



Completion Report

Project Number: 37680
Loan Number: 2045
December 2008

Kyrgyz Republic: Emergency Rehabilitation Project

CURRENCY EQUIVALENTS

Currency Unit – som (Som)

		At Appraisal (14 November 2003)	At Project Completion (as of 8 January 2008)
Som1.00	=	\$0.0239	\$0.0282
\$1.00	=	Som41.8672	Som35.4988
SDR1.00	=	\$1.358	\$1.586

ABBREVIATIONS

ADB	–	Asian Development Bank
MEES	–	Ministry of Ecology and Emergency Situations
MES	–	Ministry of Emergency Situations
MOE	–	Ministry of Education
MOTC	–	Ministry of Transport and Communications
NGO	–	nongovernment organization
PIU	–	project implementation unit
PPMS	–	project performance monitoring system
SIEE	–	summary initial environmental examination

WEIGHTS AND MEASURES

km	–	kilometer
kV	–	kilovolt

GLOSSARY

<i>oblast</i>	–	province
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NOTES

- (i) The fiscal year (FY) of the Government is from 1 January to 31 December. FY before a calendar year denotes the year in which the fiscal year ends. For example, FY2004 begins on 1 January 2004 and ends on 31 December 2004.
- (ii) In this report, "\$" refers to US dollars.
- (iii) The term Government refers to the Kyrgyz Republic.

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CONTENTS

	Page
BASIC DATA	i
MAP	vii
I. PROJECT DESCRIPTION	1
II. EVALUATION OF DESIGN AND IMPLEMENTATION	2
A. Relevance of Design and Formulation	2
B. Project Outputs	3
C. Project Costs	6
D. Disbursements	7
E. Project Schedule	8
F. Implementation Arrangements	9
G. Conditions and Covenants	10
H. Related Technical Assistance	10
I. Consultant Recruitment and Procurement	10
J. Performance of Consultants, Contractors, and Suppliers	12
K. Performance of the Borrower and the Executing Agency	12
L. Performance of the Asian Development Bank	12
III. EVALUATION OF PERFORMANCE	13
A. Relevance	13
B. Effectiveness in Achieving Outcome	13
C. Efficiency in Achieving Outcome and Outputs	14
D. Preliminary Assessment of Sustainability	14
E. Impacts	15
IV. OVERALL ASSESSMENT AND RECOMMENDATIONS	16
A. Overall Assessment	16
B. Lessons	16
C. Recommendations	16
APPENDIXES	
1. Project Framework	17
2. Details of Works Undertaken for Civil Works Contract Packages	20
3. Appraisal and Actual Project Costs	22
4. Currency Equivalents	23
5. Summary of Contracts Funded by the Asian Development Bank	24
6. Projected and Actual Disbursements	26
7. Chronology of Major Events	27
8. Project Implementation Schedule	30
9. Organization Chart of Project Implementation Structure	31
10. Status of Compliance with Major Loan Covenants	32
11. Procurement Details	40
12. Assessment of Project Impacts and Benefits	43
13. Quantitative Assessment of Overall Project Performance	45

BASIC DATA

A. Loan Identification

1.	Country	Kyrgyz
2.	Loan Number	2045-KGZ(SF)
3.	Project Title	Emergency Rehabilitation
4.	Borrower	Kyrgyz Republic
5.	Executing Agency	Ministry of Ecology and Emergency Services (subsequently the Ministry of Emergency Services)
6.	Amount of Loan	SDR3,492,000 (\$5 million equivalent)
7.	Project Completion Report Number	PCR:KGZ 1088

B. Loan Data

1.	Appraisal	
	– Date Started	8 September 2003
	– Date Completed	22 September 2003
2.	Loan Negotiations	
	– Date Started	13 November 2003
	– Date Completed	15 November 2003
3.	Date of Board Approval	11 December 2003
4.	Date of Loan Agreement	12 February 2004
5.	Date of Loan Effectiveness	
	– In Loan Agreement	12 May 2004
	– Actual	24 June 2004
	– Number of Extensions	1
6.	Closing Date	
	– In Loan Agreement	30 September 2007
	– Actual	8 January 2008
	– Number of Extensions	None
7.	Terms of Loan	
	– Interest Rate	1% per annum during grace period and 1.5% per annum thereafter
	– Maturity (number of years)	32
	– Grace Period (number of years)	8

8. Disbursements

a. Dates

Initial Disbursement	Final Disbursement	Time Interval
27 August 2004	8 January 2008	41 months
Effective Date	Original Closing Date	Time Interval
24 June 2004	30 September 2007	39 months

b. Amount (\$)

Category ^a	Original Allocation ^b	Last Revised Allocation	Net Amount Available	Amount Disbursed	Undisbursed Balance ^c
01A	1,942,000	2,283,910	2,283,910	1,974,306	309,604
01B	325,000	340,462	340,462	236,562	103,900
01C	1,330,000	1,614,918	1,614,918	1,584,291	30,627
02	154,000	233,836	233,836	237,638	-3,802
03	483,000	572,602	572,602	325,679	246,923
04	264,000	287,379	287,379	72,059	215,320
05	502,000	160,449	160,449		160,449
99		-296,931	-296,931		-296,931
Total	5,000,000	5,196,124	5,196,124	4,430,535	766,089

^a 01A- Civil Works Roads and Bridges, 01B- Civil Works Power Line, 01C- Civil Works Social Infrastructure, 02- Equipment, 03- Consulting Services, 04- Interest Charge, 05- Unallocated, 99 – Imprest Account.

^b The difference between the original amount as against the revised total amount was due to the exchange rate variation between the special drawing rights (SDR) and the US\$.

^c An undisbursed loan amount of SDR483,132.76 (equivalent to \$766,089.12) was cancelled at the loan closing date of 8 January 2008.

9. Local Costs (Financed)

	Appraisal	Actual
- Amount (\$ million)	1.246	1.207
- Percent of Local Cost	49.42	55.90
- Percent of Total Cost	19.86	22.42

C. Project Data

1. Project Cost (\$ million)

Cost	Appraisal Estimates	Actual
Foreign Exchange Cost	3.754	3.224
Local Currency Cost	2.521	2.159
Total	6.275	5.383

2. Financing Plan (\$ million)

Cost	Appraisal Estimates			Actual		
	Foreign	Local	Total	Foreign	Local	Total
Implementation Costs						
Borrower-Financed	0.000	1.275	1.275	0.000	0.952	0.952
ADB-Financed	3.490	1.246	4.736	3.152	1.207	4.359
Total	3.490	2.521	6.011	3.152	2.159	5.311
IDC Costs						
Borrower-Financed	0.000	0.000	0.000	0.000	0.000	0.000
ADB-Financed	0.264	0.000	0.264	0.072	0.000	0.072
Grand Total	3.754	2.521	6.275	3.224	2.159	5.383

ADB = Asian Development Bank.

3. Cost Breakdown by Project Component (\$ million)

Project Component	Appraisal Estimate			Actual		
	Foreign	Local	Total	Foreign	Local	Total
A. Civil Works						
Roads and Bridges	1.578	0.850	2.428	1.564	0.906	2.470
Power Distribution Lines	0.206	0.200	0.406	0.142	0.154	0.296
Schools & Municipal Infrastructure	0.802	0.861	1.663	0.882	1.099	1.981
Subtotal (A)	2.586	1.911	4.497	2.588	2.159	4.747
B. Equipment	0.154	0.031	0.185	0.238	0	0.238
Subtotal (B)	0.154	0.031	0.185	0.238	0	0.238
C. Consulting Services	0.248	0.322	0.570	0.326	0	0.326
Subtotal (C)	0.248	0.322	0.570	0.326	0	0.326
D. Contingencies						
Physical	0.351	0.182	0.533	-	-	-
Price	0.151	0.075	0.226	-	-	-
Subtotal (D)	0.502	0.257	0.759	-	-	-
Subtotal (A+B+C+D)	3.490	2.521	6.011	3.152	2.159	5.311
E. Service Charge during Construction	0.264	0.00	0.264	0.072	0	0.072
Total	3.754	2.521	6.275	3.224	2.159	5.383

4. Project Schedule

Item	Appraisal Estimate	Actual
Consultants Contracts		
International	February 2004	25 October 2004
Domestic	February 2004	15 July 2004
Civil Works Contracts		
Roads and Bridges		
Date of Awards	March 2004	10 January 2005
Completion of Construction	October 2006	20 March 2007
Power Distribution Lines		
Date of Awards	March 2004	9 June 2005
Completion of Construction	September 2005	10 February 2006
Schools and Municipal Infrastructure		
Date of Awards	March 2004	12 September 2003
Completion of Construction	October 2006	30 September 2007
Equipment		
First Procurement	8 September 2003 (retroactive)	12 October 2004
Last Procurement	March 2007	28 June 2007
Other Milestones:		
1. 12 July 2005: Reallocation of SDR101,664 (equivalent \$148,535) from Unallocated to Civil Works Category (01C Social Infrastructure).		
2. 30 January 2006: Reallocation of SDR17,149 (equivalent \$25,535) from Unallocated to Civil Works Category (01C Social Infrastructure).		
3. 3 November 2006: Reallocation of SDR66,000 (equivalent \$148,535) from Unallocated to Civil Works Category (01A Roads and Bridges) and SDR23,000 from Unallocated to Civil Works Category (01C Social Infrastructure)		
4. 6 April 2007: Reallocation of SDR42,000 (equivalent \$62,000) from Unallocated to Civil Works Category (01A Roads and Bridges).		
5. 8 January 2008: Closing of loan accounts		

5. Project Performance Report Ratings

Implementation Period	Ratings	
	Development Objectives	Implementation Progress
From 1 January 2003 to 31 December 2003	Satisfactory	Satisfactory
From 1 January 2004 to 31 December 2004	Satisfactory	Satisfactory
From 1 January 2005 to 31 December 2005	Satisfactory	Satisfactory
From 1 January 2006 to 31 December 2006	Satisfactory	Satisfactory
From 1 January 2007 to 31 December 2007	Satisfactory	Satisfactory

D. Data on Asian Development Bank Missions

Name of Mission	Date	No. of Persons	No. of Person-Days	Specialization of Members^a
Fact-Finding and Appraisal	8–22 September 2003	6	90	a, a, b, c, d, e
Inception	12–19 January 2004	3	21	b, e, d
Review 1	27 September–2 October 2004	4	24	b, f, g, j
Review 2	18–28 July 2005	2	20	g, h
Review 3 (Mid-term)	21–27 May and 26–30 June 2006	3	41	g, h, j
Project Completion Review ^b	2–6 September and 20–27 October 2008	3	12	g, i, k

^a a – principal project economist, b – transport specialist, c – energy specialist, d – urban economist, e – procurement specialist, f – project officer, g – Kyrgyz Resident Mission project implementation officer, h – Kyrgyz Resident Mission assistant project analyst, i – Kyrgyz Resident Mission senior financial and administration assistant, j – Kyrgyz Resident Mission country director, k – staff consultant.

^b The project completion report was prepared by Valeri D. Tian, Senior Project Implementation Officer//Mission Leader; Ms. Ainura D. Bekbolotova, Senior Financial and Administration Assistant; and a transport economist (staff consultant).

KYRGYZ REPUBLIC
EMERGENCY REHABILITATION PROJECT
(as completed)



LIST OF SUBPROJECTS

Road and Bridge

- 1 National Park Road - Cancelled
- 2 Kurshab-Jalpakdash Road
- 3 Ilchevka-Erdintoo Road
- 4 PAD-Budalyk
- 5 Chalma Bridge-Bulge Road
- 6 Barpy-Yrisuu-Changent Road
- 7 Sovetskaya-Syrzavod Road
- 8 Kazarman-Jalal-Abad Road
- 9 Kant-Tokmok-Kemir Road
- 10 Nalbuks-Jangbazar-Krovka Road - Cancelled

Power Distribution Line

- 1 Ala-Archa Line - Cancelled
- 2 Uzun-Zarger Line
- 3 Mirza-Ali-Salamic Line
- 4 Gulcha-Sopukorgon Line
- 5 Kapchygai-Otal Line

School and Municipal Infrastructure

- 1 Duttel School
- 2 Kichi-Bulok School
- 3 Seinz-Kol School
- 4 Kojonkul School
- 5 Kurshab 1 Permanent Resettlement Centre
- 6 Duttel Permanent Resettlement Centre
- 7 Furniture for School (1-4)
- 8 Heating and Generator Equipment for School (1-4)

I. PROJECT DESCRIPTION

1. The Emergency Rehabilitation Project was formulated in response to the urgent request of the Government of the Kyrgyz Republic to the Asian Development Bank (ADB) for emergency assistance following severe landslides and floods as a result of heavy rains in the spring and summer of 2003.¹ The rains in 2003 were 50% above the average level of rainfall in a normal year.² The severe landslides and floods caused significant damage to the country and destroyed or severely damaged public infrastructure such as roads, bridges, power distribution lines, irrigation facilities, and schools. The damage to public infrastructure severely disrupted the economic activity and social life of affected communities.³ There was an urgent need to rehabilitate or reconstruct the damaged infrastructure to restore the economic and social activities of the disaster-affected communities. The Project focused on priority areas that were identified through consultation with the Government. The four *oblasts* (provinces) of Chui, Issyk-Kul, Jalal-Abad, and Osh were considerably damaged and the Project focused on these areas.

2. The immediate objective of the Project was to assist the Government to restore economic and social activities in the communities of four *oblasts* that had been affected by the landslides, floods, and mudslides through the rehabilitation of damaged public infrastructure. The long-term objective of the Project was to assist the Government in sustaining economic growth and poverty reduction in the country. A comparison between the Project framework at appraisal and the achievements of the Project is shown in Appendix 1.⁴

3. The Project comprised 19 infrastructure subprojects at appraisal, which had been selected from a list of 52 subprojects provided by the Government, based on priorities established by the Government and agreed upon by ADB. The major selection criteria were the severity and impact of damaged infrastructure on the affected communities.

4. The Project comprised four components:

- (i) **Roads and Bridges (rehabilitation of five damaged roads and rebuilding of ten damaged bridges).** The roads to be rehabilitated were the Natural Park Ala–Archa road in Chui the Kurshab–Jalpaktash, PAD–Budalyk, and Chalma–Buyga roads in Osh; and the Barpy–Yrissu–Changent road in Jalal-Abad. Four bridges on the Barpy–Yrissu–Changent road, three on the Natural Park Ala–Archa road, and one bridge each on the Illichevka–Erkintoo, Chalma–Buyga, and Sovetskaya–Syrzavod roads were to be rebuilt.
- (ii) **Electricity (rehabilitation and rebuilding of about 21 kilometers (km) on four damaged power distribution lines in Chui and Osh).** The four damaged lines were (a) the 35 kilovolt (kV) Uzgen–Zerger line, (b) the 35-kV Mirza–Aki-Salamalik line, (c) the 10-kV Gulcha–Sopu–Korgon line, and (d) the 10-kV Ala Archa–25 Years of Kyrgyzstan Substation line. Three damaged transformer

¹ In view of the country's severe fiscal constraints and consequently its limited capacity to respond to natural disasters, the Government requested emergency assistance from the international community

² Approximately 1,000 landslides occurred during the first 8 months of 2003, compared with an average of 15–20 landslides during the similar period in a normal year.

³ According to Government figures, 43 people were killed, 864 residential houses destroyed, 6,070 families relocated from the dangerous areas, an additional 1,900 families needed to be resettled, and many more families lost their possessions.

⁴ The Project framework at appraisal has been modified to be in line with the revised design and monitoring framework now adopted by ADB.

stations located along the Ala Archa–25 Years of Kyrgyzstan Substation line were also to be replaced.

- (iii) **Schools.** The Project sought to build four schools in areas less prone to natural disasters in the *oblasts* of Chui and Osh, including provision of furniture and facilities.
- (iv) **Municipal Infrastructure.** The Project sought to build municipal infrastructure in the Kurshab-1 and Dubitel permanent resettlement centers in Osh, which the Government established for disaster-affected people. The municipal infrastructure included about 4.3 km of on-site roads, 8.6 km of power lines, two electric substations, 4.3 km of water supply network, and about 1 km of drains.

5. The Kyrgyz Republic was the Borrower and the Ministry of Ecology and Emergency Services (MEES) was the executing agency. MEES was split into two Ministries in 2006 and became known as the Ministry of Emergency Services (MES), and is hereafter referred to as such in this report. The ADB loan⁵ of \$5 million equivalent from ADB's Special Funds resources financed all of the foreign costs and a portion of the local costs of the Project.

II. EVALUATION OF DESIGN AND IMPLEMENTATION

A. Relevance of Design and Formulation

6. The Project is consistent with ADB's *Policy on Rehabilitation Assistance After Disasters*.⁶ Due to the country's severe fiscal constraints, the Government had limited capacity to respond to natural disasters and requested emergency assistance from the international community. The major rationale for ADB involvement in rehabilitation was that timely intervention would allow the Kyrgyz Republic to maintain its development momentum. Without such intervention, it would have been necessary to reallocate scarce budgetary resources from development to disaster-related activities. Damage to public infrastructure severely disrupted economic activity and social life in the affected communities. There was an immediate need to rehabilitate and rebuild damaged infrastructure so as to restore economic and social activities. The Project was also consistent with the Government's development strategy by assisting in the rehabilitation of damaged infrastructure without straining the Government's limited budgetary resources, thus enabling the Government to continue with its program of economic growth through other projects.

7. The Appraisal Mission conferred with the Government to assess damage caused to public infrastructure. Nineteen infrastructure subprojects were selected for implementation from a list of 52 subprojects and based on priorities established by the Government and agreed upon by ADB. The sectors covered in these subprojects were (i) roads and bridges, (ii) power lines, (iii) schools, and (iv) municipal infrastructure. Other international agencies, such as the World Bank, also responded to the natural disaster in the Kyrgyz Republic. Based on ADB's

⁵ ADB. 2003. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kyrgyz Republic for the Emergency Rehabilitation Project*. Manila (Loan 2045-KGZ[SF], for \$5 million equivalent, approved on 11 December 2003). Advance procurement action to permit prequalification of the civil works contracts and retroactive financing for eligible expenses incurred and paid from 8 September 2003 until loan effectiveness was approved in December 2003.

⁶ ADB has approved two major emergency policies to assist its developing member countries (DMCs): (i) *Rehabilitation Assistance to Small DMCs Affected by Natural Disasters* was approved in 1987 to address the special needs of small Pacific DMCs and the Maldives; and (ii) *Rehabilitation Assistance After Disasters*, approved in 1989, which applied to all DMCs.

experience in infrastructure and the World Bank's involvement in the irrigation sector, it was agreed that ADB assistance would cover roads, bridges, power lines, schools, and municipal infrastructure while the World Bank would rehabilitate damaged irrigation facilities and help address disaster prevention issues.

8. The formulation and design of the Project incorporated useful lessons from previous emergency assistance projects that ADB had undertaken, particularly the Flood Emergency Rehabilitation Project for the Kyrgyz Republic;⁷ and the Emergency Flood Rehabilitation Project⁸ and the Emergency Baipaza Landslide Stabilization Project⁹ for Tajikistan. The lessons from these projects were incorporated into the project design. These lessons included the following: (i) the Government must have a strong commitment to rehabilitation, (ii) capacity building is needed due to limited institutional capacity, (iii) consulting services are needed to ensure adequate construction supervision and project quality, and (iv) special attention needs to be paid to counterpart funding as inadequate counterpart funds have affected smooth project implementation.

9. The Project was intended to rehabilitate key physical and social infrastructure to pre-landslide levels to ensure the restoration of normal levels of economic and social activities. The Project was designed and formulated to contribute to the Kyrgyz Republic's economic recovery and was in accordance with ADB's country strategy.¹⁰ The Project was relevant at the time of design and remains relevant and in line with ADB's country strategy.

B. Project Outputs

10. At appraisal, the Project consisted of 19 subprojects¹¹ (17 civil works and 2 goods procurement subprojects) under four components: (i) roads and bridges, (ii) power, (iii) schools, and (iv) municipal infrastructure. Twenty subprojects were actually implemented (18 civil works and 2 goods procurement subprojects). These subprojects consisted of eight road and bridge subprojects, four power subprojects, four schools subprojects, four municipal infrastructure subprojects in the resettlement centers of Dubitel and Kurshab-1, and two procurement of equipment subprojects (e.g., heating equipment, furniture, and generators) for four schools.

11. A brief description of the major outputs achieved under each of the four components compared to those envisaged at appraisal is described in the following sections. Full details of the appraisal and a detailed assessment of targets compared to the actual outputs achieved are compared in Appendix 1. Appendix 2 gives the details of the works carried out under each of the contracts implemented.

⁷ ADB. 1998. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kyrgyz Republic for the Flood Emergency Rehabilitation Project*. Manila

⁸ ADB. 1999. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Republic of Tajikistan for the Emergency Flood Rehabilitation Project*. Manila

⁹ ADB. 2002. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Republic of Tajikistan for the Emergency Baipaza Landslide Stabilization Project*. Manila

¹⁰ ADB. October 2003. *Country Strategy and Program (2004-2006): Kyrgyz Republic*. Manila.

¹¹ The subprojects were: roads and bridges: R-1 Natural Park Ala-Archa Road (35-37 km), R-2 Kurshab-Jalpaktash Road, R-3 Ilichevka-Erkintoo Road, R-4 PAD-Budalyk Road, R-5 Chalma-Buyga Road, R-6 Barpy-Yrisuu-Changent Road, R-7 Sovetskaya-Syrzavod Road; power distribution lines: E-1 Ala Alcha-25 years of Kyrgyzstan Substation, E-2 Uzgen-Zerger, E-3 Mirza-Aki-Salamalik, E-4 Gulcha-Sopu-Korgon; schools: S-1 Dubitel School, S-2 Kichi-Bulelu School, S-3 Seinyz-Kol School, S-4 Kojomkul School, municipal infrastructure: S-5 Kurshab-1 Permanent Resettlement Center, S-6 Dubitel Permanent Resettlement Center, equipment: S-7 Heating facilities, S-8 Furniture

1. Roads and Bridges

12. It was envisaged at appraisal that five damaged roads would be rehabilitated and ten damaged bridges would be rebuilt through seven road and bridge subprojects (R-1 to R-7). The roads to be rehabilitated were the Natural Park Ala-Archa road in Chui; the Kurshab–Jalpaktash, PAD–Budalyk, and Chalma–Buyga roads in Osh; and the Barpy–Yrissu–Changent road in Jalal-Abad. Four bridges on the Barpy–Yrissu–Changent road, three on the Natural Park Ala–Archa road, and one bridge each on the Illichevka–Erkintoo, Chalma–Buyga, and Sovetskaya–Syrzavod roads were also to be rebuilt. The actual works included the rehabilitation of four damaged roads and eight bridges, including one new bridge.

13. There were several reasons for changes to the actual work implemented compared to that envisaged at appraisal. On 22 December 2004, the Government requested ADB's non-objection to a minor change in scope. The request was to (i) cancel subproject R-1 with a cost of \$621,000; (ii) decrease the allocation for subprojects R-2 and R-3 from \$240,000 and \$449,000 to \$100,000 and \$152,000, respectively; and (iii) include three subprojects to be financed out of the cumulative savings of \$1,058,000. The reasoning for this was that in a meeting between the Kyrgyz Resident Mission and the First Deputy Prime Minister on 17 December 2004 it was agreed that per the Loan Agreement any contract signed before 8 September 2003 would not be eligible for ADB financing (para 22 and footnote 5). ADB also informed the Government that it would consider funding additional subprojects out of the original list of 52 if savings were realized as a result of ADB not financing subprojects with contracts that had been signed before 8 September 2003. As a result, the Government requested a minor change in scope to cancel one subproject since the contract had been signed before 8 September 2003 (R-1), decrease the allocation for two subprojects (R-2 and R-3), and finance three additional subprojects (R-8, R-9, and R-10).¹² The change in scope was approved by ADB on 28 December 2004.

2. Electricity

14. At appraisal, it was envisaged that a total of 21 km of four damaged power and distribution lines in Chui and Osh would be rehabilitated or rebuilt. The four damaged lines were the (a) 10-kV Ala Archa-25 Years of Kyrgyzstan Substation line (subproject E-1), (b) 35-kV Uzgen–Zerger line (subproject E-2), (c) 35-kV Mirza–Aki–Salamalik line (subproject E-3), and (d) 10-kV Gulcha–Sopu–Korgon line (subproject E-4). In addition, three damaged transformer stations located along the Ala Archa–25 Years of Kyrgyzstan Substation line were also to be replaced under subproject E-1. The actual works implemented totaled 19.63 km of overhead distribution lines.

15. The reason for the changes in actual work implemented as compared to appraisal was due to a minor change in scope requested by the Government on 5 January 2005 to (i) cancel subproject E-1 for \$42,000, and (ii) include a new subproject (E-5) to rehabilitate a 35-kV electric line between Kapchygai–Oital for the same amount. The reason subproject E-1 was cancelled was due to the fact that the contract was signed prior to 8 September 2003 and was not eligible for ADB retroactive financing.¹³ Subproject E-1 was replaced by subproject E-5, which was originally envisaged to have works undertaken covering 1.2 km. This new subproject

¹² The three new subprojects were R-8 Bridge at Jalal-Abad to Kazarman Road; R-9 Detour Kant to Tokmok to Kemin Road; and R-10 Bridge at Alabuka to Janybazar to Kirovka Road. Subproject R-10 was eventually cancelled when a Review Mission learned that it did not meet the criteria as agreed at appraisal for selection of subprojects since it had not been affected by the natural disasters in 2003.

¹³ For subproject E-1, the site works commenced and were completed before 8 September 2003.

was approved by ADB on 10 January 2005. The total length of line completed for each subproject was 1.9 km for E-2, 1.38 km for E-3, 15 km for E-4, and 1.35 km for E-5.

3. Schools

16. At appraisal, it was envisaged that four schools would be built and furnished in areas that were less prone to natural disasters in the *oblasts* of Chui and Osh. The four schools were located at Dubitel (in a resettlement center established by the Government as subproject S-1),¹⁴ Kichi–Bulelu (subproject S-2), Semyz–Kol (subproject S-3), and Kojomkul (subproject S-4). The Project Completion Review (PCR) Mission visited three of the schools under the Project: the school in the Dubitel Resettlement Center, the school at Kichi–Bulelu, and the school at Kojomkul.¹⁵ As noted at appraisal, the schools were to be built in areas that were less prone to natural disasters. The PCR Mission noted that the schools at Kichi–Bulelu and Kojomkul were located next to the older schools. It was also noted by the PCR Mission that these older schools had not been damaged by the natural disasters in 2003.¹⁶ The two new schools were still using the facilities in the old schools next to them in order to accommodate student needs. At the school in Kojomkul, the old school had recently been refurbished at a total cost of Som1.5 million. The school at the resettlement center in Dubitel was constructed as envisaged at appraisal. The schools were also fitted with furniture and heating equipment (subprojects S-7 and S-8), as envisaged at appraisal. All of the furniture and heating equipment was inspected by the PCR Mission and found to be in good order.

17. A minor change in Project scope was requested by the Government on 9 August 2006 to equip the four schools constructed under the subprojects with back-up generators since they were all located in mountainous areas with frequent power cuts (subproject S-8). ADB approved this request on 12 January 2007. The Government submitted to ADB on 16 April 2007 the proposed shopping method for acquiring the generators and this was approved by ADB on 19 April 2007. The PCR Mission examined the generators at the schools in Kojomkul and Kichi–Bulelu school.¹⁷ At Kojomkul, the generator was not working because the accumulators needed to be replaced. In addition, the cost of diesel fuel for running the generator was not within the school's budget. A request had been made in September 2008 for funds to repair the generator and purchase diesel fuel. The old school in Kojomkul, which is located next to the new school, is presently being used as it has a coal-fired heating system. At Kichi–Bulelu, the generator was found to be in working order and is run every 2 weeks for two hours to ensure that it is working properly. However, funds are not available for diesel fuel to run the generator on a regular basis. Schools representatives claimed that only 2–3 hours of power per day is supplied by the local distribution networks on average.

4. Municipal Infrastructure

18. At appraisal, it was envisaged that municipal infrastructure would be undertaken in the Kurshab-1 (subproject S-5) and Dubitel permanent resettlement centers (subproject S-6) in

¹⁴ The Government established three new resettlement centers (Dubitel Resettlement Center, Kurshab-1 Resettlement Center, and Kurshab-2 Resettlement Center) to help relocate affected residents to safer areas.

¹⁵ The PCR Mission could not visit the school at Semyz–Kol due to adverse weather and driving conditions. However, the school had been examined by previous review missions and was found to be well constructed.

¹⁶ The PCR Mission was informed by the Principal of one school that MES officials had visited the site in 2004 and noted that there was no danger of landslides in the area.

¹⁷ It was not possible to examine the generator at the school in Dubitel because the Principal was not at the school on the day of the PCR Mission and he had the only key to the generator house.

Osh,¹⁸ which the Government established for disaster-affected people. The municipal infrastructure subprojects included about 4.3 km of on-site roads, 8.6 km of power lines, two electric substations, 4.3 km of water supply network, and about 1 km of drains. All works were implemented as envisaged at appraisal.

C. Project Costs

19. At appraisal, the project cost was estimated to be \$6.275 million equivalent, of which \$3.754 million (about 60%) was estimated to be the foreign exchange cost, including \$0.264 million for service charges and interest during construction (IDC). The total local currency cost was estimated at \$2.521 million equivalent (about 40%), including taxes and duties. The loan was for \$5 million equivalent from the Special Funds to finance 80% of the total project cost. ADB financing was expected to cover all of the foreign exchange costs and about 49% of local currency costs. The remaining cost of \$1.275 million equivalent was to be funded by the Borrower.

20. The actual project completion cost was \$5.383 million equivalent, with a foreign exchange cost of \$3.224 million equivalent (about 60%) and a local currency cost of \$2.159 million equivalent (about 40%). ADB financed \$4.431 million equivalent, or about 82% of the total project cost. The remaining cost of \$0.952 million equivalent in local costs was funded by the Government. Actual costs were about 14% lower than the appraisal estimate (para. 21).

21. The cost estimated at appraisal for the roads and bridges component was \$2.428 million (excluding physical and price contingencies), which was less than the actual cost of \$2.470 million. However, adding in physical and price contingencies estimated at appraisal, the estimated cost of the roads and bridges component was \$2.821 million, higher than the actual costs. The power distribution lines component was estimated at appraisal at \$0.471 million (including physical and price contingencies) compared to the actual cost of \$0.296 million. The schools and municipal infrastructure component at appraisal was estimated at \$1.932 million (including physical and price contingencies) compared to the actual cost of \$1.981 million. The original cost estimates at appraisal for schools and municipal infrastructure were exceeded mainly on account of additional subproject works. The increase in cost in this component was due to (i) new subprojects (e.g., diesel generators) and ancillary works for the schools, and additional detailed design; (ii) a considerable volume of works that were not taken into account in the original cost estimate, but were required to ensure that subprojects could be commissioned and effective operations guaranteed; and (iii) the escalation of prices for construction materials and lubricants. The additional detailed design was for (i) development of design estimates for construction of generator houses and assembling and installation of diesel generators in the schools; and (ii) construction of generator houses. The equipment cost at appraisal was estimated at \$0.214 million (including physical and price contingencies) and the actual cost at completion was \$0.238 million. Costs were higher due to the addition of generators for the four schools (para. 17). The cost for consulting services at appraisal was \$0.570 million, while the actual cost of consulting services was \$0.326 million. Due to the variations described in this paragraph and exchange rate fluctuations, the actual cost of the Project was about 14% lower than the appraisal estimate. The detailed costs for each component of the Project compared with the estimates at appraisal are shown in Appendix 3. For cost comparison, the local currency costs incurred by the executing agency were converted

¹⁸ Subproject S-6 was split into three separate contracts due to the diverse nature of the works (S-6e for power lines, S-6r for onsite roads, and S-6w for water supply).

into dollars at the prevailing rate at the time of each transaction. The average rates of exchange used are in Appendix 4. A summary of the contracts financed by ADB is given in Appendix 5.

D. Disbursements

22. No disbursement schedule was included in the appraisal. However, based on the implementation schedule prepared at the time of appraisal, projected disbursements were developed and are shown in Appendix 6 along with the actual disbursements during implementation. Due to the emergency circumstances surrounding the Project, prompt and smooth implementation was essential. ADB and the Government agreed on retroactive financing for eligible expenses incurred and paid from 8 September 2003 until loan effectiveness. ADB also approved advance action to facilitate project implementation. However, it was not until 27 August 2004 that the first disbursement was made, more than one year after the Appraisal Mission. This was partly due to the late procurement of consulting services. The submission of a due diligence report on resettlement centers was a condition for disbursement for social infrastructure subprojects and the late submission of this report delayed disbursement by about 6 months. The draft due diligence document was submitted to ADB in October 2004 and had been poorly translated and formulated, and this resulted in lengthy communications between ADB and the executing agency. The due diligence report for resettlement was finally approved by ADB in December 2004.

23. There were four reallocations of the loan proceeds during project implementation. The first reallocation was on 12 July 2005. The allocation for social infrastructure (e.g., schools and municipal infrastructure) consisted of eight contracts for civil works, one for design works, and three for construction supervision. The total commitment exceeded the allocation and a reallocation of SDR101,664 (\$148,535 equivalent)¹⁹ was made from the unallocated category to subcategory 01C (civil works for social infrastructure). The second reallocation was approved by ADB on 30 January 2006 for SDR17,149 (\$25,000 equivalent)²⁰ from the unallocated category and was also reallocated to subcategory 01C. This reallocation was due to ADB approving on 16 January 2006 a bid evaluation recommending a contract award of about \$128,000 for the remaining works under subproject S-6w, which had been left unfinished following the termination of a previous contract with a faulty contractor. On 24 January 2006, the executing agency requested to finance preparation of detailed designs for subprojects S-1 and S-3 under retroactive financing. This reallocation would enable the executing agency to meet the new commitments for (i) the remaining civil works under S-6w for about \$102,400, (ii) detailed design preparation for S-1 and S-3 totaling \$4,600, and (iii) minor anticipated contract variations that were not to exceed \$9,107. The third reallocation was approved by ADB on 3 November 2006 for SDR66,000 from the unallocated category to subcategory 01A (civil works for roads and bridges) and SDR23,000 to subcategory 01C (civil works for social infrastructure). This was to allow the executing agency to meet the increased commitments under R-6, R-7,²¹ and S-6w;²² and was considered a minor change.²³ The fourth reallocation was on 6 April 2007 for SDR42,000 (\$62,000 equivalent) from the unallocated category to subcategory 01A (civil works

¹⁹ Exchange rate as of 11 July 2005 was SDR1=\$1.4610.

²⁰ Exchange rate as of 27 January 2006 was SDR1=\$1.4578.

²¹ With regard to R-6 and R-7, on 14 March 2006 the executing agency requested contract variations that were approved by ADB on 3 April 2006.

²² With regard to S-6, on 12 June 2006 the executing agency requested contract variations that were approved by ADB on 13 September 2006.

²³ As per paragraph 6, PAI 5.04, it did not materially alter or fundamentally affect the projects purpose, components, costs, benefits, procurement or other implementation arrangements. As per paragraph 7, PAI 5.04, the proposed reallocation of SDR89,000 only represented 2.5% of the total project cost, which is less than the 15% threshold for a major change.

for roads and bridges). This was to allow the executing agency to meet the increased commitments under subproject R-9 that had resulted from (i) unforeseen additional civil works that lacked sufficient contingency provisions in the contract, and (ii) the associated extension of the supervising engineer's contract.

24. An imprest account, as envisaged at appraisal, was established. ADB's procedure the statement of expenditures was followed to reimburse eligible expenditures and liquidate advances to the imprest account. Following the last disbursement on 8 January 2008, ADB cancelled the remaining balance of SDR483,133 (\$766,089 equivalent). The initial (27 August 2004) and final (18 January 2008) disbursements were made over 41 months as compared to a disbursement period of 39 months envisaged at appraisal. Although all physical activities under the loan were completed on the original loan closing date of 30 September 2007, the loan account was kept open until 8 January 2008 due to the late submission of some withdrawal applications to ADB.

E. Project Schedule

25. Appendix 7 provides a chronology of major events during project implementation. The implementation schedule prepared at appraisal as compared with actual progress is shown in Appendix 8.

26. The ADB Board approved the loan on 11 December 2003. The Loan Agreement was signed on 12 February 2004 and became effective on 24 June 2004. Loan effectiveness was delayed and should have been on 12 May 2004. However, the fulfillment of one of the conditions for loan effectiveness had not been completed at that time—the establishment of a project implementation unit (PIU) within MES and comprising an adequate number of staff with the necessary qualifications and experience. The loan was eventually declared effective on 24 June 2004.²⁴ The closing date of the loan was 30 September 2007, which was the same date envisaged at appraisal. The Project was expected to be implemented over a 3-year period, commencing in March 2004 and finishing by March 2007. Actual implementation of all civil works was completed in August 2007.

27. As of September 2004, out of a total of six subprojects being undertaken by MES, three were ongoing and the remaining three were under bid preparation. Subprojects S-1, S-5, and S-6 (schools and municipal infrastructure) were partially completed. However, site works for these three subprojects were suspended due to non-payment to the contractors. In addition, the design of subproject S-6 conflicted with other ADB water supply projects and needed revision involving a \$75,000 increase in cost. The disbursements for these subprojects, which were eligible for retroactive financing, were delayed by six months from the loan effectiveness date (24 June 2004) due to the late submission of the due diligence report (para. 53) on resettlement centers, which was not approved by ADB until December 2004.

28. In December 2004, both R-1 (roads and bridges subproject) and E-1 (energy power lines subproject) were cancelled and three new road projects (R-8, R-9, and R-10) and one new power project (E-5) were added (para. 15). Lengthy communications on these cancellations and their substitution by new subprojects contributed to the implementation delay. Following these changes, which ADB approved in December 2004, the road subcomponent of the Project had eight subprojects (R-2 to R-9), of which 5 were under construction. The power subcomponent

²⁴ ADB approved an extension of the loan effectiveness on 18 May 2004 until 15 June 2004. However, loan effectiveness was not achieved until after the extension date of 15 June 2004.

now had four subprojects (E-2 to E-5), of which 3 were under construction. On an ADB review mission, it was determined that one of the new subprojects (R-10) included in December 2004 did not meet the criteria as agreed upon at appraisal for selection since it had not been affected by the natural disasters in 2003 and was not eligible for financing under the Project. In addition, this subproject would have only benefitted 20 families at a cost of approximately \$213,000. ADB recommended that the executing agency consider cancellation of this subproject and reallocate the funds for additional works under subproject R-5.

29. After these initial delays at project start-up in 2004 and an additional minor delay caused by political instability in March 2005, the project implementation improved and most of the civil works contracts were awarded by July 2005. The final completion of all subprojects was achieved in August 2007. The Project became the first ADB-funded project in the Kyrgyz Republic completed without an extension of the loan closing date.

F. Implementation Arrangements

30. The implementing arrangements were consistent with those envisaged at appraisal. The Borrower was the Kyrgyz Republic and the executing agency was MES, which was responsible for overall project management and coordination of implementation. A vice minister of MES was appointed as the project director responsible for implementation.²⁵ To ensure close interagency coordination and effective implementation, the executing agency was assisted by a project steering committee,²⁶ two implementing agencies, and two PIUs (one under each implementing agency). The two implementing agencies were MES and the Ministry of Transport and Communications (MOTC). MES was responsible for implementing municipal infrastructure and school subprojects, while MOTC handled roads, bridges, and power line subprojects. A new PIU was established in MES, while MOTC utilized the PIU that had already been established under the ADB-funded Road Rehabilitation Project. The PIU under MES was established on 4 April 2004 with the hiring of the first three PIU staff.²⁷ The PIU under MOTC was established by MOTC Order No. 93, which was issued on 12 March 2004. The staff at the PIU of MOTC comprised a road and bridge engineer, a power engineer, and a procurement specialist. Coordination between ADB and the executing agency, government agencies, consultants, and contractors was adequately maintained throughout implementation of the Project. The Kyrgyz Resident Mission hosted coordination meetings with the executing agency, PIUs, and consultants to review the physical progress of each component, discuss problems, and agree upon solutions.

31. Given the urgency of the Project, the Government had undertaken design works for most of the subprojects. To expedite implementation of the Project, the ADB approved the Government's request for (i) advance action on procurement for civil works, although this was not utilized (para. 42); and (ii) retroactive financing for eligible expenses incurred and paid from 8 September 2003 until loan effectiveness,²⁸ subject to a maximum amount of \$1 million equivalent and ADB Board approval. The overall implementation arrangements were generally satisfactory and worked effectively. The organization structure for the implementation of the Project is shown in Appendix 9.

²⁵ The first deputy minister was assigned as project director on 7 May 2004

²⁶ The project steering committee was established on 15 July 2004.

²⁷ The PIU at MES eventually comprised a full staff of six, including the director, an accountant, a procurement specialist, a social expert, and two support staff.

²⁸ The first day of ADB's Fact-Finding Mission.

G. Conditions and Covenants

32. Details of compliance with the covenants under the loan are presented in Appendix 10. The Government and the executing agency generally complied with the standard loan covenants. Reporting requirements under the Project were met. However, the executing agency had difficulty in complying with the timely submission of quarterly progress reports and annual audit reports.²⁹ The executing agency also submitted the PCR report late to ADB.³⁰ The first 2005 quarterly report was submitted on 4 May 2005, or about 1.5 months late. The second quarterly report was submitted about one month late. Due to the delay in recruiting the audit firm (para. 37), the audit report, which should have been submitted on 30 June 2005, was also late. Subsequent to this, audit reports were generally submitted to ADB on time and met the loan covenant requirements.

H. Related Technical Assistance

33. The Project had no technical assistance related to it.

I. Consultant Recruitment and Procurement

1. Consultant Recruitment

34. As envisaged at appraisal both international and domestic consultants were required for detailed design reviews, quality control, preparation of bidding documents, bid evaluation, construction supervision, and environmental and social impact monitoring. Consultant recruitment was in accordance with ADB's *Guidelines on the Use of Consultants* and other arrangements satisfactory to ADB for the selection of domestic consultants.

35. One international and seven domestic individual consultants were to be recruited under the Project. For the international consultant, the procurement notice was advertised in ADB *Business Opportunities* in December 2003 and MES was requested to develop a long-list of consultants based upon received expressions of interest, and then to submit a short-list of about five consultants for ADB's approval. The recruitment procedure for domestic consultants was to follow the national practice in the Kyrgyz Republic, which was acceptable to ADB. MES had already established a consulting selection committee for the selection of consultants. The minister served as the committee's chairperson. The Ministry of Finance (MOF) was also represented on the committee to enhance transparency. The international consultant contract was signed on 26 October 2004. A total of seven PIU staff were hired as domestic consultants between April and June 2004.³¹ The domestic consultants for MES were recruited and had their contracts signed and approved between April and May 2004, and the domestic consultants for MOTC were approved by ADB on 3 June 2004. During the recruitment of consultants, ADB informed the executing agency of its concern on the number of person-months of consultant inputs as it had been observed in the previous ADB-financed Flood Rehabilitation Project that consultant inputs were essential for smooth and proper implementation of the Project. It was agreed that ADB and the Government would jointly assess the need for additional consulting services during project reviews. The Government requested on 16 June 2004 to engage a translator for a period of 34 person-months given the quantity of documents that needed to be

²⁹ As noted in the ADB Review Mission in July 2005.

³⁰ The executing agency's PCR report was due in December 2007, but was not submitted until January 2008.

³¹ Originally, seven domestic consultants were engaged: project manager/municipal engineer, road and bridge engineer, energy specialist, social development specialist, accountant, and two procurement specialists. Subsequently, quality control engineers and a translator were engaged.

submitted to ADB in English. ADB approved this request on 12 July 2004. The composition of the domestic consultant staff did not change during the project implementation period.

36. At appraisal, the Project included a total of 136 person months of consulting services, comprising 12 person-months of international consulting services, and 124 person-months of domestic consulting services. The domestic consultants demonstrated sufficient capacity to manage the project. Therefore, on 12 January 2006, ADB approved a variation order to decrease the inputs of the international consultant from 12 to 8 person-months. The domestic consultants' contracts were extended due to the revision of some subprojects (e.g., R-5, R-6, R-9, and E-5). The project manager/municipal engineer's contract was extended from 30 to 43 person-months, the accountants contract from 34 person-months to 43 person-months, the road engineer's contract was extended from 30 to 37 person-months, and the procurement specialist's from 10 to 12 person-months.³² In addition, a quality control engineer was engaged for up to 17 person-months, and a translator for up to 34 person-months. Overall, total domestic consultants' inputs increased to 206 person-months.³³ The international consultant's input was further reduced from 8 person-months to 6 person-months. The consultants' overall input, both international and domestic, was 212 person-months as compared to 136 person-months estimated at appraisal. Although there was an increase in overall consultant input, there was no increase in the amount estimated at appraisal for the cost of consulting services.

37. There was a delay in the selection and recruitment of the audit firm. The bid evaluation report for audit services was approved on 4 July 2005 and the contract with the selected firm was approved by ADB on 26 July 2005 after incorporating several comments.

2. Procurement

38. Project goods and services were procured through national competitive bidding for civil works and through direct purchase for equipment in accordance with ADB's *Guidelines for Procurement*. Since the procurement was undertaken for several separate contracts under each component the full details have been provided in Appendix 11. A total of 20 civil works contract packages were procured under the Project, comprising roads and bridges subprojects R-2 to R-9 (R-1 was cancelled), power line distribution subprojects E-2 to E-5, and social infrastructure subprojects S-1 to S-8. The procurement process for each of the components of the Project went reasonably well with some exceptions. For example, there were problems with the procurement process on subproject R-4 under the roads and bridges component. On 26 August 2005, announcements were published in national newspapers with a closing date for bid proposal submission by 26 September 2005. Only one bidder purchased bidding documents. It was revealed during an evaluation that the bid was twice as much as the estimated cost. In accordance with ADB procedures, since no bids met the requirements it was necessary to make a second announcement requesting for bids. Two bids were received and the public opening of these received bids was undertaken on 20 December 2005. A contract was issued on 25 February 2006. Some of the procurement for the power distribution subprojects³⁴ had to be postponed in view of the political events occurring in 2005. Full details on the procurement process of each subproject are given in Appendix 11.

³² There were two procurement specialists.

³³ The inputs of the domestic consultants for the energy specialist (8 person-months) and the social development specialist (2 person-months) remained the same as envisaged at appraisal.

³⁴ For example, E-2, E-3, and E-4.

J. Performance of Consultants, Contractors, and Suppliers

1. Consultants

39. The performance of consultants under all components has been generally satisfactory. In 2004, an ADB mission noted that the quality of the procurement documents produced was poor, which increased the project's administrative burden and contributed to implementation delays. However, the performance of the procurement specialists improved in subsequent years and was satisfactory. The executing agency expressed concern over the performance of the international consultant when it was observed that reports, primarily quarterly progress reports, were not being submitted on a timely basis. By July 2005, the performance of the domestic consultants was deemed satisfactory and it was determined that they could assume greater project implementation responsibilities. As a result, the input of the international consultant was reduced (para. 36).

2. Contractors

40. The performance of all contractors, except one, has generally been satisfactory and the quality of the completed works was good as reviewed by the PCR Mission. The contractor on subproject S-6w (water supply at the Dubitel Resettlement Center) had to be terminated due to poor performance and the contractor's failure to meet the contract conditions. Subsequently, an alternative contractor was selected and this contractor developed a new water supply source. The new contractor completed the works satisfactorily and the subproject was completed in March 2007.

3. Suppliers

41. The only component involving the supply of equipment was under the schools component where school furniture, heating equipment, and diesel generators were supplied. The suppliers fulfilled their responsibilities as stipulated in the contracts and performed satisfactorily.

K. Performance of the Borrower and the Executing Agency

42. The performance of the Borrower and the executing agency was rated as satisfactory. Notwithstanding the complexity of the Project—several subprojects across four sectors (roads and bridges, power distribution, school, and municipal infrastructure)—the Borrower performed satisfactorily to achieve successful project implementation. However, during the early stages of the Project, there were delays (paras. 26–29). The executing agency failed to use advance procurement due to the delayed recruitment of the procurement specialists. Overall, the performance of the Borrower and the executing agency were rated as satisfactory.

L. Performance of the Asian Development Bank

43. The Project was initially processed and administered by ADB Headquarters in Manila. The Project was subsequently transferred to the Kyrgyz Resident Mission on 1 December 2004. ADB Headquarters conducted an appraisal mission, inception mission, and one review mission. Following the project delegation to the Kyrgyz Resident Mission, a review mission and also a midterm review mission were undertaken. The missions included visits to the project sites and the executing agency's headquarters in Bishkek where coordination meetings were held with the executing agency and the PIUs. Two ADB project officers were involved in project

implementation.³⁵ Beginning in 2004, ADB only fielded one review mission per year instead of two, as had been specified in the Loan Agreement, and as project implementation was much improved from 2005 on as compared to 2004 (para. 28). The annual review missions were supplemented by intensified ADB communication with the executing agency, implementing agency, and PIUs. This helped identify and resolve all emerging implementation issues in a timely manner. The last ADB mission (mid-term review) took place in May–June 2006.

44. The selection of school subprojects (S-1 to S-4) was not conducted in accordance with the Project's scope, which limited subprojects to infrastructure that had been damaged in the natural disasters of 2003. Three of the four schools included in the school subprojects were not damaged and the construction of new schools was therefore not justified. The only school that had been damaged was the school in the Dubitel Resettlement Center. However, ADB approved these subprojects. ADB had previously cancelled a road subproject (R-10) since the road had not been damaged by the natural disasters of 2003. The role performed by the ADB missions in providing advice on technical issues, preparing and evaluating bid documents, and administering the loan was recognized by the executing agency. The overall performance of ADB was rated as satisfactory.

III. EVALUATION OF PERFORMANCE

A. Relevance

45. The Project's design and formulation conformed to the Government's development strategy to promote economic development through improving infrastructure. This was in line with ADB's Country Strategy and Program 2004-2006, which aimed to reduce poverty through economic development. The Project was also consistent with ADB's *Policy on Rehabilitation Assistance After Disasters*. The Project was designed to restore infrastructure essential to economic growth that had been damaged through landslides and mudslides. All of the objectives envisaged at appraisal were achieved by project completion. With infrastructure restored, affected sectors were able to contribute to economic growth at levels at least as high as before the disaster. No major changes were made to project design during implementation. The Project is considered highly relevant and remains relevant with ADB's existing Joint Country Support Strategy 2007-2010 and the Government's latest development strategy.

B. Effectiveness in Achieving Outcome

46. The Project was rated as effective since the completed subprojects in all components achieved their principal objective of restoring damaged infrastructure to pre-disaster levels and enabling a return to normal activities, both economic and social. The restoration and rehabilitation of road and bridge subprojects enabled isolated villages to once again access markets and social services in nearby urban centers. This was particularly important for agro-based industries, which are the primary employer in the majority of areas affected by the disasters.

47. In general, all project components made notable contributions to poverty reduction in the immediate vicinity of the subprojects. An assessment of project impacts and benefits on the basis of a sample of subprojects that were visited by the PCR Mission is in Appendix 12.

³⁵ One project officer was from ADB Headquarters and one project officer was from the Kyrgyz Resident Mission after the project was delegated to the Resident Mission on 1 December 2004.

C. Efficiency in Achieving Outcome and Outputs

48. As the Project was of an emergency nature, no economic analysis was undertaken to justify the investments at appraisal. The Project focused on the restoration of damaged key infrastructure facilities and capital costs were considered sunk costs. The economic benefits of such restoration activities were those that accrued at the time of initial construction, but were lost due to landslide damage. Project-financed restoration brought infrastructure back to its original levels of productivity and efficiency. While the Project's benefits were significant, these benefits were not quantifiable for all project components. Given the fact that the damaged facilities were restored to their pre-disaster status, no attempt was made to conduct economic evaluations.³⁶ The project performance monitoring system noted that traffic on all of the roads and bridges rehabilitated under the Project increased over pre-disaster levels by 35%–82%, depending on which section of the road had been rehabilitated. The per capita income of communities located along each of the rehabilitated road sections increased by up to 4% between 2003 and 2007. Up to 3,500 households benefited from the road subprojects and up to 2,300 households benefited from the power distribution line subprojects. Overall, the Project was rated as efficient in restoring economic and social activities in the areas affected by the 2003 natural disasters. Appendix 12 gives further detail on the assessment of the Project's qualitative benefits, although an economic analysis was not undertaken.

D. Preliminary Assessment of Sustainability

49. The rehabilitation and restoration works under the Project were of an emergency nature, aimed at meeting immediate needs and enabling a return to normal economic and social activities in the affected areas. The road and bridges protection, power distribution lines, and school and social infrastructure works undertaken during the Project have not suffered any subsequent damage. This was verified by the PCR Mission in its visit to several of the completed civil works subprojects.

50. The sustainability of project components is dependent upon the executing agency's ability to ensure proper maintenance to preserve the assets that have been rehabilitated. To ensure sustainability and facilitate monitoring, covenants relating to the Project's operation and maintenance expenditures may need to be specific for each sector. However, the executing agency is faced with funding shortfalls each year resulting from inadequate budget allocations. As confirmed by the PCR Mission, these structures are still intact and have not been damaged. However, they still need to be maintained by the executing agency. The PCR Mission noted that the availability of funds for the maintenance of all roads rehabilitated under the Project is adequate. For example, it was estimated in 2008 that MOTC roads required a maintenance budget of Som287 million, while the allocated budget was approximately Som730 million. For power distribution lines, the 2008 budget for small repairs of 1,171 km in the disaster-affected areas amounted to Som4.3 million and the amount allocated to major repairs encompassing approximately 70 km of power line amounts to Som0.7 million. (These estimates are for Osh and Batken where most of the rehabilitation was undertaken.) For power lines in 2009, MOTC has allocated approximately Som2.79 million for small repairs and Som1.6 million for major capital repairs. These amounts are adequate to maintain the power lines that were rehabilitated under the Project. Project outputs are likely to be sustained.

³⁶ Section 25/BP, page 4, footnote 1, ADB's *Operations Manual* states that "the rehabilitation loan may finance numerous subprojects that are small in size and prima facie economically viable. For such small projects, internal rate of return analysis may not be feasible or practical."

E. Impacts

1. Environmental Impact

51. A summary initial environmental examination (SIEE) was undertaken at appraisal and indicated that the Project would have no direct negative impact on water supply, sewerage, energy systems, or waste disposal; and no impact on archaeological or historic resources. All subprojects recommended by the executing agency were subject to an initial environmental examination. These subprojects were checked by the Kyrgyz Resident Mission to ensure that they satisfied environmental requirements before they were approved. All subprojects nominated by the executing agency met the required environmental standards and incorporated environmental mitigation measures where necessary. The environmental mitigation measures recommended were incorporated into the design and civil works contracts, which also recommended environmental monitoring procedures. The consultants' visits on site and specific field investigations formed the basis for environmental analysis. Based on these site visits, environmental concerns were communicated to contractors so that environmental mitigation measures could be undertaken. The Project's activities did not interfere with ecosystems, as almost all work under the Project was restorative. The PCR Mission on its site visits noted that there had been no adverse environmental impact from the works that were undertaken.

2. Socioeconomic Impact

52. The Project was aimed at restoring social and economic life back to normal in disaster-affected areas. The rehabilitation of the damaged roads, bridges, and power lines has contributed to this outcome by restoring the supply and distribution networks for basic goods and services. The construction of four schools has enabled continued access to education. The restoration works allowed normal activities to be resumed with improved access to markets, hospitals, and schools. People returned to their homes and normal activities with greater assurance that local infrastructure is now better-equipped to endure the strains caused by natural disasters.

3. Resettlement Impact

53. At appraisal, it was envisaged that the Project would not require land acquisition or resettlement due to the fact that the expected rehabilitation or building of infrastructure would be within either existing rights-of-way or the resettlement areas that were established by the Government. Although the Project was not expected to require land acquisition or involve involuntary resettlement, it was necessary to comply with ADB's safeguard policy requirements for a sector loan and a resettlement framework was conducted at appraisal. However, all work was undertaken in existing alignments or original sites, and no land acquisition or resettlement was required. The Government relocated people to safe areas and allocated land for the establishment of resettlement centers after the disasters occurred in 2003 at Kurshab-1 and Dubitel. Before the construction of the ADB-financed subprojects in the two resettlement areas, MES were to prepare and submit to ADB a resettlement framework according to ADB's *Policy on Involuntary Resettlement and Handbook on Resettlement*. This was undertaken as envisaged at appraisal. A due diligence report was prepared and submitted to ADB before subprojects were undertaken in the resettlement areas to determine if the affected people had been adequately compensated and the families relocated on a voluntary basis. The ADB approved the due diligence report in December 2004.

IV. OVERALL ASSESSMENT AND RECOMMENDATIONS

A. Overall Assessment

54. The Project is considered successful, based on a review of its relevance, effectiveness, efficiency, and sustainability. Appendix 13 includes the quantitative assessment of project performance to determine the project rating.

B. Lessons

55. Project implementation was delayed for several reasons. Loan effectiveness was delayed due to the executing agency, MES, not having established a PIU in a timely manner. Close follow-up is required with the Government to ensure that the implementation arrangements that were established at project start-up are adhered to as scheduled.

56. In implementing projects that involve several sectors, it is important that regular interaction between the Government and ADB is undertaken. Using a sector approach for the Project was extremely beneficial in identifying appropriate subprojects scattered over a wide area and enabling reallocation of funds from one sector to another sector as the need arose. It is also important that the Project's scope is followed closely as some of the components implemented under the Project (e.g., schools) should not have been pursued since they were not damaged in the natural disasters of 2003.

57. Compared with MOTC, MES has had less exposure to donor-funded projects and its capacity in project management remains limited. MES needs further institutional capacity strengthening to improve and sustain their knowledge of ADB's procurement and disbursement procedures, and civil works contract management.

C. Recommendations

1. Project-Related

58. The Government should regularly provide adequate funds for routine, periodic, and emergency maintenance of completed subprojects under the Project, through allocation in the annual budget each fiscal year. The completed subprojects should be closely monitored annually.

2. General

59. For successful implementation of future ADB-supported emergency assistance projects, a central coordination and monitoring unit, such as the project steering committee, is essential. To overcome the capacity constraints of the executing agency identified during project implementation, ADB may provide training to the staff of the executing agency on ADB's procedures relating to procurement and loan disbursement.

60. Administration and supervision of a project with multiple subprojects geographically spread over the country represents a serious challenge to ADB due to limited staff resources and the location of ADB Headquarters in another country. An early delegation of such projects to ADB's resident mission is recommended to address these problems.

PROJECT FRAMEWORK

Design Summary	Performance Indicators and Targets		Project Monitoring Mechanisms	Remarks
	Appraisal	Actual		
<p>Impact</p> <ul style="list-style-type: none"> • Help sustain economic growth and poverty reduction in the Kyrgyz Republic 	<ul style="list-style-type: none"> • Economic activities reestablished • Increase in the incidence of poverty avoided 	<p>Economic activities were reestablished through implementation of subprojects.</p> <p>According to the project performance monitoring system (ppms), the level of poverty has declined but it cannot be determined if this is directly attributable to the Project.</p>	<ul style="list-style-type: none"> • National statistics • ADB's project performance audit report 	
<p>Outcome</p> <ul style="list-style-type: none"> • Assist the Government to restore economic and social activities rapidly in the disaster-affected communities of four <i>oblasts</i> (provinces). 	<ul style="list-style-type: none"> • Transport links reestablished • Power supply restored • Access to education resumed • Municipal infrastructure provided in permanent resettlement centers that the Government is establishing for disaster-affected people 	<p>Critical sections of the transport links were identified during implementation and engineering solutions implemented</p> <p>Power supply lines have been restored.</p> <p>Accessibility to education has been established by the implementation of four new schools.</p> <p>Municipal infrastructure, such as schools, roads, and power supply, has been provided in Dubitel and Kurshab-1 resettlement centers.</p>	<ul style="list-style-type: none"> • National statistics • ADB project review missions • ADB's project completion report 	<p>Paras. 10–18 give details of outputs under each component of the Project</p>
<p>Component and Outputs</p> <ul style="list-style-type: none"> • Rehabilitation of public infrastructure damaged by severe landslides, floods, and mudslides to pre-disaster conditions or better 	<p>By the end of the Project:</p> <ul style="list-style-type: none"> • Five damaged roads (the Natural Park Ala–Archa road, Kurshab–Jalpaktash road, PAD–Budalyk road, Chalma–Buyga road; and Barpy–Yrissu–Changent road) will be rehabilitated 	<p>Four damaged roads rehabilitated: Kurshab–Jalpaktash, PAD–Budalyk, and Chalma–Buyga roads in Osh; and the Barpy–Yrissu–Changent road in Jalal–Abad. The road section from Natural Park Ala–Archa was cancelled.</p>	<ul style="list-style-type: none"> • Executing and implementing agencies' quarterly progress reports • Consultants' periodic reports • ADB project review missions 	<p>paras 12–13 give details of roads repaired and Appendix 2 refers to works undertaken</p>

Design Summary	Performance Indicators and Targets		Project Monitoring Mechanisms	Remarks
	Appraisal	Actual		
	<ul style="list-style-type: none"> • Ten damaged bridges (four bridges on the Barpy–Yrissu–Changent road, three bridges on the Natural Park Ala–Archa road, and one bridge each on the Illichevka–Erkintoo road, the Chalma–Buyga road, and the Sovetskaya–Syrzavod road) will be rebuilt. • About 21 kilometers (km) of four damaged power distribution lines (the 35 kiloVolt [kV] Uzgen–Zerger line, 35kV Mirza–Aki–Salamalik line, 10kV Gulcha–Sopu–Korgon line, and the 10 kV Ala Archa–25 years of Kyrgyzstan Substation line) rehabilitated • Three electrical transformer stations along the 10kV Ala Archa–25 years Kyrgyzstan Substation line replaced. • Four schools built in areas less prone to natural disasters in Chui and Osh for children of affected families, including furniture and facilities 	<p>A total of eight bridges were done including one new bridge.</p> <p>Approximately 19.63 km restored. The 10 kV Ala Archa 25 years of Kyrgyzstan line was cancelled (E-1) and the Kapchygal–Oital line (E-5) substituted.</p> <p>This subproject was cancelled (E-1).</p> <p>Four schools were built, but not in areas less prone to natural disasters. One school was built in the Dubitel resettlement center as envisaged, and the other three schools at Kichi–Bulelu, Kojomkul, and Semyz–Kol are located next to the original schools which were not damaged.</p>		<p>paras12–13 give details of bridges repaired and Appendix 2 refers to works undertaken</p> <p>paras 14–15 and Appendix 2 refers to works undertaken</p> <p>paras 15 and 28 refers to works undertaken</p> <p>paras 16–17 and Appendix 2 refer to works undertaken</p>

Design Summary	Performance Indicators and Targets		Project Monitoring Mechanisms	Remarks
	Appraisal	Actual		
	<ul style="list-style-type: none"> • Municipal infrastructure (about 4.3 km of on-site roads, 8.6 km of power lines, two electrical substations, 4.3 km of water supply network, and 1 km of drains) constructed in the Kurshab-1 and Dubitel resettlement centers in Osh Time-bound targets: • Two subprojects completed by the end of the first year • 14 subprojects completed by the end of the second year • 19 subprojects completed by the end of the third year 	<p>Achieved as envisaged at appraisal.</p> <p>No subprojects completed at the end of the first year</p> <p>14 subprojects completed at end of second year</p> <p>20 subprojects completed at end of third year</p>		<p>para 18 refers to works undertaken</p> <p>para 22 discusses disbursement delays, which is a reason that no subprojects were completed in the first year. The Project schedule (paras 27–29) discuss delays in implementation that resulted in no subprojects being completed at the end of the first year.</p>
<p>Inputs</p> <ul style="list-style-type: none"> • Civil works <ul style="list-style-type: none"> (i) Roads and bridges (ii) Electricity (iii) Schools and municipal infrastructure • Equipment procurement • Consulting services 	<p>Base Cost at Appraisal</p> <ul style="list-style-type: none"> • \$4.5 million <ul style="list-style-type: none"> (i) \$2.4 million (ii) \$0.4 million (iii) \$1.7 million • \$0.2 million • \$0.6 million <p>Total Cost \$6.3 million (including contingencies and interest during construction)</p>	<p>Actual Cost</p> <ul style="list-style-type: none"> • \$4.7 million <ul style="list-style-type: none"> (i) \$2.5 million (ii) \$0.3 million (iii) \$2.0 million • \$0.2 million • \$0.3 million <p>Total Cost \$5.4 million (including interest during construction)</p>	<ul style="list-style-type: none"> • Executing and implementing agencies' project progress reports • Project accounts • ADB project review missions 	<p>paras 19–21 and Appendix 3 refers to works undertaken</p>

ADB = Asian Development Bank, km = kilometer, kV = kilovolt, pms = project performance monitoring system.

DETAILS OF WORKS UNDERTAKEN FOR CIVIL WORKS CONTRACT PACKAGES

Roads and Bridges	Location	Description
R-1	Natural Park Ala–Archa Road	<ul style="list-style-type: none"> Cancelled
R-2	Kurshab–Jalpakatash Road	<ul style="list-style-type: none"> Construction of a road bed and base coarse with a total length of 960 meters; Construction of a twin-slab culvert: 2x2 meters, 53.9 meters long
R-3	Ilichevka–Erkintoo Road	<ul style="list-style-type: none"> Reinforcement of bridge by gabions, rubble stone, and wire mesh mattresses on the total square of 1412 sq. meters Construction of bridge approach roads with a length of 718 meters using 15 centimeter-thick fine graded wearing coarse (fine cold asphalt) Installation of concrete road fence with a total length of 487 meters Installation of traffic signs (4 units), reflection studs (15 units) and road marking (total of 456 meters marked)
R-4	PAD–Budalyk Road	<ul style="list-style-type: none"> Construction of a road bed and road coarse with a total length of 1050 meters Construction of a drainage system using a rubble stone (2133 cubic meters) Installation of traffic signs (2 units), reflective studs (15 units), and guard rails (54 meters)
R-5	Chalma–Buyga Road	<ul style="list-style-type: none"> Construction of a road bed and road coarse with a total length of 3693 meters Construction of three round concrete culverts with a diameter of 1 meter and total length of 59.71 meters Construction of two round concrete culverts with a diameter of 1 meter and total length of 87 meters Installation of traffic signs (31 units) and reflection studs (156 units) Construction of a bridge using 12-meter long t-beams and ferroconcrete blocks; the bridge is reinforced by wire mesh mattresses and gabions of a different size
R-6	Barpy–Yrisuu–Changent Road	<ul style="list-style-type: none"> Construction of a bridge using 18-meter long t-beams and reinforcement by rubble stone Construction of 5 round concrete culverts with a diameter of 1 meter and total length of 59.71 meter Construction of 2 round concrete culverts with a diameter of 1.5 meter and total length of 63.18 meters Construction of two twin-slab reinforced concrete culverts with a diameter of 1.5 meter and total length of 55.16 meters Construction of one rectangular culvert (2x2 meters) with length of 20 meters Repair of four bridges with a total length of 82.56 meters
R-7	Sovetskaya–Syrzavod Road	<ul style="list-style-type: none"> Construction of a 50.4-meter long three-section bridge using ferroconcrete blocks and 15-meter long t-beams; the bridge is reinforced by gabions and rubble stone Construction of the bridge approach roads with a total length of 240 meters using 15-

		<ul style="list-style-type: none"> centimeter thick sandy gravel Construction of a round culvert with a diameter of 1 meter and total length of 23 meters Installation of guard fence made of concrete blocks (28 units) Installation of traffic signs (2 units) and reflective studs (12 units)
R-8		<ul style="list-style-type: none"> Construction of a 50.2 meter long three-section bridge using ferroconcrete blocks and 15-meter long t-beams; the bridge is reinforced by gabions and rubble stone; no approach road was built to the bridge
R-9		<ul style="list-style-type: none"> Construction of 12 embankment with a total length of 925 meters The river bed was reinforced in two places (250 meters in total) by a rubble stone Construction of a 150-meter long gabion using McCaffree metal wire
Power Distribution		
E-1	Ala Alcha–25 years of Kyrgyzstan substation	<ul style="list-style-type: none"> Cancelled
E-2	Uzgen–Zerger	<ul style="list-style-type: none"> Rehabilitation of a high voltage transmission line (35 kilovolt [kV]) with a total length of 1.9 km
E-3	Mirza–Aki–Salamalik	<ul style="list-style-type: none"> Rehabilitation of a high voltage transmission line (35 kV) with a total length of 1.38 km
E-4	Gulcha–Sopu–Korgon	<ul style="list-style-type: none"> Rehabilitation of a high voltage transmission line (10 kV) with a total length of 15 km
E-5		<ul style="list-style-type: none"> Rehabilitation of a high voltage transmission line (35 kV) with a total length of 1.35 km
Schools and Municipal Infrastructure		
S-1	Dubitel School	<ul style="list-style-type: none"> Dubitel School (192 seats)
S-2	Kichi–Bulelu School	<ul style="list-style-type: none"> Kichi-Bulelu School (192 seats)
S-3	Seinyz–Kol School	<ul style="list-style-type: none"> Seinyz-Kol School (260 seats)
S-4	Kojomkul School	<ul style="list-style-type: none"> Kojomkul School (260 seats)
S-5	Kurshab–1 Permanent Resettlement Center	<ul style="list-style-type: none"> Provision of 1 kilometer of drains
S-6	Dubitel Permanent Resettlement Center	<ul style="list-style-type: none"> Provision of 4.3 km of on-site roads, 8.6 km of power line, 2 electrical substations, and 3 km of water supply network
S-7	Furniture for Schools	<ul style="list-style-type: none"> Furniture for schools (S-1 to S-4)
S-8	Heating and generator equipment	<ul style="list-style-type: none"> Heating equipment and generators for schools (S-1 to S-4)

APPRAISAL AND ACTUAL COSTS (\$'000)

Project Component	Appraisal Estimate			Actual		
	Foreign	Local	Total	Foreign	Local	Total
A. Civil Works						
1. Roads and Bridges	1,578	850	2,428	1,564	906	2,470
2. Power Lines	206	200	406	142	154	296
3. Social Infrastructure	802	861	1,663	882	1,099	1,981
Subtotal (A)	2,586	1,911	4,497	2,588	2,159	4,747
B. Equipment (School)	154	31	185	238	0	238
Subtotal (B)	154	31	185	238	0	238
C. Consulting Services	248	322	570	326	0	326
Subtotal (C)	248	322	570	326	0	326
D. Contingencies^a						
1. Physical Contingencies	351	182	533	-	-	-
2. Price Contingencies	151	75	226	-	-	-
Subtotal (D)	502	257	759	-	-	-
Subtotal (A+B+C+D)	3,490	2,521	6,011	3,152	2,159	5,311
E. Interest during Construction	264	0	264	72	0	72
Grand Total	3,754	2,521	6,275	3,224	2,159	5,383

Note: ^a Contingencies include physical contingency (11%) and price contingency (5%).
Source: Asian Development Bank.

CURRENCY EQUIVALENTS

1 January–31 December	Som to \$1.00
2004	42.64
2005	41.01
2006	41.44
2007	39.96
2008 ^a	35.50

^a 2008 exchange rate is based on 8 January 2008.
Source: Asian Development Bank.

Summary of Contracts Funded by the Asian Development Bank

Description	Length (km)	Mode of Procurement	ADB Approval	Contract Signing	Commencement	Completion	Name of Contractor/Supplier/Consultant	Country of Origin	Original (in contract currency)	Rate (at contract award)	Contract Amount			ADB Financing							
											\$ Equiv.	Final (in contract currency)	Rate (at completion)	\$ Equiv.	PCSS No.	In Contract Currency	\$ Equiv.				
																		C = AB	D	E = GH	F = D/E
01. CIVIL WORKS																					
A. Roads and Bridges																					
R2		1.00	Direct Contracting	10-Jan-05	04-Feb-05	04-Feb-05	31-Aug-05	JSC Southern Construction	KGZ	Som	4,147,515	40.7250	\$ 101,842	Som	4,147,515	37.8149	\$ 109,679	0020	Som	3,318,012	\$ 63,352
R3			Direct Contracting	10-Jan-05	04-Feb-05	04-Feb-05	31-Aug-05	JSC Southern Construction	KGZ	Som	6,200,000	40.7250	\$ 152,241	Som	6,200,000	37.9499	\$ 163,373	0021	Som	4,960,000	\$ 114,420
R7		13.00	NCB	10-Jun-05	07-Jun-05	07-Jun-05	10-Feb-06	JSC KerbenJolKurulush	KGZ	Som	16,429,949	40.9577	\$ 401,144	Som	16,429,949	38.9992	\$ 421,289	0023	Som	13,143,959	\$ 302,958
R9			NCB	10-May-05	17-May-05	17-May-05	17-May-06	Gradient Ltd	KGZ	Som	13,642,357	41.0041	\$ 332,707	Som	13,642,357	38.1015	\$ 358,053	0024	Som	10,913,886	\$ 270,724
R7,R8			NCB	14-Jun-05	06-Jun-05	06-Jun-05	06-Jun-06	Urojai Ltd	KGZ	Som	20,056,812	40.9577	\$ 489,696	Som	20,056,812	38.0500	\$ 527,117	0025	Som	16,045,450	\$ 468,198
R7.8			NCB	21-Jun-05	15-Jun-05	15-Jun-05	15-Feb-07	Toktosun Jumabekov	KGZ	USD	5,000	1.0000	\$ 5,000	USD	5,000	1.0000	\$ 5,000	0027	USD	5,000	\$ 3,999
R9			NCB	21-Jun-05	16-Jun-05	16-Jun-05	30-Sep-07	Rysbek Kerimbekov	KGZ	USD	4,000	1.0000	\$ 4,000	USD	4,000	1.0000	\$ 4,000	0028	USD	4,000	\$ 2,600
R2,3,4,5			NCB	21-Jun-05	15-Apr-05	15-Apr-05	30-Sep-07	Avazbek Nurmatov	KGZ	USD	6,500	1.0000	\$ 6,500	USD	6,500	1.0000	\$ 6,500	0029	USD	6,500	\$ 4,075
R6,10			NCB	21-Jun-05	15-Jun-05	15-Jun-05	31-Mar-07	Urmat Japarov	KGZ	USD	4,750	1.0000	\$ 4,750	USD	4,750	1.0000	\$ 4,750	0030	USD	4,750	\$ 3,754
R4		1.50	NCB	14-Mar-06	23-Feb-06	23-Feb-06	01-Jun-06	Ke-Se Ltd	KGZ	Som	9,093,617	41.5194	\$ 219,021	Som	9,093,617	37.9500	\$ 239,621	0047	Som	7,274,894	\$ 183,539
R5			NCB	31-Mar-06	19-Apr-06	19-Apr-06	20-Mar-07	JSC Southern Construction	KGZ	Som	18,789,026	41.1850	\$ 456,210	Som	18,789,026	37.9500	\$ 495,100	0048	Som	15,031,221	\$ 251,301
R8			NCB	31-Mar-06	19-Apr-08	19-Apr-06	20-Dec-06	JSC Kerbenkurulush	KGZ	Som	9,605,240	41.1850	\$ 233,222	Som	9,605,240	35.1000	\$ 273,654	0049	Som	7,684,192	\$ 193,189
Advances																					\$ 112,197
Subtotal	15.50							Som	97,984,766		\$ 2,406,333				25.4930	\$ 2,608,137		Som	10,737,157	\$ 236,562	
B. Power Distribution Lines																					
E3		3.500	NCB	22-Jun-05	09-Jun-05	09-Jun-05	09-Nov-05	Jalalabad MK JSC KESS	KGZ	Som	2,917,168	40.9577	\$ 71,224	Som	2,917,168	41.0699	\$ 71,029	0031	Som	2,333,734	\$ 38,077
E4		15.000	NCB	22-Jun-05	09-Jun-05	09-Jun-05	10-Feb-06	SKESM Oshaienergo	KGZ	Som	6,074,751	40.9577	\$ 148,318	Som	6,074,751	38.1015	\$ 159,436	0032	Som	4,859,801	\$ 118,919
E2		2.700	NCB	01-Jul-05	21-Jun-05	21-Jun-05	21-Nov-05	Jalalabad MK JSC KESS	KGZ	Som	2,571,238	41.0700	\$ 62,606	Som	2,571,238	41.0000	\$ 62,713	0036	Som	2,056,990	\$ 47,910
E5		1.150	NCB	31-Oct-05	29-Aug-05	29-Aug-05	01-Mar-06	JSC Kyrgyzelectrosetstroi	KGZ	Som	1,855,789	40.9500	\$ 45,318	Som	1,855,789	39.6893	\$ 46,758	0042	Som	1,484,631	\$ 30,056
E2,3,4,5			NCB	31-Oct-05	01-Nov-05	01-Nov-05	01-May-06	Shavkatbek Sharafutdinov	KGZ	USD	2,000	1.0000	\$ 2,000	USD	2,000	1.0000	\$ 2,000	0043	USD	2,000	\$ 1,400
Advances																					\$ 200
Subtotal	22.350							Som	13,420,946		\$ 329,466				32.1721	\$ 341,936		Som	10,737,157	\$ 236,562	
C. Schools and Municipal Infrastructure																					
S1			NCB	04-Nov-04	15-Oct-04	15-Oct-04	15-Dec-06	Sandwich Ltd	KGZ	Som	148,750	43.0215	\$ 6,399,448	Som	148,750	41.7523	\$ 3,563	0012	Som	119,000	\$ 2,915
S1			NCB	23-Dec-04	09-Nov-03	09-Nov-03	25-Dec-05	Jalal-Abad PMO	KGZ	Som	13,152,000	41.4013	\$ 317,671	Som	13,152,000	41.0041	\$ 320,748	0015	Som	10,521,600	\$ 250,096
S5		1.000	NCB	23-Dec-04	15-Sep-03	15-Sep-03	31-Dec-04	KarasuuStroiUniversal Ltd	KGZ	Som	5,213,121	40.8059	\$ 127,754	Som	5,213,121	40.8059	\$ 127,754	0016	Som	4,170,497	\$ 102,246
S6		4.300	NCB	23-Dec-04	15-Dec-03	15-Dec-03	30-Sep-07	JSC Avto Jol	KGZ	Som	12,199,800	44.2182	\$ 275,900	Som	12,199,800	37.6750	\$ 323,817	0017	Som	9,759,840	\$ 192,839
S6		3.000	NCB	23-Dec-04	12-Sep-03	12-Sep-03	30-Nov-06	JSC UzgenVodstroj	KGZ	Som	2,742,000	42.5610	\$ 64,425	Som	2,742,000	41.3010	\$ 66,391	0018	Som	2,193,600	\$ 10,973
S6		8.600	NCB	23-Dec-04	19-Sep-03	19-Sep-03	25-Jul-05	Jalal-Abad MK KEES	KGZ	Som	3,592,399	43.2482	\$ 83,065	Som	3,592,399	41.0040	\$ 87,611	0019	Som	2,873,919	\$ 70,643
S4			NCB	14-Jun-05	30-May-05	30-May-05	30-May-06	KVT Ltd	KGZ	Som	17,489,595	41.0041	\$ 426,533	Som	17,489,595	37.9500	\$ 460,859	0026	Som	13,991,676	\$ 350,820
S1.6			NCB	29-Jun-05	15-Jun-05	15-Jun-05	30-Jun-05	Duishenaly Egemberdiev	KGZ	USD	6,525	1.0000	\$ 6,525	USD	6,525	1.0000	\$ 6,525	0033	USD	6,525	\$ 3,932
S3			NCB	29-Jun-05	27-Jun-05	27-Jun-05	06-Sep-06	Arstanbek Isaev	KGZ	USD	3,100	1.0000	\$ 3,100	USD	3,100	1.0000	\$ 3,100	0034	USD	3,100	\$ 2,471
S4			NCB	29-Jun-05	20-Jun-05	20-Jun-05	20-Nov-06	Isak Abdaimov	KGZ	USD	3,760	1.0000	\$ 3,760	USD	3,760	1.0000	\$ 3,760	0035	USD	3,760	\$ 1,910
S2			NCB	01-Jul-05	21-Jun-05	21-Jun-05	21-Jun-06	AlaiAiykKurulush	KGZ	Som	10,498,001	41.0700	\$ 255,612	Som	10,498,001	41.0000	\$ 256,049	0037	Som	8,398,401	\$ 207,998
S3			NCB	01-Jul-05	21-Jun-05	21-Jun-05	21-Jun-06	KochkorataAiykKurulush	KGZ	Som	10,482,940	41.0700	\$ 255,246	Som	10,482,940	41.0000	\$ 255,681	0038	Som	8,386,352	\$ 209,233
S2			NCB	04-Aug-05	27-Jul-05	27-Jul-05	27-Sep-06	Nurlan Soortbekov	KGZ	USD	3,100	1.0000	\$ 3,100	USD	3,100	1.0000	\$ 3,100	0040	USD	3,100	\$ 2,471
S6			NCB	18-Aug-05	16-Aug-05	16-Aug-05	17-Sep-05	Musal Ltd	KGZ	Som	161,745	40.9500	\$ 3,950	USD	161,745	40.9511	\$ 3,950	0041	USD	161,745	\$ 3,190
S4			NCB	13-Dec-05	29-Sep-03	29-Sep-03	14-Oct-03	JSC Bishkekproject	KGZ	Som	96,270	43.2482	\$ 2,226	Som	96,270	41.1891	\$ 2,337	0044	Som	77,016	\$ 1,878
S6			NCB	07-Feb-06	31-Jan-06	31-Jan-06	31-Jan-07	JSC Kerbenjolkurulush	KGZ	Som	6,139,988	41.3226	\$ 148,587	Som	6,139,988	37.9500	\$ 161,792	0046	Som	4,911,991	\$ 122,736
S1,2,3,4			NCB	13-Mar-07	10-Mar-07	10-Mar-07	14-Apr-07	Sandwich Ltd	KGZ	Som	330,000	38.1016	\$ 8,661	USD	330,000	38.1016	\$ 8,661	0052	Som	330,000	\$ 6,993
Advances																					\$ 40,946
Subtotal	16.900							Som	81,933,094		\$ 8,376,902				\$ 2,087,036				65,912,121	\$ 1,584,290	
Total: Civil Works	54.750							Som	193,338,806		\$ 11,112,701				\$ 5,037,109				76,649,278	\$ 3,795,158	

02. EQUIPMENT

S8	School furniture supply for Dhubitel school	Direct Contracting	24-Jan-06	31-Jan-06	31-Jan-06	02-Mar-06	Cabinet Ltd	KGZ	USD	24,600	1,000	\$	24,600	USD	24,600	1,000	\$	24,600	0045	USD	24,600	\$	24,600
S7	School furniture supply for three schools	Direct Contracting	02-Aug-06	02-Aug-06	02-Aug-06	31-Dec-06	Cabinet Ltd	KGZ	USD	69,334	1,000	\$	69,334	USD	69,334	1,000	\$	69,334	0050	USD	69,334	\$	60,185
S8	Supply and assembling electric heating equipment for two schools	Direct Contracting	18-Oct-06	16-Oct-06	16-Oct-06	18-Nov-06	JSC Envod	KGZ	Som	862,500	39,1640	\$	22,023	Som	862,500	39,1640	\$	22,023	0051	Som	862,500	\$	22,252
S7	Supply and assembling of diesel generators for four newly constructed schools	NCB	28-Jun-07	14-Jul-07	14-Jul-07	14-Jul-08	JSC KESS	KGZ	Som	4,404,000	37,9500	\$	116,047	Som	4,404,000	35,1000	\$	125,470	0053	Som	4,404,000	\$	56,725
	Advances																						73,875
	Total - Equipment									USD	5,360,434		232,004		19,0660		241,427						237,637

03. CONSULTING SERVICES

1. National Consultants

	Elmira Davletova, Translator/Interpreter	Direct Contracting	10-Aug-04	15-Jul-04	15-Jul-04	15-Sep-04	Elmira Davletova	KGZ	USD	750	1,000	\$	750	USD	750	1,000	\$	750	0001	USD	750	\$	750
	Transport Services incl salary of Driver and Runout and Repair of vehicle	Direct Contracting	10-Aug-04	15-Jul-04	15-Jul-04	16-Oct-04	Kanat Kurmanbekovich Tokoev	KGZ	USD	922	1,000	\$	922	USD	922	1,000	\$	922	0002	USD	922	\$	922
	Procurement of Goods: Supply of Computers and Office Equipment	LTD Int'l Bidding	12-Oct-04	27-Sep-04	27-Sep-04	31-Oct-04	Ermex Computer Technologies	KGZ	USD	8,619	1,000	\$	8,619	USD	8,619	1,000	\$	8,619	0003	USD	8,619	\$	8,618
	Project Manager/Municipal Engineer	NCB	02-Oct-04	05-Oct-04	05-Oct-04	30-Sep-07	Meimanbek Tashpolotov	KGZ	USD	25,769	1,000	\$	25,769	USD	25,769	1,000	\$	25,769	0004	USD	25,769	\$	24,368
	Accountant	NCB	02-Oct-04	05-Oct-04	05-Oct-04	30-Sep-07	Beishegul Iklasova	KGZ	USD	19,215	1,000	\$	19,215	USD	19,215	1,000	\$	19,215	0005	USD	19,215	\$	17,815
	Procurement Specialist	NCB	02-Oct-04	05-Oct-04	05-Oct-04	30-Sep-07	Mukash Osmonaliev	KGZ	USD	5,109	1,000	\$	5,109	USD	5,109	1,000	\$	5,109	0006	USD	5,109	\$	5,066
	Social Infrastructure Development Specialist	NCB	02-Oct-04	05-Oct-04	05-Oct-04	30-Sep-07	Asel Buteshova	KGZ	USD	2,792	1,000	\$	2,792	USD	2,792	1,000	\$	2,792	0007	USD	2,792	\$	2,791
	Highway and Bridge Engineer	NCB	02-Oct-04	05-Oct-04	05-Oct-04	30-Sep-07	Satarbek Borbuev	KGZ	USD	20,216	1,000	\$	20,216	USD	20,216	1,000	\$	20,216	0008	USD	20,216	\$	18,816
	Procurement Specialist	NCB	02-Oct-04	05-Oct-04	05-Oct-04	05-Oct-05	Kadyraly Bekov	KGZ	USD	5,109	1,000	\$	5,109	USD	5,109	1,000	\$	5,109	0009	USD	5,109	\$	5,109
	Power Engineer	NCB	02-Oct-04	05-Oct-04	05-Oct-04	30-Sep-07	Orozaly Temirov	KGZ	USD	2,792	1,000	\$	2,792	USD	2,792	1,000	\$	2,792	0010	USD	2,792	\$	2,792
	Translator/Office Manager	NCB	02-Oct-04	05-Oct-04	05-Oct-04	30-Sep-07	Elmira Davletova	KGZ	USD	15,840	1,000	\$	15,840	USD	15,840	1,000	\$	15,840	0011	USD	15,840	\$	14,424
	Procurement of Goods: Supply of 2 NIVA vehicles	LTD Int'l Bidding	03-Nov-04	12-Nov-04	12-Nov-04	30-Nov-04	Ailanta Ltd	KGZ	USD	15,700	1,000	\$	15,700	USD	15,700	1,000	\$	15,700	0014	USD	15,700	\$	15,700
	Domestic Consultants' Travel expenses	Others	24-Jan-05	24-Feb-05	24-Feb-05	31-Dec-05	Domestic Consultants	KGZ	USD	14,801	1,000	\$	14,801	USD	14,801	1,000	\$	14,801	0022	USD	14,801	\$	13,486
	Audit of Project Accounts for 2004, 2005, and 2006-2007 Advances	NCB	26-Jul-05	28-Jun-05	28-Jun-05	30-Jun-07	W. Jacobs Audit Company	KGZ	USD	11,200	1,000	\$	11,200	USD	11,200	1,000	\$	11,200	0039	USD	11,200	\$	10,567
	Subtotal	0.00								USD	305,074,518		13,857,161		193,668,806		7,995,843		USD	148,833		199,806	

2. International Consultants

	Project Advisor	ICB	21/10/2004	25-Oct-04	25-Oct-04	30-Apr-07	Louis Berger Group Inc. (Rojer Patrick Finn)	USA	USD	375,268	1,000	\$	375,268	USD	375,268	1,000	\$	375,268	0013	USD	375,268	\$	125,872
	Subtotal									375,268			375,268		375,268		375,268				375,268	125,872	

Total Consulting Services

305,449,786	14,232,429	194,044,074	8,371,111	USD	524,101	325,678
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04. INTEREST CHARGES

US\$ Capitalization							0000																2,462
US\$ Capitalization							0000																2,566
US\$ Capitalization							0000																10,862
US\$ Capitalization							0000																14,573
US\$ Capitalization							0000																19,022
US\$ Capitalization							0000																22,574
Subtotal							0000																72,059

GRAND TOTAL

504,149,026	25,577,134	194,044,074	13,649,647		4,430,532
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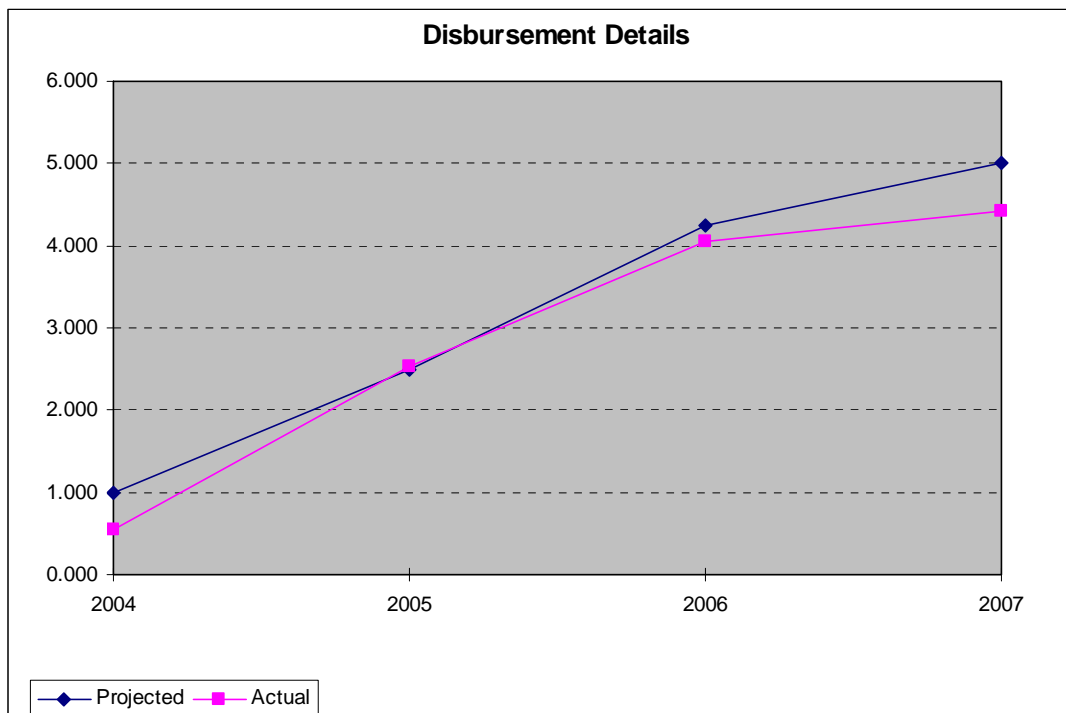
PROJECTED AND ACTUAL DISBURSEMENTS
(\$ million)

Table A6: Projected and Actual Disbursements

Year	Appraisal	Actual
2004	1.000	0.537
2005	1.500	1.990
2006	1.750	1.534
2007	0.750	0.370
Total	5.000	4.431

Note: In the absence of any appraisal estimate of disbursements, the PCR Mission estimated the disbursements at appraisal based on the implementation schedule.
Source: Asian Development Bank Loan Financial Information System.

Figure A6: Projected and Actual Disbursements



Source: Asian Development Bank.

CHRONOLOGY OF MAJOR EVENTS

Date	Event
<u>2003</u>	
Spring and Summer 2003	Severe floods and landslides in five <i>oblasts</i> (provinces): Chui, Issyk-Kul, Jalal-Abad, Naryn, and Osh
5 Aug 2003	Government requested grant assistance in response to emergency situation
8–19 Sep 2003	Fact-finding Mission in response to Government request for assistance
28 Oct 2003	Advance action for procurement of civil works and retroactive financing of eligible expenses incurred and paid from 8 September 2003 until loan effectiveness was approved
13–15 Nov 2003	Loan negotiations through fax exchange
17 Nov 2003	Minutes of loan negotiations signed and draft Loan Agreement prepared
19 Nov 2003	Draft Report and Recommendation of the President (RRP) and Loan Agreement prepared for circulation to the Asian Development Bank (ADB) Board
11 Dec 2003	Loan approval by ADB Board
<u>2004</u>	
12 Feb 2004	Loan Agreement signed
24 Jun 2004	Loan effectiveness
12–19 Jan 2004	Inception Mission
8 Jan 2004	Working group under the Ministry of Emergency Situations (MES) established
12 Mar 2004	Project implementation unit (PIU) under the Ministry of Transport and Communications (MOTC) established by MOTC order No. 93
4 Apr 2004	A separate PIU established under MES
7 May 2004	First deputy minister, MES appointed as project director by order No. IO-17k
May–Jun 2004	Eight PIU staff- local consultants engaged
15 Jul 2004	Steering committee established by Government Decree No. 372-R
23 Jul 2004	First withdrawal application submitted

Date	Event
27 Aug 2004	Initial deposit of \$0.5 million to imprest account
27 Sep–2 Oct 2004	Review Mission
26 Oct 2004	Contract with international consultant signed
3 Nov 2004	Procurement of two NIVA vehicles for the project approved
23 Dec 2004	Retroactive financing for subprojects S-1, S-5, and S-6 approved
25 Dec 2004	First minor change approved to: (i) cancel subproject R-1 for \$621,000; (ii) decrease the allocation for subprojects R-2 and R-3 from \$240,000 and \$449,000 to \$100,000 and \$152,000, respectively; and (iii) include three subprojects to be financed out of the resulting savings of \$1,058,000.
28 Dec 2004	The second minor change was approved to (i) cancel subproject E-1 for \$42,000; and (ii) include a new subproject (E-5), the 35-kilovolt (kV) Kapchygai–Oital electric line for the same amount.
<u>2005</u>	
10 Jan 2005	Change in procurement mode for subprojects R-2 and R-3 from National Competitive Bidding to direct procurement mode
28 Jun 2005	Contract for audit services signed with Jacobs Audit Ltd and approved by ADB on 26 July 2005
13 Jul 2005	Reallocation of funds: an amount of SDR101,664 (\$148,535 equivalent) from category 5 “unallocated” to category 01C civil works (social infrastructure)
18–28 Jul 2005	Review Mission
Jul 2005	Contract awards under civil works for social infrastructure subcategory exceeded the allocation. To address this, ADB processed a reallocation of SDR101,664 (\$148,535 equivalent) from unallocated category
<u>2006</u>	
30 Jan 2006	Reallocation of SDR17,149 (\$25,000 equivalent) ¹ from unallocated category to subcategory 01C (civil works/social infrastructure).
21–27 May and 26–30 Jun 2006	Mid-term Review Mission
28 Jun 2006	Audit of 2005 project accounts submitted

¹ Exchange rate as of 27 January 2006: SDR1=\$1.4578488.

Date	Event
18 Oct 2006	Reallocation of SDR66,000 to category 1A and SDR23,000 to the category 1A from unallocated
6 Nov 2006	Reallocation of project funds from unallocated category to categories 1A (SDR66,000) and 1C (SDR23,000)
15 Dec 2006	Reallocation of \$90,000 from unallocated category to subcategory 01C (civil works/social infrastructure)
27 Dec 2006	Termination of contract with international consultant Rojer Finn, project advisor; and extension of contract with project manager Meimanbek Tashpolotov approved
<u>2007</u>	
12 Jan 2007	Minor change in project scope to equip four schools with back-up generators for a total amount of \$93,000, with reallocation of \$50,000 from unallocated to category 2
17 Jan 2007	Mr. Bakirdin Jolchiev, Deputy Minister of MES, is appointed as a new project director
29 Jan 2007	Minor change in implementation arrangements connected with reorganization of the executing agency and change of the title from Ministry of Ecology and Emergency Situations (MEES) to MES
10 Apr 2007	Reallocation of SDR42,000 from unallocated to subcategory 01A civil works/roads and bridges approved
19 Apr 2007	Approval of shopping method for procurement of school generators
13 Jul 2007	Approval of contract award to Jalalabad MK JSC KESS for procurement of school generators
<u>2008</u>	
8 Jan 2008	The undisbursed loan balance of SDR483,132.76 (or equivalent of \$766,089.12) cancelled; loan Account closed the same day
Feb 2008	MES prepared and submitted the project completion report (PCR)

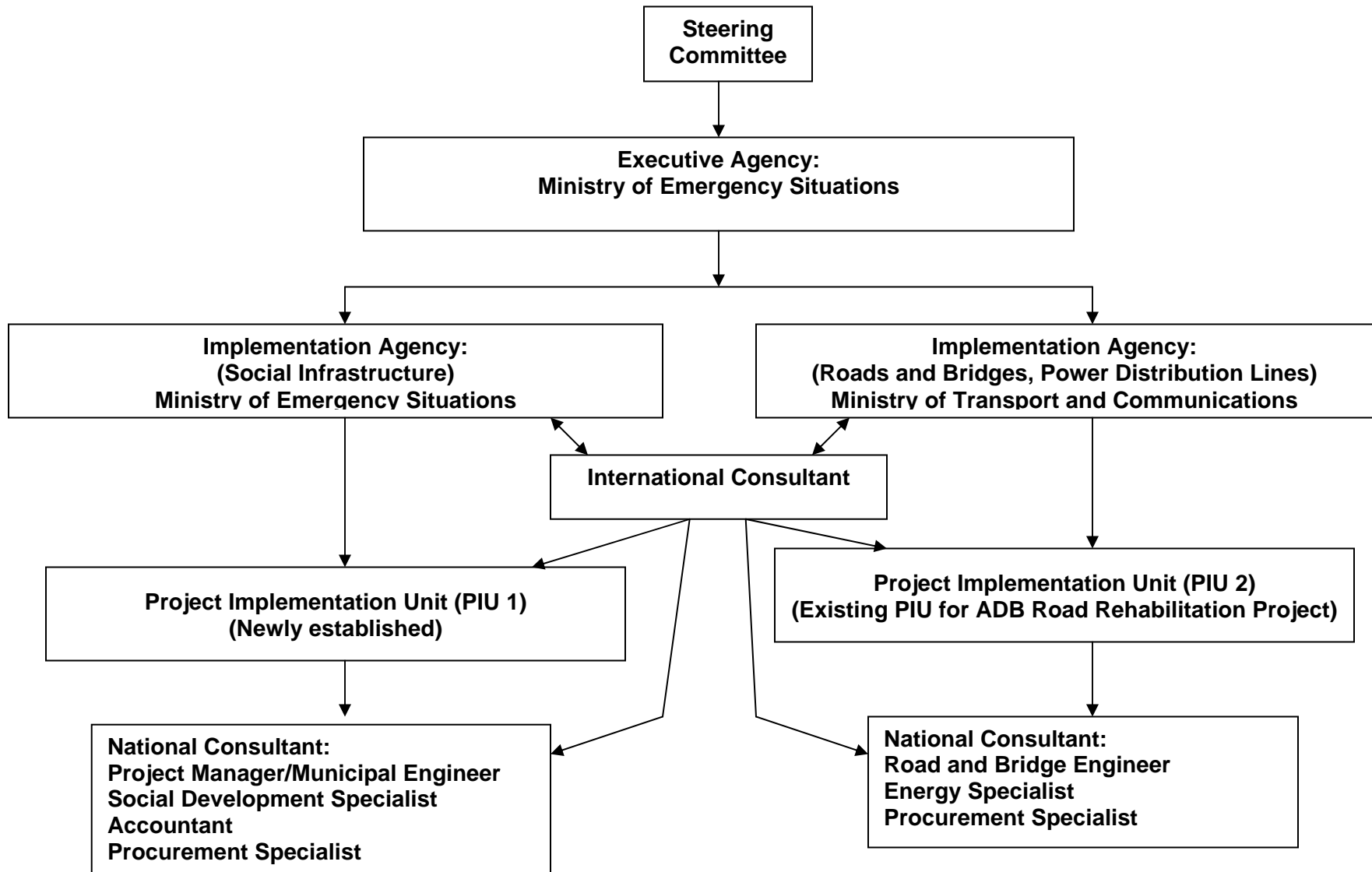
PROJECT IMPLEMENTATION SCHEDULE

Item	2003					2004					2005					2006					2007														
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N
A. Mobilization of Project Team																																			
B. Civil Works																																			
1. Roads and Bridges																																			
2. Social Infrastructure																																			
3. Power Distribution Lines																																			
C. Procurement of School Equipment																																			
D. Consulting Services																																			
1. International Consultant																																			
2. Domestic Consultant																																			
Project Period																																			

= Appraisal
 = Actual

Source: Asian Development Bank

ORGANIZATION CHART OF PROJECT IMPLEMENTATION STRUCTURE



Source: Ministry of Transport and Communications, Ministry of Emergency Situations, Kyrgyz Republic

STATUS OF COMPLIANCE WITH MAJOR LOAN COVENANTS

Covenant	Reference to Loan Document	Status of Compliance
Sector		
1. Operation and Maintenance of Project Facilities. The Borrower shall ensure that (a) the Project facilities, other than the water supply facilities, are maintained in accordance with sound administrative policies and practices by the Project Oblasts, or the PIAs, through the concerned departments and utility companies that are in charge of the operation and maintenance of such facilities, as appropriate and (b) the water supply facilities to be constructed in the Permanent Resettlement Centers are maintained in accordance with sound administrative policies and practices by the concerned water users' associations.	Loan Agreement, Schedule 6, para. 11	Complied with (a) complied with (b) complied with
2. Operation and Maintenance of Project Facilities. The Borrower shall ensure that sufficient funds are allocated for the operation and maintenance of the Project facilities during and after the Project implementation period.	LA, Schedule 6, para.12	Partly complied with. Three of total four schools do not fully benefit from back-up generators installed under the Project, due to insufficient operation and maintenance budget.
Environmental		
1. Environment and Resettlement. The Borrower shall ensure that each of Ministry of Environment and Emergency Situations (MEES) and Ministry of Transport and Communications (MOTC), as applicable, prepares an Initial Environmental Examination (IEE) for each component of the Project in accordance with the Bank's environmental guidelines and existing laws, regulations and standards of the Borrower concerning environmental protection.	LA, Schedule 6, para. 7	Complied with. MEES submitted 6 IEEs for 6 subprojects. MOTC submitted IEEs for all 12 subprojects.
2. Environment and Resettlement. The Borrower shall ensure that (a) the Project is carried out, and all Project facilities are operated and maintained, in accordance with the Bank's environmental guidelines, the IEEs, the SIEE, and existing laws, regulations and standards of the Borrower	LA, Schedule 6, para. 8	Complied with. IEE and SIEE recommendations have being incorporated into the particular conditions of contracts for civil works under each

Covenant	Reference to Loan Document	Status of Compliance
<p>concerning environmental protection, (b) all environmental mitigation measures identified in the IEEs and SIEE are undertaken during Project implementation, (c) the guidelines developed under the IEEs and SIEE are incorporated into the design, rehabilitation and operation of the Project facilities, and (d) MEES prepares and submits to the Bank, on a semi-annual basis, an environmental status report acceptable to the Bank. The Borrower shall also ensure that all necessary environmental approvals and clearances, as required under the relevant laws and regulations of the Borrower, are obtained in a timely manner.</p>		<p>subproject and implemented.</p>
<p>Social</p>	<p>LA, Schedule 6, para. 9</p>	<p>Complied with. Condition for disbursements for subprojects S-1, S-5 and S-6, located in resettlement centers. Due diligence report and action plan were received and approved</p>
<p>1. Environment and Resettlement. For those persons that have been relocated to the Permanent Resettlement Centers and those who lost agricultural land due to the establishment of the Permanent Resettlement Centers (Affected Persons), the Borrower shall (a) prepare, through an independent third-party, a due diligence report assessing (i) the adequacy of the compensation provided to such Affected Persons, (ii) whether such Affected Persons are at least as well off as they would have been in the absence of the relocation and (iii) whether the Affected Persons have been relocated on a voluntary basis; and (b) if necessary, (i) prepare a set of mitigation measures to address any inadequacies found during the due diligence assessment and (ii) implement the mitigation measures in accordance with their terms. The due diligence report and mitigation measures, if applicable, shall be conducted and determined in accordance with the Bank's Policy on Involuntary Resettlement and Handbook on Resettlement .</p>		
<p>2. Environment and Resettlement. For those persons that will be relocated to the Permanent Resettlement Centers during the Project, the Borrower shall prepare a</p>	<p>LA, Schedule 6, para. 10</p>	<p>Not applicable. No resettlement is envisaged under the project.</p>

Covenant	Reference to Loan Document	Status of Compliance
<p>resettlement framework in accordance with the Bank's Policy on Involuntary Resettlement and Handbook on Resettlement (Resettlement Framework). The Resettlement Framework shall (a) contain guidelines and measures for assessing whether (i) the Project causes land acquisition and/or resettlement impacts; and (ii) the relocation to the Permanent Resettlement Centers will be done on a voluntary basis and (b) include procedures for independent third-party verification. If, as a result of the information obtained under the Resettlement Framework, it is determined that the Project causes land acquisition and resettlement impacts, the Borrower must inform the Bank and justify the reasons for the related impacts. After concurrence from the Bank, the Borrower shall prepare a Resettlement Plan in accordance with the Bank's Policy on Involuntary Resettlement and Handbook on (Resettlement Plan). The Resettlement Plan must be approved by the Bank prior to the implementation of any resettlement activities under the Project.</p>		
<p>Financial</p>		
<p>1. The Borrower shall maintain, or cause to be maintained, records and accounts adequate to identify the goods and services and other items of expenditure financed out of the proceeds of the Loan, to disclose the use thereof in the Project, to record the progress of the Project (including the cost thereof) and to reflect, in accordance with consistently maintained sound accounting principles, the operations and financial condition of the agencies of the Borrower responsible for the carrying out of the Project and operation of the Project facilities, or any part thereof.</p>	<p>LA, Section 4.06 (a)</p>	<p>Complied with. Records and accounts are maintained by PIU established in April 2004.</p>
<p>2. The Borrower shall (i) maintain, or cause to be maintained, separate accounts for the Project; (ii) have such accounts and related financial statements audited</p>	<p>LA, Section 4.06 (b)</p>	<p>Complied with Except for audit report for 2004 accounts all audit reports were submitted</p>

Covenant	Reference to Loan Document	Status of Compliance
<p>annually, in accordance with appropriate auditing standards consistently applied, by independent auditors whose qualifications, experience and terms of reference are acceptable to the Bank; (iii) furnish to the Bank, as soon as available but in any event not later than six (6) months after the end of each related fiscal year, certified copies of such audited accounts and financial statements and the report of the auditors relating thereto (including the auditors' opinion on the use of the Loan proceeds and compliance with the covenants of this Loan Agreement as well as on the use of the procedures for imprest account and statement of expenditures), all in the English language; and (iv) furnish to the Bank such other information concerning such accounts and financial statements and the audit thereof as the Bank shall from time to time reasonably request.</p>		on time.
<p>3. The Borrower shall enable the Bank, upon the Bank's request, to discuss the Borrower's financial statements for the Project and its financial affairs related to the Project from time to time with the Borrower's auditors, and shall authorize and require any representative of such auditors to participate in any such discussions requested by the Bank, provided that any such discussion shall be conducted only in the presence of an authorized officer of the Borrower unless the Borrower shall otherwise agree.</p>	LA, Section 4.06 (c)	Complied with
<p>4. Financial Matters. The Borrower shall ensure that all funds and resources for the Project are provided on a timely basis.</p>	LA, Schedule 6, para. 6	Complied with
<p>Economic</p> <p>1. Monitoring and Evaluation. The Borrower shall (a) ensure that the PIAs, within three months of the Effective Date, establish a Project Performance Monitoring System (PPMS), and (b) through the Project Implementation Agencies (PIAs), monitor and evaluate Project impacts</p>		<p>Complied with. The PPMS was approved by ADB 31 March 2005</p>

Covenant	Reference to Loan Document	Status of Compliance
through the PPMS to ensure that the Project facilities are managed effectively and the Project benefits are maximized.		
Other		
<p>1. Established, Staffed, and Operating PMU/PIU</p> <p>MEES, as the Project Executing Agency for the Project, shall be responsible for coordinating the overall implementation of the Project. A vice minister of MEES shall be the Project Director, responsible for Project implementation matters. To ensure interagency coordination and integration of the Project Implementation, the Project Executing Agency shall be assisted by the Project Steering Committee (PSC), two Project Implementing Agencies (PIAs) and two Project Implementation Units (PIUs).</p>	LA, Schedule 6, para. 1	Complied with. Condition for loan effectiveness
<p>2. Fielding of Consultants</p> <p>In the carrying out of the Project, the Borrower shall cause competent and qualified consultants and contractors, acceptable to the Borrower and the Bank, to be employed to an extent and upon terms and conditions satisfactory to the Borrower and the Bank.</p>	LA, Section 4.03 (a)	Complied with Domestic consultants commenced their services from May 2004, international consultant was fielded in October 2004.
<p>3. The PSC shall be chaired by the Minister of Finance and shall include representatives from each of the Prime Minister's Office, MEES, MOEC, MOTC, the State Property Committee and Project Oblast government representatives. The PSC shall be responsible for supervising overall Project implementation and providing necessary guidance as appropriate. The PSC shall meet on a quarterly basis.</p>	LA, Schedule 6, para. 2	Complied with Condition for loan effectiveness
<p>4. MEES shall be the PIA responsible for implementing the rehabilitation of the schools and municipal infrastructure components of the Project and MOTC shall be the PIA responsible for implementing the roads and bridges and electricity components of the Project.</p>	LA, Schedule 6, para. 3	Complied with

Covenant	Reference to Loan Document	Status of Compliance
<p>5. There shall be two PIUs established for the Project, one in each MEES and MOTC. MOTC shall utilize the already existing PIU established in connection with the Bank-funded Road Rehabilitation Project. The PIUs shall be responsible for the day-to-day coordination and implementation of the Project, including coordinating construction supervision; conducting detailed engineering design reviews; provision of support for the procurement of equipment and materials; and monitoring and reporting on Project implementation. Each PIU shall be headed by a full-time Project manager who will coordinate with and assist the Project Director for Project implementation.</p>	LA, Schedule 6, para. 4	Complied with
<p>6. The Borrower shall ensure that (a) each of the PSC, PIAs and PIUs are maintained until 30 September 2007 and (b) each such committee, agency or unit, as the case may be, meets and operates as often as necessary to implement the Project.</p>	LA, Schedule 6, para. 5	Complied with
<p>7. The Borrower shall furnish, or cause to be furnished, to the Bank all such reports and information as the Bank shall reasonably request concerning (i) the Loan, and the expenditure of the proceeds and maintenance of the service thereof; (ii) the goods and services and other items of expenditure financed out of the proceeds of the Loan; (iii) the Project; (iv) the administration, operations and financial condition of MEES, MOTC and the other agencies of the Borrower responsible for the carrying out of the Project and operation of the Project facilities, or any part thereof; (v) financial and economic conditions in the territory of the Borrower and the international balance-of-payments position of the Borrower; and (vi) any other matters relating to the purposes of the Loan.</p>	LA, Section 4.07 (a)	Complied with
<p>8. Without limiting the generality of the foregoing, the Borrower shall furnish, or cause to be furnished, to the Bank</p>	LA, Section 4.07 (b)	<p>Late compliance The EA had difficulties in timely submission of</p>

Covenant	Reference to Loan Document	Status of Compliance
<p>quarterly reports on the carrying out of the Project and on the operation and management of the Project facilities. Such reports shall be submitted in such form and in such detail and within such a period as the Bank shall reasonably request, and shall indicate, among other things, progress made and problems encountered during the quarter under review, steps taken or proposed to be taken to remedy these problems, and proposed program of activities and expected progress during the following quarter.</p>		<p>quarterly progress reports.</p>
<p>9. Promptly after physical completion of the Project, but in any event not later than three (3) months thereafter or such later date as may be agreed for this purpose between the Borrower and the Bank, the Borrower shall prepare and furnish to the Bank a report, in such form and in such detail as the Bank shall reasonably request, on the execution and initial operation of the Project, including its cost, the performance by the Borrower of its obligations under this Loan Agreement and the accomplishment of the purposes of the Loan.</p>	<p>LA, Section 4.07 (c)</p>	<p>Late compliance EA submitted Project Completion Report in January 2008.</p>
<p>10. Project Review. The Borrower and the Bank shall jointly undertake semi-annual reviews of the Project that will identify any difficulties or constraints being encountered in implementing the Project. Specifically, the Borrower and the Bank shall discuss the adequacy of the consulting services. Adjustments will be made, if necessary, for the remaining Project implementation period.</p>	<p>LA, Schedule 6 para.14</p>	<p>Partly complied with ADB, on average, conducted only one mission per year. However, after the Project was delegated to KYRM in 2004, the annual review missions were supplemented by its intensified routine communications with EA, IA and PIUs, which were sufficient to identify and timely resolve all emerged implementation issues.</p>
<p>11. Midterm Review. The Borrower and the Bank shall, in 2005, jointly undertake a midterm review of the Project. The midterm review will assess the Project's</p>	<p>LA, Schedule 6 para.15</p>	<p>Late compliance Midterm review was conducted in two phases during 21-27 May and</p>

Covenant	Reference to Loan Document	Status of Compliance
<p>achievements and progress in implementing the Project, including assessing design and construction standards, compliance with the Project implementation schedule, social and environmental monitoring standards and results, in each case, in order to identify any difficulties or constraints being encountered in implementing the Project and to make adjustments, if necessary, for the remaining project implementation period.</p>		26-30 June 2006.
<p>12. (a) A PIU shall have been established within MEES and such PIU shall have been provided with an adequate number of staff who possesses qualifications and experience acceptable to the Bank and adequate office space.</p>	LA, Article V, Section 5.01(a)	Complied with
<p>(b) A Vice Minister of MEES shall have been appointed as Project Director.</p>	LA, Article V, Section 5.01(b)	Complied with
<p>(c) The PSC shall have been established in accordance with paragraph 2 of Schedule 6 to this Loan Agreement.</p>	LA, Article V, Section 5.01(c)	Complied with

PROCUREMENT DETAILS

1. The following sections describe the procurement process for the subprojects under each component of the Project, including (i) roads and bridges, (ii) power distribution lines, and (iii) schools and municipal infrastructure.

1. Roads and Bridges Component

2. Subproject R-1 was cancelled since it was not eligible for retroactive financing because the contract was signed before 8 September 2003. There was a change in the procurement mode for subprojects R-2 and R-3. R-2 and R-3 were awarded to the same contractor prior to 8 September 2003. The procurement documents for these subprojects were submitted to ADB on 26 October 2004. Although the documents were acceptable, due to the contracts signed before 8 September 2003 (the first day of the appraisal mission), they were ineligible for retroactive financing. The Government terminated both of these contracts and requested ADB on 22 December 2004 to finance the remaining portion of rehabilitation works on both subprojects, R-2 and R-3. This was approved by ADB on 27 December 2004. The Government then requested ADB on 5 January 2005 to approve direct procurement procedure for civil works under these subprojects from the previous contractor.¹ The procurement mode was changed from National Competitive Bidding procurement mode to the direct procurement procedure. This was approved by ADB on 10 January 2005. The works were completed in December 2005.

3. There were several problems during the procurement process for the R-4 subproject. On 26 August 2005 announcements were published in national newspapers with a closing date for bid proposal submission by 26 September 2005. Only one bidder purchased bidding documents. The evaluation revealed that the bid was twice as much as the estimated cost. ADB procedures define that if the bid does not meet the requirements it is necessary to make a second announcement requesting for bids. Therefore, two new bids were received and the public opening of the two bids received was undertaken on 20 December 2005. A contract was issued on 25 February 2006. Problems also arose on the procurement for subproject R-5. Bid documents were prepared on 1 February 2005. The bid period was initially established from 4 February to 3 March 2005. However, the issuance of bidding documents was suspended in view of adjustment of the bill of quantities due to negotiations with ADB in order to reallocate loan proceeds for rehabilitation works on this subproject, which was covered by a landslide in the spring of 2005 and as a result traffic along the road was terminated. An ADB mission advised to revise the scope in order to minimize the costs of rehabilitation of the section initially included. A second bidding took place and on 16 January 2006 bids were opened. The bid evaluation was sent to ADB on 10 February 2006 and the contract was awarded on 19 April 2006.

4. For subproject R-6, the bidding announcement was made on 4 February 2005. On 4 March 2005, the bids from three bidders were publicly opened. The contract was awarded on 6 May 2005. For R-7 the bidding announcement was also made on 4 February 2005. On 4 March 2005 the bids from two bidders were publicly opened. The contract was awarded on 17 May 2005.

5. Subproject R-8 (bridge subproject) was included in the project scope when subproject R-1 was cancelled in December 2004. The bidding documents were prepared on 1 February 2005. However, the bidding process was suspended due to adjustments of the bill of quantities since

¹ This is fully in line with ADBs *Guidelines for Procurement*, paras. 3 and para 5, PAI 3.05, as they were a natural extension of the previous work that had already been undertaken.

the project budget (\$237,000) was not sufficient for completion of the civil works according to the design estimates (\$366,000). The design estimate was revised and the dimensions of the bridge were changed. In order to remain within the budget, bridge access and both pavements were excluded. All bidding documents were then revised. ADB approved the alterations on 29 November 2005 and bidding was announced and the bid proposal opening was carried out on 19 January 2006. The bid evaluation report was sent to ADB for approval on 10 February 2006 and the contract was awarded on 19 April 2006.

6. The bid announcement for subproject R-9 was placed in national newspapers on 25 February 2005 and the bid opening was set for 28 March 2005. However, in view of the political events occurring in the country at the time, the bid opening was postponed until 11 April 2005. Bids were received from five bidders. The contract was awarded on 6 June 2005.

2. Power Distribution Subprojects

7. Subproject E-1 was cancelled due to the fact that the contract was signed prior to 8 September 2003 and was therefore ineligible for retroactive financing. The bid announcement for subproject E-2 was put in national newspapers on 25 February 2005. The bid opening was set for 28 March 2005. However, in view of the political events occurring in the country at the time, the bid opening was postponed until 11 April 2005. Bids were received from two bidders. The contract was awarded on 21 June 2005.

8. Similar situations arose for subproject E-3 and E-4, in terms of postponing the bid opening. For subproject E-3, the bid announcement was scheduled at the same time as subproject's E-2 and the bid opening was also set for the same time as E-2. Due to the political events at the time, the bid opening was postponed to 11 April 2005. Bids were received from two bidders. The contract was awarded on 9 June 2005. For subproject E-4, the bid announcement in national newspapers was on 16 June 2005. Bid opening was on 18 July 2005. Bids were received from two bidders. The contract was awarded on 26 August 2005.

9. Subproject E-5 was included in the Project's scope in January 2005 after cancellation of subproject E-1. The contract was signed on 29 August 2005.

3. Schools and Municipal Infrastructure Subprojects

10. The contract for subproject S-1 was signed on 9 October 2003 and was partially financed by retroactive financing. For subproject S-2, the design was prepared in December 2004 and the contract was signed on 21 June 2005. The S-3 subproject contract was signed 21 June 2005, the S-4 subproject contract was signed on 30 May 2005, and the S-5 subproject contract was signed 15 December 2003 and financed under the retroactive scheme.

11. Subproject S-6 was split into three separate contracts owing to the diverse nature of the works. All works commenced after 8 September 2003 and were eligible for retroactive financing. The contract for subproject S-6e (energy power lines) was signed 19 September 2003 and the works were completed in July 2005, all of which were completely financed through retroactive financing. The S-6r (roads) subproject contract was signed 15 December 2003 and was partially financed by retroactive financing. The S-6w (water supply) subproject contract was signed 12 September 2003 and was financed by retroactive financing. In July 2005, the S-6w contract was terminated owing to the poor performance of the contractor. The detailed design was revised owing to cancellation of a water supply system construction project at a neighboring village,

which was originally planned to be a water source. The new detailed design provided for an independent water source at the subproject. A new contract was signed on 7 Feb 2006.

12. Subproject S-7 and S-8 were for the procurement of goods packages for schools S1–S4. The school furniture subprojects contract was signed 2 February 2006 and 2 August 2006 (two packages), respectively. Subproject S-8 was for the procurement of heating equipment. The contract was signed 18 October 2006. The design works and installation of diesel generators contract was signed on 13 March 2007 (included in subproject S-8).

ASSESSMENT OF PROJECT IMPACTS AND BENEFITS

A. General Context

1. The socioeconomic analysis is based on a review of documents related to the Project, such as the Report and Recommendation of the President (RRP), and the project completion report prepared by the executing agency (EA). Discussions were also held with officials of the EA. In addition, the Project Completion Review (PCR) Mission made field visits to appraise selected subprojects and, wherever possible, to obtain the views of the direct beneficiaries through informal discussions. The overall assessment was limited to the post-project physical conditions and performance of the interventions at the time of the field visits. The assessment provides reasonable feedback on the project impacts, benefits, and effectiveness of the project components in general.

2. The PCR Mission visited several selected subprojects that included subprojects for roads and bridges, power distribution lines, and schools and municipal infrastructure. The specific subprojects visited included roads and bridges subprojects: (i) R-2 Kurshab–Jalpakash road, (ii) R-3 Ilichevka–Erkintoo road, (iii) R-4 PAD–Budalk road, (iv) R-5 Chalma–Bulyga road, (v) R-6 Barpy–Yrisuu–Changent road, (vi) R-7 Sovetskaya–Syrzavod road, (vii) R-8 Jalal-Abad–Kazarman road, and (viii) R-9 the bypass on the Kant–Tomok–Kemin road; power distribution line subprojects at (ix) E-2 Uzgen–Zerger, (x) E-3 Myrzaki–Salamalik, and (xi) E-4 Gulcha–Sopu–Korgon; school and municipal infrastructure projects at (xii) S-1 Dubitel village, (xiii) S-2 Kichi–Bulolu village, (xiv) S-4 Kojomkul village, (xv) S-6 municipal infrastructure in Dubitel village, (xvi) S-7 school furniture, (xvii) S-8 heating equipment for schools. Out of a total of 20 subprojects the PCR Mission was able to visit 17 subprojects. It was not possible to visit (i) the school at subproject S-3 in Semizkol village due to adverse weather conditions, (ii) the power distribution line at subproject E-5 Kapchygol–Oital due to its remoteness and scheduling, and (iii) the S-5 subproject drainage system in the Kurshab-1 resettlement area due to time limitations of the PCR Mission. However, the sites visited by the PCR Mission are representative of the overall project impacts and benefits derived from the Project.

3. The benefits for each project component are discussed below:

- (i) **Roads and Bridges.** The PCR Mission visited subprojects R2–R9. Works in all subprojects visited were found to be in order. The restoration of disaster-damaged roads, bridges, and culverts helped to restore the economic and social activities of rural people to their original pre-disaster levels. The road subprojects restored accessibility to trade centers, educational, and health facilities. The improved surface condition and riding quality of the roads that were rehabilitated and restored from their disaster-damaged conditions enabled local residents to resume travel between important centers. Per capita income levels have increased in the road subproject areas as a result of enhanced commercial activity along the improved road subprojects sites. The project performance monitoring system indicated that per capita incomes in several areas have increased by up to 4% above 2003 levels. This has contributed to alleviating rural poverty. The reconstruction and/or repair of bridges and culverts, which were washed away or severely damaged, allows local villagers to avoid long detours and benefit from reduced travel time and lower transport costs.

- (ii) **Power Line Distribution.** The PCR Mission visited subprojects E-2, E-3, and E-4 under this component. The subprojects investigated during the PCR mission were found to be in good order.
- (iii) **Schools and Municipal Infrastructure.** The PCR Mission visited several subprojects under this component. The schools in Dubitel village (S-1), Kichi-Bulolu village (S-2), and Kojomkul village (S-3) were all well maintained. The school furniture (subproject S-7) supplied to these schools was also in good condition. The school heating equipment (subproject S-8), including the generators installed, are in good working order, with the exception of Kojomkul school where the generator is not working. Although the heating equipment in the schools is in good order, the budget restrictions do not allow the schools to purchase sufficient diesel fuel to use the generators effectively. In some schools (e.g. Dubitel and Kojomkul), heating is presently supplied by coal. For electricity generation, when the schools are without power from the national grid it is extremely difficult for the schools to use the diesel generators supplied under the Project to provide lighting. At present, the schools only receive, on average, between 2 to 3 hours of power per day from the national grid due to load shedding.¹ The rehabilitation of municipal roads within Dubitel village was undertaken as envisaged at appraisal. This has improved the living conditions of those people that were resettled due to the natural disasters of 2003.

B. Project Impacts

4. The PCR Mission discussions with the rural population revealed that the bridge subprojects facilitated the return of normal commercial activity and communication between villages. The completion of bridge projects, either through rehabilitation of damaged bridges or the construction of new ones, has enabled communications and unimpeded traffic flows along roads in the project area. The reliability of road access has been increased and enabled local communities to continue their daily economic activities. The areas where the civil works were undertaken comprise roads that are now better-protected from future natural disasters. The general opinion of most of the people that the PCR Mission had discussions with was that reopening the road has improved local residents' quality of life and they no longer felt as isolated as they had following the natural disasters of 2003.

5. Although the restoration of power lines in the project areas has been substantial, the availability of electric power is still disrupted due to load shedding.

6. The implementation of the school subprojects, although it provided newer facilities for students, was not necessarily warranted under the Project because the areas where new schools were built were not subjected to natural disasters in 2003. New schools have been built alongside existing schools, which the EA, the Ministry of Emergency Situations (MES), has indicated need to be relocated to safer areas. However, these new schools have provided improved facilities for students as the old schools were beginning to reach over capacity.

¹ Load shedding is a procedure in which parts of an electric power system are disconnected in an attempt to prevent failure of the entire system due to overloading. Cutting off the electric current on certain lines when the demand becomes greater than the supply is an energy utilities' method of reducing demand (load) on the energy generation system by temporarily switching off distribution of energy to different geographical areas.

QUANTITATIVE ASSESSMENT OF OVERALL PROJECT PERFORMANCE

1. Overall Rating

Criteria	Assessment	Rating (0–3)	Weights (%)	Weighted Rating
Relevance	Highly Relevant	3	20	0.60
Effectiveness	Effective	2	30	0.60
Efficiency	Efficient	2	30	0.60
Sustainability	Likely	2	20	0.40
Overall Rating	Successful			2.20

Note: Even though the sustainability of the Project is rated “unlikely”, the Project has still been rated as “successful.” Previously, in the Operations Evaluation Department (OED) Guidelines a Project should be automatically downgraded to the next level (i.e. “partly successful”) if any rating is zero. In the new OED Guidelines this automatic downgrading no longer applies but is left to the interpretation of the reviewers. In the case of the Project, the PCR Mission is of the opinion that the Project should still be rated as “successful.”

- Relevance: - Project objectives and outputs were relevant to strategic objectives of the Government and ADB
- Effectiveness: - Project achieved its outcome
- Efficiency: - Project achieved objectives in an efficient manner
- Sustainability: - Project benefits and development impacts are sustainable

2. Rating System

Rating Value	Relevance	Effectiveness	Efficiency	Sustainability
3	Highly Relevant	Highly Effective	Highly Efficient	Most Likely
2	Relevant	Effective	Efficient	Likely
1	Partly Relevant	Less Effective	Less Efficient	Less Likely
0	Irrelevant	Ineffective	Inefficient	Unlikely

Rating:	Greater than 2.7	=	Highly Successful
	Between 1.6 and less than 2.7	=	Successful
	Between 0.8 and less than 1.6	=	Partly Successful
	Less than 0.8	=	Unsuccessful