Report Number : ICRR0021231

1. Project Data

Project ID	**Project Name**	
P106872	ET-RSDP Stage IV APL (FY09)	
Country	**Practice Area(Lead)**	
Ethiopia	Transport & Digital Development	
L/C/TF Number(s)	**Closing Date (Original)**	**Total Project Cost (USD)**
IDA-45610	30-Jun-2016	206,283,546.84
Bank Approval Date	**Closing Date (Actual)**	
02-Jun-2009	30-Jun-2017	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	245,000,000.00	0.00
Revised Commitment	204,920,973.14	0.00
Actual	206,283,546.84	0.00

Prepared by	Reviewed by	ICR Review Coordinator	Group
Kavita Mathur	Victoria Alexeeva	Ramachandra Jammi	IEGSD (Unit 4)

2. Project Objectives and Components

a. Objectives

The Project Development Objectives (PDOs) were "to assist the Recipient in strengthening and increasing its road transport infrastructure and improving the reliability thereof" (Financing agreement dated Jun 5, 2009, page 7, and Project Appraisal Document para 22).

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
10-May-2017

c. Will a split evaluation be undertaken?
No

d. Components
The project included three components:

Component 1. Upgrading of Federal Link Roads (appraisal cost was US$253.2 million, actual cost was US$221. 4 million). This component financed: (i) upgrading of Mekenajo-Dembidolo Link Road (181 km asphalt concrete); (ii) upgrading of Welkite-Hosaina Link Road (121 km asphalt concrete); (iii) upgrading of Ankober-Dulecha-Awash Arba Link Road (89 km asphalt surface treatment); and (iv) construction supervision of these three roads.

Component 2. Ethiopian Roads Authority (ERA) Modernization and Sector Capacity Building (appraisal cost was US$3.1 million, actual cost was US$3.1 million). This component financed: (i) the preparatory study toward establishing a Highway Engineering Research Center; (ii) training for ERA staff in-country and overseas; (ii) technical advisory (TA) services to prepare and conduct harmonized “Comprehensive Capacity Building”.

Component 3. Network Management Studies (appraisal cost was US$4.4 million, actual cost was US$4.4 million). This component comprised technical assistance for road sector improvement, including: (a) maintenance needs assessment and updating of road financing study; (b) transport and poverty observatories (TPOs); and (c) preparatory studies to support ERA in the process of preparation of the next phase of Road Sector Development Program (RSDP) and Universal Rural Roads Access Program (URRAP).

Physical contingencies were US$26.1 million and price contingencies were US$21.5 million.

Revised Components.

The Ankober-Dulecha-Awash Arba road (89 km) was dropped in December 2015 due to delays in implementation resulting from procurement delays and poor performance of contractors. The two contracts for this road section were terminated and subsequently re-bid with the works financed by local resources (see Section 10-Procurement for more details). The ICR reports (para 10) that the dropped road section was under execution with funding from the Government of Ethiopia at the time of the ICR writing.

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

Project Costs: The project appraisal estimate was US$308.2 million (PAD, page i). It was subsequently revised to US$276.44 million during project restructuring in 2017 as a result of cancellation of the Ankober --Dulecha-Awash Arba road section (Restructuring Paper Report No. 27520). The actual total project cost is reported to be US$275.2 million (ICR, Tale 7.6, page 53) .

Financing: The original IDA commitment was US$245 million. Revised commitment was US$204.9 million. This reflected the exclusion of the financing of the Ankober- Dulecha-Awash Arba road section. On April 7, 2017, the Government of Ethiopia cancelled the amount of SDR24.12 million (equivalent to US$33 million) from the unwithdrawn amount of the Bank Loan (Restructuring Paper Report No. 27520). The actual financing was US$206.3 million.

Borrower Contribution: The actual Borrower contribution is reported as "0" (ICR page 2), compared to the appraisal estimate of US$63.2 million. The ICR does not provide any reason for the lack of borrower contribution.

Dates: The project was approved on June 2, 2009 and became effective on September 14, 2009. The original closing date was June 30, 2016. The project was extended by one year in 2015 due to implementation delays and closed on June 30, 2017. The extension was granted to complete technical assistance and civil works, which were delayed because of an extended rainy season and insufficient contractor management capacity (ICR para 11; Project Restructuring Paper 2015). The Ankober-Dulecha-Awash Arba road (89 km) was dropped during project restructuring in 2015 due to delays resulting from procurement and implementation issues; it was subsequently financed through local funds.

During project restructuring in 2017, the results framework was modified to reflect the cancelled road section and the dropping of the related outcome-level indicator of reduction in average travel time on the Ankober--Dulecha-Awash Arba road.

A split-rating assessment: IEG does not apply a split rating methodology as the PDO remains unchanged. However, the assessment takes into account the project administrative and operational inefficiencies that led to delays in completion of the activity within the project timeframe.

3. Relevance of Objectives

Rationale

This was the fourth phase of the Adaptable Program Lending (APL) financed by the World Bank since 1998. The four operations (Ethiopia-Road Sector Development Phase 1–4) were designed to address the main sector issues through a sequence of investments and institutional support. The objective of the APL series was to support the Government of Ethiopia (GOE) in increasing the efficiency of the road sector through sector reform, especially through capacity building and modernization of the Ethiopian Road Authority

(ERA) as a commercially oriented entity. The objectives of APL4 are in line with the preceding phases - to assist the GOE in strengthening and increasing its road transport infrastructure and its reliability.

The project objectives remain aligned with Focus Areas 1 and 3 of the Country Partnership Framework (FY18–FY22). The project objective of strengthening and increasing its road transport infrastructure and improving the reliability thereof supports objective 1.4 "Improved connectivity and enhanced regional growth and secondary cities" and objective 3.1 "Increased capacity and improved governance in service".

The project objectives also remain fully aligned with the Government of Ethiopia's Growth and Transformation Plan (GTP II), which sets targets for the expansion and quality of the road infrastructure: total road length is planned to increase from 110,414 km in 2014/15 to 220,000 km by 2019/20.

Rating
High

4. Achievement of Objectives (Efficacy)

Objective 1

Objective
To assist the Recipient in strengthening and increasing road transport infrastructure.

Rationale
According to the project's theory of change, the project activities supporting the improvement of physical infrastructure, institutional reforms of the road sector, capacity development of the Ethiopian Roads Authority, and the increase in knowledge on maintenance technology, road safety management, as well as understanding of traffic pattern for improved planning and management of the national road network – would lead to the achievement of the objective of "strengthening and increasing the road transport infrastructure and its reliability".

Outputs

Infrastructure
About 302 km of roads were upgraded from narrow gravel roads to standard asphaltic surface roads against the original target of 391 km. The Ankoker-Dulecha-Awash Arba road (89 km) was dropped and revised target of 302 km was achieved. This road was being executed (30% completion as of June 2017) with government funding.

Capacity building
The Highway Research Center study was completed. The project supported the establishment of the Highway Research Center for the Ethiopian Roads Authority. This center laid the foundation and framework for building a comprehensive road research center in the country. At project closure, the center was

functioning (ICR page 26). Soon after the establishment of the Highway Research Center, several research activities, including developing of low-cost pavement, the use of locally available materials for pavement, and works related to landslides were undertaken (ICR, para 17).

The road traffic census program and comprehensive road safety program were established as targeted, and streamlined under the Ethiopian Roads Authority's work program. A road traffic census was carried out on major corridors to better understand the composition of traffic and an analysis was carried out to prepare a comprehensive road safety program.

Several Ethiopian Roads Authority staff were trained through local and international trainings; three engineers were trained overseas at Master of Science (MSc) level, and three other staff received a Master of Philosophy (MPhil) degree. The ICR reports (page 27) that a comprehensive five-year sector capacity building program is under implementation based on the comprehensive capacity building assessment that was undertaken under the project.

Under the project, the Ethiopian Roads Authority undertook a maintenance needs assessment study. However, the GOE was slow in implementing the recommendations from the study, even after two years of study completion. In 2015, the Ethiopian Roads Authority adopted the first recommendation of the maintenance needs assessment study, i.e., the inclusion of the vehicle registration fee as part of the road fund revenue. Other recommendations remained to be acted upon leaving the road fund below the level needed for maintenance.

A study to establish the social and economic impact of road improvements was completed as planned, i.e, Transport and Poverty Observatory (TPO). The assessment covered four roads corridors, with a combined length of 667 km and an estimated population of about 1.65 million. It was carried out from 2012 to 2016 and included six quantitative surveys (ICR's Annex 10).

Outcomes

The outcome targets for increase in the share of roads and access were achieved or exceeded. These indicators largely reflected the overall Government program results in the road sector to which the project contributed. The consolidated monitoring did not reflect the cancellation of the 89 km road section from the project support that was being executed through local funds beyond project closure. Overall, the ICR reports that i) the percentage of roads in good and fair condition as a share of total classified roads increased from the baseline baseline 65% (2008) to 86% in 2017, exceeding the target of 80%; and (ii) the share of rural population with access to all season road increased from the baseline 20% (2009) to 57% in 2017, achieving the revised target of 57% and surpassing the original target of 30%. This includes distance between household homes and all-season roads in the Zone of Road's Influence (ZORI) areas.

There was about 250 percent increase in the number of public transport passengers and freight vehicles, according to the Transport and Poverty Observatory (TPO) impact assessment.

The outcome target of 1720 million Ethiopian Birr (ETB) for increasing road maintenance and financing needs was not achieved and reported at 1450 million ETB at project closure. The only recommendation implemented led to the increase of the road fund by 6 percent, below the targeted 7 percent (ICR, page 59).

According to the TPO impact assessment, the socio-economic impacts of the improved roads included better accessibility to markets and other social facilities by 42 percent; and an increase in job opportunities for men and women, of which 8.5 percent was the share of female employment opportunities. The upgraded roads are reported to have contributed to improved health of residents along the road corridors due to better accessibility through the reported increased number of health staff, availability of medical supplies and drugs, as well as reduced cost of health services in ZORI. These could have contributed to improved health by 13 percent in the project areas over the period.

The TPO impact assessment also indicated increases in income and employment generation along the improved roads, but as noted by the ICR (page 60), these cannot be stated with the precision required by the Results Framework.

Rating
Substantial

Objective 2
Objective
To assist the Recipient in improving the reliability of its road transport infrastructure.

Rationale
Outputs

Same as objective 1.

Outcomes

In 2017, the traffic on Mekenajo-Dembidolo increased by 330 percent and on Welkite-Hosaina by 773 percent after completion of the upgrading (no targets were set) (ICR para 16). The ICR reports (Annex 4) that the increase in traffic on Mekenajo-Dembidolo and Wolkite-Hossaina roads after upgrading can be attributed to their improved riding quality (improvement in roughness), which led to significant reduction in travel time and costs for the traffic using them.

The average travel time along the upgraded Mekenajo-Dambidolo road was reduced from 3 minutes per kilometer in 2009 to the targeted one minute in 2017 (ICR page 24).

The average travel time along the upgraded Welkite-Hosaina linked road, the travel time reduced from 2.5 minutes per kilometer in 2009 to the targeted one minute in 2017 (ICR page 24).

The waiting time for mini buses on Mekenajo-Dembidolo road was reduced from 112.6 minutes in 2012 to 23.5 minutes in 2016 (no targets were set) (ICR para 16).

According to the Transport and Poverty Observatory (TPO) report, the distance between household homes and all-season roads in the Zone of Road's Influence (ZORI) areas was reduced by 53 percent.

Rating
Substantial

Rationale
The project objectives of assisting Ethiopia in strengthening and increasing the road transport infrastructure and improving its reliability were rated substantial, as supported by evidence from the socio-economic impact study carried out under the project. A road section of 89 km was dropped from project support, and was being executed through government funds; the related outcome is likely to be achieved.

Overall Efficacy Rating
Substantial

5. Efficiency

Economic Analysis: At appraisal, an economic analysis was conducted using the Highway Design Model (HDM-4) to determine the economic benefits of roads planned for upgrading under the project. The benefit stream consisted of savings in vehicle operating costs and travel time. The cost comprised construction costs and net incremental road maintenance costs (PAD para 53). The Economic Rate of Return (ERR) for the three roads was 13.5%. Individually, the ERRs for the three roads were: Mekenajo-Dembidolo (181 km) 14.8%, Welkite-Hosaina road (121 km) 13.7%, and Ankober-Dulecha-Awash Arba road (89 km) 10.3%.

The ex-post ERR was 22.8%, higher than the appraisal estimate of 13.5% due to significant increase in traffic, savings in vehicle operating cost, reduced road maintenance cost, and travel time. The ex-post ERR was 21.5% for the Mekenajo-Dembidolo road and 24.4% for the Welkite-Hosaina road. The Ankober-Dulecha-Awash Arba road was not included in the economic analysis.

Cost Effectiveness: Significant cost overruns were experienced both on the procurement of works and services (ICR para 43). The road contracts awarded were completed before closing of the project, but overran their budget. The cost overruns averaged about 30 percent, due to poor performance of contractors, price escalation of construction materials, variations due to increase in quantities, claims arising from delay in the right-of-way (ROW) clearance, and shortage of construction materials (cement and fuel) (ICR para 23).

Operational Efficiency: The project was delayed by one year due to extended rainy season and insufficient contractors' management capacity (ICR para 11). Time overrun on the original contract time accounted for about 140% on average for the contracted civil works contracts. Overall, 60% of the project road works contracts were completed within the contract period and budget (ICR, page 28).

The 89-km Ankober-Dulecha-Awash-Arba road was dropped from the project support due to slow progress in procurement and construction. There were overall procurement delays, partly related to capacity shortages within the ERA and the Ethiopian construction industry to support the size of RSDP. This led to entry of new contractors and consultants with little or no experience of operating in Ethiopia or insufficient knowledge of the national procurement regulations and requirements. The delays were in review of prequalification applications, preparation of bid evaluation reports, and obtaining the World Bank's no-objection (ICR para 43).

Cancellation of the 89-km road from the project and significant cost overruns, including operational inefficiencies, detract from the results of the economic analysis, and the overall 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	✓	13.50	90.00 ☐Not Applicable
ICR Estimate	✓	22.80	0 ☑Not Applicable

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

6. Outcome

The relevance of the project development objectives is assessed as high. The project helped substantially strengthen and increase Ethiopia's road transport infrastructure and improve its reliability. However, the project efficiency is rated modest. Overall, the project outcome is moderately satisfactory.

a. **Outcome Rating**
Moderately Satisfactory

7. Risk to Development Outcome

The main risks to the development outcome are based on three dimensions: (a) inadequate funding of road maintenance as the current road fund revenues cover about 50% of the annual maintenance needs on the network; (b) challenges in retaining qualified staff at the Ethiopian Roads Authority (ERA) due to inadequate remuneration by the Government of Ethiopia; and (c) weak capacity of the newly created Engineering Research Center.

8. Assessment of Bank Performance

a. Quality-at-Entry

The project (APL4) incorporated lessons from previous APLs, which had PDO ratings of moderately satisfactory for APL 1 (P044613), moderately unsatisfactory for APL2 (P082998), and moderately satisfactory for APL 3 (P091088). The activities in each component were drawn from the original template for the Program (APL) and the critical gaps remaining from the preceding projects. The institutional activities provided opportunities to continue the capacity building of the Ethiopian Roads Authority (ERA). Following the World Bank guidelines, ERA undertook project preparation, including preparation of the engineering design and bidding documents, and safeguard management plans with participatory processes (ICR, para 29). Analysis of risks during the project implementation and their mitigation measures were appropriate. The overall risk rating of the project was moderate. Specific risks identified as high or substantial related to the macroeconomic framework due to the expansionary economic development program of the government and the emerging external debt trend.

The ICR reports (para 31) that while most of the project preparation studies were ready before project approval, the low quality of the design of the project roads was an issue, which affected some bid packages and affected implementation. The monitoring and evaluation (M&E) design and results framework had weaknesses (see Section 9).

Quality-at-Entry Rating
Moderately Satisfactory

b. Quality of supervision

The ICR reports that the project team offered extensive support on engineering designs, procurement, environmental, social, and financial management. Altogether, 18 supervision mission were carried out (on average, twice per year). However, the midterm review (MTR) was conducted in November 2014 – in the last quarter of the project implementation period. The MTR noted several shortcomings: (a) the civil work contracts were too large for domestic contractors to participate, whereas, the international contractors who won such contracts performed poorly; (b) the government had not implemented the recommendations from the Maintenance Needs Assessment and Updating of Road Financing study which was completed two years before (ICR para 33); and (c) the implementation of safeguards was not effective due to inability of contractors to implement the ESMP. The issues were partially addressed by project closure.

The ICR points to the fact that the Bank could have been more proactive in consultation with the GOE to increase road maintenance funds, and more persuasive on issues of safeguards implementation and advice to ERA on procurement activities, which could have minimized delays on civil works activities. Also, while the 89 km Ankober-Dulecha-Awash-Arba road was dropped in 2015, the results framework was modified only in 2017 to reflect this change.

Quality of Supervision Rating

Moderately Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

There were two M&E frameworks in the PAD—one for the program (APL1–APL4) and the other for the project (APL4). The ICR reports (para 35) that it was a challenge to differentiate between the indicators for the program and the project. The projects results framework included one PDO outcome indicator of reduction in average travel time linked to the PDO, and the rest of outcome-level indicators were mixed with intermediate level indicators (PAD, Annex 3). The baselines were provided, and targets set. The M&E design, however, lacked the indicators to monitor the achievement of institution building within the Ethiopian Roads Authority. The intermediate indicators, i.e., on contracts completed were not helpful in monitoring implementation progress (ICR, para 37).

A study to establish the social and economic impact of road improvements was incorporated in the project design. The consolidated arrangements for APL 1-4 Results Monitoring included the increase in household incomes and generated employment on targeted roads that would be measured by the impact study (PAD, Annex 3, page 57).

b. M&E Implementation

ERA carried out data collection regularly and also updated the indicators regularly. ERA's road asset management tool was able to capture progress and monitoring of the indicators. ERA also developed an information and communication technology (ICT) platform to enhance monitoring of road infrastructure projects (ICR para 36). The socio-economic study was completed that provided the evidence basis of the project achievements. Albeit some M&E design-related indicators (i.e., increases income and employment generation along project roads) could not be stated with the precision required by the Results Framework (ICR, page 60).

At the time of restructuring, the PDO indicator ‘average travel time for Ankober--Dulecha-Awash Arba’ was dropped and the target for intermediate indicator ‘roads rehabilitated’ was reduced to 302 km from the original target of 391 km. These changes were reflected in the results framework in 2017, although the Ankober-Delecha-Awash road sections (89km) was dropped in 2015.

c. M&E Utilization

The ICR notes (para 37) that ERA was able to monitor the civil works, because they were linked to specific outputs that were easy to measure. However, the indicator for monitoring contract performance (contract completed within contract period and time) was not useful in seeking remedies for persistent delays and cost overrun on civil works contracts. According to the ICR, more disaggregated indicators related to a specific task or stage in contract execution for example, time for completion of pavement structure and/or the amount disbursed, would have provided better information on delays during contract execution and would have allowed for remedial action.

M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

Safeguards Identified at Appraisal

The project was placed in Category A under the Bank’s environmental and social safeguard policies. The following four safeguards were triggered: Environmental Assessment (OP/BP 4.01), Natural Habitats (OP/BP 4.04), Physical Cultural Resources (OP 4.11), and Involuntary Resettlement (OP/BP 4.12).

The PAD (para 82) noted that the Environmental Assessment (OP/BP 4.01) policy was triggered because the planned upgrading activities included the new realignments in urban and rural areas of the Amhara, Afar, and Oromiya Regions. Since the upgrading of the roads as well as the new alignments would require land acquisition, Involuntary Resettlement (OP/BP 4.12) policy was triggered (PAD para 90).

The PAD (para 84) noted that the Natural Habitats (OP/BP 4.04) policy was triggered to ensure that the precautionary measures were included in the environmental contract clauses - particularly for the two bird species - the Ankober Serin and the Yellow Throated Serin found along the Ankober--Dulecha-Awash Arba Link Road.

The PAD (para 86) noted that the Physical Cultural Resources (OP 4.11) policy was triggered as physical cultural resources from Ethiopia's history may be encountered during the excavation of works for the roads.

Safeguards Implementation

Environmental Safeguards: An Environmental and Social Safeguards Unit was created in the Ethiopian Roads Authority (ERA). The purpose of this unit was to ensure that all contractors prepared site-specific Environmental Management Plans within 28 days of contract commencement (ICR para 40). The ICR (p.19) reports that there were delays in implementing the plan, which started more than 10 months after construction commenced, as against the contract requirement of a maximum of 28 days from contract commencement. It further states that ERA recovered from delays by addressing the mitigating measures, especially those included in the bill of quantities as paid items (replacement tree planting, grassing of cut slopes, and HIV/AIDs alleviation programs). HIV/AIDs alleviation program were implemented satisfactorily, according to the ICR (p.19).

The road slope protection by grassing to ensure that the grass is well rooted before contractors demobilize from sites was not done on time. For instance, in some sections on Mekenajo to Dembidolo road corridor, trees and grass that had been planted were yet to take root in many places well after the handing over of the project road. Flooding was widely observed in the Mekenajo-Dembidolo road corridor, where several coffee-growing farmers reported losing coffee trees and other perennial crops (ICR p.77).

Social safeguards: The project-affected people (PAP) were compensated following the Environmental and Social Impact Assessment (ESIA). However, the Regional Rural Authority (RRA) and lower level of governments (*woredas*) delayed the provision of land to the PAPs; the process of providing lands to PAPs by the RRA was slow, and *woredas* were not familiar with the Bank's safeguards compliance requirements (ICR para 41). According to the TPO study, complaints regarding compensation were raised in all road corridors. By project closing, 90% of the PAPs were relocated.The ERA worked closely with the *woredas,* and the remaining PAPs were relocated shortly after project closure (ICR, p. 19). The ICR did not report on the number of people that were relocated.

The ICR did not include a "compliance statement" on whether the project complied with the safeguards policies. Also, there is no discussion on Natural Habitats (OP/BP 4.04) and Physical Cultural Resources (OP 4.11) policies.

b. Fiduciary Compliance

Procurement: The ICR reports (para 43) that procurement activities were completed successfully. However, due to low procurement capacity there were significant delays in the review of prequalification applications, preparation of bid evaluation reports, and obtaining the World Bank's no-objection, resulting in time and cost overruns. For example, five out of the planned seven contracts were delayed and had cost overruns and the remaining two contracts (for the construction of Ankober-Dulecha-Awash Arba road section (89 km) had to be terminated due to protracted delays caused by procurement issues and poor performance of the contractors. In particular, according to the Project Restructuring Paper (2015), the design review exercise for Ankober-Dulecha-Awash road took much longer than anticipated at appraisal, and the procurement of the civil works started more than 37 percent into implementation, which subsequently affected the delivery schedule. The road was bid in two packages; the first package (Ankober – Dulecha) was re-bid due to an unsuccessful tender process during the first round of bidding in 2014. The second package (Dulecha – Awash) suffered excessive delays during its implementation leading to only less than 2 percent completed against 40 percent time elapsed in the contract by June 2015. Subsequently the contract was terminated.

The Bank's Ethiopia Office in collaboration with the Government of Ethiopia conducted a study on Procurement Value Chain Analysis to improve procurement and contract management capacity. The ICR reports (para 43) that the recommendations of the study were being implemented by the Ethiopian Roads Authority.

Financial Management (FM): The ICR reports (para 43) that there were no significant issues relating to the financial management of the project. Financial reports were provided on time. The ICR further notes that during implementation, the Ethiopian Roads Authority improved its transaction-level budget monitoring and internal audit oversight. It prepared action plans to address the FM related weaknesses. As the ICR states (para 44), all FM issues were addressed progressively to the end of the project

c. Unintended impacts (Positive or Negative)

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d. Other

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11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	---
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---
Quality of M&E	Substantial	Modest	Due to shortcomings in design and utilization of the M&E indicators.
Quality of ICR		Substantial	---

12. Lessons

The ICR (para 49) presented several lessons and recommendations. The main lessons are presented below with some adaptation of the language:

- **The road slope protection by grassing should be done on time to ensure the grasses are well rooted before contractors demobilize from sites**. For instance, in some sections on Mekenajo to Dembidolo road corridor, trees and grass that had been planted were yet to take root in many places even well after the handing over of the project road. Flooding was widely observed in the Mekenajo-Dembidolo road corridor, where several coffee-growing farmers reported losing coffee trees and other perennial crops (ICR p.77).

- **The involvement of multiple institutions that manage resettlement, land acquisition, and grievances requires early discussions and greater coordination.** Early discussion and consultations with the different agencies, such as Regional Road Authorities and lower level government - *woredas*, and with PAPs, over land acquisitions and resettlement could help to minimize delay during project implementation.

13. Assessment Recommended?

Yes

Please explain

The PDO ratings of the previous three APLs are as follows: moderately satisfactory for APL 1 (P044613), moderately unsatisfactory for APL2 (P082998), and moderately satisfactory for APL 3 (P091088). The field assessment of the four APL can provide important lessons on implementation experience and project impacts.

14. Comments on Quality of ICR

The ICR is outcome-oriented and the quality of evidence is adequate. It provided a good account of project activities and candidly reported on shortcomings. The ICR provides useful road sector-related Annexes with a review of costs in road construction in Ethiopia, procurement analysis as well as an overview of APL 1-4 performance and lessons. Annex 7 provides important insights and analysis of the overall APL program in Ethiopia. There are a few shortcomings:

- The ICR's rating for outcome is not in line with the OPCS/IEG guidelines - it rated the relevance of objectives as high, efficacy as substantial and efficiency as also substantial. Based on this assessment, overall outcome should be rated satisfactory and not "moderately satisfactory" as reported in the ICR.

- The cost tables are incorrect/confusing. On page 2, total project is reported as US$206.3 million while in Annex 3 the total project cost is reported as US$276.4 million. Annex 3 table on “Project Cost by component” is incorrect. Amount at approval shows price and physical contingencies as “0’ while these are recorded in actual cost. It is not clear what the actual project costs are by components and the total project cost. Also, the last cell reports the total actual cost as a percentage of approval cost as 287.4. This is incorrect.

- The ICR does not provide the reason why the actual Borrower contribution is “0” compared to the appraisal estimates of US$63.2 million.

- The ICR provided insufficient details on safeguards implementation, particularly for a category A project with resettlement. The project restructuring paper (2017) discussed in detail issues in safeguards implementation.

Overall, the ICR Quality is rated substantial due to the availability of multiple Annexes that comprehensively covered and analyzed issues in implementation and evidence.

a. Quality of ICR Rating

Substantial