two corridors. This was far below both the original and revised targets of 435 and 612 km respectively. The number of km of roads rehabilitated in the three countries: 109.2 km in Cameroon (target 320.2 km), 60 km in Chad (target 135 km), and 153 km in Chad (target 160 km).
- The share of roads in good and fair condition in the Douala - Bangui corridor increased from 53% at the baseline to 95.8%, exceeding the original and revised targets of 71% and 90%. The share of roads in good and fair condition in the Douala- N'Djamena corridor increased from 40% at the baseline to 81.3% (This exceeded the original target of 80% but was short of the revised target of 91%).
- The number of fixed checkpoints on the Douala - N'Djamena route were reduced from eight at the baseline in 2007 to four when the project closed, short of the target of two. The number of checkpoints (6) on the Douala-Bangui corridor however did not change relative to the baseline.

Outcomes.

The outputs described above were expected to reduce the average time taken at Douala port for unloading an imported container to final destinations in CAR and Chad.

- The average time taken at Douala port for unloading an imported container to final destinations along the Douala-N'Djamena corridor reduced from 32.5 days at the baseline in May 2011 to 18 days when the project closed. This exceeded both the original and revised targets of 29 and 27 respectively.
- The average time taken at Douala port for unloading an imported container to final destinations along the Douala-Bangui corridor reduced from 30 days at the baseline to 17.4 days when the project closed. This exceeded both the original and revised targets of 28 and 27 respectively.
- The variance in transit time for the movement of imported goods from the Douala port to final destinations in N'Djamena decreased to 4.3, exceeding the target of 6.3. The variance in transit time for the movement of imported goods from the Douala port to Bangui decreased to 3.9, exceeding the target of 5.1.
The average number of turnarounds on the Douala-N’Djamena corridor increased from 15 at the baseline in 2007 to 20.4 (an increase of 36% relative to the baseline), but not on the Douala-Bangui Corridor where an average increase of only 19.2 was achieved, as compared to the target of 20%.

The ICR (paragraph 32) acknowledges that although some of the outcome targets were achieved, they were not fully attributable to the project activities, as other donor interventions and other initiatives taken by the national authorities, including through bilateral mutual agreements on transit data exchange, complemented the World Bank’s civil works interventions.

In sum, efficacy of this objective is assessed as modest.

Rating
Modest

OVERALL EFFICACY

Rationale
Overall efficacy is assessed as modest, in view of the limited achievements of the project. For PDO 1, there were issues with the implementation of the CEMAC transit regime, which in turn contributed to the limited outcomes with transit trade. For PDO 2, most of the project-related activities were partially completed and some achievements were not fully attributable to the project activities.

Overall Efficacy Rating
Modest
Primary Reason
Low achievement

5. Efficiency

Economic analysis. A cost-benefit analysis was conducted both at appraisal and at closure for: (i) Road works activities; and (ii) Trade facilitation investments and institutional support for trade facilitation. These activities accounted for 84% of the actual cost.

Road works activities. A simplified version of the Highway Development and Management (HDM 3 and 4) was used for conducting the economic analysis for road activities. The costs included construction costs (but excluded supervision costs). The overall economic benefits were assumed to come from: (i) reduction in transport costs due to reduced port dwell time; (ii) reduction in uncertainty for transit travel; (iii) savings in travel time and vehicle operating cost due to the improved road infrastructure.

An economic analysis was not conducted for road works in Chad and CAR due to the security situation. The economic analysis was conducted for two road sections in Cameroon: The Mbere - Ngaoundere section and the Mbe - falaise segment of the Ngaoundere - Garoua section. For the Mbere - Ngaoundere section, the Net Present Value (NPV) at 12% discount rate was - US$14.44 million when the project closed (as compared to
a NPV of US$74.0 million at appraisal using the same discount rate). The ex-post Economic Internal Rate of
Return was 7.1% as compared to the ex-ante EIRR of 15.5%. For the Mbe - falaise segment of the Ngaoundere
- Garoua section, the NPV at 12% discount rate was - US$5.53 million when the project closed (as compared
to the NPV of US$56.0 million at appraisal. The ex-post EIRR was 7.5%, representing half of the ex- ante EIRR.
The substantial decrease in NPV and EIRR was due to the delays in road works, which were delivered almost
four years after the initial expected date. Further, the economic analysis considered only the construction
cost, and not the supervision costs which amounted to US$24.1 million (including US$9.4 million in Cameroon,
US$9.3 million in CAR, US$5.4 million in Chad and US$5.3 million for World Bank supervision costs).

Trade facilitation investments and institutional support for trade facilitation activities. The methodology
entailed comparison of the impact of the electronic and integrated clearance procedures on the port dwell time.
The project benefits were assumed to come from the improved transit procedures for Chad and CAR due to the
improvements in Douala port. The NPV at 12% discount rate was - US$72.36 million (as compared to the
NPV US$5.09 million at appraisal. There was no EIRR cited at closure. The negative NPV was due to the surge
in port dwell time between 2014 - 2018. and even though the rest of the activities in CAR and Chad were going
well, the negative impact brought about by the port of Douala's activities outpaced the positive economic
benefits of CAR's and Chad's components.

Administrative and operational shortcomings. There were several operational shortcomings during
implementation such as: (i) long delays in mobilizing enterprises on the ground (in some cases up to one year)
for bringing the critical equipment for civil works; (ii) poor qualification of the contractor's key operational staff
(and long delays to replace them); (iii) gaps in equipment needed as per the contract for works; (iv) delays in
preparing execution studies and plans (e.g. for the two main bridges and the road section PK00-PK35, which
were not completed 16 -20 months of the contract start); and (v) the very long delay in importing the quarry
explosives, and clearing imported equipment through the Douala port. These administrative shortcomings were
exacerbated by external factors over which the project had no control such as, deteriorating security situation in
the three countries, macroeconomic conditions, and the restrictions imposed in the wake of the COVID-19
pandemic. The combined effects of these factors led to much higher overall final project cost for road works.

Rail sector activities. Although the rail activities were completed successfully, they were delayed two to nine
times compared to the original deadlines and had substantive cost increases due to factors such as, low
capacity and bankruptcy of service providers (leading some to close the contracts which necessitated the need
for restarting the procurement process), unavailability of ballast laying equipment, uncontrolled occupation of
right-of-way, and other constraints linked to the operation of the railway line (ICR, paragraph 36).

Regional Implementing Agency. Regional and national coordination and engagement activities were affected
by low capacity and commitment levels of key stakeholders. CEMAC Commission was responsible for the
coordination of all facilitation facilities in the three countries. However, it did not play its designated role, due to
institutional weaknesses and lack of commitment to the project. The regional steering committee held its last
meeting in 2012 and after this there was no competent authority to guide the activities of the participating
countries (ICR, paragraph 49, page 43). These factors contributed substantially to the non-completion of the
new CEMAC transit regime.

In sum, the project did not demonstrate value for money for the Bank financing. The modest positive
achievement of the PDO results were achieved with substantive costs and over six years extension of the
project implementation period (100% extension of the original timeline). Despite several extensions to the
Efficiency Rating

Negligible

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:

<table>
<thead>
<tr>
<th>Rate Available?</th>
<th>Point value (%)</th>
<th>*Coverage/Scope (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appraisal</td>
<td>✓</td>
<td>15.50</td>
</tr>
<tr>
<td>ICR Estimate</td>
<td>✓</td>
<td>7.30</td>
</tr>
</tbody>
</table>

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

6. Outcome

The relevance of the PDO to the Bank's and the region's strategies is assessed as High. Efficacy of the two objectives is assessed as modest in view of the limited achievement of project activities. Efficiency is assessed as negligible, given the economic analysis and significant administrative and operational shortcomings during implementation. Taking these factors into account, overall outcome is assessed as unsatisfactory, reflecting major shortcomings in the project's achievements of its objectives and in its efficiency.

a. Outcome Rating

Unsatisfactory

7. Risk to Development Outcome

Government commitment. Cameroon has operationalized its road safety database, and the road agencies in CAR and Chad have allocated adequate financial resources for the road safety features implemented under this project (ICR, paragraph 104).

However, there is high risk to development outcomes, in view of the inadequate financing for road maintenance activities in all the three countries. Cameroon had appropriate funds for maintenance till 2011, and since then there has been no viable arrangement for funding road maintenance activities. This means that some of the road sections along the Douala- N'Djamena and Douala - Bangui corridors will need reconstruction in the short run. Likewise in CAR, the funds that can be mobilized by the Road Fund for road maintenance are low. Further, axle load limits are still not harmonized in the three countries. Although the
countries have road weighing stations, permitted axle loads level still differ from one country to another (ICR, paragraph 103).

There is high risk to development outcomes for activities associated with intermodal platforms and port efficiency. The failure of CEMAC to play a coordinating role in this project, has led the participating states to develop bilateral approaches to coordinating facilitation operations. Given the low commitment of the ministries of transport of the respective countries to trade facilitation operations, the sustainability of the few achievements made in this project could be undermined due to the lack of a regional trade facilitation mechanism (ICR, paragraph 105).

8. Assessment of Bank Performance

a. Quality-at-Entry

The analytical underpinnings of the project were sound and based on the following: (i) the Bank's Cameroon Transport Sector program; (ii) the results of the 1994 World Bank lending review study on regional corridors; (iii) the CEMAC Integrated Network Study (2003) which identified the priority corridors; (iv) lessons from rail concession projects, including the study on Cameroon railways; (v) the Bank's Diagnostic Trade Integration studies for Chad and CAR; and (vi) the Independent Evaluation Group's (IEG) World Bank Report on multi country operations (The Development Potential of Regional Programs: An evaluation of World Bank support of Multi country operations. December 19, 2006).

The Bank prepared this project based on the experiences from previous Bank-financed trade and transport facilitation projects - Trade and Transport Facilitation Project in Southeast Europe, Greater Mekong Area Regional Integration Program, and the ongoing East Africa trade and transport facilitation project. (However, these projects did not have comparable capacity deficiencies, security risks, and also probably had greater commitment from the government's involved). Lessons incorporated at design included: (i) involving the key public and private stakeholders during preparation (PAD, paragraph 33); and (ii) although each country project was implemented independently, they were focused on keeping the goal of regional integration. This flexible approach aided in customizing activities to the country context. Given that there parallel financing for complementary activities from other donors, the Bank prepared this project in close collaboration with AFDB, ADF and the EU (However, there is scant evidence that this made any difference).

Several risks were identified at appraisal such as, security risk as Chad and CAR are conflict-affected countries, political instability in CAR, vested interests opposed to customs reforms and fiduciary risks. Mitigation measures incorporated at design included, close monitoring of the security situation through consulting with local communities and adopting contingency planning for contractors, and country-based support for the customs reform agenda. With mitigation measures, the overall project risk was only rated as substantial and not high, given the large number of entities involved in the project activities (PAD, page 23).

There were substantial shortcomings in Quality-at-Entry. One, as indicated in Section five, costs were underestimated. This in combination with factors such as the fragile security situation in the countries, and shortfalls in funding from other donors, contributed to a financing gap and need for AFs for the project; Two, the implementation arrangements were not appropriate. CEMAC Commission was
responsible for the coordination of all facilitation facilities in the three countries. However, it did not play its designated role, due to institutional weaknesses and lack of commitment to the project. The regional steering committee held its last meeting in 2012 and after this there was no competent authority to guide the activities of the participating countries (ICR, paragraph 49, page 43). These factors contributed substantially to the non-completion of the new CEMAC transit regime. The commitment of the government's of the participating countries was mixed. This led to the limited completion of country-level activities. Three, there were shortcomings in M&E design (discussed in section 9); and four, the arrangements made at appraisal for M&E, fiduciary and safeguards compliance were not adequate (discussed in sections 9 and 10).

Quality-at-Entry Rating
Moderately Unsatisfactory

b. Quality of supervision
The World Bank held ninety-two field missions during the project lifecycle (ICR, paragraph 94). However, the missions held with CAR and Chad had to be either virtual or through Douala, because of the security issues in those countries. The practice manager undertook two missions in CAR to participate in high-level meetings (e.g. involving the Minister of Public Works and the Ministry of Transport) to help the client in solving implementation issues. The supervision team also made some field trips in the Boko Haram threatened areas in the Far Northern parts of Cameroon with special security arrangements (armored vehicles and military escorts). The supervision team provided implementation assistance to the ever-changing needs of the each country through eight Level 2 restructurings. This aided in responding to the security crises.

There were moderate shortcomings in supervision. One, given the problems experienced during implementation, the supervision was hampered by lack of continuity of leadership, with no less than eight experienced task team leaders during the project lifetime of seven years. Two, to address security issues, the supervision team chose an innovative option through entrusting the Army Corps of Engineers under an output-based force account arrangement. The team worked with the client to develop a replicable approach including the army to carry out works in conflict areas. The results obtained through this area were however poor, partly due to the Bank's lack of experience of intervention in conflict areas. and three, the Bank at best reactively resolved implementation issues such as, due to inadequate funding from other donors, delayed implementation of the Resettlement Action Plan, managing the severe accidents with the client (discussed in section 10a), and identifying the ineligible expenditures (discussed in section 10b).

Given the factors enumerated above, the ICR assesses the Bank performance during supervision as moderately satisfactory.

Quality of Supervision Rating
Moderately Satisfactory

Overall Bank Performance Rating
Moderately Unsatisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The number of fixed customs checkpoints for secured goods in transit along the Douala - N'djamena corridor and along the Douala - Bangui corridor was appropriate for monitoring PDO activities. The Douala port dwell time for the main importers was appropriate for monitoring PDO2 activities.

However, the M&E framework, with the extensive number of indicators could have been simplified, particularly in the context of the fragile context and weak implementation capacities of the Project Implementation Units. Furthermore, although the indicators were easily measurable, they were not straightforward in quantifying which outcomes were attributable to the project (given the parallel activities by other donors and other national initiatives not directly under the project's mandate). It would have helped to indicators pertaining to assessment of transport costs, trade volumes and passenger travel and road accidents on the selected segments of the corridors.

The CEMAC Secretariat was responsible for implementing the CU based on the data from the participating countries (PAD, paragraph 56). At the country level, the ministries in charge of public works were responsible for annual assessments of the road infrastructure condition on the corridors, the ministries of transport in charge of monitoring the implementation of trade facilitation measures, and the national customs authorities in charge of monitoring customs indicators (PAD, paragraph 57). The baseline data on indicators were derived from the Bank's Trade Diagnostic studies (PAD, paragraph 59).

b. M&E Implementation

Frequent adjustments had to be made to the results framework through the Level 2 restructurings to reduce the unrealistic number of indicators. Further, the targets for some indicators were revised upwards to reflect the increase in project scope through the AFs for the project.

There were difficulties in collecting and aggregating indicators data across the three countries (ICR, paragraph 70). This problem persisted all through the implementation period. The ICR notes that the data on indicators in the Results Framework were not updated, and always reported in a fragmented way that was not coherent. At the regional level, CEMAC was unable to play its coordination role, and at the national level there was poor performance in implementing M&E in the three countries.

c. M&E Utilization

The ICR (paragraph 72) notes that the outcome indicators provided limited support in monitoring infrastructure investments. Although the data were useful for the general supervision by the World Bank, its use at the regional level was limited. The ICR also notes that there is no evidence that the data was utilized to inform any strategy or policy changes by the Governments.
In sum, M&E is rated as modest given the limitations in design and shortcomings in implementation and utilization.

**M&E Quality Rating**
Modest

### 10. Other Issues

#### a. Safeguards

The project was classified as a Category B (partial assessment) project triggering four safeguard policies at appraisal: Environmental Assessment (OP/BP 4.01); Involuntary Resettlement (OP/BP 4.12); Natural Habitats (OP/BP 4.04); and Physical Cultural Resources (OP/BP 4.11). (PAD, page 35). The project classification changed to a Category A (full assessment) project during implementation.

**Environmental Assessment and Natural Habitats.** The direct environmental and social impacts of activities associated with road and rail sector interventions were expected to be limited, as these investments were along the existing sections. An Environmental Impact Assessment (EIA), an Environment Management Plan was prepared and publicly-disclosed at appraisal (PAD, paragraph 139).

The project classification changed from a Category B project to a Category A (full assessment) project under the World Bank safeguard policies, following the decision to entrust the implementation of a road segment in the far northern part of Cameroon to the Army Corps of Engineers. An Environment and Social Management Plan (ESMP) was prepared to address issues pertaining to safeguards (ICR, paragraph 76). The ESMP was further updated to include measures relating to COVID-19 prevention, with guidelines from the World Bank (ICR, paragraph 79).

The ICR (paragraph 82) notes that the safeguards performance was rated as moderately unsatisfactory for an extended period. This was due to a combination of factors including, the reforestation operation which did not take place as planned in Cameroon, and the Army Corps of Engineers did not fully comply with the requirements of the labor law regarding civilian staff, absence of an environmental and social audit in Chad and issues regarding waste management and disposal on the new customs building, as well as issues pertaining to the abrupt halt on the construction of the Baoro-Bour road in Chad. The ICR does not state that there was final compliance with the environmental safeguards.

The project reported six Occupational and Health and Safety (OHS) project incidents in Cameroon since the start of the works. Of these, two were classified as severe, two as serious and two as indicative. A safeguards corrective action plan was prepared and implemented (ICR, paragraph 77).

**Involuntary Resettlement and Physical Cultural Resources.** The PAD (paragraph 141) notes that road widening under the Cameroonian section would involve land acquisition along the Benoue National Park. The physical cultural resources safeguards were triggered as several tombs were to be moved. A Resettlement Action Plan was prepared and publicly-disclosed at appraisal to address resettlement and the safeguards on physical cultural resources (PAD, paragraphs 141 and 142).
The ICR (paragraph 81) notes that a Resettlement Policy Framework (RPF) was prepared during the restructuring in 2016, due to the security situation that arose in the project area. The RPF identified the need to recruit a Non-Governmental Organization to monitor the implementation of the complaint's management mechanism and social communication in the project area. A dedicated Third-Party Monitoring (TPS), a Grievance Redress Mechanism (GRM), and Works Independent Observatory (WIO) were implemented. The ICR (paragraph 81) observes that there were no implementation difficulties. The GRM functioned well and this mechanism made it possible to capture and process all the complaints (ICR, paragraph 84). The ICR, on the other hand, does not provide any details on whether there was land acquisition, involuntary resettlement or any issues with the safeguards on physical cultural resources.

b. Fiduciary Compliance

Financial Management. The Bank conducted an assessment of the financial management arrangements of the implementing agencies at appraisal. The Bank concluded that these arrangements were satisfactory (PAD, paragraph 114).

The ICR (paragraph 87) advises that the administrative, financial and accounts management functions were rated moderately unsatisfactory overall. However there were variations across the participating countries. In CAR, the regularity and quality of financial reporting was adequate and was rated as moderately satisfactory. In Chad, there was a shortcoming relating to insufficient mobilization of counterpart funds which resulted in an outstanding balance to contractors. In Cameroon, there were issues associated with significant uncleared matters pertaining to the railway component. This issue was only partly resolved when the project closed as there was still a remaining unjustified balance of about US$8 million. The Bank granted an exceptional extension to resolve the issue by February 28, 2021.

Procurement Management. The Bank conducted an assessment of the procurement management arrangements of the implementing agencies at appraisal. This assessment concluded that these arrangements were satisfactory (PAD, paragraph 114).

Nevertheless, the ICR (paragraph 88) reported that procurement management was rated as moderately unsatisfactory overall. The main issues across all countries were long delays in awarding contracts and problems in monitoring the execution of contracts during implementation. The ICR reports no case of mis-procurement.

c. Unintended impacts (Positive or Negative) ---

d. Other ---

11. Ratings
<table>
<thead>
<tr>
<th>Ratings</th>
<th>ICR</th>
<th>IEG</th>
<th>Reason for Disagreements/Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome</td>
<td>Unsatisfactory</td>
<td>Unsatisfactory</td>
<td>There were substantial shortcomings in Quality-at-Entry and moderate shortcomings in supervision.</td>
</tr>
<tr>
<td>Bank Performance</td>
<td>Moderately Satisfactory</td>
<td>Moderately Unsatisfactory</td>
<td></td>
</tr>
<tr>
<td>Quality of M&amp;E</td>
<td>Modest</td>
<td>Modest</td>
<td></td>
</tr>
<tr>
<td>Quality of ICR</td>
<td>---</td>
<td>Substantial</td>
<td></td>
</tr>
</tbody>
</table>

### 12. Lessons

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

1. **An appropriate regional institutional frameworks (such as a corridor authority) with appropriate powers and operational capacity is essential for regional projects involving two or more countries.** The regional authority for this project was highly inefficient, due to lack of capacity and funding. The absence of such an organization encouraged bilateral discussions and arrangements on regional issues, which could undermine the coordination of activities at the regional level.

2. **The technical design of transport projects should include activities for maintaining the proposed infrastructure.** For CAR and Chad, the maintenance of the proposed physical assets were not part of the project design. A lesson from this project that project design should ensure that there is an efficient budgeting mechanism and appropriate implementation capacity to maintain the physical road assets.

3. **Expanding the scope of the project to finance socio economic infrastructure for local communities along the road corridor helps in fostering inclusive outcomes.** The rehabilitation/construction of schools and markets in the project impact areas of the rehabilitated road in this project had an important impact of the living conditions of the population along the corridors.

### 13. Assessment Recommended?

No

### 14. Comments on Quality of ICR

The ICR is clear. It candidly discusses the problems encountered in a regional project where all the participating countries had security issues. The theory of change provided in the text provides a clear link...
between the project activities, their outputs and the intended outcomes. The theory of change also explicitly states the assumptions under which the intended outcomes are likely to be realized. The ICR draws reasonable lessons from the experiences in implementing this project.

There are minor shortcomings. The length of the ICR is almost three times the recommended length of 15 to 20 pages. The ICR could have benefitted from better editing. The ICR does not provide sufficient detail or clearly state whether there was compliance with the environmental safeguards.

a. Quality of ICR Rating
   Substantial