



1. Project Data

Project ID
P125584

Project Name
PK: KP Emergency Roads Recovery Project

Country
Pakistan

Practice Area(Lead)
Transport & ICT

Additional Financing
P147713,P149311

L/C/TF Number(s)
TF-10112,TF-15895,TF-16992

Closing Date (Original)
30-Jun-2015

Total Project Cost (USD)
26,100,000.00

Bank Approval Date
16-Jul-2011

Closing Date (Actual)
12-Dec-2015

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	26,100,000.00	17,100,000.00
Revised Commitment	26,100,000.00	17,100,000.00
Actual	26,100,000.00	17,100,000.00

Sector(s)
Rural and Inter-Urban Roads(73%):Social Protection(18%):Public Administration - Transportation(9%)

Theme(s)
Conflict prevention and post-conflict reconstruction(100%)

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2. Project Objectives and Components

a. Objectives

Project Portal Project Development Objective

The Project Development Objective (PDO) was “to enable the population along the Project corridor to benefit from year round improved access and mobility through reconstruction of priority damaged roads and bridges in the conflict hit areas” (Emergency Project Paper, paragraph 28).



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

No

- c. Components

Component 1: Infrastructure Rebuilding (appraisal cost US\$6.42 million; actual cost US\$24.61 million). This included reconstruction of a 10.5 km section (Kanju to Sharif Abad) of provincial highway S3-B (Madyan to Chakdara). This component would also finance associated relocation of utilities, land acquisition and resettlement.

Additional financing increased the scope of the project from the original section of 10.5 km of provincial highway S3-B to a total length of 40.9 km. Two link roads of 9.4 km were added, bringing the total road length constructed under the project to 50.3 km

Component 2: Project Management (appraisal cost US\$0.61 million; actual cost US\$1.01 million). This included support for: (a) contract administration and construction supervision consultant services; (b) environmental & social safeguards consultant services; and (c) other project management activities through the financing of incremental operating costs. The cost increased because of the enlarged scope of the project.

- d. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project Costs: The actual cost of the project was US\$25.62 million, compared to the appraisal estimate of US\$8.0 million. The reason for the increased cost was due to the additional financing mentioned in Section 2c

Financing: The project was financed through a Multi Donor Trust Fund. The original commitment amount was US\$8.0 million. The first additional financing was in December 2013 for the amount US\$9.1 million and the second in April 2014 for the amount US\$9.0 million. The actual disbursement was US\$25.62 million.

Borrower Contribution: There was no planned or actual Borrower contribution.

Dates: The first and the second phases of the project closed on schedule on June 30, 2014 and June 30, 2015. The third phase closing was delayed by four months and closed on October 31, 2015.

3. Relevance of Objectives & Design

- a. Relevance of Objectives

The PDO is highly relevant in the post-conflict context. The Pakistan Country Partnership Strategy (CPS) for FY10-13 recognized that conflict and insecurity represented major obstacles to economic development and poverty reduction. According to the CPS, the persistence of conflict in Khyber-Pakhtunkhwa (KP) Province and FATA posed a threat to some of the most vulnerable and marginalized populations in Pakistan, while also challenging economic stability across the country (paragraph viii).

At appraisal, the project was fully aligned with the CPS, falling under both Pillar 3 – ‘Improving Infrastructure to Promote Growth’ and Pillar 4 – Improving Security and Reducing the Risk of Conflict’. Under Pillar 3, the CPS sought to improve efficiency and reliability of the transport and logistics network (CAS, page 31) and under Pillar 4, the CPS supported increased responsiveness and effectiveness of the state. Under this pillar the CAS states that the persistence of conflict in KP and FATA poses a threat to some of the most vulnerable and marginalized populations in Pakistan, while also challenging economic stability across the country. The absence of employment opportunities and inadequate livelihoods in FATA and KP has created a favorable environment for opportunistic militant groups whose economic incentives for potential recruits greatly outweigh available opportunities. Investments in transport (roads) is critical.

The project objectives remained aligned with the current CPS for FY15-19, which seeks to address sources of fragility and conflict, with an emphasis on restoring trust between citizens and the Governments of KP, FATA, and Baluchistan (paragraph 35 and Annex XV). However, this CPS is more selective than the previous one and did not include a specific focus on the transport sector. Nonetheless, addressing transport issues remains highly relevant in KP Province.



Rating

High

b. Relevance of Design

The project design logic was sound and realistic, the objective was clearly stated, and the project activities were relevant to the project development objectives. The original project design, through the reconstruction of damaged priority roads and bridges in the conflict hit areas, was expected to contribute to year round improved access and mobility. The additional financing was also directed at the rehabilitation and reconstruction of essential roads in the project area and expected to contribute to year round improved access and mobility. However, the ICR noted that while a “2016 post-construction (traffic) estimate based on actual traffic counts” was close to the traffic forecasts in the Emergency Project Paper for 2015 and 2016, larger variations for some vehicle types, notably many more passenger buses, fewer cars/jeeps/vans and 2-axle trucks but more 3-axle and 4-axle trucks (Annex 3, paragraph 7). In light of the greater presence of large trucks using the new roads in association with the lack of plans for future road maintenance, the ICR expressed concern about a “reduced benefit streams (from the roads) in the longer term” (paragraph 60). This conclusion raises questions about the relevance of the original design for the roads focusing on reconstruction because it should be no surprise to find out that improved roads would attract heavier vehicles placing a greater burden on the roads.

Annex 2 of the Emergency Project Paper for this operation provided a results framework although it did not show any results chains to indicate how project inputs and intermediate outcomes would be achieved (e.g. through the project’s implementing institutions) and hence how the project’s objective would ultimately be achieved.

Rating

Substantial

4. Achievement of Objectives (Efficacy)

Objective 1

Objective

Enable the population along the Project corridor to benefit from year round improved access and mobility through reconstruction of priority damaged roads and bridges in the conflict hit areas.

Rationale

Outputs

The targets for road reconstruction were achieved. The project reconstructed 40.9 km of S3-B provincial highway (Kanju to Chakdara) and further 9.4 km of link roads. Following road sections totaling 50.3 km were reconstructed (ICR, para 11).

- 10.5 km Kanju to Sharif Abad (original project)
- 5.0 km Sharif Abad to Dadahara (funded from exchange rate depreciation and other savings)
- 17.7 km Dadahara to Shamozaï (first Additional Financing)
- 10.7 km Shamozaï to Chakdara (second Additional Financing)
- 8.0 km Shamozaï to Zarkhela link road
- 1.4 km Shamozaï to Shamozaï Bridge link road

Outcome

The ICR noted that reconstruction of the whole 40.9 km section of highway S3-B improved year round access and mobility for people living in the area. The link roads further extended the access from road S3-B to Shamozaï Bridge over the Swat River (para 40).



- The civil works involved widening the road from a mostly 3.5 meter wide single lane to a 7.3 meter wide 2-lane single carriageway asphalt road with appropriate side and cross drainage structures including two bridges leading to year round access (ICR, Annex page 3). According to the traffic study, there was a substantial increase in vehicle speeds—the speed for 2-axle trucks increased by 83 percent (from 30 km/hour to 55 km/hour); 3-axle trucks by 67 percent (from 30 km/hour to 50 km/hour); and passenger buses by 63 percent (from 40 km/hour to 65 km/hour) (ICR, Annex page 5).
- According to the focus group discussions conducted in 2015 as a part of the customer satisfaction study, participants reported significant savings on transporting fruit and other local farm produce. Other economic impacts such as more transport service providers, lower transport costs, more new roadside businesses and an increase in average land prices and rents were also identified (ICR, para 46).
- According to the consumer satisfaction survey, the most important non-economic uses of the road are access to health facilities (major purpose for 32 per cent), to markets (major purpose for 30 per cent) and to schools (major purpose for 22 per cent) (ICR, para 56).

Rating
Substantial

5. Efficiency

At appraisal, the Economic Rate of Return (ERR) was estimated at 29.9 percent for the first phase. The project benefits included reduction in vehicle operating costs and estimated savings in travel time due to increase in travel speeds for different types of vehicles. Costs included estimated capital costs, annual operation & maintenance costs and periodic maintenance costs. Traffic growth was estimated at 5 percent per year. The ERRs for Phase II and III were together estimated at 28 percent.

The estimated construction cost of US\$ 26.1 million for 40.9 km at appraisal was US\$ 638,000 per km. Construction of 50.3 km with this budget reduced it to approximately US\$ 519,000 per km, a 19 per cent reduction. National competitive bidding (NCB) for Phase I and using the 2011 Consolidated Schedule of Rates (CSRs) for Phases II and III improved cost effectiveness. The project also experienced cost savings during implementation due to: (a) variations in exchange rate, (b) lower compensation for affected persons, and (c) a cost de-escalation clause in the contract and efficiency savings - resulting in the construction of 50.3km compared to the planned 40.9 km.

The ICR does not provide an estimate for an ex-post ERR but reports that ERRs and benefit-cost ratios estimated at the appraisals of Phases I, II and III would be valid at project completion because estimated benefits were judged to be the same as at appraisal and actual costs were lower compared with estimates at appraisal. Nevertheless, there was no estimate of the ex-post ERR.

On the basis of the evidence available in the ICR, efficiency of the project is rated as 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	✓	29.90	0 <input checked="" type="checkbox"/> Not Applicable
ICR Estimate		0	0 <input type="checkbox"/> Not Applicable

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



6. Outcome

The relevance of objectives is rated high and that of design is substantial. The achievement of the objective, which enabled the population along the Project corridor to benefit from year round improved access and mobility through reconstruction of priority damaged roads and bridges in the conflict hit area, is assessed as substantial. Efficiency is rated modest because no estimate of the rate of return was made for the project at completion. The project was assessed in this Review as having moderate shortcomings and its overall outcome is therefore rated as moderately satisfactory.

- a. Outcome Rating
Moderately Satisfactory

7. Rationale for Risk to Development Outcome Rating

There is a substantial risk that project benefits may not be sustained over time due to inadequate maintenance and/or vehicle traffic that is too heavy for the roads as designed (i.e. high rate of traffic growth and the presence of heavy multi axle trucks) which would result in potentially rapid deterioration of the roads. The annual road maintenance allocation by Pakhtunkhwa Highway Authority (PkHA) is less than one-third of the requirement estimated by the Bank Team (ICR, para 39). The annual road maintenance plan does not have provision for routine maintenance and there is also no routine maintenance system in place.

- a. Risk to Development Outcome Rating
Substantial

8. Assessment of Bank Performance

- a. Quality-at-Entry

The Government of Khyber Pakhtunkhwa (GoKP) and Pakhtunkhwa Highway Authority (PkHA), had identified rehabilitation of the severely damaged single lane provincial highway S-3B as a high priority project which served the local population of some 300,000 people on the right bank of Swat river and had requested Bank's assistance. The Bank, in response to the post-conflict situation in the FATA, established a Multi-Donor Trust Fund (MDTF) with development partners to support the implementation of a program for reconstruction of damaged infrastructure. The Bank was swift in responding to GoKP request for financing and an Emergency Project Paper (EPP) was prepared (ICR, para 61). An Environmental and Social Screening and Assessment Framework (ESSAF) was prepared in accordance with the OP 8.0 for emergency operations. The project activities (road reconstruction) were ready for implementation as the selected consultants and the contractor were working on a road project (USAID supported Madyan to Kanju section) in the vicinity of the project site. They were therefore familiar with the local conditions including the security situation and had plant and equipment nearby (ICR, para 13).

Quality-at-Entry Rating
Satisfactory

- b. Quality of supervision

The Bank team maintained a good working relationship with the borrower during implementation and was responsive to the client's needs by provided additional funding for the project through two additional financing. Design surveys to establish baselines and targets for the new sections were carried out.

The serious security situation during much of the implementation period was a challenge for supervision, especially of safeguards. There were also deficiencies in monitoring of physical progress and performance. The ICR reports that innovative ICT based monitoring methods specified in the Emergency Project Paper (EPP) could have been used along with formal independent monitoring of physical works (para



21). This was not done; this shortfall should have been corrected during Bank supervision. The Mid-term Review (MTR), one of the Grant Agreement requirements, was not conducted and there were no Aide Memoires as records of decision and action points (ICR, para 62).

Quality of Supervision Rating

Moderately Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. Assessment of Borrower Performance

a. Government Performance

The Government of Khyber-Pakhtunkhwa (GoKP) and Pakhtunkhwa Highway Authority (PkHA) had placed high priority on the project and used their own resources to commission surveys and prepare designs for the rehabilitation of the whole 88km of the Madyan to Chakdara road. Assistance was secured from USAID and the Government of Pakistan for the reconstruction of approximately 43 km of S-3B from Madyan to Kanju. GoKP and PkHA and from the MDTF for the remaining sections. GoKP supported the PkHA in preparation for the project by setting up a PMU (ICR, para 64). The main shortcoming of the GoKP was its reluctance to devote staff and resources to social and environmental compliance. The Deputy Director (Environmental & Resettlement) was withdrawn by the PkHA from the PMU for five months, but the ICR does not provide the reason.

Government Performance Rating

Moderately Satisfactory

b. Implementing Agency Performance

Initially, the lack of familiarity of the Government of Khyber-Pakhtunkhwa and Pakhtunkhwa Highway Authority (PkHA) with Bank procedures and compliance requirements was a concern. Nevertheless, the PMU rapidly learnt about Bank fiduciary and safeguards requirements. It worked competently leading to timely implementation of the project and cost savings. Each phase of the project was completed relatively quickly and within budget enabling reconstruction of additional road lengths. However, the ICR reports that PkHA appeared to be reluctant to adopt lessons from the project on institutionalizing environmental and social safeguard practices adopted by this project (ICR, para 65).

Implementing Agency Performance Rating

Moderately Satisfactory

Overall Borrower Performance Rating

Moderately Satisfactory

10. M&E Design, Implementation, & Utilization

a. M&E Design

The monitoring of the physical works was the responsibility of the supervision consultant under the supervision of the PMU (ICR, para 16). The M&E design included outcome indicators to measure the achievement of project objectives with respect to access and mobility. However, PDO indicator 1 in the results matrix ("decrease in vehicle operating costs") was not the right indicator to measure improved mobility. On the other hand, PDO indicator 2 in the results matrix (increase in operating speeds of commercial traffic) was appropriate.



However, targets were set only for the rehabilitation of the original 10.5 km of roads in the project.

b. M&E Implementation

Design surveys to establish baselines and targets for the new sections (funded under the two additional financing) were carried out in 2013 under a single consultancy which measured and recorded data for the entire 40.9 km road. No distinctions were made between the individual sections. The baselines and targets for the three combined sections became the baselines and targets for the project. The ICR reports that this may have come about as a result of the Bank team not being able to visit the project site, and erratic communication with the Highway Authority because of the uncertain security situation, or a misunderstanding of monitoring methodology and procedure.

The ICR team requested the client to commission a post-construction VOC, speed and traffic volume study for the whole reconstructed 40.9km section. The study was conducted in February 2016 by the supervision consultant on a basis comparable with the study carried out in the 2013 assessment. The findings from the study are reported in the ICR and show that the reduction in average vehicle operating costs for commercial vehicles and an increase in average vehicle speed were achieved.

c. M&E Utilization

The M&E utilization is not reported in the ICR.

M&E Quality Rating
Substantial

11. Other Issues

a. Safeguards

At appraisal the project was assigned Environmental Category B because the rehabilitated project roads would follow the existing alignment. Following two safeguards policies were triggered: Environmental Assessment (OP/BP 4.01), and Involuntary Resettlement (OP/BP 4.12).

Environmental Safeguards

The potentially negative environmental and social impacts of project activities were related to soil erosion, slope stabilization, drainage, air quality deterioration, improper disposal, contamination of soil and water, loss of natural vegetation, damage to wild- and aquatic life, displacement of population, disturbance to people, disruption of traffic, and impacts on the health and safety of general public and workers (ICR, para 24). To address the potentially negative environmental and/or social impacts associated with the projects, an Environmental and Social Screening and Assessment Framework (ESSAF) was prepared in accordance with the OP 8.0 for emergency operations at appraisal. The ESSAF was shared with the Frontier Highway Authority (FHA) and disclosed locally by the FHA on May 17, 2011 and also at the Bank's *InfoShop*.

During implementation, an Environmental Management Plan (EMP) and Environmental Impact Assessments (EIA) were prepared by the supervision consultant and submitted to the Bank by the Pakhtunkhwa Highway Authority (PkHA) for each Phase (i.e. the two Additional Financing). Training for the relevant staff of the contractor, supervision consultant and the PMU was provided by project's environmental specialist. The Deputy Director (Environmental & Resettlement) conducted frequent monitoring visits and used checklists based on the EMP to assess compliance. The PkHA also engaged an independent auditor to provide further checks and controls (ICR, para 24). However, the ICR notes the auditor cannot be considered fully independent because of their contractual relationship with the client (para 24). However, the supervision of environmental safeguards was affected by the security situation, which prevented the Bank staff to visit work sites until late in the project i.e. until mid-2015. The site visit by the environmental specialist identified gaps in EMP implementation such as the need for higher awareness of environmental and safety issues on site, compliance with safety requirements and conditions in workers' living conditions on site (ICR, para 25).

The ICR reports that the environmental safeguards compliance was moderately satisfactory (para 21).

Social Safeguards

Since the roads largely followed the existing alignment, the amounts of land acquisition and loss of assets were low and the compensation



payments were below the provisions made in the project papers.

For Phase I, it was estimated that 498 persons would be directly affected, about 3.75 acres of land would have to be acquired, and additional 1.75 acres where farmers had encroached on the right of way. 1000 trees would be lost, and 158 structures would be affected. The actual number of persons affected and losses requiring compensation were lower than estimated (114 persons affected, 1.6 acres of land in all either acquired or reclaimed with compensation for lost crops and loss of 74 trees and 24 structures (para 27).

In Phase II there were 88 affected persons, crop losses over 4.5 acres and 731 trees and 23 structures were lost. In Phase III there were 12 affected persons with very small losses overall. In addition, payments were made in all phases to the utility companies to move electricity and telephone pylons and poles (para 28).

The ICR reports that 98 percent of the affected persons were compensated. The project included grievance redressal mechanism which operated through Grievance Redressal Committees. These committees were composed of project affected persons. The ICR reports that the system worked well. At the time of the writing of the ICR, the court decision for two persons was still pending (para 21).

The withdrawal of the Deputy Director (Environmental & Resettlement) by PkHA from the PMU (for five months) resulted in delays in dealing with redressal issues and payment of compensation to affected persons (para 21).

Independent monitoring and was done by auditors and the auditor's reported high degree of compliance with social safeguards.

The ICR reports that the social safeguards compliance was satisfactory (para 21).

b. Fiduciary Compliance

Procurement: The ICR reports that the procurement compliance was satisfactory. National Competitive Bidding (NCB) for Phase I. For the reconstruction of additional lengths under Phases II and III and the link roads, the contracts were extended by variation orders to the original contract. Third-party audit found that Phase 1 costs were reasonable and the quality of works was satisfactory (para 34).

Financial Management: The project complied with the Bank's financial reporting requirements. The PMU submitted the required financial reports (Interim Financial Reports, IFRs) and forecasts regularly. The Bank's financial management team conducted regular supervision of the financial aspects of the project, and provided the necessary training and support to the client. The ICR reports that financial management was satisfactory throughout the project implementation period. The internal audit was conducted by KPMG and some procedural issues were identified such as timely payments, payment from incorrect budget lines; tax compliance, and cost escalation. This required further explanation on these matters was provided by the implementing agency (ICR, para 38).

c. Unintended impacts (Positive or Negative)

Negative impact: The project increased the risk of accidents on rehabilitated roads due to higher traffic, aggressive driving and over speeding. The ICR reports that although there is no empirical evidence to support this statement, the Customer Satisfaction Survey (CSS) identified this risk as one of the unintended consequences of the reconstructed road (para 53).

d. Other

None.

12. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	---
Risk to Development Outcome	Substantial	Substantial	---
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---



Borrower Performance	Moderately Satisfactory	Moderately Satisfactory	---
Quality of ICR		Substantial	---

Note

When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.

The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate.

13. Lessons

The ICR (paras 67 to 71) contains five lessons of which three have general application beyond the project. These are noted below:

- **Transport projects need to create awareness and build capacity for institutionalizing safeguards for all national roads built by the client.** In this project Pakhtunkhwa Highway Authority and the Government of Khyber-Pakhtunkhwa demonstrated reluctance to devote staff and resources to social and environmental compliance beyond fulfilling minimum Bank and other project requirements.
- **In emergency projects a number of countries have used Information and Communications Technology (ICT) methods in the supervision of road works in insurgency prone areas.** This project could have used these innovative project monitoring mechanisms instead of conventional monitoring (physical supervision of works by the Task Team).
- **Informal coordination and review arrangements are not a substitute for formal reviews and appropriate record keeping** (such as Aide Memoires Mid-term Review).

14. Assessment Recommended?

No

15. Comments on Quality of ICR

The ICR is results oriented, concise and candid regarding the challenges faced by the project during implementation. The lessons, although not all of general interest, were based on evidence and analysis. However, the ICR does not provide an overall Economic Rate of Return for the project at completion despite the fact that an estimate (along with a sensitivity analysis) would have been possible using information collected by the supervision consultant.

- a. Quality of ICR Rating
Substantial