



1. Project Data

Project ID P132750	Project Name SNRTP	
Country Nepal	Practice Area(Lead) Transport	
L/C/TF Number(s) IDA-53360,IDA-H8990	Closing Date (Original) 15-Jul-2019	Total Project Cost (USD) 83,519,545.70
Bank Approval Date 23-Dec-2013	Closing Date (Actual) 15-Jan-2020	
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	100,000,000.00	0.00
Revised Commitment	91,504,644.91	0.00
Actual	83,519,545.70	0.00

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2. Project Objectives and Components

a. Objectives

The Project Development Objective (PDO) as stated in the Financing Agreement (Schedule 1, page 5) and the Project Appraisal Document (PAD, 11) was:

" To enhance the availability and reliability of transport connectivity for rural communities in the participating districts "



This review regards the PDOs of enhancing availability and reliability of transport connectivity as complementary objectives. The review hence does not parse the objectives and treats it as a single objective.

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

07-Jun-2018

c. Will a split evaluation be undertaken?

Yes

d. Components

There were two components (PAD, pages 14 - 16).

A. Institutional Strengthening, Technical Assistance and Monitoring. The estimated cost at appraisal was US\$19.7 million. The cost of this component increased significantly due to the inclusion of three additional districts that were severely affected by the devastating earthquake of April 2015, which added about 500 kilometers (km) of roads under routine maintenance, 70 km of roads under periodic maintenance, and 22 meters of new crossing structures. The revised estimate of this component was US\$26.9 million. The increase in costs of this component was met by a combination of factors, including reallocation of funding between project components and counterpart funding. The actual cost was US\$22.1 million. This component planned to finance the following activities:

(i) Technical Assistance (TA) and training to the participating districts, the Department of Local Infrastructure Development and Agricultural Research (DoLIDAR), the Ministry of Federal Affairs and Local Development (MOFALD), and the National Vigilance Center (NVC); (ii) Beneficiary monitoring of the physical works financed under component B; (iii) TA for preparing technical audits and verification activities for component B activities; and (iv) financing analytical studies and technical preparation activities.

B: Civil works. The estimated cost at appraisal was US\$155.7 million. The revised estimate with the first restructuring of the project was US\$148.5 million. The actual cost was US\$127.5 million. This component planned to finance activities pertaining to upgrading/rehabilitating rural roads and maintenance of rural roads. This component consisted of two parts (or windows) of sequenced activities.

(i) Output based maintenance approach to support routine and periodic maintenance of roads and structures. Under this approach, release of IDA funds were linked to completing road maintenance activities, according to a pre-specified set of Maintenance Performance Indicators (MPIs), and verification of outputs by a third party.

(ii) Upgrading and rehabilitation. This window planned to finance the rehabilitation of roads and crossing structures.



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

Project cost. The estimated cost at appraisal was US\$175.4 million. The actual cost was US\$149.6 million. The actual cost was lower than expected, due to a combination of factors, including depreciation of the Nepali Rupee (NR) relative to the US\$ during implementation and reduction in project scope (discussed below).

Project financing. The project was financed by an IDA Grant of US\$72.0 million and an IDA Credit of US\$28.0 million. With this, the Bank financing for the project was US\$100.0 million. The amount disbursed at closure was US\$83.5 million. The difference between the appraisal estimate and amount disbursed was due to the depreciation of the NR relative to the US\$ during implementation. Other donors were expected to provide co-financing of US\$11.5 million. Financing from other donors did not materialize during implementation. There was parallel financing for complementary road sector activities from the United Kingdom Department for International Development (DFID).

Borrower contribution. Borrower contribution was estimated at US\$63.9 million at appraisal. The borrower contribution was revised upwards to US\$75.4 million, in the wake of lack of co financing from other donors. Their actual contribution was US\$66.0 million.

Dates. The project approved on December 23, 2013, became effective on April 2, 2014, and was scheduled to close on July 15, 2019. The project closed six months behind schedule on January 15, 2020.

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

The following main changes were made through the first restructuring on June 7, 2018 (Restructuring Paper).

- As indicated in section 2, the project scope (the number of km of roads under routine maintenance, the km of roads under periodic maintenance and number of crossing structures), even before the project roads were selected, was expanded substantially due to the inclusion of three districts that were severely affected by the devastating earthquake in April 2015). Costs of several project activities (such as, rehabilitation of roads, crossing structures and periodic road maintenance) that were based on limited available information had to be revised based on conditions on the ground. This resulted in reducing the targets for the more expensive rehabilitation and upgrading of major works (road rehabilitation, periodic maintenance of roads and construction of crossing structures) and increasing the targets for the less expensive routine road maintenance work (ICR, paragraph 21).
- Funds were reallocated between project components. and,
- The counterpart funding figures were revised upwards, in the wake o the lack of funding from other donors.

The following main changes were made through the second restructuring (Restructuring Paper February 15, 2019).

- Following the adoption of a new constitution, Nepal transitioned from a unitary to a three-tier governance structure comprising federal, provincial and local authority levels. The names of



implementing agencies were changed as part of this restructuring (The Department of Local Infrastructure and Agricultural Roads (DoLIDAR) became the Department of Local Infrastructure Development (DOLI) and the District Technical Offices (DTOs) became the Infrastructure Development Offices (IDOs).

- Fund were reallocated between components.
- The closing date was extended by six months from July 15, 2019, to January 15, 2020, to ensure completion of ongoing activities.

Split rating. There was a rather substantial reduction of targets for activities associated with rehabilitation of roads, periodic maintenance on roads and construction of crossing structures. Hence, this assessment is based on a split rating of objectives, when 41.5% of the total disbursement of US\$83.52 million was disbursed before the restructuring of 2018 and the balance 41.5% was restructured after restructuring.

3. Relevance of Objectives

Rationale

Country context. Nepal is one of the least developed countries in the world, with the second lowest Gross Domestic Product (GDP) in South Asia. Nepal's economy is agrarian, with a third of the GDP coming from the agricultural sector, which accounts for 64.5% of all employment in the country (World Bank data). Improving connectivity in Nepal was important in the country context, for ensuring affordable and safe transport networks socio economic growth and rural poverty reduction.

Sector context. Nepal's local road network was generally poor, with less than 20% of the network passable during the monsoon season (June to September), rendering many communities isolated. Local road linkages often only provided seasonal coverage due to frequent failures, inadequate drainage, low quality surfacing, haphazard road construction without appropriate engineering, and lack of crossing structures. District level Government officials, who were responsible for managing rural roads, were both under-resourced and capacity constrained. Improving transport connectivity and institutional strengthening of the district level road agencies was hence important to the government strategy.

Government strategy. The Priority Investment Plan (PIP) prepared in 1997 and updated for 2007, highlighted the importance of improving accessibility to the core strategic road network, by specifically bringing the population within two hours walk in the Terai (the southern plains bordering India), and four hours walk in the hill districts (north of the Terai), to an all-season road. The government's 14th periodic plan (2017-2019) and the 15th plan (2020 -2024) identified improving physical infrastructure, and improving accessibility as priorities.

Bank strategy. The PDOs were well-aligned with the Bank strategy. At appraisal, the Interim Strategy Note (ISN) of 2007, proposed that the emerging development agenda focus on public investments in remote areas for inclusive growth. The Pillar one on the Country Partnership Strategy (CPS) for 2014 -2018, underscored the need for "Increasing economic growth and competitiveness" through explicitly focusing on market access to the poor, and facilitating national and regional integration through improving transport connectivity. The Bank's current Country Partnership Framework (CPF) for 2019-2023, also highlighted poor transport connectivity as a top constraint for the business environment. The CPF aimed at addressing the persistent shortcoming in the strategic and local road networks through strengthened planning and road



management, as well as improving the quality and resilience of transport infrastructure including through constructing bridges.

Bank's prior experience. This project built on the two previous Bank supported rural transport infrastructure projects (Rural Access Improvement and Decentralization Projects). While these projects demonstrated the potential to achieve transformational results for rural communities, they also indicted the need for a more strategic approach for addressing road maintenance activities. Given that road maintenance was important for improving rural connectivity, the design adopted a sequencing approach, through focusing on maintenance of the core road network, before districts could access funds for rehabilitating roads and crossing structures.

Although the PDO was well-aligned with the government and Bank strategy, the level of ambition at which the PDO is pitched does not reflect/build on the previous engagement of Bank in rural transport projects. Given this, the relevance of the PDO is rated substantial.

Rating

Substantial

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To enhance the availability and reliability of transport connectivity for rural communities in the participating districts.

Rationale

Theory of change. The results framework was logical. The outputs of activities associated with rehabilitating rural roads, periodic and routine maintenance on rural roads and constructing crossing structures, were aimed at improving the condition of the rural road network. These outputs could plausibly be expected to aid in enhancing connectivity for rural communities in the participating districts. The sequencing of activities through focusing on road maintenance (through an output-based performance approach), before districts could access funds for rehabilitation of roads and crossing structures was likely to reinforce the intended outcomes. The technical assistance activities aimed at updating the district transport plans, annual maintenance plans, using beneficiary monitoring mechanism and enabling the key districts to use the material testing laboratories, were aimed at strengthening the institutional capacities of road sector agencies in the participating districts. These activities were likely to enhance the reliability of transport connectivity in the participating districts. The causal links between the project activities, their outputs and outcomes were clear, and the intended outcomes were monitorable.

Outputs (pages 5 -6 and pages 43 - 45).



- 1,048 km of rural roads were rehabilitated when the project closed, well short of the original target of 2,221 km.
- Periodic road maintenance was provided on 1,587 km of the core rural road network using the output-based maintenance approach at project closure. This was well short of the original target of 2,309 km.
- Routine road maintenance using the output-based maintenance approach was performed on 5,500 km of the district core network, exceeding the target of 3,067 km.
- 1,178 meters (m) of crossing structures on the district core road networks were rehabilitated, well short of the target of 4,500 m.
- Periodic maintenance was provided on 4,427 m crossing structures using the output-based maintenance approach, exceeding the target of 2,100 m.
- Routine maintenance was provided on 4,000 m of crossing structures, well short of the target of 5,850 m.

Technical assistance was provided by the International Labor Organization (ILO) for institutional strengthening of the respective sector agencies in the participating districts. These activities included:

- The Rural Transport Information Management System (RUTIMS) (a data repository for managing rural roads) was developed. The system was used for digitizing 13,955 km of the road inventory. The participating districts generated annual road maintenance plans using the system.
- 37 Local Road Users Committees (LRUCs) or Village Road Co-ordination Committees were formed for improving transparency and accountability, exceeding the target of 33. Material testing laboratories were established in 37 project districts, exceeding the target of 33.
- Transport Master Plans were prepared by the participating districts as targeted. These plans identified the District Core Road Network (DCRN) and prioritized the CDRN for road maintenance, road improvements (upgrading/rehabilitation) and constructing new roads.
- The Performance Assessment Tool (PAT) for contract monitoring was adopted in four participating districts. The ICR (page 44) notes that the tool could not be replicated in other districts due to the change in the implementing agencies in the wake of Federalism.
- Technical Assistance was provided to the participating districts for undertaking routine and periodic road maintenance.
- A Global Positioning System (GPS) was developed to help users to monitor field level activities. Occupational Safety and Health (OSH) guidelines were developed, including through awareness measures.
- 2,769 professional staff of the implementing agencies in the participating districts were trained in areas of safeguards and fiduciary management.
- Temporary employment was provided to about 2,700 maintenance workers organized in 650 Routine Maintenance Groups (RMGs). The workers included 64% women, 35 percent Dalits (historically disadvantaged groups) and 37% indigenous people. The project activities also provided 6.5 million person-days of employment through upgrading and maintenance of roads activities.
- About 88 site-specific Gender Action Plans were prepared during implementation. 148 skills training sessions were conducted for 1,855 participants across the project districts as part of the Vulnerable Community Development Plan (VCDP). 39% of the participants were women.

Outcomes.



- The project activities were expected to increase the percentage of population with access to an all-weather road (within two hours walking distance in the participating Terai districts, and four hours walking distance in the participating Hill districts). 12.17% of the population had access to an all-weather road in the project-intervened areas at project closure. This exceeded the target of 4%. In the Terai districts, the population within two hours walking distance to an all-weather road increased by 12.35%, whereas in the Hill districts it increased by 11.81%.
- The project activities were expected to increase the percentage of the core road network in the participating districts that were reported to be in "good" or "fair" condition. The ICR (paragraph 15) notes that this indicator was not measurable, as there was no baseline, and there was no monitoring system in place for the entire classified road network. To determine the project's contribution, an alternative approach was used for determining the condition of the 278 km of roads upgraded under this project. The sample comprised 20 roads (15 paved roads and five gravel roads) from 17 districts in both the Terai and Hills regions. The survey indicated that 79% of the roads rehabilitated under this project were in good or fair condition. The ICR provides no details on how the sample road section was determined.

Impact study.

An impact study was conducted near to the closing date to assess the project's contribution to the development outcomes. The methodology entailed a survey of 1,620 households and other stakeholders (communities, vehicle owners and drivers, transport associations and hotel operators from 21 of the 37 participating districts). The main conclusions of the study were:

- The average distance to reach an all-weather road decreased by 60% in the case of paved roads and 44% in the case of gravel roads in the participating districts. The average travel time to reach an all-weather road decreased by 61% in the case of paved roads and 42% in the case of gravel roads.
- The average travel time for the people to reach socio-economic centers was reduced by 24% in the case of paved roads and 15% in the case of gravel roads. The travel time to health services for pregnant women decreased by 18%. The average travel time to seek immunization services for children decreased by 21%.
- The vehicle operating cost decreased by 28% in the case of paved roads and by 17% for the gravel roads, while the trips by people in the participating districts to shops and restaurants increased by 63% and 47% in the case of paved roads and by 57% and 69% in the gravel roads.

Though there were clearly benefits from the road works, the evidence base is not clear whether the reduction of works against the original targets limited the overall impact of the project. Given that the original targets were not realized in a number of cases, efficacy is rated as modest.

Rating
Modest

OBJECTIVE 1 REVISION 1

Revised Objective



Although the PDO of enhancing the availability of transport connectivity for rural communities in the participating districts were unchanged, the targets for activities associated with rehabilitation of roads, periodic maintenance on roads and construction of crossing structures were revised downwards significantly.

Revised Rationale

Outputs (pages 5 -6 and pages 43 - 45).

In addition to the technical assistance activities provided by the International Labor Organization for the institution strengthening of the respective agencies described above, the following outputs were produced.

- 1, 048 km of rural roads were rehabilitated when the project closed, slightly short of the revised target of 1210 km.
- Periodic maintenance was provided on 1,587 km of roads using the output-based maintenance approach, exceeding the revised target of 1,400 km. The ICR (page 20) notes that with subsequent continuation of works by the Government from their own resources, as of June 2020, the total length of roads covered under periodic maintenance reached 1,601 km.
- Routine road maintenance was provided on using the output-based maintenance approach on 5,500 km of the district core network, as per the revised target.
- 1,178 m of crossing structures on the district core road network were rehabilitated when the project closed. This was slightly short of the revised target of 1,270 m.
- Periodic maintenance was completed on 4,427 m crossing structures, exceeding the revised target of 2,100 m.
- Routine maintenance was completed on 4,000 m of crossing structures, as per the revised target.
- Temporary employment was provided to about 2,700 maintenance workers organized in 650 Routine Maintenance Groups (RMGs). There were no targets for this indicator. The project activities also provided 6.5 million person-days of employment through upgrading and maintenance of roads activities.
- About 88 site-specific Gender Action Plans were prepared during implementation. There were no targets indicated for this activity.
- 148 skills training sessions were conducted for 1,855 participants across the project districts as part of the Vulnerable Community Development Plan (VCDP). 39% of the participants were women.

Outcomes.

- 12.17% of the population had access to all weather roads in the project-intervened areas when the project closed. This exceeded the target of 4%. In the Terai districts, the population within two hours walking distance from an all-weather road increased by 12.35%, whereas in the Hill districts, the population within four hours walking distance from an all-weather road increased by 11.81%.
- The project activities were expected to increase the percentage of the core road network that were reported to be in "good" or "fair" condition. The ICR (paragraph 15) notes that this indicator was not measurable, as there was no baseline, and there was no monitoring system in place for the entire classified road network. To determine the project's contribution, the condition of the roads (good or fair) roads upgraded under this project an alternative approach was used. This involved measuring the condition of the roads upgraded under this project. This covered a total length of 278 km of roads upgraded under this project. The sample comprised 20 roads (15 paved roads and five gravel roads)



from 17 districts in both the Terai and Hills regions. The survey indicated that 79% of the roads rehabilitated under this project were reported to be in good or fair condition.

Impact study.

An impact study was conducted near to the closing date to assess the project's contribution to the development outcomes. The methodology entailed a survey of 1,620 households and other stakeholders (communities, vehicle owners and drivers, transport associations and hotel operators), from 21 of the 37 participating districts). The main conclusions of the study were:

The average distance to reach an all-weather road decreased by 60% in the case of paved roads and 44% in the case of gravel roads in the participating districts. The average travel time to reach an all-weather road decreased by 61% in the case of paved roads and 42% in the case of gravel roads.

The average travel time for the people to reach socio-economic centers was reduced by 24% in the case of paved roads and 15% in the case of gravel roads. The travel time to health services for pregnant women decreased by 18%. The average travel time to seek immunization services for children decreased by 21%.

The vehicle operating cost decreased by 28% in the case of paved roads and by 17% for the gravel roads, while the trips by people in the participating districts to shops and restaurants increased by 63% and 47% in the case of paved roads and by 57% and 69% in the gravel roads.

Given that the revised targets were realized for the most part, efficacy was rated as substantial after restructuring.

Revised Rating

Substantial

OVERALL EFFICACY

Rationale

Efficacy is rated modest under the original targets given that works fell well short of the original design and this inevitably affected the number of people affected and the benefits they were expected to accrue. Key outcome targets do not provide sufficient evidence that the delivered works compensated for the reductions experienced in the project.

Overall Efficacy Rating

Modest

Primary Reason

Low achievement

OVERALL EFFICACY REVISION 1



Overall Efficacy Revision 1 Rationale

Efficacy is rated substantial, given that the revised targets for road rehabilitation, periodic maintenance of roads and construction of crossing structures were realized for the most part.

Overall Efficacy Revision 1 Rating

Substantial

5. Efficiency

Economic analysis. An economic analysis was conducted both at appraisal and at closure using the Highway Development and Management Model (HSM 4). The methodology entailed comparison of "with project improvement" with the alternative of "without the project" (that is, without road improvement and minimum road maintenance). The analysis was conducted for activities associated with road maintenance activities and rehabilitation of roads. These activities accounted for 89% of the estimated cost at appraisal and 85% of the actual cost. The project benefits were assumed to come from savings on vehicle operating costs and savings in journey time of passengers and goods. The Net Present Value (NPV) discounted at 12% discount rate was positive in all the project intervened sections. The ex post Economic Internal Rate of Return (EIRR) was slightly higher at 32%% as compared to the ex-ante EIRR of 30%, due to the higher than anticipated traffic flows on the project-intervened areas.

Administrative and operational issues. One aspect of the design was the maintenance component, where a relatively small sum of US\$918,450 was leveraged to encourage the Government to spend over US\$31 million towards addressing road maintenance activities.

There were however operational shortcomings during implementation. Road selection did not occur until one to two years into implementation. Despite the savings generated due to the significant depreciated of the Nepali Rupee relative to the US\$ during implementation, costs of several project activities were higher than expected at appraisal, due to a combination of factors including: (1) inclusion of three additional districts that were severely affected by the devastating earthquake of April 2015; (2) cost estimates of road rehabilitation activities were based on the assumption that the roads would be selected from a pool of roads used in a predecessor project that met specified quality standards; (3) the length of roads that required periodic maintenance was lower than envisaged at appraisal, because the road network in hill districts were mostly earthen roads requiring upgradation, instead of the relatively cheaper periodic road maintenance activities; (4) costs of routine road maintenance activities were higher due to the higher share of earthen roads in the hill districts; and (5) the actual costs of labor and construction materials originally based on costs of an earlier project, proved to be much higher during implementation. The underestimation of costs led to the reduction in project scope. Although the project scope was reduced, the activities were completed, at a relatively higher standard than anticipated at appraisal and the project closed just six months behind schedule.

In sum, efficiency is rated as substantial, given the economic justification for the project.



Efficiency Rating

Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	30.00	89.00 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	32.00	85.00 <input type="checkbox"/> Not Applicable

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

6. Outcome

The relevance of the PDO to the government and Bank strategy is substantial. Efficiency is substantial. A split rating was used to assess the project outcome, in view of the rather significant reduction in project scope (US\$41.52 million before restructuring in 2018 and US\$42 million after restructuring, with the total disbursement of US\$83.52 million). Efficacy was rated modest under the original targets and substantial under the revised targets.

Taking into account the ratings indicated above, the outcome rating was moderately unsatisfactory under the original targets, and satisfactory under the revised targets. Weighing these two ratings with the respective shares of Bank disbursement before and after restructuring, and adding the two weighted outcomes yields an overall rating of moderately satisfactory ($0.50 \times 3 + 0.50 \times 5 = 4$).

a. Outcome Rating

Moderately Satisfactory

7. Risk to Development Outcome

Institutional and financial risks. The risk to sustainability of project outcomes is high, given that it is unclear whether the provincial districts will continue to adhere to the various best practice measures introduced under the project for planning, procurement and implementation of works (ICR, paragraph 48). It is also not clear that the participating districts will continue to accord high priority to road maintenance activities, that are clearly needed for sustainability of the outcomes. According to the clarifications provided by the team, in terms of process, the funds for maintenance are provided by the respective tier of government, such as, for example, the provincial governments for the provincial roads and village municipalities for the village roads. The team also clarified that the provincial governments and the village



municipalities also receive funds for the federal government. The team clarified that these resources are expected to be available for maintenance of road under the respective tier of government (including for the roads rehabilitated under this project).

8. Assessment of Bank Performance

a. Quality-at-Entry

The project was prepared based on the experience from the prior Bank-financed in Nepal - Rural Access and Decentralization Project - and from the experiences of a Bank-financed decentralization project in Mexico, and rural projects in Vietnam and Peru. Lessons incorporated at design, included a sequencing approach, with road maintenance activities preceding road rehabilitation activities, field-based support to oversee district level implementation, and focusing on relatively small value interventions to maintain roads along existing alignments within available right of ways (PAD, pages 15 -16). As indicated in section 5, a notable aspect of the design was the road maintenance component, where a modest amount of about US\$918,450, was leveraged to encourage the government to spend more than US\$31 million, towards routine and periodic road maintenance activities. Several risks were identified at appraisal, including weak implementation capacity of district institutions and governance risks. Mitigation measure incorporated at design, included support for beneficiary monitoring, physical verification of maintenance works and training district agencies on technical aspects. Even with mitigation measures, project risk was rated as High. (PAD, page 19). The implementation arrangements were appropriate, with a Kathmandu-based Central Project Management Unit (PMU) in the Department of Local Infrastructure Development and Agricultural Roads (DoLIDAR) responsible for coordination, and two regional MUs to supervise district-level implementation. (PAD, page 30). Appropriate arrangements were made at appraisal for safeguards and fiduciary compliance (discussed in section 10).

There were nevertheless shortcomings at Quality-at-Entry. One, individual roads were not selected until one to two years after project effectiveness. Two, as discussed in section 3, the design was overly ambitious. The costs of several project activities, which were based on the cost estimates of the prior Bank-financed rural roads project were high than expected at appraisal. This necessitated significant reduction of targets: and (ii) there were also M&E design shortcomings (discussed in section 9).

Quality-at-Entry Rating

Moderately Satisfactory

b. Quality of supervision

Twelve supervision missions were conducted during the project lifetime, implying twice a year supervision missions. The ICR (paragraph 46) notes that these missions were supplemented by multiple technical



visits. The supervision teams were multi-disciplinary with an appropriate skill mix. According to the information provided by the team, the continuity of leadership was maintained, with three Task Team Leaders (TTLs) during the project lifetime. The team also clarified that the TTLs were based in Nepal Country Office, except during December 2016 to December 2017, when the project was managed by a TTL based at Headquarters. The supervision team responded proactively in identifying problems and challenges. For instance, the ICR (paragraph 32) notes that the project faced severe governance challenges including, the sudden transfer of senior project management staff, inconsistencies in project supervision procedures, gaps at the sub project level in the technical quality of construction works, procurement and safeguards compliance, and delay in the operationalization of the grievance redressal system. The supervision team responded to these issues through developing an action plan in February 2017, focusing on enhancing supervision and auditing, enhancing the use of Information Technology tools (IT) for effective monitoring and additional checks on safeguards compliance. The supervision team aided in managing the transition arising from the transfer of frontline Project implementation responsibility from the District Development Councils (DDCs) and District Technical Officers (DTOs) to the Provincial governments.

Quality of Supervision Rating

Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The project adopted a three-tiered framework structuring for Monitoring and Evaluation at the project, district and sub-project levels to measure outputs and outcomes. The two key outcome indicators - the percentage of population within two- and four- hours walking distance in the participating Terai and hill districts respectively from an all- weather roads and the percentage of the core road network in the participating districts that were reported to be in "good" or "fair" condition - was appropriate for monitoring project performance. However the second indicator had no baseline figures. The M&E design also envisioned an impact survey at closure. The Results Framework moreover did not have any specific indicators for measuring the outcomes of capacity building activities provided under the auspices of this project. The ICR (paragraph 31) notes that the systems for measuring and monitoring key project development indicators had not been established at the start of implementation.

b. M&E Implementation



The ICR (paragraph 31) notes that the M&E was generally implemented as designed and regularly monitored and reported. However, one limitation was the absence of a system to regularly monitor and measure the condition of the core road network for assessing performance against the second PDO indicator. The project hence had to rely on a substitute measure, which was the condition of a sample set of roads upgraded under the project. The ICR (paragraph 36) notes that detailed monitoring during implementation assisted in decision-making and in adjusting response to the changing circumstances (including revising targets for activities such as, upgrading roads and crossing structures). The ICR observes that the trimester reports were shared with the Bank regularly and most of the project documents were made available in the public domain.

c. M&E Utilization

The ICR (paragraph 37) notes that the M&E was utilized for monitoring project performance. The ICR (paragraph 37) notes that the implementation of M&E improved with the operationalization of project management tools in the latter years of the project.

In sum, M&E is rated as modest, especially in view of the shortcomings at design.

M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

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

Environmental impacts. Environmental and Social Management Plans (ESMP) were prepared to address the site-specific impacts for each project. The ICR (paragraph 39) notes that in addition to the ESMP, the following plans were also produced during implementation: (i) Voluntary Land Donation Impact Mitigation Plan (VLDP): (ii) Gender Action Plan (GAP) and (iii) Vulnerable Community Development Plan (VCDP).

The ICR (paragraph 40) notes that environmental safeguards performance at the end of the project was rated as "moderately satisfactory". According to the information provided by the team, there were no adverse impacts on natural habitats, forests, physical cultural resources, and indigenous peoples.

Involuntary Resettlement. A Resettlement Action Plan (RAP) was prepared during implementation. Social safeguards performance was rated as moderately satisfactory during implementation (ICR, paragraph 41). The ICR notes that the project activities involved land acquisition, involuntary resettlement, disturbance of



livelihood activities and loss of common property resources, as well as 921 residential structures and 1371 minor structures and 31 people's livelihoods were affected due to the project activities. The ICR (paragraph 41) notes that livelihood losses were compensated as per the provisions of the ESMP. A total of 11,033 Project Affected People (PAP) lost land from road construction activities. Of these 9,263 were compensated in line with the RAP. The remaining PAP were absent from the sub-project locations and not yet claimed their compensatory payments. Hence the project has deposited the compensation amount in an Escrow Account. According to the information provided by the team, the remaining PAs were to contact their respective Infrastructure Development Offices (IDOs) for payments. The team also clarified that following the outbreak of COVID -19, the IDOs were closed and have not to date been able to implement the payment arrangements.

b. Fiduciary Compliance

Financial management. An assessment of the financial management capacity of the implementing agency was conducted at appraisal. The financial management arrangements of this project were similar to the financial management arrangements of the prior Bank-financed project, which had been rated as moderately satisfactory. These arrangements were nonetheless deemed to be satisfactory (PAD, paragraph 47). The ICR (paragraph 43) notes that financial management was rated as moderately satisfactory. The ICR (paragraph 43) notes that there were delays in payment to the consultants, delays in depositing liquidated damages, delays in establishing implementation offices at the provincial level. The ICR notes that these issues were rectified and there was significant improvement in financial management. The audit reports, which were deemed to be acceptable to the Bank and unqualified were submitted, albeit with some delays.

Procurement. As assessment of the procurement management capacity of the implementing agency, conducted at appraisal, concluded that the procurement arrangements were satisfactory. The procurement risks identified at appraisal, included the risks due to the relatively large number of procurement entities, the scattered nature of activities, and the significant procurement workload needed to execute many small sale works. The mitigation measures, included establishing two separate Project Management Units (PMUs) with dedicated procurement specialists and training procurement official to the central and field-based staff. The ICR (paragraph 42) notes that procurement management was rated as moderately satisfactory during implementation. The Bank's Integrity Vice President conducted an administrative inquiry, which substantial allegations of corruption involving certain officials, who were removed from the Project (ICR, page 11). The team, however, confirmed that there were no cases of mis-procurement.

c. Unintended impacts (Positive or Negative)

d. Other

11. Ratings



Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Moderately Satisfactory	Based on a split rating applied due to the reduction in scope, efficacy is rated modest under the original targets.
Bank Performance	Satisfactory	Moderately Satisfactory	There were shortcomings in Quality-at-Entry
Quality of M&E	Modest	Modest	
Quality of ICR	---	Substantial	

12. Lessons

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

1. The design elements need to directly address the key challenges associated with road maintenance activities. Given that maintenance of rural roads often receives inadequate attention due to lack of prioritization and inadequate funding in developing countries, the project adopted a "maintenance first" approach, through sequencing project activities with road maintenance activities taking precedence over road rehabilitation activities. Further, the design leveraged a small amount of IDA financing to mobilize several multiples of government spending towards road maintenance.

2. The estimated costs at design needs to be updated at appraisal. In the case of this project, the selection of roads was made two years after effectiveness. The costs of these activities proved to be much higher than expected at appraisal. This necessitated rather significant reduction in targets.

3. The design of rural roads project should aim at providing jobs for local communities. In this project, routine maintenance groups were mobilized for routine maintenance predominantly from the local areas near each road and trained for providing routine maintenance. In this project, the impact study showed that 2,700 maintenance workers from local communities received temporary employment. This included 64% women and 37% indigenous people.

13. Assessment Recommended?

No

14. Comments on Quality of ICR



The ICR is well written, concise and adheres to the recommended length of 15 pages. The theory of change provides a good analysis of the links between project activities and how these activities were aimed at the intended outcomes. The ICR candidly acknowledges the issues concerning monitoring and evaluation, and draws sound lessons from the experience of implementing this project.

However, the ICR contains few details on the continuity of leadership and environmental safeguards. The ICR could also have included a summary of the methodology followed in administering the impact survey, and could have provided more information under the relevance section. Even though the indicator targets changed considerably during implementation and the scope reduced rather significantly, the ICR did not use a split rating as required by the guidelines in assessing the outcome.

a. Quality of ICR Rating
Substantial