



Completion Report

Project Number: 44372-013
Loan Numbers: 2742, 2743
September 2016

Pakistan: Flood Emergency Reconstruction Project

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Asian Development Bank

CURRENCY EQUIVALENTS

Currency Unit		–	Pakistan rupee/s (Pre/PRs)
	At Appraisal		At Project Completion
	(25 February 2011)		(30 September 2015)
PR=1.00	= \$0.0117		\$0.0095
\$1.00	= PRs85.45		PRs104.45

ABBREVIATIONS

ADB	–	Asian Development Bank
CDTA	–	capacity development technical assistance
DNA	–	damage and needs assessment
EMP	–	environmental management plans
FERP	–	Flood Emergency Reconstruction Project
FWO	–	Frontier Works Organization
GRM	–	grievance redress mechanism
ha	–	hectares
km	–	kilometer
IDS	–	Irrigation Department Sind
NHA	–	National Highway Authority
PDD	–	Planning and Development Department
PIU	–	project implementation unit
PMC	–	project management consultants
PMU	–	project management unit
PSC	–	project steering committee
QCBS	–	Quality- and cost-based selection method
WSDS	–	Works and Services Department Sindh

NOTE

- (i) The fiscal year (FY) of the government and its agencies ends on 30 June. FY before a calendar year denotes the year in which the fiscal year ends, e.g., FY2012 ends on 30 June 2012.
- (ii) In this report, "\$" refers to US dollars.

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BASIC DATA

A. Loan Identification

1.	Country	Pakistan
2.	Loan Numbers	2742 and 2743
3.	Project Title	Flood Emergency Reconstruction Project
4.	Borrower	Islamic Republic of Pakistan
5.	Executing Agencies	Sindh Irrigation and Power Department Sindh Works and Services Department National Highway Authority
6.	Amount of Loan	
	Loan 2742 (OCR)	\$600,000,000
	Loan 2743 (SF)	SDR31,704,000
7.	Project Completion Report Number	PAK 1600

B. Loan Data

1.	Appraisal	
	– Date Started	Aug 2010
	– Date Completed	Sep 2010
2.	Loan Negotiations	
	– Date Started	17 Mar 2011
	– Date Completed	21 Mar 2011
3.	Date of Board Approval	30 Mar 2011
4.	Date of Loan Agreement	14 Apr 2011
5.	Date of Loan Effectiveness	
	– In Loan Agreement	A date 30 days after loan agreement
	– Actual	26 May 2011 (for both loans)
	– Number of Extensions	None
6.	Closing Date	
	– In Loan Agreement	30 Sep 2014 (for both loans)
	– Actual	Loan 2742-PAK—loan account is still open; loan 2743-PAK—15-Apr-2015.
	– Number of Extensions	1 (L2742)
7.	Terms of Loan	
	Loan 2742, Ordinary Capital Resources	
	– Interest Rate	London interbank offered rate
	– commitment charges per annum	0.15%
	– Maturity (number of years)	24
	– Grace Period (number of years)	8
	Loan 2743, Special Funds Resources	
	– Interest Rate	1% per annum
	– Maturity (number of years)	30
	– Grace Period (number of years)	10
8.	Terms of Relending	
	Loan 2742, Ordinary Capital Resources	
	– Interest Rate	London interbank offered rate

–commitment charges per annum	0.15%
– Maturity (number of years)	24
– Grace Period (number of years)	8
– Second-Step Borrower	Government of Sindh National Highway Authority

Loan 2743, Special Funds Resource	
– Interest Rate	1% per annum
– Maturity (number of years)	30
– Grace Period (number of years)	10
– Second-Step Borrower	Government of Sindh

9. Disbursement

Loan 2742	a. Dates		
	Initial Disbursement	Final Disbursement	Time Interval
	8 Sep 2011	2 Dec 2015	45
	Effective Date	Original Closing Date	Time Interval
	26 May 2011	30 Sep 2014	40
Loan 2743	Initial Disbursement		
	Initial Disbursement	Final Disbursement	Time Interval
	6 Sep 2012	15 Mar 2014	18
	Effective Date	Original Closing Date	Time Interval
	26 May 2011	30 Sep 2014	40

b. Amount (\$)

Loan number 2742-PAK

Category or Subloan	Original Allocation	Last Revised Allocation	Amount Cancelled	Net Amount Available	Amount Disbursed	Undisbursed Balance
1 Works	487,262,000	464,164,000	(23,098,000)	464,164,000	439,763,777	24,400,223
1A NHA	224,378,000	185,000,000	(39,378,000)	185,000,000	169,067,805	15,932,195
1B IDS	155,300,000	166,500,000	11,200,000	166,500,000	163,552,074	2,947,926
1C WSDS	107,584,000	112,664,000	5,080,000	112,664,000	107,143,898	5,520,102
2 - Equipment and vehicles	965,000	411,900	(553,100)	411,900	392,830	19,070
2A NHA	556,000	41,900	(514,100)	41,900	38,313	3,587
2B IDS	90,000	100,000	10,000	100,000	99,912	88
2C WSDS	319,000	270,000	(49,000)	270,000	254,605	15,395
3 Consulting services	22,678,000	12,482,000	(10,196,000)	12,482,000	10,108,800	2,373,200
3A NHA	16,723,000	7,870,000	(8,853,000)	7,870,000	6,061,624	1,808,376
3B IDS	2,430,000	1,002,000	(1,428,000)	1,002,000	1,001,208	792
3C WSDS	3,525,000	3,610,000	85,000	3,610,000	3,045,968	564,032
4 Incremental management cost	5,207,000	3,092,200	(2,114,800)	3,092,200	1,544,111	1,548,089

4A NHA	3,687,000	1,819,200	(1,867,800)	1,819,200	258,939	1,560,261
4B IDS	180,000	273,000	93,000	273,000	269,328	3,672
4C WSDS	1,340,000	1,000,000	(340,000)	1,000,000	1,015,844	(15,844)
5. Interest and commitment charges	7,116,000	7,116,000	0	7,116,000	6,701,720	414,280
6. Contingencies	76,772,000	10,000,000	(66,772,000)	10,000,000	0	10,000,000
Total	600,000,000	497,266,100	(102,733,900)	497,266,100	458,511,238	38,754,862

() = negative, zero = magnitude zero, IDS = Irrigation Department Sindh, NHA = National Highway Authority, WSDS = Works and Service Department Sindh Component.,

Loan No. 2743-PAK (SDR)

Category or Subloan	Original Allocation	Last Revised Allocation	Amount Cancelled	Net Amount Available	Amount Disbursed	Undisbursed Balance
1. Works	27,139,000	26,674,501	(464,499)	26,674,501	26,674,501	0
2. Interest during construction	571,000	386,024	(184,976)	386,024	386,024	0
Total	27,710,000	27,060,525	(649,475)	27,060,525	27,060,525	0

() = negative, zero = magnitude zero

10. Local Costs Financed (\$ million): Not applicable

- Amount (\$ million)
- Percent of Local Costs
- Percent of Total Cost

C. Project Data

1. Project Cost (\$ million)

Cost	Appraisal Estimate	Actual
Foreign Exchange Cost	Not Applicable	Not Applicable
Local Currency Cost	Not Applicable	Not Applicable
Total	722.20.00	571.51

2. Financing Plan (\$ million)

Cost	Appraisal Estimate	Actual
Implementation Costs		
Borrower Financed	72.20	72.02
ADB Financed	642.00	492.20
Other External Financing	Not Applicable	
Total	714.20	564.22
IDC Costs		
Borrower Financed	Not Applicable	Not Applicable
ADB Financed	8.00	7.29
Other External Financing	Not Applicable	Not Applicable
Total	722.20	571.51

ADB = Asian Development Bank, IDC = interest during construction.

1. The government share has increased in categories from 10% to 11.57 % in 1A, 11.01% in 2A, and 11.99% in 3A of the National Highway Authority component. This is due to (i) 100% payment made under six contracts after loan closure under category 1A, (ii) differences in government tax rates in different fiscal years and exchange rate fluctuation under categories 2A and 3A, (iii) a 100% payment made from the government share after loan closure for incremental charges under category 4A, and (iv) additional payment of more than \$3 million against land acquisition recorded as the government's share.

2. The government share has increased in categories from 10% to 10.23% in 1C and 10.42% in 2C of the works and services department Sindh component. This is due to (i) a 100% payment made under three contracts after loan closure under category 1C, and (ii) differences in government tax rates in different fiscal years and exchange rate fluctuation under category 2C.

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

	Component	Appraisal Estimate	Actual
1.	NHA		
	1a. Works	249.30	194.19
	2a. Equipment and Vehicle	.60	.043
	3a. Consulting Services	18.60	6.89
2.	IDS		
	1b. Works	220.10	226.88
	2b. Equipment and Vehicle	.10	.10
	3b. Consulting Services	2.70	2.63
3.	WSDS		
	1c. Works	119.50	119.35
	2c. Equipment and Vehicle	.40	.28
	3c. Consulting Services	3.90	3.25
4.	Incremental Management Costs		
	4a. NHA	4.10	8.99
	4b. IDS	.20	1.18
	4c. WSDS	1.50	.48
5.	Interest & Commitment Charges	8.00	7.29
6.	Contingencies	93.20	0
	Total	722.20	571.51

IDS = Irrigation Department Sindh, NHA = National Highway Authority, WSDS = Works and Service Department Sindh.

4. Project Schedule

Item	Appraisal Estimate	Actual
Date of contract with consultants (NHA)		
- Design consultant (North package)	30 Sep 2011	9 Feb 2012
- Design consultant (South package)	30 Sep 2011	9 Feb 2012
- Design review services consultant	31 Jan 2012	3 May 2013
- Project management consultant	30 Mar 2012	6 Jun 2013
Date of contract with consultants (IDS)	8 Oct 2011	22 Nov 2011
Date of contract with consultants (WSDS)		
- Design consultants upper sindh	30 Sep 2011	10 Oct 2011
- Design consultants lower sindh	30 Sep 2011	10 Oct 2011
- Project management consultant	30 Sep 2011	30 Dec 2011
Completion of engineering designs (NHA)	31 Dec 2011	30 Nov 2011
Completion of engineering designs (IDS)	31 Dec 2011	15 May 2012
Completion of engineering designs (WSDS)	31 Dec 2011	30 May 2013
Civil works contract		
Date of award (NHA)	1 Oct 2011–30 Jun 2012	26 Mar 2012 –28 Jun 2013
Date of award (IDS)	1 Dec 2011 –30 Jun 2012	29 Dec 2011 –21 Nov 2012
Date of award (WSDS)	1 Oct 2011 –30 Jun 2012	3 Feb 2012 –1 July 2013
Completion of work (NHA)	31 Dec 2014	31 Dec 2015
Completion of work (IDS)	30 Jun 2013	30 Sep 2013
Completion of work (WSDS)	31 Dec 2014	30 May 2014
Equipment and supplies Dates		
First procurement (NHA)	11 Oct 2012	11 Oct 2012
First procurement (IDS)	1 Apr 2011	1 Jun 2011
First procurement (WSDS)	1 Aug 2011	29 Sep 2011
Last procurement (NHA)	30 Jun 2014	3 Aug 2015
Last procurement (IDS)	30 Jun 2011	6 Sep 2011
Last procurement (WSDS)	30 Sep 2014	3 May 2012

IDS= Irrigation Department Sindh, NHA=National Highway Authority, WSDS= Works and Service Department Sindh.

5. Project Performance Report Ratings

Implementation Period	Ratings
	Overall Performance Ratings
From 1 July 2011 to 30 September 2011	S
From 1 October 2011 till 31 March 2012	PP
From 1 April 2012 till 31 March 2013	AP
From 1 April 2013 till 30 June 2013	PP
From 1 July 2013 till 31 March 2016	S

S = satisfactory; PP = potential problem; AP = actual problem.

D. Data on Asian Development Bank Missions

Name of Mission	Date	No. of Persons	No. of Person-Days	Specialization of Members
Inception	16 May–15 Jul 2011	9	30	a,b c
Loan Review	15 Jul–16 Jul 2011	1	2	g
Loan Review	13–15 Sep 2011	4	12	a,b,g,h
Loan Review	10–12 Oct 2011	3	9	a, g, i
Loan Review	15–16 Nov 2011	2	6	a,g,j
Loan Review	30 Jan– 4 Feb 2012	5	30	a,g,h,j,k
Loan Review	8 Feb 2012	2	2	a,g
Loan Review	9–11 Jul 2012	2	6	a,k
Loan Review	7–11 Jan 2013	5	16	a, g,h,i,k
Country Portfolio and Program Review	19–20 Feb 2013	1	1	h
Midterm Review	12 Mar– 14 Apr 2013	8	51	a,e,f,g,h,k,l,
Loan Review	27–31 May 2013	5	10	a,l
Project Completion Review	3–5 Jul 2013	1	2	d
Loan Review	9–13 Sep 2013	1	5	l
Loan Review	16–18 Sep 2013	1	3	a
Loan Review	26–27 Sep 2013	1	2	l
Loan Review	18–21 Nov 2013	2	10	a, k
Loan Review	8–16 Dec 2013	2	5	a,i
Loan Review	21–27 Jan 2014	2	10	a,k
Loan Review	27–Mar 2014	3	3	a,g,i
Loan Review	21 Apr– 7 May 2014	5	27	a,f,l,m
Loan Review	18–22 Aug 2014	1	5	a
Loan Review	26–28 Aug 2014	1	3	a
Loan Review	19–20 Dec 2014	3	3	a,i,m

a = project officer transport, b = procurement consultant or specialist, c = control officer, d = project completion review consultant, e = financial control analyst, f = country director, PRM, g = senior transport specialist, h = senior project officer (water and sanitation), i = deputy country director, PRM, j = head disbursement unit, PRM, k = project analyst, l = project officer—transport (water and sanitation component), m = project officer.

I. PROJECT DESCRIPTION

1. The worst floods in Pakistan's history affected 100,000 square kilometers and 20 million people in 2010. They had some impact on more than one-tenth of the country's population and caused about 1,800 deaths. As soon as the floods subsided, the government began early recovery efforts and the restoration of basic services, housing, and livelihoods. Basic transport and irrigation facilities were badly damaged in 80 of the country's 110 districts across Balochistan, Khyber Pakhtunkhwa, Punjab, and Sindh provinces. A damage and needs assessment (DNA) was prepared by the Asian Development Bank (ADB) and the World Bank in 2010, in coordination with federal and provincial government agencies.¹ The DNA showed that 793 kilometers (km) of national highways—equivalent to 7% of the national highway network—needed immediate rehabilitation to ensure structural stability and public safety. It found that breaches in the flood embankments along the Indus River had led to the flooding of 1.5 million hectares of agricultural land and damaged 1,925 km of the provincial roads network in Sindh Province. The DNA estimated the overall combined damage to the irrigation and transport sectors in Pakistan in terms of reconstruction needs to be \$3.3 billion.

2. The government requested an emergency assistance loan from ADB in February 2011 to help fund reconstruction of roads, flood embankments, canals, and drains damaged by the floods. The intended impact of the project was to be economic and social recovery to pre-flood levels through the restoration and reconstruction of critical infrastructure, with increased resilience to future flooding.

II. EVALUATION OF DESIGN AND IMPLEMENTATION

A. Relevance of Design and Formulation

3. The design was relevant both at appraisal and at completion to the project's intended purpose of providing emergency assistance. It conformed to the priorities identified in the DNA and by a flood reconstruction plan prepared in 2010 by the Planning Commission of Pakistan.² At appraisal, the project output target for the roads component was repair, rehabilitation, and reconstruction of (i) 793 km of national highways; and (ii) 800 km of provincial highways. The output of irrigation component targeted (i) improvement of 1.5 million hectares (ha) of flood affected agricultural land through repair, rehabilitation, strengthening and re-sectioning of flood protection embankments and rehabilitation of main canal, distributaries, minor canals and drainage infrastructure identified in the DNA; and (ii) rehabilitation, strengthening and re-sectioning of 90% of the selected flood protection embankments and irrigation infrastructure identified in the DNA. The objective was to rehabilitate and reconstruct the national highways, as well as road, irrigation, drainage, and flood protection infrastructure in Sindh.

4. The DNA estimate of damage to road, and irrigation and flood protection infrastructure was based on visual observation at a time when it was still submerged under water. This meant that the detailed designs for the works had to be prepared during the implementation phase after the flooding had subsided. The recruitment of the design consultants for this emergency intervention was done under the usual Quality- and Cost-Based Selection QCBS method but with reduced response times. It nonetheless took a considerable period. The subsequent

¹ ADB and World Bank. 2010. *Pakistan Floods 2010: Preliminary Damage and Needs Assessment*. Islamabad.

² Planning Commission, Government of Pakistan. 2010. *National Flood Reconstruction Plan*. Islamabad. <http://www.pc.gov.pk/hot%20links/Nation%20Reconstruction%20Plan%202010/National%20Flood%20Reconstruction%20Plan%202010.pdf> (accessed 27 July 2016).

procurement of works contracts, was a long process as well even though the response time for the bids was shortened. As a result, the works for the project contracts involving the Irrigation Department Sindh (IDS) and the Works and Services Department Sindh (WSDS) began more than 1 year after the floods and almost 2 years afterwards in the case of the highways under the administrative control of National Highway Authority (NHA). This delay of the emergency physical work meant that the government's reconstruction initiatives that had ADB support remained invisible for almost 2 years after the floods had occurred. By the time the loan became effective in May 2011, the government had already incurred significant expenditures on urgent work on the national highways and provincial roads to restore traffic, as well as on the damaged irrigation and flood protection infrastructure. Retroactive financing of this expenditure to up to 30% of the loan amount was therefore included in the project.

5. This emergency project was not covered by ADB's Country Partnership Strategy for Pakistan for 2009–2013³ but was consistent with ADB's Disaster and Emergency Assistance Policy, which calls for emergency projects to be designed to mitigate immediate losses to priority assets, capacity, or productivity.⁴ The project focused on priority road and irrigation infrastructure and on reconstructing assets to be more resilient to natural hazards and restore productivity and normal life in the affected areas. The design was based on the DNA. No preparatory technical assistance was involved. The revisions necessary in the scope and costing during implementation were done only in the national highways component, and were in line with the project's intended outcome.

B. Project Outputs

6. The original project outputs were (i) Road network system (including bridges) repaired and rehabilitated; (ii) Provincial irrigation facilities rehabilitated and reconstructed; and (iii) Support services. The design and monitoring framework (DMF) and the actual achievements are in Appendix 1. In line with the DNA, the outcome statement in the DMF specified that the physical infrastructure assets be rebuilt to original standards or better.

7. **Output 1: Road network system, including bridges, repaired and rehabilitated.** The scope of the NHA output 1 component at appraisal was the repair, rehabilitation, and reconstruction of 793 km of completely and partially damaged national highways. These sections had been identified by the DNA based on ocular inspection. It classified 383 km as partially damaged and 410 km as fully damaged. A subsequent more detailed survey after the design phase began showed that 1,044 km of national highways had been damaged. Based on the fixed loan amount approved, the scope was then reduced to 653 km. The cost estimates increased after the detailed designs were completed, and the scope was cut back again to 475 km of the roads (including bridges) that would be given priority under 33 contracts. Higher-than-expected bid prices, available loan funds, and time constraints reduced this to 424 km under 25 subprojects.⁵ Finally, 19 contracts covering 344 km were awarded and closed with the end of the physical work on 25 May 2015 (Appendix 2).⁶ Because contracts could not be procured for all of the prioritized roads, the loan proceeds were underutilized and the unused amount was cancelled. The project also allowed for retroactive financing of the works undertaken by the NHA to immediately restore traffic. Based on information provided to ADB by the NHA, 208

³ ADB. 2009. *Country Partnership Strategy: Pakistan, 2009–2013*. Manila.

⁴ ADB. 2004. *Disaster and Emergency Assistance Policy*. Manila.

⁵ This scope revision was carried out at midterm review in April 2013.

⁶ An exception was less than 2 km under subproject ICB-N-03: rehabilitation of Kohala–Muzaffarabad Road package-1. Work is ongoing due to subsequent damage during flooding in 2014.

small contracts involving 368 km of national highway were retroactively financed for an amount of \$11.4 million (Appendix 3).

8. The Sindh provincial roads component under output 1 reconstructed 920 km of provincial highways and three canal bridges in seven districts of Sindh Province, compared with the appraisal target of 800 km (Appendix 4).⁷

9. **Output 2: Provincial irrigation facilities rehabilitated and reconstructed.** The project improved irrigation facilities to about 2.2 million ha of agricultural land, compared with the output target of 1.5 million ha. The project rehabilitated and reconstructed canals and appurtenant structures, flood embankments, and drains. The project restored 41.2 billion cubic meters of canal carrying capacity, up from an appraisal target of 59 million cubic meters.⁸ It reconstructed 103 flood embankments with a total length of 1,453 kilometers against the appraisal target of 81 embankments of 1,000 kilometers in total length (Appendix 5). Based on information provided to ADB by the IDS, 328 small contracts for immediate reconstruction and flood protection works were retroactively financed for an amount of \$82.0 million (Appendix 6).

10. **Output 3: Support services:** The project included support for the implementation of the gender action framework (GAF) which required at least 15% of the water structures to have gender features in their design and implementation. The gender elements included in the irrigation subprojects achieved 20% compared to the target. These included the construction of washing bays and drinking water supply schemes, included in four canal subprojects. Significant benefits of these facilities were noticed which directly impact the women's life, including reduced water fetching time, improved health and hygiene conditions, convenience in performing their household chores, and improved safety by direct access to water rather than fetching it from the canals. In addition, to complement the gender benefits of the project, a pilot project in district Shikarpur of Sindh province was funded by ADB's Regional Technical Assistance.⁹ Under this pilot project, community members, including women, were trained in life skills, enterprise development techniques, disaster risk reduction skills, health and hygiene, and resource mobilization.¹⁰

11. The support services output also included support for ensuring procurement and safeguard compliance, which were financed by the associated capacity development technical assistance (CDTA) described in paras. 26-27.¹¹

⁷ The scope of one subproject (5404) was reduced because the site was inaccessible due to the high water level in Hamal Lake. The Sindh provincial government informed ADB that it intended to develop Hamal Lake into a tourist resort and would later finance the completion and lengthening of the road to connect the area to nearby arterial links.

⁸ The target set at appraisal was underestimated. The total carrying capacity of the canals restored was 41.2 billion cubic meters.

⁹ ADB. 2010. *Technical Assistance for Promoting Gender-Inclusive Growth in Central and West Asia Developing Member Countries into Regional Cooperation*. Manila.

¹⁰ The pilot project's success led to a grant by Citibank in 2013. Through its corporate social responsibility funds, Citibank, N.A. provided a grant for \$50,000 for women communities of district Shikarpur in partnership with ADB. This grant was used to increase economic opportunities for women in selected villages through enhancing their skills in making handicrafts, and their marketing.

¹¹ ADB. 2011. *Technical Assistance for Flood Emergency Reconstruction Project*. Manila.

C. Project Costs

12. The estimated total project cost at appraisal was \$722.2 million, and the actual cost at completion was \$571.5 million.

13. The total cost of the national highways component was estimated at appraisal to be \$272.6 million, excluding taxes and duties. ADB share was to be \$245.3 million (excluding interest during construction and commitment charges), and the government's \$27.3 million. The actual loan amount was \$207.1 million after the cancellation of \$77.1 million (para. 7). The government financed \$31.7 million.

14. At appraisal, the costs for the irrigation component were estimated to be \$223.1 million, (excluding taxes and duties), and ADB was to provide two loans—\$158.0 million from ADB's ordinary capital resources (OCR), and \$42.8 million equivalent from the Asian Development Fund (ADF) excluding interest during construction and commitment charges. The government's share was to be \$22.3 million. The actual cost for this component was \$230.0 million, of which \$164.9 million was financed from the OCR loan, \$40.4 million from the ADF loan and \$24.7 million by the government. No cost overrun occurred, and \$13.6 million from the two loans was cancelled.

15. The total cost of the provincial roads component at appraisal was estimated at \$125.3 million, excluding taxes and duties. The ADB share was to be \$112.8 million (excluding interest during construction and commitment charges), and the government's share was estimated at \$12.5 million. The actual cost of this component was \$124.0 million. Of the total actual costs, ADB financed \$111.5 million (excluding interest during construction and commitment charges) and \$12.0 million was cancelled. The government financed \$12.5 million. There was no cost overrun.

D. Disbursements

16. Imprest accounts and the statement-of-expenditure procedure were used to pay contractors, since this ensured that payments would be timely. Use of the imprest accounts helped the executing agencies smooth the execution of civil works. The consultants, suppliers, and contractors were also paid through direct payment procedure. The disbursement procedures proved efficient and supported smooth implementation. The annual disbursements are shown in Appendix 7.

E. Project Schedule

17. The project schedule was ambitious. Irrigation and provincial roads components were to involve small contracts, and thus ADB expected an expeditious bidding process. Apart from the traffic restoration works financing retroactively, the national highways component required the recruitment of consultant firms to prepare the design of the works upon which the procurement of works contracts would be based. Even with reduced response times permitted under the emergency project, ADB's QCBS bidding process for recruiting a consultant firm was extremely time-consuming (paras. 30–32).

18. The loan agreement was signed on 14 April 2011, and the loan became effective on the scheduled date of 26 May 2011. The conditions for the loan effectiveness—establishment of a project management unit (PMU) and the appointment of project directors—were met on time. Implementation started immediately after loan signing and continued without any interruption.

The Sindh Province irrigation and roads components encountered no significant implementation delays, but the national highways component required an extension of the loan closing date from the original 30 September 2014 to 25 May 2015. This was mainly due to the long time it took to recruit consultants under ADB's QCBS procedures and the government's own approval processes, and subsequently to procure the services of the works contractors. The design consultants took longer than expected to provide the detailed designs and estimates required for bidding documents.

19. Procurement under the national highways component was further delayed. Using the ICB modality resulted in NHA having to make multiple submissions of its bid evaluation reports before they met ADB's standards. In addition, the approval processes of both partners – ADB and NHA – took the standard amount of time, which could have been shortened for an emergency loan. Other than reducing the bidder response time allowed from 42 days to 30 days, ADB and the NHA took no other steps to ensure that the award of large ICB contracts under the emergency project would be speeded up.

20. The project steering committee was established on time. Irrigation and provincial roads components experienced no delays in consultant recruitment or the procurement of goods. The first civil works contracts for this component were awarded on 29 December 2011 and 3 February 2012. Overall, project implementation remained on schedule. All the works for the IDS were completed by 30 September 2013 and those for the WSDS by 25 May 2014. The implementation schedule for each component is provided in Appendix 8.

F. Implementation Arrangements

21. The project activities were planned in three components, i.e. (i) the national highways component under the administrative control of the NHA; (ii) the irrigation component under the administrative control of the IDS; and (iii) the provincial roads component under the administrative control of the WSDS. The formulation process was adequate, key stakeholders were included in the DNA, and their concerns were addressed in the design. Implementation arrangements were adequate. The NHA was the executing agency for the national highways component, and the Planning and Development Department (PDD) of the Sindh provincial government was the executing agency for the IDS and WSDS components, with the IDS and the WSDS acting as the implementing agencies for their respective activities. The outputs, targets, stakeholder consultation and participation, and risks as appraised were relevant.

22. The NHA, the IDS, and the WSDS established dedicated project management units (PMUs). The NHA component PMU was headed by a general manager at the NHA head office in Islamabad. The PMUs for the IDS and the WSDS were established in the Sindh provincial city of Hyderabad, each headed by a project director. The PMUs functioned as the project hubs and repositories of record and managed implementation and vertical coordination with the PDD, and site and regional offices. The NHA did not provide a full-time general manager or project director for its PMU. The project directors for the IDS and WSDS components were full-time, but the WSDS frequently changed its project director due to retirement of incumbents. Independent construction supervision firms were recruited as the project management consultants (PMCs) as discussed in paras. 30-31.

23. The technical and management capacity of the PMUs was strengthened by providing independent consultant experts hired under the CDTA associated with the project. This helped in the timely implementation of the IDS and WSDS components. A project steering committee for the IDS and WSDS components was established in July 2011 and headed by the additional

chief secretary (development) of the PDD. It was mandated to provide policy advice, periodically review performance, and support the timely execution of the civil works.

24. The project established a grievance redress mechanism (GRM) separately for the three components. The GRM was based on an ADB needs assessment undertaken through visits to a sample of subproject sites and discussions with key stakeholders, including staff of the implementing agency, and local communities. The GRM provided a structured process for addressing the grievances of people and vulnerable groups.

G. Conditions and Covenants

25. All 63 covenants included in the loan and project agreements were relevant to smooth implementation of the project. The few loan effectiveness and disbursement conditions were met in a timely manner, and the loans became effective within the stipulated period. The borrower's overall performance on compliance with loan covenants was satisfactory, with all 62 met in part or in full. One covenant requiring post-completion audit will become due after loan account is closed. A covenant requiring provision of counterpart funding was partly complied with. NHA, IDS, and WSDS counterpart funding was delayed at times, although this did not affect the project's performance since it accounted for only 10% of the works contracts' costs. The audited project financial statements required under one covenant were invariably provided late. No loan covenant was modified, suspended, or waived. The covenants and the status of compliance with them are provided in Appendix 9.

H. Related Technical Assistance

26. A CDTA of \$4 million was provided on grant basis from ADB's Technical Assistance Special Fund (TASF-IV) to finance 20 person-months of international consultant services and 600 person-months of national consultant services. The CDTA was intended to help the implementing agencies carry out the key governance functions of monitoring, reporting and evaluation; bidding document preparation; contracting; contract management; and internal and external communications. It also aimed to put the fiduciary arrangements in place for sound financial management, and audit functions. A third goal was to support the implementation of environmental and social safeguards by helping to develop, execute, and monitor resettlement, environmental, and gender plans. The CDTA was instrumental in completing the awarded works contracts within the project completion period.

27. The consultants recruited under the CDTA provided excellent support to the executing and implementing agencies in procurement, contract administration, compliance with environmental and social safeguards, financial management, and monitoring and evaluation. The CDTA has been completed and is rated *successful*. Of the \$4.00 million approved for the CDTA, \$2.68 million was used. Forty eight national consultants and seven resource persons were recruited for 705 person-months. Two international consultants were recruited for 147 person-days. The CDTA scope changed twice. A minor change in scope was made in October 2011 to prepare another DNA following a new round of flooding. The major change in March 2015 was needed to prepare an emergency loan as a consequence of 2014 floods.¹² Both activities were completed successfully. CDTA closure is being processed.

¹² ADB. 2015. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Islamic Republic of Pakistan for the Flood Emergency Reconstruction and Resilience Project*. Manila.

I. Consultant Recruitment and Procurement

28. The procurement of goods, works, and services was implemented as envisaged at design and followed the guidelines under ADB's Disaster and Emergency Assistance Policy, as well as ADB's *Guidelines for Procurement* (2010, and as amended from time to time), and ADB's *Guidelines on the Use of Consultants* (2010, and as amended from time to time). The implementation arrangements were backed by strong fiduciary oversight and grievance redress mechanisms. Independent consultants were hired under the associated CDTA and placed in the implementing agencies for assistance. Independent procurement consultants attended the procurement committees as observers to ensure transparency and efficiency. ADB staff for its Pakistan Resident Mission oversaw implementation.

29. At appraisal, the three components of the project were expected to require 2,893 person-months of design and supervision services for design, design review, and construction supervision.

30. For the national highways component, the recruitment of two national consultant firms for the detailed design of the northern and southern packages of the NHA component began in July 2011, and the firms completed the detailed designs in June 2012. A separate firm was recruited to review the designs prepared by the design consultants. Recruitment of PMC (international firm) was started on time but was delayed. This meant that construction supervision for packages already awarded in June 2012 was assigned to the two design consultants for the northern and southern packages as a stopgap measure through variations in their contracts. Through this variation, the design firm for northern package provided construction supervision input of 474 months, while the firm for the southern package provided 520 person-months. The design review firm provided 48 person-months of inputs, and the PMC 1,455. The total for the four firms involved in the NHA component was 2,497 person-months.

31. For the irrigation component, a consortium of three national firms was recruited and mobilized in December 2011 to provide support to the implementing agency and the PMU in project design, execution, and management. For the provincial roads component, two national consultant firms were mobilized in October 2011 who provided the detailed designs in phases during February 2012–May 2013. The recruitment of a PMC (national firm) for the provincial roads was completed as scheduled in December 2011. The PMCs were responsible for ensuring compliance with ADB's safeguards policy in execution, monitoring and reporting of the works contracts. This facilitated the implementation of the works contracts and the establishment of the project performance management system.

32. Procurement of works contracts of the national highway component was delayed as a consequence of delayed recruitment of the design consultants under the QCBS method (para. 30). NHA did not simplify its approval processes to suit the emergency nature of the project. Recruitment of the PMC under QCBS took 23 months, even with a reduced bidder response time. The delay in procurement of 17 works packages was due to the 6 ICBs and post-qualification method adopted for all NCB and ICB packages. NHA needed to make multiple submissions of its bid evaluation reports before they met ADB's standards. Procurement process for the works contracts took longer than anticipated (para. 19).

33. The NHA component included 793 km of national highways. A more detailed survey during the design phase showed that 1,044 km of national highways had been damaged. Based on the loan amount available, the scope was reduced to 653 km. The cost estimates increased after the detailed designs were completed, and the scope was reduced to 475 km of priority

highways and bridges. At midterm review, the component scope was further reduced from 475 km to 424 km due to slow procurement and delay in contract awards. Multiple issues included delays in submission of designs by the design consultants, and delays in finalizing contract clauses in the bidding documents dealing with cost escalation and interest rates on delayed payment. These required frequent meetings between ADB and the NHA, and repeated submissions to ADB for approval. NHA's bid evaluation reports were deficient, required a great deal of correction, and had to be resubmitted to ADB over and over again before they met requirements. This problem was compounded by the NHA's bid approval processes, which were multitier, repetitive, and time-consuming. Neither ADB nor NHA could streamline their standard procedures to speed up approvals. Cumbersome ADB and NHA procedures, higher-than-expected bid prices, the available loan proceeds, and remaining loan period led to the reduced scope of 424 km under 25 subprojects.¹³

34. Out of the 25 subprojects, contracts for 19 subprojects covering 344 km were awarded and successfully implemented by the project completion date of 25 May 2015.¹⁴ This included one contract completed by Frontier Works Organization (FWO) under ADB's force account procedures. NHA had agreed with FWO to implement seven contracts under ADB's force account procedures. However, due to delay in agreement between ADB and NHA for a change in the procurement plan, and FWO's commitments elsewhere, only one contract was implemented by them. Because the contracts could not be procured for all of the prioritized roads, the loan proceeds were underutilized and the unused amount was cancelled.

35. The consultants for the irrigation component were recruited as planned. They provided the required 243 person-months of inputs efficiently. IDS completed the procurement of 8 goods contracts, and 52 works contracts, as planned. For WSDS, 86 person-months of inputs for design of the roads was estimated for which two national consultant firms (for northern and southern packages) were recruited as planned. They provided 79 person-months of inputs. The PMC, a consortium of national firms provided 414 person-months of inputs compared with the estimated 822 person-months. Fifty-one works contracts were procured in four batches, with the first awarded on 3 February 2012. Six contracts for goods were procured as scheduled.

J. Performance of Consultants, Contractors, and Suppliers

36. The performance of the design consultants for the national highways component was partly satisfactory. Their deliverables were provided late, and their designs had to be modified during implementation. This delayed the procurement of works contracts and created bottlenecks in contract implementation. The design review consultants identified some of the weaknesses in the designs prepared by these consultants, but others were discovered only during construction. The performance of the supervision consultants was generally satisfactory. So was the performance of the contractors, although a systemic lack of planning and management skills in the industry needs to be addressed through capacity building. The contractors generally met the technical specifications and quality requirements with the help of the supervision consultants. The national highways component involved no procurement of goods.

37. A satisfactory performance by the consultants, contractors, and suppliers helped complete the irrigation component without delays.

¹³ Scope revision was carried out at midterm review in April 2013.

¹⁴ Footnote 6.

38. The consultants for the Sindh provincial roads component was generally satisfactory, but key staff inputs were sometimes not provided as agreed. For example, the firm engaged did not provide a full-time contracts specialist, as required by the consultancy contract. In addition, some of the resident engineers left before the project ended, adding to the workload of those who remained. The civil works contractors demonstrated some of the weaknesses that affect the national construction industry in general—e.g., in project planning and project documentation in such areas as cost and time claims—but their overall performance was satisfactory. Law and order problems in the Sindh province districts of Jacobabad, Shikarpur, Kambar-Shahdadkot, and Kandhkot caused delays. The contractors engaged under 18 of the component contracts did not mobilize the required human, equipment, and financial resources to deliver the works on schedule, and liquidated damages were imposed because of the delays. Three contractors performed exceptionally well and completed the works before the target completion date and received bonuses. The satisfactory performance of the suppliers combined with the generally satisfactory performances by the consultants and contractors contributed to the on-time completion of the provincial roads component.

K. Performance of the Borrower and the Executing Agencies

39. The borrower provided the facilities, services, and other resources required to carry out the project in a timely manner and complied with its obligations under the loan agreement. The project started on schedule, and coordination between the line departments and the project management and staff was efficient and productive. However, counterpart funds were delayed in FY 2012–2013. Overall, the performance of the borrower is rated *satisfactory*.

40. As the executing agency for the national highways component, NHA managed the project in the same way that it would a regular, non-emergency project. This meant that the component activities were not expedited. In addition, the NHA restructured the responsibilities of its top management toward the end of the project by putting all of its works contracts, regardless of the financing sources, under the jurisdiction of one senior staff member in each province. This changed the project management structure envisaged at appraisal and left the PMU as a coordinating office with lesser control over the project. The performance of the NHA as the executing agency is rated partly satisfactory. However, ADB should consider a different approach to project management by the executing agencies in future emergency interventions. The PMU managed the social safeguards satisfactorily by establishing environment and social units. NHA prepared and carried out the land acquisition and resettlement plan with the support of a resettlement specialist hired under the associated CDTA. The PMU managed institutional and compensation disbursement arrangements efficiently.

41. The executing agency and implementing agencies executed the Sindh irrigation and provincial roads components as envisaged and complied with environmental and social safeguards, and other applicable ADB guidelines. The performance of the PDD, IDS, and WSDS of the government of Sindh are rated *highly satisfactory*.

L. Performance of the Asian Development Bank

42. While ADB's performance is rated *satisfactory* in general, it did not streamline its procedures to accommodate the emergency nature of the loan for the national highways component. ADB exhibited a business as usual approach to the decision making in procurements matters. During implementation, ADB staff in the resident mission facilitated implementation, and made sure that the project outputs were delivered, and that policies, procedures, and safeguards were complied with. ADB fielded regular loan review missions, took

timely decisions to improve implementation, and interacted promptly with the government when required. ADB staff worked as a team with the project management staff, provided day-to-day guidance, and helped to address implementation issues promptly. Through independent consultants recruited under the associated CDTA, ADB provided training to the project staff in the procurement of works, goods, and services and in financial management and disbursement procedures. ADB fielded 24 missions, including one inception mission, one country portfolio and program review mission, 20 loan review missions, one midterm review mission, and one project completion review mission.

III. EVALUATION OF PERFORMANCE

A. Relevance

43. The emergency project is rated *relevant*. It was relevant to the government's development priority of reconstructing flood damaged infrastructure. It was highly relevant to ADB's strategy of providing emergency interventions to its developing member countries when affected by natural calamities. The project was appropriately designed to achieve its development objectives of supporting reconstruction after major flooding.

B. Effectiveness in Achieving Outcome

44. The project is rated *effective* overall in achieving its outcome, although the national highways component was less than effective. Only 344 km of national highway were repaired, rehabilitated, and/or reconstructed—i.e., 43.4% of the original target of 793 km (para. 33).¹⁵ NHA's safeguard compliance was improved through the implementation of the land acquisition and resettlement plan for one highway section. This was managed by dedicated environment and social units established at the PMU, with support from a resettlement specialist whose services were financed by the associated CDTA. The highway sections and bridges covered by the emergency project were rebuilt to higher specifications to provide resilience against future flooding. Travel time and vehicle operation costs have declined on the rebuilt sections.

45. The Sindh irrigation component was *highly effective* in helping to achieve the project's outcome. It restored 41.2 billion cubic meters of canal carrying capacity, against an (underestimated) appraisal target of 59 million cubic meters. It rehabilitated, reconstructed, and strengthened 103 flood embankments measuring 1,453 km in length, compared with the target of 81 flood embankments and 1,000 km. It strengthened the capacity of implementing agencies and executing agencies in fiduciary management, procurement, and safeguard compliance. Performance against gender targets was satisfactory. The reconstructed flood embankments protect social and economic assets in the flood-affected areas of Sindh.

46. The Sindh roads component was *highly effective*. The project completed 920 km of provincial roads and three bridges, exceeding the appraisal target by 15%. Light vehicle traffic on the rebuilt sections has generally remained unchanged from before the flooding and emergency project, but truck traffic has increased on average by 141% from the traffic estimated at the time of design. This is a sign of improved traffic flow and reduced travel times, but it is also likely to cause faster deterioration of the road pavement and thus demand more maintenance and greater maintenance costs than previously. The project built capacity in the implementing agency for fiduciary management, procurement, and safeguard compliance. This is evident from its exceeding the appraisal output target.

¹⁵ In addition, 368 kms of immediate repairs necessary for traffic restoration were retroactively financed.

C. Efficiency in Achieving Outcome and Outputs

47. The project is rated *efficient* overall in achieving the intended outcome and outputs, with the Sindh irrigation and provincial roads components proving more efficient than the national highways component. Because it was an emergency intervention, economic analysis was not carried out at appraisal. However, an economic internal rate of return was calculated only for the irrigation component at completion. Unit cost analysis of the works contracts was conducted to indicate the level of efficiency in the road components.

48. The national highways component was less than efficient. This is because the unit costs of the civil works contracts were higher than the costs estimated at appraisal, although they met the industry standards at the time of the awards. In addition, the component was less than efficient because (i) its scope was reduced from 793 km of highway works to 475 km, of which only 344 km could be awarded and completed (paras. 33-34), (ii) cost increases brought about this scope reduction, and (iii) delayed procurement, and thus completion were delayed. Project efficiency was also diminished by the fact that the loan savings from unsuccessful procurement of works could not be put to work before project closing and these amounts had to be cancelled.

49. The Sindh irrigation component was highly efficient. It was completed at 99% of the estimated cost and achieved the targets. The component's economic internal rate of return at completion is 23.6% (Appendix 10).¹⁶ The high rate of return was mainly due to low-cost implementation and improved returns. Sensitivity analysis of economic costs and benefits showed that the project will remain economically viable even with a increase of 10% in costs or a 10% decline in benefits. The gender action framework (GAF) was implemented successfully. The status of GAF implementation is attached (Appendix 11). The project restored and provided flood protection for 2.2 million hectares (ha) of agricultural land, greatly surpassing the appraisal target of 1.5 million ha. All damaged flood embankments, canals, and drains identified in the DNA were rehabilitated, strengthened, and re-sectioned, compared to the appraisal target of 90%.

50. The Sindh roads component was highly efficient as well. Although the unit costs of the civil works contracts met the industry standards at the time of the award, the intended targets were exceeded by 15%, and this was done within the planned implementation period using less of the loan resources than originally planned.

D. Preliminary Assessment of Sustainability

51. The project is rated *likely sustainable*. The project's outcome will probably be sustained because (i) the government of Pakistan shared in the capital cost of reconstruction of the irrigation and road infrastructure; (ii) the operations and maintenance (O&M) requirements have been identified and planned for in the annual maintenance budgets of both the NHA and the Sindh provincial government; and (iii) an institutional mechanism is in place to ensure that the Sindh provincial government will continue to provide the IDS and the WSDS with adequate O&M funding.

52. The national highways component is most likely to be sustainable. NHA finances the annual maintenance plan of the national highways from a road maintenance account funded

¹⁶ Economic Internal Rate of Return (EIRR) was not estimated at appraisal due to emergency nature of the intervention.

primarily by tolls paid by the national highway users. The Sindh irrigation and roads components are likely sustainable. Funding for the O&M requirements have been worked out and are reflected in the provincial government's annual budget. For example, annual allocations for WSDS maintenance needs rose by 370% from PRs794,710,000 in 2011 to PRs3,739,822,000 in 2015. Continued availability of maintenance allocation is required for the infrastructure investment to perform during its design life. Sindh provincial government is likely to continue increasing the maintenance allocations in its annual budget for irrigation and roads.

E. Impact

53. The project's overall impact is positive. By end of 2015, the estimated annual average daily traffic on the national highways affected by the floods was 22.4% higher than in 2010, beating the appraisal target of a 10% increase.¹⁷ By the end of 2015, in Sindh province, wheat production was 3.0 million tons, compared with the target of 3.70 million tons; cotton production was 2.8 million tons, compared with the target of 4.2 million tons; sugarcane production was 17.6 million tons, compared with the target of 13.5 million tons; and rice productions was 2.45 million tons, compared with the target of 2.42 million tons.¹⁸ The establishment of environment and social units in the PMUs ensured proper planning and implementation of social and environment safeguards and improved PMU's safeguards planning and implementation capacity. These units have managed to function beyond the emergency loan and will serve NHA under subsequent ADB-funded projects. The environmental assessment of subprojects was carried out before the start of execution. Negative environmental impacts and mitigation measures were identified, and an environmental management plan (EMPs) was prepared for each subproject. The EMPs were made parts of each works contract. Implementation of the EMPs was regularly monitored and reported.

IV. OVERALL ASSESSMENT AND RECOMMENDATIONS

A. Overall Assessment

54. The project is rated *successful* overall. It was a multi-sector emergency intervention in the wake of a natural disaster, prepared under ADB's emergency provisions, and based on the findings of the DNA (para. 3). Emergency interventions are by their nature prone to implementation challenges. The national highways component required a reduction in scope during implementation, and only 43.4% of the output target was achieved. This component was relevant, less than effective, less than efficient, and most likely sustainable. NHA's project performance monitoring system was robust, efficient, and monitored component progress. The Sindh irrigation and roads components were relevant, highly effective, highly efficient, and are likely sustainable. They were implemented as conceived, and their output and outcome targets were exceeded. The performance management systems for these components were robust and enabled monthly and biannual monitoring and evaluation of progress and performance.

B. Lessons

55. The lesson learnt from the success of Sindh irrigation and roads components was primarily due to its design, which accounted for actual conditions in the project area, applied lessons from previous interventions, and incorporated efficient and sustainable delivery

¹⁷ Information provided to ADB by Road Asset Management Directorate NHA.

¹⁸ Government of Pakistan, Ministry of Finance, Revenue, Economic Affairs, Statistics and Privatization. Pakistan. *Economic Survey 2015-16*. Islamabad.

mechanisms. Success was also due to ADB's proactive participation in implementation, supervision, and monitoring, along with its flexibility in addressing actual conditions in the project area and providing essential support to the implementing agency in a timely manner. Associated CDTA support was instrumental to effective, on-time implementation.

56. The project adequately addressed the short-term actions to restore traffic through retroactive financing under the national highways component. However, neither the ADB's nor the NHA's institutional mechanisms were suited to the procurement for planned medium- and long-term rehabilitation of the affected sections of national highways. This showed that interventions are not feasible under emergency mechanisms for large-scale contracts on operational national highways.

C. Recommendations

57. ADB should provide technical assistance support to assist with implementing emergency interventions. This is needed to fill the capacity gaps within executing and implementing agencies, and ensure timely implementation by the stakeholders. Aside from preventing the delivery of the emergency support expeditiously, delays in these projects have financial implications as subproject and consulting costs rise.

1. Project Related

58. **Future monitoring.** Allocation of an adequate maintenance budget is the key to ensuring the sustainability of the flood protection and road assets built under the loan. ADB has been engaged in an ongoing dialogue with the government of Pakistan, the Sindh provincial government and NHA to emphasize the importance of adequate budgetary allocations for maintenance. The NHA's off-budget financing of its maintenance needs reasonably ensures that the highway assets will be adequately maintained. If this maintenance funding is inadequate, the assets provided by the project could diminish in value, the associated benefits could decline, and the infrastructure could become more vulnerable to damage during future flooding. It is recommended that ADB continue its ongoing dialogue with the government of Pakistan to ensure the sustainability of these assets through adequate and timely provision of the necessary maintenance funds.

59. **Covenants.** The covenants agreed under the loan were appropriate. While the executing and implementing agencies faced some delays in receipt of the counterpart funds, the specific loan covenant requiring the government to provide this funding was instrumental in ensuring that overall the funding remained available. The covenants should remain part of ADB loan and project agreements.

60. **Further action or follow-up.** During the quarterly portfolio performance reviews, ADB should follow up with the NHA and the Sindh provincial government on the ongoing works under subproject ICB-N-03: rehabilitation of Kohala–Muzaffarabad Road package-1. This work is ongoing due to subsequent damage during 2014 flooding. It should also follow up with the provincial government to ensure that the adequate maintenance allocations will be provided in the province's current annual budget to maintain the project-supported irrigation infrastructure and provincial roads.

61. **Additional assistance.** As discussed in para. 34, the unutilized loan funds were cancelled. Prior to loan closing, the government requested additional assistance and an extension to the loan closing date to finance the construction of the remaining 212 km of

national highway and 33 bridges in the project's original scope. Because this was an emergency loan, ADB could not extend it beyond 4 years. In 2015, after consultations with the government, ADB approved a stand-alone loan to rehabilitate the remaining 212 km and 33 bridges.¹⁹

62. **Timing of the project performance evaluation report.** A project performance evaluation report should be scheduled for 2017, at which time all assets will have been in use for 3 years and their impact can be properly measured.

2. General

63. Emergencies demand immediate action on the part of the government, with ADB intervening afterwards. A government's actions are usually prompt in the short term, but its focus on other continued pressing priorities can divert its attention from the requirements of medium- and long-term rebuilding. This can diminish or delay counterpart financing needed for ADB's emergency interventions. As a result, ADB's emergency interventions should not rely on counterpart funding, since these funds will be uncertain under these conditions and when missing will delay the expeditious project implementation that is the defining objective of an emergency loan. Executing agencies will treat the restoration of traffic or the closing of breaches in irrigation infrastructure as an immediate priority but deal with rebuilding as a matter of routine. ADB processes are not entirely appropriate in emergencies, either. The main provision is a reduction in bidding response times, which this project showed deals with only one of the obstacles to expeditious implementation. For these reasons, it is recommended that in future emergency interventions ADB and the executing and implementing agencies involved consider adopting a different approach to project management that centers on expeditious management actions.

¹⁹ ADB. 2015. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Islamic Republic of Pakistan for the Post-Flood National Highways Rehabilitation Project*. Manila.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions, Risks	Achievement
Impact Economic and social recovery from the floods	<p>By end 2014, the AADT flow on national roads affected by floods is 10% higher than the projected AADT of 145,000 vehicles in 2010.</p> <p>By end 2015 agriculture production of major crops in Sindh equals or is above pre-flood levels - 2009/10 (metric tons). wheat - 3.70 cotton - 4.27 sugarcane – 13.50 rice – 2.42</p>	<p>NHA data and revenue statistics</p> <p>Production data on major crops published by the Ministry of Agriculture and Bureau of Statistics</p>	<p>Assumptions</p> <p>Other reforms proceed in parallel</p> <p>Political stability is maintained and the economic program is implemented successfully</p> <p>Risks</p> <p>Security situation deteriorates, aggravated by social tensions caused by inequities in the distribution of emergency rehabilitation reconstruction assistance</p>	<p>The project's overall impact is positive. By end of 2015, the estimated annual average daily traffic on the national highways affected by the floods was 22.4% higher than in 2010, compared with the appraisal target of a 10% increase.</p> <p>By the end of 2015, in Sindh province, wheat production was 3.0 million tons, compared with the target of 3.70 million tons; cotton production was 2.8 million tons, compared with the target of 4.2 million tons; sugarcane production was 17.6 million tons, compared with the target of 13.5 million tons; and rice productions was 2.45 million tons, compared with the target of 2.42 million tons</p>
Outcome Critical physical infrastructure to restore livelihoods and access to markets has been put in place. Assets are rebuilt back to their original standards or better.	90% of the damages identified for national roads in the DNA Report are reconstructed and rehabilitated by end 2014	Project progress reports by NHA, consultants and ADB	<p>Assumptions</p> <p>Adequate and timely Government and development partner funding Project implementation arrangements are in place and timely Procedural formalities do not delay the award of contracts Strong government support to timely and effective</p>	43.4% of the damaged national highways reconstructed and rehabilitated.

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions, Risks	Achievement
	<p>Pre-flood irrigation systems with a water carrying capacity of 59 million cubic meters restored in Sindh by end 2014</p> <p>Pre-flood employment level of men (9.2 million) and women (3.7 million) in agriculture for Sindh restored by end 2014</p> <p>81 major flood embankments (estimated length of 1,000 km); and</p> <p>800 km of provincial roads restored, rehabilitated by end 2014. Reconstructed to protect social and economic assets in the flood-affected areas of Sindh and at standards to protect against future floods</p> <p>Improved capacity of IAs and EAs in terms of fiduciary management, procurement, safeguard compliance and gender mainstreaming – progress</p>	<p>Reports on irrigation system by departments of irrigation in Sindh, consultants and ADB</p> <p>Federal and provincial government statistics on agriculture and employment – statistics divisions</p> <p>Progress reports of the departments of irrigation and W&S in Sindh. Flood damage reports of future floods by National Disaster Management Authority. Consultant and ADB review mission reports.</p> <p>Annual third party audit reports. Achievements on annual contracts according to protection plans (ADB PPMS) and</p>	<p>project implementation</p> <p>Risks</p> <p>Detritions of other factors like security or impact of other natural hazards like drought, etc.</p>	<p>41.24 BCM capacity is restored</p> <p>4.3 million men and 1.7 million women employed in agriculture in Sindh Province by end of 2010 (PBS Labor Force Survey: 2010–2011).</p> <p>103 embankments of 1,453 km in total length restored.</p> <p>920 km of provincial roads restored.</p> <p>Done</p>

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions, Risks	Achievement
	measured through reconstruction projects (by end 2014)	ADB Mission procurement and safeguard review reports. Website reports.		
Outputs 1. Road network system (including bridges) repaired and rehabilitated	793 km of completely and partially damaged national highways repaired, rehabilitated and reconstructed by end 2014 At least 800 km of Sindh provincial roads repaired, rehabilitated and reconstructed by end 2014	NHA progress reports, corroborated by the Planning Commission and P&DD reports, consultants and ADB. Progress reports provided by the IA and the provincial P&DD	Assumptions The PMC is in place by 15 August 2011 and at least 50% of the civil works contracts are awarded by November 2011 Domestic contractors with adequate capacity are available Risks underlying Low public sector capacity to execute projects Logistics constraints, including availability of construction materials, and the sharp increase in construction prices Security concerns affecting mobility of consultants/contractors The level of realignment, environment, and acquisition of land takes more time than estimated	344 km of national highways repaired, rehabilitated and reconstructed, i.e. 43.4% of the original scope. 920 km of Sindh provincial roads repaired, rehabilitated and reconstructed, i.e. 115% of the original scope. By end 2013, 2.2 million ha of flood-affected agricultural land improved through repair, rehabilitation, strengthening, and re-sectioning of flood protection embankments, and rehabilitation of main canal, distributaries minor canals and drainage infrastructure.
2. Provincial irrigation facilities rehabilitated and reconstructed	1.5 million ha of agricultural land affected by floods in Sindh improved through repair, rehabilitation, strengthening, and re-sectioning of flood protection embankments, and rehabilitation of main canal, distributaries minor	Federal and provincial government statistics on agriculture and cultivated land. Consultant reports, ADB missions.		

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions, Risks	Achievement
	<p>canals and drainage infrastructure identified in the DNA (by end 2014)</p> <p>At least 90% of selected flood protection embankments and irrigation infrastructure identified in the DNA rehabilitated, strengthened, and re-sectioned with maintenance access in Sindh by end 2014.</p>	<p>Progress report of Sindh irrigation departments.</p>		<p>100% of selected flood protection embankments, canals, and drains identified in DNA rehabilitated, strengthened, and re-sectioned</p>
3. Support services	<p>Assistance with procurement and safeguards compliance according to ADB guidelines and the arrangements included in the financing agreements.</p> <p>At least 15% of the water structure (especially canals) has gender features in their design and Implementation.</p> <p>One women-livelihood project designed and financed</p>	<p>Procurement review by ADB</p> <p>Progress report of the irrigation department and the gender monitoring reports by consultants and the irrigation department.</p> <p>Consultant report and ADB missions</p>	<p>Engagement of advisors not done on time</p>	<p>TA consultants assisted PMU in procurement and safeguards compliance.</p> <p>20% canals and drains subprojects incorporated gender features in their design and implementation.</p> <p>One women's livelihood pilot project launched under a separate ADB's regional technical assistance in 4 villages of Shikarpur District</p>

AADT = annual average daily traffic, ADB = Asian Development Bank, ADF = Asian Development Fund, DNA = damage and needs assessment, EA = executing agency, FERP = Flood Emergency Reconstruction Project, GDP = gross domestic product, ha = hectare, IA = implementing agency, km = kilometer, NHA = National Highway Authority, OCR = ordinary capital resources, P&DD = Planning and Development Department, PMC = project management consultant, PPMS = project performance monitoring system, TA = technical assistance, TOR = terms of reference, W&S = works and services.

Source: Asian Development Bank.

NATIONAL HIGHWAY AUTHORITY CIVIL WORK SUBPROJECTS AND COSTS

S#	Description of Contract Work	Contractor	Contract Cost	Final Contract Amount
1	Hala–Moro (pkg-i) sb (Hala–Sabu Rahu)	Sachal-Xuchang JV	1,957,715,418	1,849,431,097
2	Hala–Moro (pkg-ii) sb (Sabu Rahu–Mishakh)	Sachal-Xuchang JV	1,875,203,620	1,692,147,771
3	Hala–Moro (Pkg-III) sb (Mishakh–Aliabad)	Sachal-Xuchang JV	1,979,423,442	1,773,935,683
4	Ranipur–Rohri (pkg-i) nb	Xinjiang Beixin Road and Bridge Group	1,386,334,000	1,503,131,060
5	Ranipur–Rohri (pkg-ii) nb	Xinjiang Beixin Road and Bridge Group	1,296,188,742	1,160,625,759
6	Kohala–Muzaffarabad (package-1 road)	Xinjiang Beixin Road and Bridge Group	1,716,002,100	2,566,305,327
7	Ratodero–Qubo Saeed Khan	Umer Jan and Muhammad Ramzan (JV)	450,421,000	283,643,984
8	Chakdara bridge including protection works	Mohmand Construction	480,505,449	410,960,475
9	Sarhad bypass– Dherki (nb)	Sardar Muhammad Ashraf Baluch	583,599,000	566,243,878
10	Kohala– Muzaffarabad	AM Associates	782,961,000	899,003,195
11	Multan–Muzaffargarh–D.G. Khan–Bewata (vedor nullah)	Techno Time Construction	127,302,466	187,139,907
12	Mansehra–Naran– Jalkhad–Chilas	Rustum Associates and Dynamic Constructors (JV)	93,739,500	94,603,739
13	Mansehra–Naran–Jalkhad–Chilas including bridges	Rustum Associates and Dynamic Constructors (JV)	844,545,925	1,039,319,171
14	Chakdara–Kalam (road package-1)	Zahir Khan and Techno Time (JV)	912,455,000	1,083,074,574
15	Chakdara–Kalam (road package-2)	Zahir Khan and Techno Time (JV)	861,417,500	743,627,707
16	Kohala–Muzaffarabad - bridge package (02 bridges)	Habib Rafique	433,918,428	368,963,869
17	Rohri–Panu Aqil (sb)	Zarghoon Enterprises	1,004,599,990	965,956,793
18	Jacobabad–Dera Allah Yar Jamali bypass km. 90 – 95 and Jacobabad city portion km. 84–94+700	Umer Jan and Muhammad Ramzan (JV)	566,105,784	706,612,929
19	Dharki–Panu Aqil (nb)	FWO	1,291,999,736	1,146,605,609

FWO = frontier works organization, JV = joint venture, PRs = Pakistan rupee/s.

1. Data source: ADB LFIS, government PCRs, and project record.

2. ADB share is 90% of total contract amount.

NATIONAL ROADS SUBPROJECTS UNDER RETROACTIVE FINANCING

S#	Route	Contract Number	PCSS No.	Name of Contractor	Contract Cost (PRs)	ADB Share (PRs)
1	N-5	EM-PN-10-05-27	0220	Z.A. Cheema	974,763	877,287
2	S-2	EM-PN-10-S2-15	0221	Malik Amir Iqbal	502,400	452,160
3	S-2	EM-PN-10-S2-16	0222	Lasani Builders	8,949,241	8,054,317
4	S-2	EM-PN-10-S2-17	0223	Gul Haider Khan	353,040	317,736
5	S-2	EM-PN-10-S2-18	0224	Abid Associates	315,600	284,040
6	S-2	EM-PN-10-S2-19	0225	Abid Associates	1,486,040	1,337,436
7	S-2	EM-PN-10-S2-20	0226	Al Firdous	1,745,505	1,570,955
8	S-2	EM-PN-10-S2-21	0227	Al Firdous	1,402,385	1,262,147
9	S-2	EM-PN-10-S2-24	0228	Concrete N Construct	2,670,509	2,403,458
10	S-2	EM-PN-10-S2-25	0229	Yar Mohd Khattak	3,637,925	3,274,133
11	S-2	EM-PN-10-S2-26	0230	Gul Haider Khan	317,120	285,408
12	S-2	EM-PN-10-S2-22	0231	Lasani Builders	4,346,441	3,911,797
13	N-5	EM-PN-09-05-32	0518	Shah Developers	12,090,759	10,881,683
14	S-2	EMQ-PN-10-S2-71	0557	Gul Haider Khan	614,597	553,137
15	N-70	EM-PS-10-Flood Emerg-5	0232	Tribal Builders	20,844,600	18,760,140
16	N-70	EM-PS-10-Flood Emerg-6	0233	Nawaz Engineer	7,330,963	6,597,867
17	N-70	EM-PS-10-50-03	0234	Kohistan Engineers	13,405,529	12,064,976
18	N-70	EM-PS-10-50-07	0235	Atta Engineers	4,913,461	4,422,115
19	N-70	EM-PS-10-50-08	0236	Habib Construction.	17,091,657	15,382,491
20	N-70	EM-PS-10-50-09	0237	Falak Sher	24,536,987	22,083,288
21	N-70	EM-PS-10-50-10	0238	Conex	5,039,394	4,535,455
22	N-70	EM-PS-10-50-11	0239	Supercon	3,355,966	3,020,369
23	N-70	EM-PS-10-50-12	0240	Yasir Indus	16,525,530	14,872,977
24	N-70	EM-PS-10-50-13	0241	Nizakat Ali	17,459,415	15,713,474
25	N-5	EM-SD-11-5025	0243	Moon Builders	754,129	678,716
26	N-5	EM-SD-11-5030	0244	Khaki Construction	7,006,223	6,305,601
27	N-5 SBC	EM-SD-11-5023	0245	Sukkur Enterprises	9,549,414	8,594,472
28	N-25	EMQW-SD-11-5003	0246	Mac Engineers	835,284	751,756

S#	Route	Contract Number	PCSS No.	Name of Contractor	Contract Cost (PRs)	ADB Share (PRs)
29	N-55	EM-SD-11-5018	0247	Abdul Qayoom Mazari	6,227,889	5,605,100
30	N-55	EMQW-SD-11-5010	0248	Badar Din Jatoi	444,972	400,475
31	N-55	EMQW-SD-11-5009	0249	Badar Din Jatoi	910,435	819,392
32	N-55	EMQW-SD-11-5008	0250	Mac Engineers	835,806	752,225
33	N-55	EMQW-SD-11-5006	0251	AK Engineers	975,452	877,907
34	N-55	EMQW-SD-11-5007	0252	Muhammad Haroon	987,559	888,803
35	N-55	EM-SD-11-5021	0253	Mac Engineers	1,985,703	1,787,133
36	N-55	EM-SD-11-5026	0254	Tarique Hussain Abbasi	1,136,942	1,023,248
37	N-55	EM-SD-11-5027	0255	Tarique Hussain Abbasi	1,153,221	1,037,899
38	N-55	EM-SD-11-5028	0256	Mac Engineers	1,670,098	1,503,088
39	N-55	EM-SD-11-5015	0257	Tarique Hussain Abbasi	6,332,453	5,699,208
40	N-55	EM-SD-11-5012	0258	M Ramzan	22,582,368	20,324,131
41	N-55	EM-SD-11-5016	0259	Highway Engineers	19,064,392	17,157,953
42	N-55	EM-SD-11-5017	0260	M. Ibrahim Gongga	19,085,464	17,176,917
43	N-55	EM-SD-11-5019	0261	Faiz M Buriro	1,520,618	1,368,557
44	N-55	EM-SD-11-5020	0262	Umer Jan	12,451,433	11,206,290
45	N-65	EM-SD-11-5002	0263	Abdul Qayoom Mazari	11,928,956	10,736,060
46	N-65	EM-SD-11-5003	0264	Umer Jan	37,322,935	33,590,642
47	N-65	EM-SD-11-5029	0265	Abdul Razzaque Chohan	4,959,001	4,463,101
48	M-8	EM-SD-11-5004	0266	M. Ramzan	13,728,411	12,355,570
49	M-9	EMQW-SD-11-5004	0267	Qaim Khani	1,044,949	940,454
50	N-5	EM(F)-KP-10-5009(P)	0268	Mohmand Construction	7,965,935	7,169,342
51	N-5	EM(FQ)-KP-10-5053(P)	0269	Nisar Ahmed	750,129	675,116
52	N-5	EM(F)-KP-10-5010(P)	0270	Mohmand Construction	19,282,025	17,353,823
53	N-5	EM(F)-KP-10-5041(P)	0271	Nisar Ahmed	7,731,770	6,958,593
54	N-5	EM(F)-KP-10-5045(P)	0272	Mohmand Construction	4,179,872	3,761,885
55	N-5	EM(Q)-KP-10-5065(P)	0273	M. Ajmal	994,200	894,780
56	N-5	EM(F)-KP-10-5066(P)	0274	Yar Muhammad Khattak	22,042,385	19,838,147
57	N-5	EM(F)-KP-10-5040(P)	0275	M. Ibrahim Associates	7,698,210	6,928,389
58	N-45	EM(FQ)-KP-10-5002(B)	0276	Mohmand Construction		

S#	Route	Contract Number	PCSS No.	Name of Contractor	Contract Cost (PRs)	ADB Share (PRs)
					1,532,063	1,378,857
59	N-45	EM(FQ)-KP-10-5060(B)	0277	Ghulam Muhammad	1,203,159	1,082,843
60	N-45	EM(F)-KP-10-5004(B)	0278	Sajjad	2,655,220	2,389,698
61	N-45	EM(FQ)-KP-10-5049(B)	0279	M. Ajmal	419,553	377,598
62	N-45	EM(FQ)-KP-10-5003(B)	0280	Ghulam Muhammad	770,925	693,833
63	N-45	EM(FQ)-KP-10-5050(B)	0281	Ittehad Construction	538,812	484,931
64	N-45	EM(F)-KP-10-5035(B)	0282	Abid Associates	16,255,814	14,630,233
65	N-45	EM(F)-KP-10-5037(B)	0283	Sajjad	4,821,197	4,339,077
66	N-45	EM(FQ)-KP-10-5006(B)	0284	Saadat	1,864,538	1,678,084
67	N-45	EM(F)-KP-10-5039(B)	0285	Sajjad	6,944,918	6,250,426
68	N-45	EM-KP-10-5082(B)	0286	Abid Associates	8,616,634	7,754,971
69	N-50	EM(F)-KP-10-5030(D)	0287	RK Brothers	2,175,807	1,958,226
70	N-50	EM(FQ)-KP-10-5031(D)	0288	Sawan Enterprises	1,598,582	1,438,724
71	N-55	EM(FQ)-KP-10-5001(K)	0289	Haji Pasham Khan	1,639,430	1,475,487
72	N-55	EM(FQ)-KP-10-5047(K)	0290	Haji Pasham Khan	487,207	438,486
73	N-55	EM(FQ)-KP-10-5048(K)	0291	Mansoor Construction	740,366	666,329
74	N-55	EM(F)-KP-10-5015(P)	0292	Zeb Construction	3,576,875	3,219,188
75	N-55	EM(F)-KP-10-5043(P)	0293	Masood Construction	4,102,913	3,692,622
76	N-55	EM(FQ)-KP-10-5055 (KTP)	0294	Inamullah Khan	450,105	405,095
77	N-55	EM(FQ)-KP-10-5032(D)	0295	ZS Construction	1,348,584	1,213,726
78	N-55	EM(FQ)-KP-10-5033(D)	0296	Z.S Construction	771,654	694,489
79	N-55	EM(FQ)-KP-10-5034(D)	0297	Usman.	1,490,768	1,341,691
80	N-55	EM(F)-KP-10-5046(D)	0298	Haji Raees Khan	11,572,131	10,414,918
81	N-55	EM(FQ)-KP-10-5056(D)	0299	Haji Raees Khan	698,949	629,054
82	N-55	EM(FQ)-KP-10-5057(D)	0300	Haji Raees Khan	443,700	399,330
83	N-55	EM(FQ)-KP-10-5058(D)	0301	Haji Raees Khan	201,740	181,566
84	N-55	EM(FQ)-KP-10-5059(D)	0302	Haji Raees Khan	75,660	68,094
85	N-55	EM(F)-KP-10-5075(K)	0303	Haji Pasham Khan	5,520,929	4,968,836
86	N-55	EM(F)-KP-10-5076(K)	0304	MAK Constructor	2,961,853	2,665,668
87	N-55	EM(F)-KP-10-5077(K)	0305	Awal Dad	2,036,012	1,832,411

S#	Route	Contract Number	PCSS No.	Name of Contractor	Contract Cost (PRs)	ADB Share (PRs)
88	N-55	EM(F)-KP-10-5078(K)	0306	Haji Pasham Khan	2,294,581	2,065,123
89	N-55	EM(F)-KP-10-5079(K)	0307	M. Suleman	1,942,580	1,748,322
90	N-55	EM(F)-KP-10-5080(K)	0308	Mansoor Construction	1,147,254	1,032,529
91	N-55	EM(Q)-KP-10-5066 (KT)	0309	Abid Associates	1,287,570	1,158,813
92	N-55	EM(F)-KP-10-5074(K)	0310	Bannu Construction	13,284,631	11,956,168
93	N-55	EM-KP-10-5083(K)	0468	Usman	5,073,644	4,566,280
94	N-80	EM(F)-KP-10-5044(P)	0311	Sajjad	25,225,604	22,703,044
95	N-80	EM(FQ)-KP-10-5054(P)	0312	Sajjad	421,596	379,436
96	N-80	EM(FQ)-KP-10-5018(P)	0313	Bannu Construction	1,305,845	1,175,261
97	N-80	EM(FQ)-KP-10-5019(P)	0314	Bannu Construction	1,522,112	1,369,901
98	N-80	EM(F)-KP-10-5020(P)	0315	Sajjad	2,117,069	1,905,362
99	N-80	EM(F)-KP-10-5021(P)	0316	Sajjad	2,320,233	2,088,210
100	N-80	EM(F)-KP-10-5022(P)	0317	Sajjad	2,375,982	2,138,384
101	N-80	EM(F)-KP-10-5023(P)	0318	Sajjad	2,396,275	2,156,648
102	N-80	EM(FQ)-KP-10-5024(P)	0319	Sajjad	1,257,145	1,131,431
103	N-80	EM-KP-10-5081(P)	0320	M. Ibrahim	10,428,391	9,385,552
104	N-90	EM(F)-KP-10-5008(S)	0321	Bakht Zada	2,547,748	2,292,973
105	N-95	EM(FQ)-KP-10-5051(S)	0521	M/s Batkht Zada	832,785	749,507
106	N-95	EM(FQ)-KP-10-5052(S)	0522	Batkht Zada	541,176	487,058
107	N-65	EM-KZ-10-5010	0322	Allah Bahaya	17,658,962	15,893,066
108	N-65	EM-KZ-10-5015	0323	Taj & Brothers	6,723,292	6,050,963
109	N-65	EM-KZ-10-5019	0324	Allah Dad	11,490,721	10,341,649
110	N-65	EM-KZ-10-5009	0469	Akber Shawani	2,437,075	2,193,368
111	N-65	EM-KZ-10-5008	0470	Taj and Brothers	2,442,808	2,198,527
112	N-65	EM-KZ-10-5018	0471	H. Mohammad Yaqoob Bangulzai	2,163,507	1,947,156
113	N-15	EM(Q)-NA-2010-11/N-15/25	0325	M. Rafique	1,054,260	948,834
114	N-15	EM(Q)-NA-2010-11/N-15/26	0472	Dynamic Constructors	2,144,025	1,929,623
115	N-15	EM(Q)-NA-2010-11/N-15/27	0473	Dynamic Constructors	2,174,811	1,957,330
116	N-15	EM(Q)-NA-2010-11/N-15/28	0474	Dynamic Constructors	2,191,303	1,972,173
117	N-15	EM(Q)-NA-2010-11/N-	0475	Rustum Associates		

S#	Route	Contract Number	PCSS No.	Name of Contractor	Contract Cost (PRs)	ADB Share (PRs)
		15/29			2,182,507	1,964,256
118	N-15	EM(Q)-NA-2010-11/N-15/30	0326	Rustum Associates	2,167,114	1,950,403
119	N-15	EM(Q)-NA-2010-11/N-15/31	0327	Rustum Associates	2,160,517	1,944,465
120	N-15	EM-NA-2010-11/N-15/03	0328	Sultan	5,346,559	4,811,903
121	N-15	EM(Q)-NA-2010-11/N-15/24	0329	Sohail Khan Jadoon	415,106	373,595
122	N-15	EM(Q)-NA-2010-11/N-15/41	0476	Al-Quresh Construction	1,998,510	1,798,659
123	N-15	EM-NA-2010-11/N-15/06	0477	M. Rafique	9,887,603	8,898,843
124	N-35	EM(Q)-NA-2010-11/N-35/02	0478	Malik Traders	2,038,100	1,834,290
125	N-35	EM(Q)-NA-2010-11/N-35/03	0330	Shah Usman Khalid	2,198,400	1,978,560
126	N-35	EM(Q)-NA-2010-11/N-35/04	0479	Malik Traders	2,118,250	2,118,250
127	N-35	EM(Q)-NA-2010-11/N-35/05	0331	Lawaghar Construction	1,621,795	1,459,616
128	N-35	EM(Q)-NA-2010-11/N-35/06	0332	Lawaghar Construction	2,154,664	1,939,198
129	N-35	EM(Q)-NA-2010-11/N-35/08	0480	Daad Constructors	1,648,171	1,483,354
130	N-35	EM(Q)-NA-2010-11/N-35/09	0333	Sajjad	1,649,796	1,484,816
131	N-35	EM(Q)-NA-2010-11/N-35/10	0334	SS Brothers	1,356,508	1,220,857
132	N-35	EM(Q)-NA-2010-11/N-35/11	0335	Sajjad	2,097,088	1,887,379
133	N-35	EM(Q)-NA-2010-11/N-35/12	0336	Sajjad	540,578	486,520
134	N-35	EM(Q)-NA-2010-11/N-35/13	0337	Gul Haider Khan	428,827	385,944
135	N-35	EM(Q)-NA-2010-11/N-35/14	0338	Zeb Construction	215,263	193,737
136	N-35	EM(Q)-NA-2010-11/N-35/15	0339	Zeb Construction	825,721	743,149
137	N-35	EM(Q)-NA-2010-11/N-35/16	0340	Gul Haider Khan	842,789	758,510
138	N-35	EM(Q)-NA-2010-11/N-35/17	0341	Wali Muhammad Khan	1,955,273	1,759,746
139	N-35	EM(Q)-NA-2010-11/N-35/18	0342	Shah Usman Khalid	310,217	279,195
140	N-35	EM(Q)-NA-2010-11/N-35/19	0343	Wali Muhammad Khan	331,551	298,396
141	N-35	EM(Q)-NA-2010-11/N-35/20	0344	Shah Usman Khalid	1,387,164	1,248,448
142	N-35	EM(Q)-NA-2010-11/N-35/21	0345	Gul Haider Khan	1,240,230	1,116,207
143	N-35	EM(Q)-NA-2010-11/N-35/22	0346	Wali Muhammad Khan	1,134,553	1,021,098
144	N-35	EM(Q)-NA-2010-11/N-35/23	0347	Gul Haider Khan	662,203	595,983
145	N-35	EM(Q)-NA-2010-11/N-35/07	0348	Rashid Brothers	1,076,372	968,735
146	N-5 (NBC)	BC-PN-10-05-01	0349	Aftab	7,278,834	6,550,951

S#	Route	Contract Number	PCSS No.	Name of Contractor	Contract Cost (PRs)	ADB Share (PRs)
147	S-2	EM-PN-10-S2-59	0542	GSP Associates	17,089,499	15,380,549
148	S-2	EMQ-PN-10-S2-60	0543	Civil Engineering Solution	2,262,097	2,035,887
149	S-2	EM-PN-10-S2-61	0544	Taimoor Shah Construction	8,621,831	7,759,648
150	S-2	EM-PN-10-S2-62	0545	Taimoor Shah Construction	9,495,085	8,545,577
151	S-2	EM-PN-10-S2-77	0546	Haji Nizakat	29,041,918	26,137,726
152	S-2	EM-PN-10-S2-63	0547	Zoraiz Engineering	25,678,065	23,110,259
153	S-2	EMQ-PN-10-S2-64	0548	Civil Engineering Solution	2,414,798	2,173,318
154	S-2	EM-PN-10-S2-65	0549	Khalid Enterprises	10,643,538	9,579,184
155	S-2	EM-PN-10-S2-66	0550	Progressive Builders	13,650,009	12,285,008
156	S-2	EM-PN-10-S2-67	0551	Khan Enterprises	13,747,755	12,372,980
157	S-2	EM-PN-10-S2-68	0552	Khan Enterprises	13,112,595	11,801,336
158	S-2	EM-PN-10-S2-69	0553	Initiatives	9,014,658	8,113,192
159	S-2	EMQ-PN-10-S2-72	0554	GSP Associates	1,991,532	1,792,379
160	S-2	EMQ-PN-10-S2-73	0555	Gul Haider Khan	1,804,432	1,623,989
161	S-2	EMQ-PN-10-S2-74	0556	Raja Abdul Aziz	2,030,947	1,827,852
162	N-5	EM-PS-10-50-04	0350	MM Builders	21,858,263	19,672,437
163	N-70	EM-PS-10-50-05	0351	Conex	4,432,304	3,989,074
164	N-70	EM-PS-10-50-06	0352	Allah Dad	4,909,095	4,418,186
165	N-70	EM-PS-10-50-16	0519	Friends Enterprises	50,145,640	45,131,076
166	N-70	EM-PS-10-50-14	0242	Strong Force	21,002,050	18,901,845
167	N-5	BCQW-SD-11-0001	0353	Sukkur Enterprises	973,561	876,205
168	N-25	EM-SD-11-5034	0354	Shah Builders	28,009,615	25,208,654
169	N-25	EM-SD-11-5035	0355	Irshad Ahmed Mengal.	35,806,146	32,225,532
170	N-25	EM-SD-11-5036	0356	Muhammad Ramzan	23,144,172	20,829,754
171	N-25	EM-SD-11-5037	0357	Mac Engineers	22,736,560	20,462,904
172	N-55	EM-SD-11-5008	0358	Lal Khan Bugti	19,591,622	17,632,460
173	N-55	EM-SD-11-5009	0359	M Ramzan	29,357,528	26,421,775
174	N-65	EM-SD-11-5006	0360	Haji Sultan Ahmed	2,913,838	2,622,454
175	N-65	EM-SD-11-5013	0361	Act International	15,517,095	13,965,386
176	N-65	EM-SD-11-5011	0362	Act International		

S#	Route	Contract Number	PCSS No.	Name of Contractor	Contract Cost (PRs)	ADB Share (PRs)
					22,780,258	20,502,232
177	M-8	EM-SD-11-5033	0363	Ali Enterprises	19,586,356	17,627,720
178	M-9	EM-SD-11-5001	0364	Tarique Hussain Abbasi	9,662,388	8,696,149
179	N-55	EM-SD-11-5014	0520	Al Mustafa	9,666,504	8,699,854
180	N-45	EM(FQ)-KP-10-5005(B)	0365	M. Ajmal	1,401,871	1,261,684
181	N-45	EM(F)-KP-10-5007(B)	0366	Ittehad Construction	3,873,314	3,485,983
182	N-45	EM(F)-KP-10-5038(B)	0367	M. Ibrahim	4,836,191	4,352,572
183	N-45	EM(F)-KP-10-5064(B)	0368	Pak Army 476, Engineering Group	18,076,101	16,268,491
184	N-45	EM(F)-KP-10-5036(B)	0369	M. Ajmal	8,998,134	8,098,321
185	N-45	EM(F)-KP-10-5067(B)	0370	Lawari Construction	8,796,015	7,916,414
186	N-45	EM(F)-KP-10-5068(B)	0371	Akhunzada Fazal Jameel	3,081,862	2,773,676
187	N-45	EM(F)-KP-10-5069(B)	0372	Akhunzada Fazal Jameel	5,251,650	4,726,485
188	N-45	EM(F)-KP-10-5070(B)	0373	Iqbal Construction	1,770,331	1,593,298
189	N-45	EM(F)-KP-10-5071(B)	0374	Ghulam Muhammad	15,248,633	13,723,770
190	N-45	EM(F)-KP-10-5072(B)	0375	Akhunzada Fazal Jameel	2,621,045	2,358,941
191	N-45	EM(F)-KP-10-5073(B)	0376	Lawari Construction	4,406,715	3,966,044
192	N-45	EM-KP-10-5086(B)	0481	Lawari Construction	6,584,425	5,925,983
193	N-45	EM-KP-10-5087(B)	0482	Lawari Construction	4,726,025	4,253,423
194	N-45	EM-KP-10-5095(B)	0483	IBCC	6,974,900	6,277,410
195	N-45	EM(Q-KP-10-5070(B)	0484	Ghulam Muhammad.	1,897,950	1,708,155
196	N-55	EM-KP-10-5098(K)	0485	M. Khel Construction	10,496,951	9,447,256
197	N-50	EM-BN-10-5001	0486	Umer Jan	7,762,282	6,986,054
198	N-65	EM-KZ-10-5017	0487	Ali Construction	1,581,654	1,423,489
199	N-65	EM-KZ-10-5011	0488	Karamullah Construction	20,427,454	18,384,709
200	N-65	EM-KZ-10-5012	0489	Jan Brothers	22,010,921	19,809,829
201	N-65	EM-KZ-10-5013	0490	AKB Construction	11,577,155	10,419,440
202	N-65	EM-KZ-10-5014	0491	Hafeezullah Lehri	5,265,532	4,738,979
203	N-65	EM-KZ-10-5016	0492	Mir Ahmed Jan Bangulzai	10,137,050	9,123,345
204	N-15	EM-NA-2010-11/N-15/04	0493	Hayat Ali	6,079,055	5,471,150
205	N-35	EM-NA-2009-10/N-35/02	0377	Lawaghar Construction	64,107,363	57,696,627

S#	Route	Contract Number	PCSS No.	Name of Contractor	Contract Cost (PRs)	ADB Share (PRs)
206	M-1	EM-04-2010	0494	Taimur Shah	12,897,331	11,607,598
207	M-1	EM-(M-1)-10-01	0495	Fateh Khan	801,529	721,376
208	M-1	EM-(M-1)-10-02	0496	Ali Engineers	17,404,368	15,663,931

FWO = frontier works organization, JV = joint venture, PRs = Pakistan rupee/s.

1. Data source: ADB LFIS, government PCRs, and project record.

2. ADB share is 90% of total contract amount.

WORKS AND SERVICES DEPARTMENT CIVIL WORK SUBPROJECTS AND COSTS

S#	Description of Contract Work	Contractor	Original Contract Cost (PRs Millions)	Final Contract Cost (PRs Millions)
1	Reconstruction & rehabilitation of roads in district Kashmore road from (i) Ghouspur to Tangwani :13.10 km (ii) Indus highway to Khahi village via chachar gas field, 6.10 km	Umer Jan	239.352	245.786
2	Road from Jacobabad to Thull	AZ Builders	228.334	242.665
3	Road from Jacobabad to Thull	Shahrukh (Jv)	245.077	248.160
4	Jacobabad to Thull	Haji Sirajuddin	81.369	81.369
5	Road from Jacobabad – Dodapur to Garhi Khairo	D. Baloch	495.752	503.402
6	Road from Jacobabad – Dodapur to Garhi Khairo	D. Baloch	402.740	405.558
7	Reconstruction & rehabilitation of roads in district Jacobabad (i) Thull Saifal road Sajjan Bagar Laro to Mirpur Buriro,10.30 km (ii) Thull to Barim Bux via Bahadurpur.15.90 km	Umer Jan	319.020	359.746
8	Road from Thull to Saifal	D. Baloch	172.293	156.458
9	Road from Thull to Saifal	D. Baloch	137.794	130.522
10	Jacobabad to Shahi Wah	NKB	219.405	212.528
11	Thull via Garhi Hassan Piyaro	Umer Jan	163.563	175.815
12	Road from Khanpur to Thull	AZ Builders	172.35	177.033
13	Road from Khanpur to Thull via Rahimabad	Umer Jan	210.746	224.334
14	Road from Humayun to Thull bypass i/c link to Mian-jo-Goth	Umer Jan	375.47	387.827
15	Humayun to Thull /bridge over Geghari canal	Umer Jan	52.412	52.412
16	Road from Shikarpur to Rustam	Maqbool Associate	212.90	214.585
17	Road from Sultankot to Jaggan	D. Baloch	212.25	208.750
18	Road from Hamayoon to Sher Muhammad Thaheem	Haji Sirajuddin	156.75	61.515
19	Road from Hamayoon to Sher Muhammad Thaheem	Lilley International	191.26	191.260
20	Road from Shahdadkot to Garhi Khairo road	Lilley International	335.762	368.745
21	Road from Sujawal to Garhi Khairo	Lilley International	214.419	192.986
22	Road from Sujawal to Garhi Khairo	Lilley International	208.379	239.081
23	(i) Shahdadkot to Imam Bux Jamali road 16.30 km (ii) Qubo Saeed Khan to katchi pull 7.45 km	Shahrukh (JV)	262.74	265.121
24	(i) Road no: 40803 Kamber - Ghabidero road at point Buthi Lashkar to Kandho (Warah) 18.30 Km (ii) Construction of road from f.p bund to Hamal village 6.30 km	Echo West International	255.862	257.106
25	Road from Dadu to Johi road	Stand. Construction	256.771	236.145
26	(i) Khairpur Nathan Shah to Burira to Gozo	NKB	373.699	485.591

S#	Description of Contract Work	Contractor	Original Contract Cost (PRs Millions)	Final Contract Cost (PRs Millions)
	road 13.307 km (ii) Khairpur Nathan Shah _ Sindhi Butra road .14.472 km			
	(ii) Khairpur Nathan Shah _ Sindhi Butra road .14.472 km			
27	i). Road Khairpur Nathan shah to Sita : 12.603 km ii). Road from indus highway to Khanpur to Mitto Babar 11.183 km iii). Road from Ramzan Babar to Khoh Wara Kalhoro. 9.263 km	FWO	389.814	374.706
28	Mehar Nau Goth road to Shah Panjo	NKB	209.36	244.734
29	Road Mehar to Warah via Gaji Khawar	Shahrukh (JV)	158.379	158.023
30	Road Mehar to Warah via Gaji Khawar	Shahrukh (JV)	173.907	188.528
31	Mehar to Warah via Gaji Khawar	Umer Jan	49.35	41.381
32	Road from Mehar to Faridabad	NKB	317.539	486.767
33	Road from sehwan to jhangara	Shah Abdul R.	286.47	285.920
34	i) Road from indus highway to Bubak via Jaheja Khabrote 13.084 km + 4.024 km link= 17.108 (ii) Road from Indus Highway to Bhan Bye Pass to Chhinni. 24.372 Km	Qasim Khan	496.07	571.463
35	Road from indus highway @ Tando Shahbazi railway x-ing to Dadu	Ibrahim Khan	309.63	309.594
36	Jhangara to Chinni	Umer Jan	195.224	242.967
37	Jhangara to chinni	Umer Jan	196.711	227.227
38	Road from Sujawal to Jati	Zargoan.	395.389	394.987
39	Road from Chuhr Jamali-Chach Jehan via Ladyoon link to Shah Yaqeeq	Kazi Nisar.	251.595	251.263
40	Road from Sujawal -Chuhar Jamali mile	Qasim Khan	142.800	142.778
41	Road from sujawal -chuhar jamali mile	Kazi Nisar	155.858	155.799
42	Road from Jati to Chach Jehan Khan	RMS	337.882	332.764
43	Road from Jati to Raj Malak	RMS	246.825	238.717
44	Road from sujawal -bathoro-bulri shah karim	Friends International	275.304	302.132
45	Road from Sujawal -Bathoro-Bulri Shah Karim	Haji Sirajuddin	186.502	186.413
46	Road from Sujawal Daro via Belo	Echo West International	207.273	194.034
47	Road from Sujawal Daro via Belo	Stand. Construction	235.984	235.539
48	Road from Mirpur -Bathoro -Jati	Haji Sirajuddin	167.650	167.298
49	Road from Mirpur -Bathoro -Jati	Shahrukh (JV)	225.078	267.464
50	Chohar Jamali - Shah Bandar	M Kazi Nisar	226.156	226.090
51	Chohar Jamali - Shah Bandar	Haji Sirajuddin	213.484	213.253

JV = joint venture, PRs = Pakistan rupee/s.

1. Data source: ADB LFIS, government PCRs, and project record.
2. ADB share is 90% of total contract amount.

IRRIGATION DEPARTMENT CIVIL WORK SUBPROJECTS AND COSTS

S#	Loan No.	Description of Contract Work	Firm Name	Original Contract Cost (PRs)	Final Contract Cost (PRs)
1	2742	Package #1: Construction of stone pitching/apron along Jamshoro front bund mile 0/0 to 0/2 + 300 & mile 0/2 + 450 to 3/0 and repair of studs (3 nos.) along mile 2/4	Saeed Khan	39,948,630	35,915,200
2	2742	Package #2: Raising of stone pitching, earth work along jherruck bund mile 4/4 to 5/6 and shaikhani bund mile 0/10 to 1/6	Agha Fateh Muhammad Khan	60,309,123	54,270,197
3	2742	Package #3: Raising of stone pitching, earth work along f.p bund from rd 1 to 30, 120 to 147 and 192 to 220, providing stone pitching from rd 120 to 147 and 192 to 220 and service track from rd 120 to 220	Sher Mohammad Mugheri	457,912,839	411,314,507
4	2742	Package #4: Raising of stone pitching of sann veeh dari bund from mile 4/0 to 13/4, providing stone pitching with toe wall from mile 4/2 to 5/0, 7/4 to 8/0, 9/4 to 11/2 and 12/0 to 13/4	Saeed Khan	193,514,818	216,526,358
5	2742	Package #5: Raising of stone pitching, earth work along indo bund from mile 0/0 to 15/6	Abdul Hakeem Chachar	195,363,440	175,526,449
6	2742	Package #6: Raising of stone pitching of ms bund from mile 12/0 to 18/1 + 150 & mile 18/3 + 30 to 24/7 & raising of old stone pitching from mile 14/5 to 18/1 + 150 and mile 18/3 + 30 to 22/0	MAJ and ICC (JV)	197,599,169	177,163,932
7	2742	Package #7: Raising of stone pitching, earth work along link canal bund from rd .56 to rd .64 and providing stone pitching from rd .70 to rd .80	Shams Builders, Developers and NKC (JV)	81,469,719	99,291,140
8	2742	Package #8: Raising of stone pitching, earth work along b.u bund from mile 15/0 to 23/7, 27/6 to 35/3 & sp 16/4 to 16/6, 20/7 to 21/4, 27/6 to 28/0 29/6 to 30/3, 33/3 to 33/7	MJB Construction	296,717,447	264,552,315
9	2742	Package no. 10: Raising of stone pitching of i.s bund from mile 52/0 to 66/0 and providing s p from mile 58/0 to 66/0 and construction of gauge pillars.	Haji Muhkam Din Solangi	443,895,652	399,370,835
10	2742	Package no 11: Providing stone pitching from mile 85/4 to 87/4 and earthwork for strengthening of	RPS Construction	84,077,459	79,535,272

S#	Loan No.	Description of Contract Work	Firm Name	Original Contract Cost (PRs)	Final Contract Cost (PRs)
		Larkana Sehwan bund from mile 97/4 to 102/0.			
11	2742	Package no 15: Raising of Manchar containing bank to design level and stone pitching from rd 63+00 to 100+00.	Thadani Enterprises	446,046,076	418,948,165
12	2742	Package no 16: Raising of Manchar containing bank to design level and stone pitching from rd 0+0 to 62+00.	SCC and SE	388,865,890	364,589,641
13	2742	Package no 13: Raising & strengthening of f.p bund from rd 395 to 452 & providing stone pitching from rd 395 to 435 & construction of landhi (1 no.)	Eid Muhammad Brohi	399,893,926	345,460,416
14	2742	Package no 14: Raising, strengthening of f.p bund from rd 452 to 502 & providing stone pitching from rd 475 to 502 & construction of landhi (01 no)	Khyber Grace	356,087,446	287,386,007
15	2742	Package no. 9: Raising of stone pitching along suprio bund from rd 0 to 60, rd 65 to 80 and providing stone pitching from rd 60 to 65 and 80 to 95.	RPS Construction	177,139,767	157,330,270
16	2742	Package no 12: Providing stone pitching and strengthening from rd-183 to 263.5 along f.p bund and construction of 2 nos. landhies	Qalander Bux Abro	577,061,656	503,500,455
17	2742	Package no 18: Earthwork strengthening of s.m bund from mile 60/0 to 80/0 and providing stone pitching from mile 61/0 to 62/4, mile 64/0 to 65/0 and mile 74/4 to 78/5.	Sher Muhammad Mugheri	264,465,636	260,654,716
18	2742	Package no 19: Earthwork strengthening of s.m bund from mile 0/0 to 0/5, 2/4 to 3/2, 8/0 to 12/0, bakhri loop bund from mile 1/0 to 2/0, s.m bund from mile 16/0 to 19/1, moria loop bund from mile 0/0 to 1/0, pipri loop bund from mile 1/0 to 3/5, bugho dero loop bund from mile 0/0 to 1/0 and s.m bund from mile 29/0 to 54/6 & 57/1 to 60/0 and providing stone pitching along s.m bund from mile 0/5 to 2/4, 40/0 to 41/0, 54/0 to 54/6.	Thadani Enterprise	267,492,636	237,580,363
19	2742	Package no 20: Raising & strengthening of s.l bund from mile 5/2 to 9/0, 14/6 to 30/3, 37/0 to 40/5, moria loop bund from mile	Skafs International	414,321,716	340,770,603

S#	Loan No.	Description of Contract Work	Firm Name	Original Contract Cost (PRs)	Final Contract Cost (PRs)
		0/0 to 1/2 and providing stone pitching along s.l bund from mile 5/2 to 5/6, nasrat loop bund mile 4/0 to 4/6 & s.l bund from mile 37/0 to 40/5			
20	2742	Package no. 17: Providing stone pitching along f.p bund rd-220 to rd-346.	IT and TH (JV)	563,426,952	500,867,041
21	2742	Package no. 21: Raising and strengthening of paliya loop bund from mile 0/0 to 3/3, abad ring bund from mile 0/6 to 2/6, l.s bund from mile 9/4 to 17/2, mile 20/0 to 23/2, mile 26/2 to 27/4, mile 28/0 to 32/3 and providing stone pitching along l.s bund from mile 10/0 to 11/1.	KMK and SE (JV)	328,889,591	291,473,776
22	2742	Package no 24: Raising & strengthening of ghotki feeder bund from mile 3/0 to 8/0 and raising of stone pitching along machka bund from mile 0/0 to 2/4+230	Abdul Hakeem Chachar	46,189,856	45,677,721
23	2742	Package no. 25: Raising & strengthening and stone pitching along l.m bund mile 0/0 to 7/2 & left spur mile 0/0 to 2/3.	IOM (JV)	331,411,389	294,020,482
24	2742	Package no. 26: Constructing stone pitching along k.k. bund from mile 3/0 to 6/0 and mile 24/0 to 25/6.	Abdul Qayoom Mazari	105,524,611	93,789,792
25	2742	Package no 22: Raising and strengthening of r.n mangli bund from mile from 0/0 to 1/3, front bund from mile 0/0 to 0/7 & r.n bund from mile 0/2 to 1/1 (ali wahan complex), providing stone pitching along r.n bund from mile from 22/4 to 26/4 and gemro bund from mile from 11/4 to 13/4, construction bund landhi along r.n mangli bund at mile 0/2 and gauge pillars, mile /furlong stones.	Jan Muhammad	226,873,883	210,104,626
26	2742	Package no 23: Raising and strengthening of dilwaro bund from mile 0/0 to 7/0 & raising of stone pitching from mile 0/0 to 1/0 & providing stone pitching from mile 1/0 to 3/0, construction of bund landi, gauge pillars & mile/furlong stones and providing stone pitching along ranwati bund from mile 9/0 to	Sher Muhammad Mugheri	154,163,620	136,578,280

S#	Loan No.	Description of Contract Work	Firm Name	Original Contract Cost (PRs)	Final Contract Cost (PRs)
		11/0.			
27	2742	Package no 28: Raising and strengthening of l.s bund from mile 66/0 to 77/2 and providing stone pitching from mile 66/0 to 74/1 and raising of stone pitching from mile 74/1 to 77/2	Haji Saeed Mohammad	437,220,229	393,442,056
28	2742	Package no 29: Raising and strengthening of l.s bund from mile 38/6 to 41/7 and providing stone pitching from mile 38/6 to 40/7	Salman Enterprises	129225415	112,860,907
29	2742	Package no. 31: Raising and strengthening of earth work along b.u bund from mile 23/7 to 27/6 and providing stone pitching from mile 24/2 to 25/5 and from mile 27/0 to 27/6	Kayber Constructors	98,034,648	84,398,037
30	2742	Package no 30: Raising and strengthening of extended suprio bund from rd 95 to 162.	Qalandar Bux Abro	213,637,470	166,751,456
31	2742	Package no. 27: Raising of stone pitching along haibat bund from mile 17/3 to 18/2 & providing stone pitching along haibat bund from mile 18/2 to 19/2, new makhwani bund from mile 0/0 to 2/0, old tori bund from mile 6/4 to 6/6+300 and l.b bund from mile 3/1 to 6/4	AT and IT (JV)	192,245,502	169,358,198
32	2743	Package no. 33: Earth work along s.m bund from mile 93/6 to 97/1 & 104/3 to 112/0 and providing stone pitching from mile 93/6 to 94/0+93 and 95/0 to 97/1 and recouping stone apron from mile 105/3+100 to 106/1+200.	Hafiz Rabnawaz	248,217,805	234,476,148
33	2743	Package no 34: Earthwork along s.m bund from mile 123/0 to 124/0, 125/0 to 126/4, 127/0 to 130/2, 137/0 to 137/6, new Fatehpur bund from mile 0/0 to 4/4, old Fatehpur bund from mile 0/0 to 0/7, x bund from mile 0/0 to 0/7, s.m bund from mile 142/2 to 142/4+400, 143/1 to 144/4 and 148/0 to 156/4, extension of stone pitching along s.m bund from mile 123/0 to 123/4, 129/4 to 130/2, new Fatehpur bund from mile 0/3+520 to 4/4, old Fatehpur bund from mile 0/0 to 0/7, x bund from mile 0/0 to 0/7, s.m bund from mile 142/2 to 142/4+400, 143/1 to	Haji Saeed Muhammad	324,925,300	292,344,612

S#	Loan No.	Description of Contract Work	Firm Name	Original Contract Cost (PRs)	Final Contract Cost (PRs)
		144/1+180,148/0 to 156/4 and providing of stone pitching along s.m bund from mile 125/4 to 126/4,144/1+180 to 144/4 and new Fatehpur bund from mile 0/0 to 0/3+520; and repair of stud no.2 at mile 136/2 of s.m bund.			
34	2743	Package no 35: Restoration of damaged stone apron and stone pitching of spurs along ruk bund at miles 1/6 & 2/3.	Sher Muhammad Mugheri	90,516,162	80,147,938
35	2743	Package no 36: Constructing stone pitching along ring bund from mile 0/2 to 1/2, l.b.b.g bund from mile 0/0 to 2/2, ulra jagir bund from mile 5/4 to 6/5 & gerkino bund from mile 49/0 to 53/3 and raising stone pitching on old pitching along ulra jagir bund from mile 0/0 to 5/4 & Faridabad bund from mile 4/0 to 8/6.	Haji Muhkam Din Solangi	333,034,218	296,103,655
36	2743	Package no. 37: Providing stone pitching along f.p bund from rd 346 to 347, rd 371 to 389.7 & construction of landhi (1no).	Ghulam Nabi	164,564,094	146,043,752
37	2743	Package no. cd 2: Restoration / rehabilitation of gharo leading channel, gharo main drain system, badeh branch drain system, Nasirabad branch drain, Nasir branch drain & allied structure works, gharo pump house, operator quarter, sluice gates & transformers.	Eid Muhammad Brohi	313,553,546	237,591,401
38	2743	Package no. cd1: Restoration / rehabilitation of Shahdadt and mirokhan drainage system and allied structures works.	Madni Engineering and Cemcon JV	495,793,483	441,296,513
39	2743	Package no cd-4: restoration / rehabilitation work of head & x-regulators, village road bridges & raising and strengthening of channels in warah division	Abdul Karim Mengal	153,068,954	133,201,546
40	2743	Package no cd-5: Rehabilitation of banks along Saifullah magsi branch from rd-128 to 224 (ip side).	Ghulam Nabi	123,462,891	109,901,601
41	2743	Package no. Cd-3: Restoration and rehabilitation of Mehar & Khairpur Nathan Shah drainage systems & allied structure works operator quarters sluice gates & transformers.	Hafiz Rabnawaz		313,178,517

S#	Loan No.	Description of Contract Work	Firm Name	Original Contract Cost (PRs)	Final Contract Cost (PRs)
42	2743	Package no. Cd-06: Restoration of distributaries repair of head regulator x-regulators and inlets n kalri baghar division.	Madni Engineering		75,852,917
43	2743	Package Cd-7: Rest of banks along begari canal from mile 7/0 to 33/0 reconstruction of x-regulator at mile28 of segari canal & rest cc lining along 2r distry.	Sher Muhammad Mugheri		147,582,183
44	2743	Package cd8: rest. Banks of bs fdr at rd225226238 &239 choi branch from rd0 to 1 unhar canal from rd0-7 (various portions) const. Retaining walls.	Haji Muhkam Din Solangi		136,376,772
45	2743	Package-cd12: Reconstruction of structure of danistar pumping scheme including a staff landhi trussel platform and supporting pillars at new sadabahr pumping sc	Ghulam Nabi		317,989,743
46	2743	Package cd-14: Restoration and rehabilitation of banks of p.f. I from rd50 to 55 & 103 to 112 (ip side) rd 53 to 54 (nip side) fall regulator along p.f. I at rd 35+0	Skafs International		66,894,878
47	2743	Package cd-9: Restoration and rehabilitation work of head & x-regulator embankments along pat feeder cananl rd 75 to 81 (i.p) & 91 (both sides) in Kandhkot division.	Abdul Qayoom Mazari		52,484,545
48	2743	Package cd11: Rehabilitation of Johi branch from rd150+00 to 238+560 & earth work along pahore minor from rd41 to 51 Patoro minor from rd 20 to 30 chinjani.	Haji Muhkam Din Solangi		40,907,165
49	2743	Package no. cd10: Raising and strengthening of embankments of various canals/channels rehabilitation of kudan branch pumping station leading channel	Thadani Enterprises		81,884,301
50	2743	Package no. cd-16: Providing stone pitching and counter forts d/s of dino shah x regulator rd 114 pfl.	Sikandar Ali Khokhar		48,426,660
51	2743	Package no. cd 13: Rehabilitation of drains water course crossings village road bridges & open type inlets in shikarpur drainage division.	AL-Rae construction		33,107,244
52	2743	Recouping of existing stone apron stone pitching and providing steel sheet piles along ms bund mile43/4	CGC, RSL, and SMMC (JV)		701,465,065

S#	Loan No.	Description of Contract Work	Firm Name	Original Contract Cost (PRs)	Final Contract Cost (PRs)
		to44/2 and providing stone pitching			

JV = joint venture, PRs = Pakistan rupee/s.

1. Data source: ADB LFIS, government PCRs, and project record.
2. ADB share is 90% of total contract amount.

IRRIGATION SUBPROJECTS UNDER RETROACTIVE FINANCING

S#	PCSS #	Description of Contract Work	Firm Name	Contract Amount (PRs)	ADB Share (PRs)
1	127	Restoration and closing breach of unhar canal road 0 to 7	Hafiz Rabnawaz Chachar	13,271,720	11,944,548
2	128	Repair of x-regulator mile 8/0 koreja branch	Abdul Bhayo	2,464,130	2,217,717
3	129	Repair of x-regulator mile 6th koreja branch	Haji Muhkumuddin Solangi	2,316,678	2,085,010
4	130	Repair of x-regulator mile 3rd koreja branch	Barkat Ullah Balouch	2,465,553	2,218,998
5	131	Repair of x-regulator mile 10th choi branch	Muhammad Ayoob	2,273,028	2,045,725
6	132	Restoration banks of BS feeder road 219 to 226 IP side	Lilley International	92,182,999	82,964,699
7	133	Restoration and closing breach rd 224 to 269 and d/s begari head regulator left side (various portions)	Sardar M. Ashraf Baloch	81,654,389	73,488,950
8	134	Restoration banks of BS feeder road 219 to 226 NIP side	Shah Rukh Eng Construction	92,468,040	83,221,236
9	135	Restoration of khahi wah, ghouspur minor and dadar minor	Malik Shoukat Ali	12,227,692	11,004,923
10	140	Restoration of flood damages of jati, rehria and sher khana distry from rd-0 to 50	Ashok Kumar	17,073,892	15,366,503
11	141	Restoration of flood damages of ludhako, naseer & matla distry	Anwar Hussain Memon	17,696,716	15,927,044
12	142	Restoration of flood damages of mehmooda, gotaro and bosano minor	Hafiz Rabnawaz Chachar	17,015,646	15,314,081
13	143	Restoration of flood damages of chahto large & cha to small distry	Anwar Hussain Memon	7,595,531	6,835,978
14	144	Restoration of flood damages of keenjherm geri and khudi minor	Sher Muhammad Mughari	15,298,482	13,768,634
15	145	Restoration of flood damages of khiral mirwah left minor	Allah Warayo Samo	11,545,197	10,390,677
16	146	Restoration of food damanges of dars, kazi, khize and tambo minor	Gul Hassan Naper	10,012,062	9,010,856
17	147	Restoration of flood damages of sattah branch rd-00 to 79	Mukhtiar Ali	11,992,526	10,793,273
18	148	Restoration of flood damages of tango distry rd-02 to 45	Anwar Hussain Memon	4,174,446	3,757,001
19	149	Restoration of flood damages of mirkhana branch rd -100 to 108	Mehar Ali Palijo	2,934,451	2,641,006
20	150	Restoration of flood damage of machki branch rd-72 to 134	Muhammad Usman Memon	4,545,319	4,090,787
21	151	Restoration of flood damage of daro branch from r d-2.0 to 17.0	Ghansham Das	20,277,006	18,249,305
22	152	Restoration of flood damage of daro branch from rd-17.0 to 33.0	Ghansham Das	21,697,156	19,527,440
23	153	Restoration of flood damage of head regulator & modules along gungri small, khiral monor, chatta pinyari and mehmooda distry	Tawakal Enterprises	7,779,768	7,001,791
24	154	Restoration of flood damage of head regulator and modules bed excavation of channels along shor wah and hajia distry	Anwar Hussain Memon	12,775,562	11,498,006
25	155	Restoration of flood damage of head	Saleem Iqbal	6,996,306	6,296,675

S#	PCSS #	Description of Contract Work	Firm Name	Contract Amount (PRs)	ADB Share (PRs)
		regulator and modules along pinyari branch and head regulator of sahibani distry			
26	156	Restoration of flood damage of head regulator and modules along ladhako minor, naseer wah, matla and daro branch.	Saim Brothers	15,521,238	13,969,114
27	157	Restoration of flood damage of pinyari branch from rd 119 to 134	Allah Warayo Samo	14,968,471	13,471,624
28	158	Restoration of flood damage of pinyari branch from rd-134 to 183	Inayat Ullah Jumani	14,933,076	13,439,768
29	159	Restoration of flood damages of malia branch from rd-0 to 92.5	Canney Engineers	14,013,612	12,612,251
30	160	Restoration of flood damage of mirkhana branch from rd-0 to 100	Maqbool	18,772,759	16,895,483
31	161	Restoration of flood damages of gadap branch from rd-0 to 50	Niaz Brothers	5,894,546	5,305,091
32	162	Restoration of flood damage of begnah distry from rd-0 to 90	Engineer Naeem Ahmed Mangi	11,467,296	10,320,566
33	163	Restoration of flood damage of karund distry from RD-0 to 53	Zawar and AS Construction	9,395,634	8,456,071
34	164	Restoration of flood damage of sahbani and multan distry	Saim Brothers	16,037,212	14,433,491
35	165	Restoration of flood damage of amerji distry from RD-0 to 28.3.	Jamali Brothers	7,596,311	6,836,680
36	166	Restoration of flood damage of hajia, khalsa and saeeda minor from road 0 to 28.3.	RPS Construction Company	15,190,786	13,671,707
37	167	Restoration of flood damage of chota pinyari from rd-0 to 25	Dilawar Khan	7,596,236	6,836,612
38	168	Restoration of flood damage of modules along rehria distry, tango distry & mirkhnana x-regulator	Al Habib	11,083,166	9,974,849
39	169	Restoration embankment along desert canal mile 37 to 39	Relu Mal	16,321,708	14,689,537
40	170	Restoration embankment along desert canal mile 39 to 41	Jagan Khan Mazari	16,389,601	14,750,641
41	171	Restoration embankment along desert canal mile 41 to 44	Nazim Uddin Dahar	24,586,340	22,127,706
42	172	Restoration embankment along desert canal mile 63 & rd-340 to 364 both sides	Israr	23,190,997	20,871,897
43	173	Restoration embankment along garhi hassan branch rd-28 to 110	Sher Muhammad Mugheri	14,945,836	13,451,252
44	174	Restoration embankment along frontier distry rd-60 to 80 b/s & rd-31 to 38 nip	Abdullah Engineering Works	21,469,050	19,322,145
45	175	Restoration embankment along bhutta distry rd-6 to 13 b/s, hairo distry 5 to 13, rd-40 to 47 nip, rd-47 to 53 ip, bahadurpur distry rd-10 to 8 and rd-25 to 38 ip. b/s & rd-31 to 38 nip	Hafiz Rabnawaz Chachar	12,215,109	10,993,598
46	176	Restoration embankment along garhi hassan distry rd-62.5 to 69.40	Haji Aijaz Ahmed Ansari	4,970,384	4,473,346
47	177	Restoration embankment along qaiser distry rd-15 to 37 b/s	Naeem Ahmed Mangi	14,202,418	12,782,176
48	178	Restoration of damaged flank wall d/s x-regulator 19th mile desert canal.	Kashmore Construction Company	3,454,983	3,109,485

S#	PCSS #	Description of Contract Work	Firm Name	Contract Amount (PRs)	ADB Share (PRs)
49	179	Re-construction of collapse head regulator selachi minor rd-57 pat feeder.	Veer Construction	4,713,500	4,242,150
50	180	Collapsed tail end structure of adio distry falling pat feeder.	Bakhmir Mazari	6,140,529	5,526,476
51	181	Repair & construction r.c.c slab & flank wall at r d-92 garhi hassan branch	Abdul Ghaffar	5,578,111	5,020,300
52	182	Restoration & repair of flank wall along d/s regulator @ rd -56 garhi hassan distry	Shahid Ali Dayo	2,558,016	2,302,214
53	183	Repair & construction r.c.c slab & flank wall at head regulator mistry minor	Muhammad Akram Lashari	3,682,537	3,314,283
54	184	Construction of flank wall along garhi hassan distry rd-5	Shahid Ali Dayo	1,697,888	1,528,099
55	185	Restoration of banks along adio distry rd-50 to 69 b/s	Engineering Links International	5,175,456	4,657,910
56	186	Closing breaches along mehar branch ip side rd-87,88,90,95,100 and 102	Barkat Ali Awan	3,451,647	3,106,482
57	187	Closing breaches along kakol branch rd-40,45,47 and 48 both sides	Javed Ahmed Abbasi	2,960,454	2,664,409
58	188	Closing breaches along mehar branch nip side rd-7,88,90,95,100 and 102	Barkat Ali Awan	3,452,976	3,107,678
59	189	Closing breaches along kudan branch rd-47, 48, 50, 51 both sides	Ali Dost Buriro	3,960,357	3,564,321
60	190	Closing breaches along nara branch rd-05, 10, 11, 12, 13, ip side	Haji Muhammad Saleh Abro	3,396,479	3,056,831
61	191	Closing breaches along nara branch rd-05, 10, 11, 12, 13, 14 n.i.p side	Haji Sikander Ali Katto	3,427,253	3,084,528
62	192	Closing breaches along radhan branch rd-55 & 56 both sides	Hizbullah Construction	1,576,842	1,419,158
63	193	Closing breaches along dhamro branch rd-112, 113,114,115,116 i.p side	Abdul Kareem Mangle	3,448,914	3,104,023
64	194	Closing breaches along dhamro branch rd-112, 113,114,115,116 n.i.p side	Nazir Ahmed Shaikh	3,462,571	3,116,314
65	195	Closing breaches along arther branch rd-94, 96, 99 both sides	Eid Muhammad Brohi	2,953,487	2,658,138
66	196	Closing breaches along gul muhammad wah distry rd-42, 43 both sides	Naeem Ahmed Mangi	1,479,088	1,331,179
67	197	Closing breaches along saleh distry rd-14, 15, 16, 17 both sides	Ali Jan Chandio	2,968,304	2,671,474
68	198	Closing breaches along kolachi distry rd-7, 12, 13, 14 both sides	Nadeem Ahmed Enterprises	2,995,147	2,695,632
69	199	Closing breaches along Nara Distry RD-43, 47, 48, & 49 both side sides	Ghulam Abbas Katto	2,962,227	2,666,004
70	200	Closing breaches along Abad Distry RD-4,8,12 & 15 both sides.	Fida Hussain	2,957,878	2,662,090
71	202	Closing breaches along Mashar Distry RD-5,6,8,9 both sides	Haji Sultan Ahmed Katto	2,955,596	2,660,036
72	203	Closing breaches along Mangio Distry RD-10 & 15 both sides	Naeem Ahmed Mangi	988,826	889,943
73	204	Closing breaches along khuhawar distry rd-37 & 38 both sides	New Paradise Construction	985,152	886,637
74	205	Closing breaches along baledai minor rd-3 & 4 both side	Abdul Hafeez Shaikh	982,031	883,828
75	206	Closing breaches along lal minor rd-2 & 4 both side	Abdul Hafeez Shaikh	943,480	849,132
76	207	Restoration of flood damages earth work along gungri small rd 0/0 to 67/0	Zain Ul Arfin	17,741,179	15,967,061

S#	PCSS #	Description of Contract Work	Firm Name	Contract Amount (PRs)	ADB Share (PRs)
77	208	Restoration of flood damages earth work along gungri large rd 0 to 101	Vital Corporation	9,717,243	8,745,519
78	209	Restoration of flood damages of strengthening weak portion and bed excavation repair hydraulic structure along shakapoor distry rd 0 to 49	Gulam Nabi	12,422,362	11,180,126
79	210	Repairs of x-regulator modules and road bridge along raj wah ex. p.f.l.	Noor Uddin Shaikh	2,932,323	2,639,091
80	211	Repair to modules and road bridge along shah wah P.F.L	Babbar	922,758	830,482
81	212	Closing breach along kbf lower from rd-22 to rd-25	Faiz	5,648,367	5,083,530
82	213	Closing breach (damage portion) along jheruck distry from rd-27.0 to rd-55.0 (both sides)	Mukhtiar	14,299,647	12,869,682
83	214	Closing breach (damage portion) along tando hafiz shah distry from rd-0.0 to rd-3.0 (both sides)	Mehmood Alam Shah	7,422,228	6,680,005
84	215	Flood restoration of canals work engaging excavator to clear silt desposit jheruck dsitry rd-0.0 to rd 27.0	Izhar Ahmed Memon	9,031,556	8,128,400
85	216	Closing breach (damage portion) along tando hafiz shah distry from rd-3.0 to rd-8.0 (both side)	Khursheed Anwar	4,606,796	4,146,116
86	217	Closing breach (damage portion) along tando hafiz shah distry rd-8.0 to rd-21.6 (both sides)	Mumtaz Ali Memon	5,466,576	4,919,918
87	218	Repair to modules and road bridges along raj wahe x-pinyari branch	Bashir Ahmed Shakih	1,152,409	1,037,168
88	378	Restoration of koreja branch rd 0 to 89	Abdul Haque Bhayo	23,020,371	20,718,334
89	379	restoration of noor wah branch rd 0 to 99	Barkat Ullah Baloch	34,629,630	31,166,667
90	380	Restoration of begari canal mile 33/0 to 53/0	Tariq Hussain Abassi	78,151,310	70,336,179
91	381	Restoration of choi branch rd 0 to 176.10	Sher Mohammad Mugheri	17,611,783	15,850,605
92	382	Repair of head regulator mirza wah	Saleemullah Soomro	3,521,332	3,169,199
93	383	Repair of x- regulator mile 9th mirza wah	Ali Engineers Construction.	5,530,818	4,977,736
94	384	Restoration of begari canal mile 7/0 to 33/0	JM Contractor	78,301,024	70,470,922
95	385	Restoration of unhar canal rd 7 to 55	Asif Ali Mugheri	3,334,289	3,000,860
96	386	Restoration of begari canal mile 53/0 to 78/0	Sher Mohammad Mugheri.	57,750,271	51,975,244
97	387	Repair of head regulator at sone wah	Shoukat Ali Jamali	534,559	481,103
98	388	Repair of head regulator khariro distry	Gulzar Ahmed Bhayo	3,619,124	3,257,212
99	389	Repair of rd:66 x- regulator a.a mussa branch	New Al Faraz Constructions	3,078,179	2,770,361
100	390	Repair of head regulator mirpur minor	Abdul Wajid	526,544	473,890
101	391	Repair of head regulator alhando minor	Abdul Haque Bhayo	817,040	735,336
102	392	Repair of head regulator lund minor	Asif Ali Mughairi	1,209,104	1,088,194

S#	PCSS #	Description of Contract Work	Firm Name	Contract Amount (PRs)	ADB Share (PRs)
103	393	Repair of head regulator naseer branch	Asif Ali Mughairi	27,893,608	25,104,247
104	394	Repair of head regulator nar minor	Asif Ali Mughairi	8,688,808	7,819,927
105	395	Closing of breaches along nawab distry rd 0 to tail both sides	Mohammad Aslam Brohi	2,044,322	1,839,890
106	396	Closing of breaches along murad ali minor, kamal minor, mirpur minor, supro minor, garhi minor rd 0 to tail	Nazir Ahmed	2,436,699	2,193,029
107	397	Closing of breaches along suleman minor rd 0 to tail both sides	Eid Mohammad Brohi	4,036,544	3,632,890
108	398	Closing of breaches along panhwaro distry rd 48 to 74 both sides	Ali Dost Buriro	5,010,294	4,509,265
109	399	Closing of breaches along thull distry, chhori distry, gopnag distry, meenhal minor	Zanwar AS Construction	2,302,653	2,072,388
110	400	Closing of breaches along naseer distry rd 30 to 52 both sides	Eid Mohammd Brohi	13,998,122	12,598,310
111	401	Closing of breaches along kanwar distry rd 0 to tail both sides	Ali Dost Buriro	4,589,492	4,130,543
112	402	Closing of breaches along hamid minor rd 0 to tail both sides	Abdul Karim Brohi	2,759,646	2,483,681
113	403	Closing of breach along khirthar branch at rd-96 ip side	United Construction	4,390,662	3,951,596
114	404	Closing of breach along khirthar branch at rd-97 nip side	Mohammad Ramzan	2,506,844	2,256,160
115	405	Closing of breach along saifullah magsi branch at rd-104 ip side	Mohammad Haider Ali	783,894	705,505
116	406	Closing of breach along saifullah magsi branch at rd-224 nip side	Ramesh Kumar	887,064	798,358
117	407	Closing of breach along khirthar branch at rd-19 nip side	Aqib	1,512,119	1,360,907
118	408	Closing of breach along khirthar branch at rd-106 nip side	Mir Mohammad	2,915,041	2,623,537
119	409	Closing of breach along khirthar branch at rd-102 ip side	Rashid Ahmed Abbasi	811,019	729,917
120	410	Closing of breach along khirthar branch at rd-52 nip side	Tarique Abbasi	7,888,364	7,099,528
121	411	Closing of breach along khirthar branch at rd-63 nip side	Mohammad Ramzan	2,075,886	1,868,297
122	412	Closing of breach along saifullah magsi branch at rd-175 nip side	Aqib	5,103,318	4,592,986
123	413	Closing of breach along saifullah magsi branch at rd-209 ip side	Sultan Ahmed	1,161,248	1,045,123
124	414	Closing of breach along saifullah magsi branch at rd-223 ip side	Mujahid Shaikh	1,055,431	949,888
125	415	Closing of breach along khirthar branch at rd-52 ip side	United Construction Company	8,546,334	7,691,701
126	416	Closing of breach along khirthar branch at rd-96 nip side	Abdul Khaliq	2,358,024	2,122,222
127	417	Closing of breach along khirthar branch at rd-108 ip side	Mansoor Ali	2,398,587	2,158,728
128	418	Closing of breach along khirthar branch at rd-91 ip side	Mohammad Ramzan	1,046,478	941,830
129	419	Closing of breach along saifullah magsi branch at rd-46 nip side	Hazoor Bux	1,412,018	1,270,816
130	420	Closing of breach along khirthar branch at rd-108 nip side	Mir Mohammad	3,290,720	2,961,648

S#	PCSS #	Description of Contract Work	Firm Name	Contract Amount (PRs)	ADB Share (PRs)
131	421	Closing of breach along khirthar branch at rd-97 ip side	Khadim Hussain	3,297,369	2,967,632
132	422	Closing of breach along saifullah magsi branch at rd-24 ip side	Akhtar Ali Brohi	1,498,263	1,348,437
133	423	Closing of breach along saifullah magsi branch at rd-195 nip,196 ip ,198 ip & nip,204 ip & nip,205 nip,206 nip,210 ip & nip,212 nip,213 ip & nip,214 ip & nip,215 ip & nip,217 ip & nip,218 ip & nip	Sher M. Mugheri	64,239,859	57,815,873
134	424	Closing BREACH ALONG SALLAR DISTRY AT RD-65 IP	Shaheen Builders	1,544,313	1,389,882
135	425	Closing breach along sallar distry at rd-65 nip	M Haider Ali	1,368,939	1,232,045
136	426	Closing breach along kiltch distry at rd-58 ip	Image Construction	2,088,008	1,879,207
137	427	Closing breach along kiltch distry at rd-60 ip	Image Construction	2,233,441	2,010,097
138	428	Closing breach along kiltch distry at rd-62 ip	Shaheen Builders	1,813,366	1,632,029
139	429	Closing breach along kiltch distry at rd-58 n ip	Shaheen Builders	1,945,861	1,751,275
140	430	Closing breach along kiltch distry at rd-60 nip	Abdul Khalique	835,196	751,676
141	431	Closing breach along kiltch distry at rd-62 nip	Abdul Khalique	835,196	751,676
142	432	Closing breach along gul shah at rd-35 ip	Khalil Ahmed Kamboh	268,287	241,458
143	433	Closing breach along gul shah at rd-38 ip	Khalil Ahmed Kamboh	557,212	501,491
144	434	Closing breach along leghari distry at rd-11 ip	Shahid Ali	695,587	626,028
145	435	Closing breach along leghari feeder at rd-4ip	M Haider Ali	458,387	412,548
146	436	Closing breach along tanwri distry at rd-48ip	Shaheen Builders	2,010,246	1,809,221
147	437	Closing breach along tanwri distry at rd-52 nip	Shahid Ali	793,376	714,038
148	438	Closing breach along tanwri distry at rd-51ip	Hussain Enterprises	2,291,532	2,062,379
149	439	Closing breach along tanwri distry at rd-53ip	Abdul Khalique	999,312	899,381
150	440	Closing breach along tanwri distry at rd-55ip	Hussain Enterprises	2,374,269	2,136,842
151	441	Closing breach along forest minor at rd-11 nip	Shahid Ali	813,418	732,076
152	442	Closing breach along forest minor at rd-13 nip	Shahid Ali	703,188	632,869
153	443	Closing breach along forest minor at rd-16 nip	Shahid Ali	805,816	725,234
154	444	Closing breach along forest minor at rd-13 ip	Shahid Ali	793,031	713,728
155	445	Closing breach along hawani minor at rd-11 ip	Khalil Ahmed	501,196	451,076
156	446	Closing breach along hawani minor at rd-16 ip	Khalil Ahmed	481,204	433,084
157	447	Closing breach along hawani minor at rd-16 nip	Abdul Khalique	386,287	347,658

S#	PCSS #	Description of Contract Work	Firm Name	Contract Amount (PRs)	ADB Share (PRs)
158	448	Closing breach along muhammad pur minor at rd-9ip	M Haider Ali	1,897,849	1,708,064
159	449	Closing breach along muhammad pur minor at rd-9nip	M Haider Ali	1,849,451	1,664,506
160	450	Closing breach along new saleh minor at rd-14ip	M Haider Ali	576,614	518,953
161	451	Closing breach along new saleh minor at rd-17ip	M Haider Ali	584,910	526,419
162	452	Closing breach along new saleh minor at rd-14nip	Shahid Ali	554,934	499,441
163	453	Closing breach along leghari feeder at rd-13ip	M Haider Ali	489,500	440,550
164	454	Closing breach along kalhora minor at rd-3ip	Haider Ali	693,112	623,801
165	455	Closing breach along kalhora minor at rd-11ip	Haider Ali	1,348,196	1,213,376
166	456	Closing breach along kalhora minor at rd-16ip	Khalil Ahmed	1,237,578	1,113,820
167	457	Closing breach along kalhora minor at rd-11nip	Haider Ali	981,766	883,589
168	458	Closing breach along kalhora minor at rd-16nip	Khalil Ahmed	1,235,850	1,112,265
169	459	Closing breach along kurshah minor at rd-14ip	Mukhtiar Ali	423,127	380,814
170	460	Closing breach along kurshah minor at rd-16ip	Khalil Ahmed	454,239	408,815
171	461	Closing breach along sanjar minor at rd-5ip	Mukhtiar Ali	323,567	291,210
172	462	Closing breach along sanjar minor at rd-11ip	M Haider Ali	564,168	507,751
173	463	Closing breach along sanjar minor at rd-19ip	M Haider Ali	517,500	465,750
174	464	Closing breach along sanjar minor at rd-7nip	Khalil Ahmed	499,426	449,483
175	465	Closing breach along sanjar minor at rd-11nip	Mukhtiar Ali	304,208	273,787
176	466	Closing breach along masooda minor at rd-7ip	Khalil Ahmed	454,024	408,622
177	467	Closing breach along masooda minor at rd-15ip	Khalil Ahmed	536,573	482,916
178	0508	Closing of breach along s.m branch at rd 48 ip side	Akhtar Ali Brohi	3,787,580	3,408,822
179	0509	Closing of breach along saif ullah magsi branch at rd 84 ip	Ramesh Kumar	886,269	797,642
180	0510	Closing of breach along khithar branch at rd 100 ip side	Subhan Allah Builders	3,400,844	3,060,760
181	0511	Closing of breach along khithar branch at rd 100 nip side	MY Brothers	2,646,646	2,381,981
182	0512	Closing of breach along khithar branch at rd 101 ip side	Mohammed Din	1,650,997	1,485,897
183	0513	Closing of breach along saif ullah magsi branch at rd 69 ip and khirthar branch rd 116 nip	RPS Construction	10,356,603	9,320,943
184	0514		Mohammad Ishaque	1,705,539	1,534,985
	0515	Closing of breach along saif ullah magsi branch at rd 104 ip side	Mohammad Hyder Ali	1	1

S#	PCSS #	Description of Contract Work	Firm Name	Contract Amount (PRs)	ADB Share (PRs)
185	0516	Reconstruction of garrang x-regulator along khirtar branch rd 102	Quality Construction	110,703,283	99,632,955
186	201	Closing breaches along rawat drain rd-15, 18, 20 & 26 both side	Eid Muhammad Brohi	4,911,694	4,420,525
187	0499	Earth work along sb drain i.p & n.i.p from rd: 0 to 73, 1-r sb drain i.p & n.i.p from rd 0 to 26, 2-r sb drain i.p & n.i.p from rd : 0 to 30, 3-r sb drain i.p & n.i.p from rd: 0 to 22, 4-r sb drain i.p & n.i.p from rd: 0 to 30	Naeem Ahmed Mangi	11,260,299	10,134,269
188	0500	Earth work along 1-l nagan dhoro drain from rd: 0 to 60, 2-r nagan dhoro from rd: 0 to 30, 3-r nagan dhoro from rd: 0 to 33 and repair to road bridge along 1-l nagan dhoro, rcc pipe inlet and open type inlet along 1-l nagan dhoro outfall drain	Abdul Wahid Memon	6,711,022	6,039,920
189	0501	Earth work for closing breaches occurred during flood 2010 along jherruck sub drain, i.p & n.i.p from rd: 0 to 30 & repair to inlets (5 nos)	Mumtaz Ali Memon	5,560,813	5,004,732
190	0502	Earth work for closing breaches occurred during flood 2010 along nagan dhoro outfall drain u/s regulator rd:2.3 to 11 i.p & nip rd : 14 to 134 i/c repair to rcc pipe inlet	Saeed Khan	9,352,529	8,417,276
191	0503	Repair to flood damages along right side guide bank left side bank of nagan dhoro outfall regulator & earthwork for closing breaches d/s (old) regulator of nagan dhoro drain.	Zawar AS Construction	12,978,146	11,680,331
192	0504	Earth work along bathoro branch drain rd 0.0 to 15 and rd 22 to 32 ip & np	Mir Mohammad Alam Lehri	9,034,918	8,131,426
193	0505	Earth work along bathoro branch drain rd 36 to 46, 49 to 59 and rd 32 to 69 ip & np	Mir Mohammad Alam Lehri	13,153,416	11,838,074
194	0506	Earth work along 1-r bathoro branch drain rd 0.0 to 9.0 ip & nip	International Traders	6,130,223	5,517,201
195	0507	Earth work along bhudo talpur link drain rd 0.0 to 9.0 ip & nip	International Traders	4,738,162	4,264,346
196	0001	Providing stone pitching right side d/s marginal bund from r.d 0-0 to rd 4+800 and r & s along right side u/s marginal bund 0-0 to 8+400	Jatoi	28,979,417.000	26,081,475
197	0002	Earthwork along p.b.bund from mile 0/7 to 5/0 and providing s/pithing from mile 4/5 to 5/0	Niaz Brothers	81,014,009	72,912,608
198	0003	Raising and strengthening of earthwork and raising of stone pitching along hp bund mile 3/0 to 6/4.	Haji Bashir Ahmed Soomro	52,500,334	47,250,301
199	0004	Raising and strengthening of earthwork and raising of stone pitching along hp bund mile 0/0 to 3/0.	Haji Sultan Ahmed Katu	41,312,391	37,181,152
200	0005	Package iii- earthwork along k.b feeder upper (river bund) from mile rd 60+00 to 85+00	Yasin	23,035,977.000	20,732,379
201	0006	Package v- earthwork along k.b feeder upper (river bund) from mile rd 121+00	Mir Muhammad Alam Khan Lehri	62,536,000	56,282,400

S#	PCSS #	Description of Contract Work	Firm Name	Contract Amount (PRs)	ADB Share (PRs)
		to 145+00			
202	0007	Package ii- earthwork along k.b feeder upper (river bund) from mile rd 40+00 to 60+00	National Engineering Works	29,530,931	26,577,838
203	0008	Package i- earthwork along k.b feeder upper (river bund) from mile rd 5+800 to 28+500	Abdul Qayyum Mazari	46,772,573	42,095,316
204	0009	Package ii- earthwork along p.b bund from mile 5/0 to 15/0	Anwar Hussain Memon	114,758,368	103,282,531
205	0010	Raising and strengthening of earthwork along hp bund mile 15/4 to 20/2.	Abdul Hakeem Chachar	47,661,927	42,895,734
206	0011	Raising and strengthening of earthwork and raising of stone pitching along hp bund mile 6/4 to 8/0.	JM Construction	29,114,129	26,202,716
207	0012	Raising and strengthening of earthwork and raising of stone pitching along hp bund mile 13/4 to 15/4.	Saim	26,041,407	23,437,266
208	0013	Raising and strengthening of earthwork and raising of stone pitching along hp bund mile 11/0 to 13/4.	Canny	41,545,532	37,390,979
209	0014	Raising and strengthening of earthwork and raising of stone pitching along hp bund mile 8/0 to 11/0.	Saeed Khan Construction	56,613,842	50,952,458
210	0015	Earth work and providing stone pitching and dumping of stone at breach site (kotalmo) of ms bund mile 18/1+150 to 18/3+30	Bashir Ahmed Shaikh	55,448,414	49,903,573
211	0016	Package iv- earthwork along k.b feeder upper (river bund) from mile rd 92+00 to 121+00	MJB Construction	48,921,630	44,029,467
212	0017	Restoration of stone apron mile 5/7+100 to 6/1+600 of qadirabad loop bund	Karim Bux Kalwar	8,614,948	7,753,453
213	0018	Constructing stone pitching along sm bund from mile 41/0 to 42/0, 45/0 to 46/0 and 51/0 to 52/0	Mumtaz Builders	49,728,159	44,755,343
214	0019	Recouping and construction of stone pitching and earth work along ghallian front bund mile 1/4 to 2/4	Mumtaz Builders	26,343,116	23,708,804
215	0020	Construction of garhi pathan bund mile 2/1 to 4/0	IOM	58,623,408	52,761,067
216	0021	Constructing stone apron along ulra jagir bund mile 2/6 to 3/4	RPS Construction Company	52,220,653	46,998,588
217	0022	Constructing stone apron along ulra jagir bund mile 3/4 to 5/2	IOM	145,339,774	130,805,797
218	0023	Raising and strengthening jamsher loop bund mile 3/0 to 4/4, ulra jagir bund 13/4 to 14/0, faridabad bund mile 0/0 to 3/7 & constructing pitching faridabad bund mile 0/0 to 3/7	Taqui Builders And Al-Faqir Construction	60,389,878	54,350,890
219	0024	Raising and strengthening of faridabad bund mile 3/7 to 12/0, bhatti pir qasim bund mile 28/2 to 31/0, bharo bund mile 31/0 to 34/0 & constructing pitching faridabad bund mile 3/7 to 4/0	Sher Muhammad Mugheri	68,307,819	61,477,037
220	0025	Recouping and construction of stone pitching and earth work along ghallian front bund mile 9/4 to 11/0	Shams Builders	28,374,366	25,536,929
221	0026	Constructing stone pitching along front	Hafiz Rabnawaz	52,509,007	47,258,106

S#	PCSS #	Description of Contract Work	Firm Name	Contract Amount (PRs)	ADB Share (PRs)
		bund mile 0/0 to 3/3			
222	0027	Construction stone pitching along s.m bund from mile 163/0 to 166/4	Atta Muhammad	62,490,163	56,241,147
223	0028	Construction stone pitching along s.m bund from mile 54/6 to 57/1 and 62/4 to 63/0	Saeed Khan Construction Company	54,961,747	49,465,572
224	0029	Construction launched/damaged stone and pitching along j-spur from 1500ft to 3100ft of dadu moro makhdoom bilal bridge	Madni Engineering and Cemcon	34,329,782	30,896,804
225	0030	R & R of path of ghotki feeder into bunds from mile 0/0 to 0/3 and providing guage pillers and fulong / mile stine along ghotki feeder from mile 0/0 to 8/0.	Sher Muhammad Mugheri	49,175,073	44,257,566
226	0031	earthwork along s.m bund from mile 80/0 to 80/4, 81/4 to 83/4,84/4 to 88/6+330, stone pitching and earthwork along s.m bund mile 80/4 to 81/4, 83/4 to 84/4	Sher Muhammad Mugheri	73,378,036	66,040,232
227	0032	Extension of trench bund with stone pitching raising and strengthening from mile 8/7 to 15/7 of left marginal bund	Sher Muhammad Mugheri	198,529,396	178,676,456
228	0033	Extension of trench bund with stone pitching raising and strengthening from mile 7/2+150 to 8/7 of left marginal bund	International Traders	79,461,683	71,515,515
229	0034	Raising and strengthening of suprio bund from rd 0 to 17 and constructing bund sluice rd 10 (package-01)	Ghulam Nabi	44,717,440	40,245,696
230	0035	Raising and strengthening of suprio bund from rd 17 to 49 (package-2)	Tarique Hussain Abbasi	51,583,759	46,425,383
231	0036	Raising and strengthening of suprio bund from rd 39 to 51 and breach rd 40 i/c stone pitching of breach site (package-3)	Eid Muhammad Brohi	42,072,989	37,865,690
232	0037	Raising and strengthening of suprio bund from rd 51 to 95 (package-4)	Ghulam Nabi	100,244,677	90,220,209
233	0038	Re-sectioning and providing diaphragm wall and stone pitching along kashmore bund mile 21/3 to 21/6 (package-3)	Hafiz Rabnawaz	29,007,609	26,106,848
234	0039	Re-sectioning k.k bund mile 10/0 to 14/3 and constructing diaphragm wall mile 12/4 to 14/3	Jagan Khan Mazari	51,803,076	46,622,768
235	0040	Rising and strengthening of Earthwork along B.U Bund Mile 5/0 to 10/0.	MJB Construction	52,857,712	47,571,941
236	0041	earth work and extension of stone pitching along s.m bund from mile 156/4 to 163/0	Sher Muhammad Mugheri	49,492,949	44,543,654
237	0042	Raising and strengthening of bhahro bund mile 34/0to 36/0,razi dero bund mile 0/0 to 1/4 and constructing stone pitching baharo bund mile 33/0 to 36/0	Haji Muhkmuddin Solangi	51,421,813	46,279,632
238	0043	Raising and strengthening of f.p bund from rd 346 to 356 and providing stone pitching rd 347 to 355	Ghulam Nabi	42,008,768	37,807,891
239	0044	Raising and strengthening of f.p bund from rd 366 to 376 and providing stone pitching rd 366 to 370	Eid Muhammad Brohi	33,324,036	29,991,632
240	0045	Raising and strengthening of f.p bund	Abdul Karim	32,422,331	29,180,098

S#	PCSS #	Description of Contract Work	Firm Name	Contract Amount (PRs)	ADB Share (PRs)
		from rd 376 to 386 and providing stone pitching rd 389 to 395 and closing breaches along f.p bund at rd 477,483 & 485	Mengal		
241	0046	Recouping and construction of stone pitching and earth work long ghallian front bund mile 5/4 to 7/0	Irshad Ali Dahri	25,895,584	23,306,026
242	0047	Re-sectioning and providing diaphragm wall in kashmore bund mile 19/2 to 20/7 (package-01)	Nazimuddin Dahar	87,471,386	78,724,247
243	0048	Constructing stone pitching and earthwork along s.m bund mile 100/3+520 to 104/0	Madni Engineering Construction and Cemcon (Jv)	75,454,983	67,909,485
244	0049	Earthwork along gidumal front bund mile 1/3 to 2/5	Yaseen	16,640,162	14,976,146
245	0050	Construction of garhi pathan bund mile 0/0 to 2/1	Haji Muhkmuddin Solangi	59,340,846	53,406,761
246	0051	Earthwork along s.m bund from mile 98/0 to 98/6+450, constructing stone pitching and earthwork along s.m bund mile 97/0+660 to 98/0 & 99/0 to 100/0	United Engineers Construction	48,985,073	44,086,566
247	0052	Raising and strengthening of earthwork along m.s bund mile 6/0 to 12/0.	Saeed Khan Construction	39,357,369	35,421,632
248	0053	Providing diaphragm wall along sukkur begari bund mile 0/0 to 4/0	Nazimuddin Dahar	65,254,822	58,729,340
249	0054	Providing stone pitching and remodeling of 1st surjani bund mile 0/0 to 1/7	MMCL	40,916,527	36,824,874
250	0055	Providing stone pitching along both sides of shank of left j-head spur and filling breach point u/s gudu barrage from mile 0/5+422 to 0/6+520 (package-2)	Sher Muhammad Mugheri	50,405,596	45,365,036
251	0056	Raising and strengthening of earthwork along f.p bund rd 220 to 268 (package 1)	Abdul Karim Mangal	91,368,847	82,231,962
252	0057	Raising and strengthening of earthwork along f.p bund rd 268 to 334 (package 2)	Ghulam Nabi	125,632,290	113,069,061
253	0058	Raising and strengthening of earthwork along f.p bund rd 334 to 346 (package 3)	Eid Muhammad Brohi	38,749,073	34,874,166
254	0059	Raising and strengthening f.p bund from rd 356 to 366 and providing stone pitching rd 356 to 364	Abdul Rasheed Kalwar	41,921,431	37,729,288
255	0060	Raising and strengthening & stone pitching along l.s bund from mile 84/0 to 85/4 (package-01)	Pritam Das	25,846,604	23,261,944
256	0061	Earthwork for raising and strengthening of qadirpur loop bund mile 4/0 to 6/0 and raising stone pitching mile 5/0 to 5/7 & providing stone pitching from mile 4/0 to 5/0 and constructing bund landhi, gauge pillars & furlongs /mile stone from mile 4/0 to 6/0	Sikandar Ali Lashari	25,054,857	22,549,371
257	0062	Stone pitching r/s of earthwork along m.s bund mile 29/2 to 30/4.	JM Construction	27,632,951	24,869,656
258	0063	Recouping and construction of stone pitching and pitching and earth work long ghallian front bund mile 11/0 to 12/7	Sher Mohammad Mugheri	33,940,796	30,546,716
259	0064	Recouping and construction of stone	Mumtaz Builders	52,957,440	47,661,696

S#	PCSS #	Description of Contract Work	Firm Name	Contract Amount (PRs)	ADB Share (PRs)
		pitching and pitching and earth work long ghallian front bund mile 2/4 to 4/0			
260	0065	Recouping and construction of stone pitching and pitching and earth work long ghallian front bund mile 7/0 to 8/0	Yaseen	27,838,604	25,054,744
261	0066	Recouping and construction of stone pitching and pitching and earth work long ghallian front bund mile 8/0 to 9/4	Tarique Hussain	27,703,737	24,933,363
262	0067	Recouping and construction of stone pitching and earth work long ghallian front bund mile 0/0 to 1/4	Mumtaz Builders	23,555,593	21,200,034
263	0068	Recouping and construction of stone pitching and pitching and earth work long ghallian front bund mile 4/0 to 5/4	Al Ameer Enterprises	48,659,533	43,793,580
264	0069	Re-sectioning and raising of stone pitching and closing breaches along ghouspur bund from mile 10/0 to 11/0 (package-01)	Zulfiqar Ali Abro	26,265,953	23,639,358
265	0070	Re-sectioning and raising of stone pitching and closing breaches along ghouspur bund from mile 11/0 to 11/4 (package-02)	Abdul Qayoom Mazari	51,268,336	46,141,502
266	0071	Restoration flood damages of raising and strengthening earth work along m.s bund mile 34/6 to 44/6	Anwar Hussain Memon	54,181,260	48,763,134
267	0072	Restoration flood damages of raising and strengthening earth work of m.s bund mile 44/6 to 55/4	Zawar & AS Construction	64,714,223	58,242,801
268	0073	Constructing stone pitching along s.m bund from mile 144/4 to 148/0	Haji Muhkmuddin Solangi	59,492,672	53,543,405
269	0074	Raising and strengthening of earthwork along b.u bund mile 0/0 to 5/0.	Ghulam Nabi	76,286,175	68,657,558
270	0075	Raising & strengthening of l.s bund mile 32/3 to 36/5 and stone pitching along l.s bund mile 32/3 to 36/1.	Mumtaz	108,924,319	98,031,887
271	0076	Raising and strengthening of earthwork along b.u. bund mile 10/0 to 15/0.	Sher Muhammad Mugheri	73,688,056	66,319,250
272	0077	Raising and strengthening of earthwork along m.s. bund mile 0/0 to 6/0.	Ghulam Nabi	39,343,058	35,408,752
273	0078	Re-equipping of existing stone apron and pitching along m.s. bund mile 43/4 to 44/2.	Sikander Ali Khokhar	103,057,859	92,752,073
274	0079	Raising and strengthening link bund mile 0/0 to 0/2 ring bund mile 0/0 to 1/2 main river bund mile 5/5 to 6/1 l.b.b.g bund mile 0/0 to 2/2 and ulra jagir bund mile 0/0 to 3/0 in kairpur bund sub division.	Madni Engineering and Cemcon (JV)	89,481,617	80,533,455
275	0080	Raising and strengthening ulra jagir bund mile 3/0 to 6/5 new nareja bund mile 0/0 to 3/2 ulra loop bund mile 4/4 to 3/7 new mahesar loop bund mile 0/0 to 3/0 and jamsher loop bund mile 1/1 to 3/0 in kairpur bund sub division.	IOM	65,577,331	59,019,598
276	0081	Stone pitching R/S of Earthwork along M.S Bund Mile 30/4 TO 32/2.	Hafiz Rabnawaz	38,705,021	34,834,519
277	0082	Stone pitching r/s of earthwork along m.s bund mile 32/2 to 34/6.	Saim Brothers	50,818,920	45,737,028
278	0083	Earthwork along jamshoro front bund	Atta Mohammad	20,543,278	18,488,950

S#	PCSS #	Description of Contract Work	Firm Name	Contract Amount (PRs)	ADB Share (PRs)
		mile 0/0 to 1/4.	Jatoi		
279	0084	Earthwork along jamshoro front bund mile 1/4 to 3/0.	Atta Mohammad Jatoi	21,912,904	19,721,614
280	0085	Recouping and construction of stone pitching & earthwork along gidumal front bund mile 2/5 to 4/4.	Cavish Builders	40,536,259	36,482,633
281	0086	Raising and strengthening of Qadirpur loop bund from mile 6/0 to 8/4 & providing guage pillars from mile 6/0 to 8/4 & constructing furlong/mile stone form mile 6/0 to 8/4.	Ghansham Das	25,430,837	22,887,753
282	0087	Rising strengthening and stone pitching along l.s bund mile 89/6 to 92/0.	RPS Construction	38,901,849	35,011,664
283	0088	Raising and strengthening of gemrobund mile 5/1 to 13/4.	Ghulam Sarwar	59,625,047	53,662,542
284	0089	Raising and strengthening of r.n. bund mile 3/4 to 12/4.	Sher Muhammad Mughari	82,432,322	74,189,090
285	0090	Raising and strengthening of r.n. bund mile 24/4 to 26/4.	Kazmi Construction	17,269,991	15,542,992
286	0091	Raising and strengthening of r.n. bund mile 22/4 to 24/4.	Jan Muhammad	16,931,591	15,238,432
287	0092	Recouping and construction of stone pitching & earth work along jamshoro front bund mile 3/0 to 4/6.	Mumtaz Builders	26,316,507	23,684,856
288	0093	Raising and strengthening & stone pitching along M.C bank from RD 30-78.	Sehwani Enterprises	115,101,667	103,591,500
289	0094	Constructing stone studs along ulra jagir bund mile 4/0 +320 to 4/3 +5340 in khairpur bund sub division	IOM	18,352,590	16,517,331
290	0095	Raising and strengthening (earthwork & extension of stone pitching) along s.m bund from mile 166/4 to 172/0 in hala bund sub division	Sher Mohammad Mugheri	50,722,880	45,650,592
291	0096	Earthwork from mile 88/6+330 to 90/0 to 92/0 93/6, stone pitching and earthwork from mile 90/0 to 92/0 and 92/6 to 93/4 along s.m bund	Mumtaz	76,641,581	68,977,423
292	0097	Constructing stone pitching s.m bund mile 7/4 to 8/4 and raising & strengthening banks of kandiaro escape from rd-26 to 29 r/s and 28 to 32 l/s.	Mumtaz	64,648,150	58,183,335
293	0098	R & S of ranwati bund mile 6/0 to 11/7 & constructing of guage pillars & mile/furlong stone from mile 6/0 to 11/7	Abdul Qayoom Mazari	48,059,063	43,253,157
294	0099	R & S of ranwati bund mile 0/0 to 6/0 & construction of guage pillars & mile/furlong stone from mile 0/0 to 6/0.	Karim Bux A. Kalwar	29,285,072	26,356,565
295	0100	Restoration Of Damaged Stone Apron And Pitching Along Akil Loop Bund Mile 0/2 To 0/7 And Spurs At Mile 0/4, 0/7	Haji Muhkmuddin Solangi	136,107,049	122,496,344
296	0101	Construction of t-head spur at mile 2/6+250, extension of restored stone apron along akil loop bund mile 0/2 to 0/7, restoration of damaged stone apron along agani akil loop bund mile 2/3 to 2/6 +200 and apron of akil link bund mile 0/0 to 0/0+300 recoupment of apron around spur mile 2/3 and spurs at mile	Haji Muhkmuddin Solangi	522,171,056	469,953,950

S#	PCSS #	Description of Contract Work	Firm Name	Contract Amount (PRs)	ADB Share (PRs)
		0/4, 0/7 of akil loop, 10 nos, stone studs, earthwork raising and strengthening agani akil loop bund mile 2/5 to 2/7 and akil loop bund mile 0/0 to 0/7, stone pitching along akil loop bund mile 0/2 to 0/7			
297	0102	Raising and re-sectioning of earth work along e.f link taki 0/0 to 32 muhammada-bagh,taki 32 to 82 s.b bund mile 18/5 to 19/3	Haji Agha Muhammad Khan	28,477,357	25,629,621
298	0103	Raising and re-sectioning of earth work along sukkur begari bund mile 0/0 to 4/6 and garag bund mile 4/6 to 6/0 and nasirabad bund mile 0/0 to 0/2	Madni Cemcon	43,833,891	39,450,502
299	0104	Raising and strengthening of and stone pitching along m.c bank from rd 93 to 100	Thandani Engineers	49,573,008	44,615,707
300	0105	Raising and strengthening of and stone pitching along s.l bund mile 0/2 to 5/2 (package no 3)	Haji Muhkmuddin Solangi	110,214,267	99,192,840
301	0106	Raising and providing stone pitching along flood protective bund from rd 0 to 220	Mumtaz	222,480,898	200,232,808
302	0107	R and s of l.s bund mile 18/0 to 19/0, bk loop bund mile 0/0 to 1/1 and gaji dero link bund mile 0/0 to 1/2 (package 02)	Mumtaz	66,962,390	60,266,151
303	0108	Resectioning and providing diaphragm wall in kashmore bund mile 20/7 to 21/3 (package no2)	Dawood Khan	38,688,096	34,819,286
304	0109	Resectioning ghoraghat x-bund from mile 1/0 to 2/4 and stone pitching from mile 2/2 to 2/4 and resectioning khair wah bund from mile 0/0 to 0/6 (package no 2)	Hafiz Rabnawaz	36,128,704	32,515,834
305	0110	Raising & Strengthening of Bundar Walls and Bunds in Barrage Division Sukkur	Haji Muhkmuddin Solangi	118,367,654	106,530,889
306	0111	Raising and strengthening of earth work along s.f bund section-iv-a mile 0/0 to 1/2 section-iv mile 10/4 to 13/0 section-iii mile 6/1 to 10/4 to 6/1, mile 0/0 to 2/0 to 0/0 and section-ii-a 25/4 to 33/0 of sukkur begari bund	Haji Agha Muhammad Khan	160,203,757	144,183,381
307	0112	Resectioning new ghoraghat bund from mile 0/2 to 2/0 and stone pitching from mile 0/0 to 0/4 and 1/4 to 2/0 and resectioning ghoraghat x-bund from mile 0/0 to 1/0	Hafiz Rabnawaz	49,337,776	44,403,998
308	0113	Raising and re-sectioning of earth work along s.b. bund mile 11/0 to 16/2	Qazmi Construction	39,094,333	35,184,900
309	0114	Constructing new haibat loop x-bund connecting new ghoraghat bund mile 0/2 to 12/4 of haibat loop bund	Hafiz Rabnawaz	71,584,363	64,425,927
310	0115	Raising and re-sectioning of earth work along garang bund mile 6/0 to 7/4, old beechanji bund mile 0/0 to 0/4, new beechanji bund milw 0/0 to 1/2 mungi 0/5 to 1/4 & sb 9/2 to 11/0	Ajmer Electric Engineering Works	27,998,491	25,198,642

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311	0116	Providing stone pitching along both sides of shank of left j head spur abd filling breach point u/s guddu barrage from mile 0/0 to 0/5+422	International Traders	54,636,461	49,172,815
312	0117	Raising and re-sectioning of machka bund mile 0/0 to 3/0 & constructing of guage pillers and mile / furlong from mile 0/0 to 3/0	Abdul Wajid	15,555,006	13,999,505
313	0118	Raising & strengthening & stone pitching along l.s. (larkana sehwan) bund mile 92/0 to 97/4 and closing artificial cut at mile 100	Hafiz Rabnawaz	50,124,488	45,112,039
314	0119	Raising & strengthening and stone pitching along m.c bank from rd 78 to 93.	Madni Cemcon	47,543,536	42,789,182
315	0120	Recouping of existing stone apron along hp bund 3/6+260 to 4/0, 5/7 to 6/2,6/6 to 6/7 and new stone apron along hp bund 3/4 to 3/6+260, 4/0 to 5/5+330 & recouping stone spur (nose point) along hp bund mile 13/2 (bhudka)	Haji Bashir Ahmed Soomro	188,771,983	169,894,785
316	0121	Raising & strengthening of baiji bund from mile 0/0 to 9/4 and providing stone pitching from mile 8/4 to 9/4.	Sher Muhammad Mugheri	85,329,379	76,796,441
317	0122	Raising & strengthening of baiji bund from mile 9/4 to 10/3 and providing stone pitching from mile 9/4 to 10/3.	Karim Bux Kalwar	17,794,968	16,015,471
318	0123	Raising & strengthening of l.m bund (old) from mile 0/0 to 5/0 & raising of exiting stone pitching from mile 0/0 to 3/1.	Abdul Hafeez	75,318,810	67,786,929
319	0124	Raising & strengthening of l.m bund (old) from mile 5/0 to 6/7 & constructing bund landhi, gauge pillars & furlong/mile stone from mile 0/0 to 6/7.	Ghansham Das	24,879,890	22,391,901
320	0125	Raising & strengthening & stone pitching along l.s. (larkana sehwan) bund mile 87/4 to 89/6.	Pritam Das	42,701,991	38,431,792
321	0126	Providing stone pitching and raising & strengthening along f.p bund rd 169 to 183 in saifullah magsi branch division, shahdadkot	RPS Construction	63,275,640	56,948,076
322	0136	Raising And Strengthening & Stone Pitching Along M.C Bank From Rd 0 To 30	Hafiz Rabnawaz	59,079,111	53,171,200
323	0137	Re-sectioning and san coring from mile 17/3 to 19/2 and providing stone pitching from mile 18/2 to 19 /2 along haibat bund	Hafiz Rabnawaz	78,619,496	70,757,546
324	0138	Re-sectioning along k.k. link bund mile 0/0 to 25/6 and construction stone pitching along 24/0 to 25/6	Dawood Khan	119,075,021	107,167,519
325	0139	Re-sectioning along k.k. link bund mile 0/0 to 10/0 and construction stone pitching along 3/0 to 6/0	Abdul Qayoom Mazari	93,136,277	83,822,649
326	0219	Raising And Strengthening Of Earthwork And Providing Stone Pitching Along S.H	United Engineers Construction	64,438,949	57,995,054

S#	PCSS #	Description of Contract Work	Firm Name	Contract Amount (PRs)	ADB Share (PRs)
		Bund Mile 0/0 To 3/2, Ali Bahar Bund Mile 0/0 To 2/2 And Hillaya Bund Mile 0/0 To 0/6			
327	0558	Re-sectioning and providing stone pitching along l.b bund mile 4/0 to 6/4.	Sardar Muhammad Ashraf D Baloch	60,576,248	54,518,623
328	0559	Re-sectioning of new makhwani bund from mile 0/0 to 4/0 and providing stone pitching from mile 0/0 to 2/0 & old tori bund mile 6/4 to 6/6+300.	Sardar Muhammad Ashraf D Baloch	60,508,654	54,457,789

JV = joint venture, PRs = Pakistan rupee/s.

1. Data source: ADB LFIS, government PCRs, and project record.

2. ADB share is 90% of total contract amount.

ANNUAL DISBURSEMENTS**Loan 2742**
(\$ million)

Calendar Year	Quarter	Contract Award	Disbursement
2011	Q1	0.00	0.00
	Q2	0.00	0.00
	Q3	82.29	10.23
	Q4	31.23	61.00
	Total	113.55	71.23
2012	Q1	127.73	24.61
	Q2	69.14	28.58
	Q3	0.077	37.70
	Q4	25.41	38.35
	Total	222.36	129.24
2013	Q1	31.59	25.01
	Q2	104.67	23.11
	Q3	21.57	31.41
	Q4	0.00	24.89
	Total	157.83	105.42
2014	Q1	0.38	22.95
	Q2	0.00	30.28
	Q3	0.00	28.17
	Q4	0.00	28.19
	Total	0.38	109.59
2015	Q1	0.27	10.22
	Q2	0.00	17.71
	Q3	0.00	11.05
	Q4	0.00	4.06
	Total	0.270	43.08
2016	Q1	(4.25)	0.00
	Q2	0.00	0.00
	Q3	0.00	0.00
	Q4	0.00	0.00
	Total	(4.25)	0.00

() = negative, zero = magnitude zero, Q = quarter.

Sources: ADB loan financial information system and baseline projections in eOperations.

ANNUAL DISBURSEMENTS**Loan 2743**

(\$ million)

Calendar Year	Quarter	Contract Award	Disbursement
2011	Q1	0.00	0.00
	Q2	0.00	0.00
	Q3	0.00	0.00
	Q4	0.00	0.00
Total		0.00	0.00
2012	Q1	0.00	0.00
	Q2	16.62	0.00
	Q3	17.93	1.21
	Q4	5.84	8.90
Total		40.40	10.11
2013	Q1	0.00	5.90
	Q2	0.00	18.22
	Q3	0.00	4.49
	Q4	0.00	1.43
Total		0.00	30.04
2014	Q1	0.00	0.25
	Q2	0.00	0.59
	Q3	0.00	0.00
	Q4	0.00	0.00
Total		0.00	0.84

() = negative, zero = magnitude zero, Q = quarter.

Sources: ADB Loan Financial Information System, and baseline projections in eOperations

IMPLEMENTATION SCHEDULE

(National Highway)

Description of Activities	2010		2011				2012				2013				2014				2015				2016	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Retroactive financing																								
Advance contracting																								
Establish PMU within NHA																								
Recruitment of Project Management, and Design and Construction Supervision Consultants																								
Award of civil work contracts																								
Construction of works																								
Management of activities																								
LARP activities																								
Gender action framework key activities																								
Environmental assessment and management activities																								

LARP = land acquisition and resettlement plan, PMU = project management unit, NHA = national highway authority

■ At Appraisal

■ At Completion

IMPLEMENTATION SCHEDULE
(Irrigation Department Sindh)

Description of Activities	2010					2011												2012												2013								
	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9
Retroactive financing																																						
Establish PMU within irrigation department																																						
Recruitment of project management consultants																																						
Award of civil works contracts																																						
Construction of works																																						
Management of activities																																						
LARP activities																																						
Gender action framework key activities																																						
Environmental assessment and management activities																																						

LARP = land acquisition and resettlement plan, PMU = project management unit

■ At Appraisal

■ At Completion

IMPLEMENTATION SCHEDULE
(Works and Services Department, Sindh)

Description of Activities	2010		2011				2012				2013				2014				2015	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Establish PMU within provincial WSDS																				
Recruitment of project management consultants																				
Recruitment of design consultants																				
Award of civil work contracts																				
Construction of works																				
Management of activities																				
LARP activities																				
Gender action framework key activities																				
Environmental assessment and management activities																				

LARP = land acquisition and resettlement plan, PMU = project management unit, WSDS = works and services department Sindh,

■ At Appraisal

■ At Completion

STATUS OF COMPLIANCE WITH LOAN COVENANTS

Sr. No.	Covenant	Reference in Loan Agreements (LAs) and Project Agreements (PAs)	Due date of implementation	Status of Compliance with Remarks
Financial Covenants				
1.	Except as ADB may otherwise agree, NHA / Sindh shall procure all Goods, Works, Consulting Services and other items of expenditure to be financed out of the proceeds of the Loans in accordance with the provisions of Schedule 4 to the Loan Agreements, respectively. ADB may refuse to finance a contract where such item of expenditure has not been procured under procedures substantially in accordance with those agreed between the Borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.	Section 2.03. (b) Article II PAs		Complied with
2.	NHA / Sindh shall take out and maintain with responsible insurers, or make other arrangements satisfactory to ADB for insurance of the Project facilities to such extent and against such risks and in such amounts as shall be consistent with sound practice.	Section 2.05. (a) Article II PAs		Complied with, although insurance of the works, and contractor's all risk insurance under the provisions of the civil works contracts for WSDS was delayed in some cases
3.	NHA / Sindh shall maintain, or cause to be maintained, records and accounts adequate to identify the Goods, Works, Consulting Services and other items of expenditure financed out of the proceeds of the Loans, 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, its operations and financial condition.	Section 2.06. Article II PAs		Complied with
4.	NHA / Sindh shall (i) maintain separate accounts for the Project and for its overall operations; (ii) have such accounts and related financial statements (balance sheet, statement of income and expenses, and related statements) audited annually, in accordance with appropriate auditing standards consistently applied, by independent auditors whose qualifications, experience and	Section 2.09. (a) Article II PAs	six (6) months after the close of the fiscal year	Partly complied with. Separate accounts were maintained, but Sindh government did not prepare balance sheets and income and expense statements because it said it uses cash basis accounting under which such

Sr. No.	Covenant	Reference in Loan Agreements (LAs) and Project Agreements (PAs)	Due date of implementation	Status of Compliance with Remarks
	terms of reference are acceptable to ADB; and (iii) furnish to ADB, promptly after their preparation but in any event not later than six months after the close of the fiscal year to which they relate, 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 proceeds of the Loans and compliance with the financial covenants of the Loan Agreements as well as on the use of the procedures for imprest account and statement of expenditures), all in the English language. NHA / Sindh shall furnish to ADB such further information concerning such accounts and financial statements and the audit thereof as ADB shall from time to time reasonably request.			statements are not applicable. Annual project financial statements (APFSs) have been submitted to ADB, but some have been delayed and some have not been submitted.
5.	NHA / Sindh shall enable ADB, upon ADB's request, to discuss NHA's / Sindh's financial statements and its financial affairs from time to time with the auditors appointed by NHA / Sindh pursuant to Section 2.09 (a) hereinabove, and shall authorize and require any representative of such auditors to participate in any such discussions requested by ADB, provided that discussion shall be conducted only in the presence of an authorized officer of NHA / Sindh unless NHA / Sindh shall otherwise agree.	Section 2.09 (b) Article II PAs		Complied with
6.	NHA / Sindh shall enable ADB's representatives to inspect the Project, the Goods and Works financed out of the proceeds of the Loans and any relevant records and documents.	Section 2.10. Article II PAs		Complied with
7.	Except as ADB may otherwise agree, the Loan proceeds shall be disbursed in accordance with the Loan Disbursement Handbook.	Schedule 3 LAs, Para 5		Complied with
8.	Except as ADB may otherwise agree, the Borrower shall ensure that immediately after the Effective Date, the Implementing Agency shall establish an imprest account at the National Bank of Pakistan. The imprest account shall be established, managed, replenished and liquidated in accordance with the Loan Disbursement Handbook, and detailed arrangements agreed upon between the Borrower	Schedule 3 LAs, Para 6. (a)	26 June 2011	Complied with

Sr. No.	Covenant	Reference in Loan Agreements (LAs) and Project Agreements (PAs)	Due date of implementation	Status of Compliance with Remarks
	and ADB. The imprest account shall only be used for the purposes of the Project. The currency of the imprest account shall be the Dollar. The ceiling for the imprest account shall not exceed the lower of (i) the estimated expenditure for the first 6 months of Project implementation; and (ii) 10% of the Loan amount.			
9.	Withdrawals from the Loan Account may be made for reimbursement of eligible expenditures incurred and paid for under the Project before the Effective Date, in connection with items to be retroactively financed, subject to a maximum amount equivalent to 30% of the Loan amount; provided that (i) the expenditures have been incurred and paid for after 7 August 2010 and not earlier than twelve months before the date of this Loan Agreement and (ii) the relevant request for retroactive financing for specified expenditures has been approved by ADB in accordance with the criteria and process as set out in the PAM.	Schedule 3 LAs, Para 7		Complied with
10.	The Borrower shall seek ADB's approval before it: (a) grants any extension of the stipulated time for completion of a contract for Goods or Works; or (b) agrees to any modification or waiver of the conditions of a contract for Goods or Works, including any change order that falls under (c) or (d) below; or (c) issues any change order under a contract for Goods or Works which would in aggregate increase the original contract price (for the avoidance of doubt, such aggregate shall take into account any previous or simultaneous change order or orders under such contract); or (d) issues any change order under a contract for Goods or Works that would involve more than 15% of the original contract price, even if such change order would not in aggregate increase the original contract price.	Schedule 4 LA, Para 14 (Loan 2742), and Schedule 4 LA, Para 11 (Loan 2743)		Complied with
11	If it is determined by ADB, and notified to the Borrower, that any expenditures withdrawn from the Loan Account by or on behalf of the Borrower have been applied to finance: (a). ineligible expenditures (whether by way of retroactive	Schedule 5 LAs, Para 3		Complied with. Such a situation did not arise.

Sr. No.	Covenant	Reference in Loan Agreements (LAs) and Project Agreements (PAs)	Due date of implementation	Status of Compliance with Remarks
	financing or otherwise), including but not limited to expenditures in relation to subprojects that do not satisfy the Subproject criteria or have not been approved according to the procedures set out in the PAM; or (b.) expenditures in respect of contracts that (i) do not satisfy the retroactive financing procurement parameters as detailed in the PAM; or (ii) are subject to declaration of misprocurement by ADB in accordance with its Procurement Guidelines and the arrangements set out in the PAM. The Borrower shall promptly repay such amounts equal to such expenditures and accrued interest to ADB.			
12.	The Borrower will ensure that (i) adequate budgetary allocations of required counterpart funds are made and released in a timely manner to the Project Executing Agency, and that these counterpart funds are in addition to the ongoing development program of the Project Executing Agency and (ii) the Project Executing Agency will provide such counterpart funds to the Implementing Agency in a timely manner.	Schedule 5 LAs, Para 4		Partly complied with. At times, availability of counterpart funding was delayed.
13.	The Borrower will ensure that proper accounting and audit procedures are in place to ensure efficient and economic use of the ADB financing proceeds. Accounts and financial statements in relation to the Project and the Subprojects will be maintained and certified by independent auditors acceptable to ADB. The Borrower shall allow, and shall procure that NHA and each Implementing Agency shall allow, ADB representatives to carry out spot or random checks on the flow of funds through the imprest accounts (if applicable).	Schedule 5 LAs, Para 13		Complied with
14.	The Borrower shall, and shall procure that each Project Executing Agency shall, allow independent auditors, acceptable to ADB, to undertake performance audits on a random basis to review, among others, implementation of the Gender Action Framework and compliance with ADB's safeguard policies.	Schedule 5 LAs, Para 14		Complied with. ADB did not request performance audits during implementation. However, ADB missions reviewed GAF and safeguard compliances.
15.	The Borrower shall ensure that post completion audit is	Schedule 5 LAs,		Not done yet because loan

Sr. No.	Covenant	Reference in Loan Agreements (LAs) and Project Agreements (PAs)	Due date of implementation	Status of Compliance with Remarks
	conducted by the independent auditors acceptable to ADB promptly after completion of the Project.	Para 15		account is not closed
Other Covenants				
16.	NHA / Sindh shall carry out the Project with due diligence and efficiency, and in conformity with sound applicable administrative, technical, financial, business, development and operational practices.	Section 2.01. (a) Article II PAs		Complied with.
17.	In the carrying out of the Project and operation of the Project facilities, NHA / Sindh shall perform all obligations set forth in the Ordinary Operations Loan Agreement to the extent that they are applicable to NHA / Sindh.	Section 2.01. (b) Article II PAs		Complied with
18.	NHA / Sindh shall make available, promptly as needed, the funds, facilities, services, equipment, land and other resources which are required, in addition to the proceeds of the Loan, for the carrying out of the Project.	Section 2.02. Article II PAs		Complied with
19.	In the carrying out of the Project, NHA / Sindh shall employ competent and qualified consultants and contractors, acceptable to ADB, to an extent and upon terms and conditions satisfactory to ADB.	Section 2.03. (a) Article II PAs		Complied with
20.	NHA / Sindh shall carry out the Project in accordance with plans, design standards, specifications, work schedules and construction methods acceptable to ADB. NHA / Sindh shall furnish, or cause to be furnished, to ADB, promptly after their preparation, such plans, design standards, specifications and work schedules, and any material modifications subsequently made therein, in such detail as ADB shall reasonably request.	Section 2.04. Article II PAs		Complied with
21.	Without limiting the generality of the foregoing, NHA / Sindh undertakes to insure, or cause to be insured, the Goods to be imported for the Project and to be financed out of the proceeds of the Loan against hazards incident to the acquisition, transportation and delivery thereof to the place of use or installation, and for such insurance any indemnity shall be payable in a currency freely usable to replace or repair	Section 2.05. (b). Article II PAs		Complied with

Sr. No.	Covenant	Reference in Loan Agreements (LAs) and Project Agreements (PAs)	Due date of implementation	Status of Compliance with Remarks
	such Goods.			
22.	ADB and NHA / Sindh shall cooperate fully to ensure that the purposes of the Loan will be accomplished.	Section 2.07 (a). Article II PAs		Complied with
23.	NHA / Sindh shall promptly inform ADB of any condition which interferes with, or threatens to interfere with, the progress of the Project, the performance of its obligations under this Project Agreement, or the accomplishment of the purposes of the Loan.	Section 2.07 (b). Article II PAs		Complied with
24.	ADB and NHA shall from time to time, at the request of either party, exchange views through their representatives with regard to any matters relating to the Project, NHA and the Loan.	Section 2.07 (c). Article II PAs		Complied with
25.	NHA / Sindh shall furnish to ADB all such reports and information as ADB shall reasonably request concerning (i) the Loan and the expenditure of the proceeds thereof; (ii) the Goods, Works, Consulting Services and other items of expenditure financed out of such proceeds; (iii) the Project; (iv) the administration, operations and financial condition of NHA; and (v) any other matters relating to the purposes of the Loan.	Section 2.08 (a). Article II PAs		Complied with
26.	The NHA / Sindh shall furnish to ADB quarterly reports on the execution 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 ADB 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.	Section 2.08 (b). Article II PAs		Complied with
27.	Promptly after physical completion of the Project, but in any event not later than three (3) months thereafter or such later date as ADB may agree for this purpose, NHA / Sindh shall prepare and furnish to ADB a report, in such form and in such detail as ADB shall reasonably request, on the execution and initial	Section 2.08 (c). Article II PAs		Complied with. Project completion reports provided to ADB.

Sr. No.	Covenant	Reference in Loan Agreements (LAs) and Project Agreements (PAs)	Due date of implementation	Status of Compliance with Remarks
	operation of the Project, including its cost, the performance by NHA / Sindh of its obligations under this Project Agreement and the accomplishment of the purposes of the Loan.			
28.	NHA / Sindh shall, promptly as required, take all action within its powers to maintain its corporate existence, to carry on its operations, and to acquire, maintain and renew all rights, properties, powers, privileges and franchises which are necessary in the carrying out of the Project or in the conduct of its operations.	Section 2.11 (a). Article II PAs		Complied with
29.	NHA / Sindh shall at all times conduct its operations in accordance with sound applicable administrative, financial, business, development and operational practices, and under the supervision of competent and experienced management and personnel.	Section 2.11 (b). Article II PAs		Complied with
30.	NHA / Sindh shall at all times operate and maintain its plants, equipment and other property, and from time to time, promptly as needed, make all necessary repairs and renewals thereof, all in accordance with sound administrative, financial, engineering, environmental, public utility, and maintenance and operational practices.	Section 2.11 (c). Article II PAs		Complied with
31.	Except as ADB may otherwise agree, NHA / Sindh shall not sell, lease or otherwise dispose of any of its assets which shall be required for the efficient carrying on of its operations or the disposal of which may prejudice its ability to perform satisfactorily any of its obligations under this Project Agreement.	Section 2.12. Article II PAs		Complied with
32.	Except as ADB may otherwise agree, NHA / Sindh shall apply the proceeds of the Loan to the financing of expenditures on the Project in accordance with the provisions of the Ordinary Operations Loan Agreement and this Project Agreement, and shall ensure that all Goods, Works, Consulting Services and other items of expenditures financed out of such proceeds are used exclusively in the carrying out of the Project.	Section 2.13. Article II PAs		Complied with

Sr. No.	Covenant	Reference in Loan Agreements (LAs) and Project Agreements (PAs)	Due date of implementation	Status of Compliance with Remarks
33.	NHA / Sindh shall promptly notify ADB of any proposal to amend, suspend or repeal any provision of its constitutional documents and shall afford ADB an adequate opportunity to comment on such proposal prior to taking any action thereon.	Section 2.14. Article II PAs		Complied with
34.	The Borrower shall carry out, or cause each Project Executing Agency to carry out, the Project with due diligence and efficiency and in conformity with sound applicable technical, financial, business, and development practices.	Section 4.01 (a). Article IV LAs		Complied with
35.	In the carrying out of the Project and operation of the Project facilities, the Borrower shall perform, or cause to be performed, all obligations set forth in Schedule 5 to this Loan Agreement.	Section 4.01 (b). Article IV LAs		Complied with
36.	The Borrower shall make available to each Project Executing Agency, promptly as needed, the funds, facilities, services, land and other resources, as required, in addition to the proceeds of the Loan, for the carrying out of the Project.	Section 4.02. Article IV LAs		Complied with.
37.	The Borrower shall ensure that the activities of its departments and agencies with respect to the carrying out of the Project and operation of the Project facilities are conducted and coordinated in accordance with sound administrative policies and procedures.	Section 4.03. Article IV LAs		Complied with
38.	The Borrower shall enable ADB's representatives to inspect the Project, the Goods and Works, and any relevant records and documents.	Section 4.04. Article IV LAs		Complied with
39.	The Borrower shall (i) maintain, or cause to be maintained, separate accounts for the Project; (ii) have such accounts and related financial statements audited annually, in accordance with appropriate auditing standards consistently applied, by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB; (iii) furnish to ADB, as soon as available but in any event not later than six 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	Section 4.05 (a). Article IV LAs		Partly complied with. The APFS was invariably submitted late or not submitted.

Sr. No.	Covenant	Reference in Loan Agreements (LAs) and Project Agreements (PAs)	Due date of implementation	Status of Compliance with Remarks
	(including the auditors' opinion on the use of the Loan proceeds and compliance with the financial covenants of this Loan Agreement as well as on the use of the procedures for imprest accounts and statement of expenditure), all in the English language; and (iv) furnish to ADB such other information concerning such accounts and financial statements and the audit thereof as ADB shall from time to time reasonably request.			
40.	The Borrower shall enable ADB, upon ADB'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 auditors appointed by the Borrower pursuant to Section 4.05(a) hereinabove, and shall authorize and require any representative of such auditors to participate in any such discussions requested by ADB, 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.	Section 4.05 (b). Article IV LAs		Complied with
41.	The Borrower shall take all actions which shall be necessary on its part to enable each Project Executing Agency to perform its obligations under the relevant Project Agreement, and shall not take or permit any action which would interfere with the performance of such obligations.	Section 4.06. Article IV LAs		Complied with
42.	The Borrower and the Project Executing Agency shall ensure that the Project is implemented in accordance with the detailed arrangements set forth in the PAM. Any subsequent change to the PAM shall become effective only after approval of such change by the Borrower and ADB. In the event of any discrepancy between the PAM and this Loan Agreement, the provisions of this Loan Agreement shall prevail.	Schedule 5 LAs, Para 1		Complied with
43.	The Borrower will ensure that all subprojects meet, to the satisfaction of ADB, the agreed selection criteria as set out in Annex 1 of the PAM and that all subprojects are properly approved, controlled and monitored to the satisfaction of ADB.	Schedule 5 LAs, Para 2		Complied with. All subprojects were selected from the list attached at the time of appraisal.

Sr. No.	Covenant	Reference in Loan Agreements (LAs) and Project Agreements (PAs)	Due date of implementation	Status of Compliance with Remarks
44.	The Borrower will ensure that the facilities to be provided or financed under the Project are operated and maintained appropriately, and that adequate budgetary and other resources are provided for their operation and maintenance.	Schedule 5 LAs, Para 5		Complied with. However, ADB should continue to follow up on the future provision of maintenance allocations.
45.	(a). a dedicated environment and social unit (ESU) is established in each of (i) the two PMUs in respect of the Sindh Component, (ii) the North zonal office, the South zonal office and the PMU of NHA, and that such ESUs will be adequately staffed including at least one officer dedicated to handle Project related grievances including but not limited to grievances relating to safeguard compliance, employment opportunities, payment by contractors and sub-contractors and access of irrigation water for poor or marginalized groups; (b). each ESU shall develop and implement an independent and effective grievance mechanism, including an outreach program to provide access to the Subproject areas and gender sensitive protocols; and (c). linkage between each ESU and the relevant ombudsmen's office at the provincial level is established to provide an open channel for any Project related grievance to be addressed by the ombudsmen's office at the request of the complainant.	Schedule 5 LAs, Para 9		Complied with
46.	The Borrower will publicly disclose on the website for the Project information on how the proceeds of the Loan are being used for the intended beneficiaries following applicable procedures. The website shall present financial statements and track procurement contract awards, and include information on, among others, status of flood damages and casualties, subproject selection criteria, information on funding commitment by donors, the list of participating bidders, name of the winning bidder, basic details on bidding procedures adopted, amount of the contract awarded, the list of goods and/or procedures adopted, amount of the contract awarded, the list of goods and/or services purchased, and	Schedule 5 LAs, Para 10		Partly complied with. Websites do not show the financial statements.

Sr. No.	Covenant	Reference in Loan Agreements (LAs) and Project Agreements (PAs)	Due date of implementation	Status of Compliance with Remarks
	their intended and actual utilization.			
47.	The Borrower shall ensure that the Project Executing Agency and the Implementing Agency shall, (i) comply with ADB's Anticorruption Policy (1998, as amended to date) and acknowledge that ADB reserves the right to investigate directly, or through its agents, any alleged corrupt, fraudulent, collusive or coercive practice relating to the Project; and (ii) cooperate with any such investigation and extend all necessary assistance for satisfactory completion of such investigation.	Schedule 5 LAs, Para 11		Complied with
48.	The Borrower shall ensure, or cause the Project Executing Agency to ensure, that the anticorruption provisions acceptable to ADB are included in all bidding documents and contracts, including provisions specifying the right of ADB to audit and examine the records and accounts of the executing and implementing agencies and all contractors, suppliers, consultants, and other service providers as they relate to the Project.	Schedule 5 LAs, Para 12		Complied with
49.	The Borrower shall ensure that the necessary support is provided to ADB to review and monitor the status of Project implementation, including performance of the key indicators under the design and monitoring framework.	Schedule 5 LAs, Para 24	26 November 2011	Complied with
50.	The Borrower will ensure that the Project Executing Agency will actively seek community participation in the selection, design, monitoring and implementation of all works carried out under the Project to the extent feasible.	Schedule 5 LAs, Para 6		Complied with
51.	The Borrower shall ensure that all Works contracts follow all applicable labor laws of the Borrower and that these further incorporate provisions requiring the contractors to: (a). give preference to local labor with the required skills; (b). use their best efforts to employ women living in the vicinity of the Subproject area, including taking affirmative action for allocating 10% of labor force employed for Works to women for 15% of Subprojects; (c). not differentiate between men and women's wages or benefits for work of equal value;	Schedule 5 LAs, Para 7		Complied with

Sr. No.	Covenant	Reference in Loan Agreements (LAs) and Project Agreements (PAs)	Due date of implementation	Status of Compliance with Remarks
	(d). disseminate information at worksites on the risks of sexually transmitted diseases and human immunodeficiency virus/acquired immunodeficiency syndrome for those employed during construction; (e). take measures to protect workers from potential exposure to sexually transmitted diseases; and (f). abstain from child labor.			
52.	The Borrower shall implement the Gender Action Framework (GAF) in accordance with its terms, shall allocate adequate resources for such implementation, and shall monitor and report to ADB on key gender outcome and output targets in accordance with the performance and monitoring system described in the PAM.	Schedule 5 LAs, Para 8		Complied with
53.	Environmental Covenants The Borrower shall ensure that no Works contract shall be awarded until: (a) the relevant environment authority has granted the final approval of the EIA/IEE (if required); and (b) the relevant provisions from the EMP have been incorporated into the Works contract.	Schedule 4 LAs, Para 7		Complied with
54.	The Borrower shall ensure that the preparation, design, construction, implementation, operation and decommissioning of the Subprojects and all Project facilities comply with (a) all applicable laws and regulations of the Borrower relating to environment, health and safety; (b) the Environmental Safeguards; (c) the EARF; and (d) all measures and requirements set forth in the EARF and the relevant IEE/EIA, the EMP, and any corrective or preventative actions set forth in a Safeguards Monitoring Report.	Schedule 5 LAs, Para 16		Complied with
55.	Social Covenants The Borrower shall ensure that: (a) a dedicated environment and social unit (ESU) is established in its PMU and that such ESUs will be adequately	Schedule 5 LAs, Para 9	31 August 2011	Complied with

Sr. No.	Covenant	Reference in Loan Agreements (LAs) and Project Agreements (PAs)	Due date of implementation	Status of Compliance with Remarks
	<p>staffed including at least one officer dedicated to handle Project related grievances including but not limited to grievances relating to safeguard compliance, employment opportunities, payment by contractors and subcontractors and access of irrigation water for poor or marginalized groups;</p> <p>(b) the ESU shall develop and implement an independent and effective grievance mechanism, including an outreach program to provide access to the Subproject areas and gender sensitive protocols; and</p> <p>(c) linkage between the ESU and the relevant ombudsmen's office at the provincial level is established to provide an open channel for any Project related grievance to be addressed by the ombudsmen's office at the request of the complainant.</p>			
56.	<p>The Borrower shall ensure that any Works contract which involves involuntary resettlement impacts shall not be awarded until the Borrower has prepared and submitted to ADB the final LARP based on the Subproject's detailed design, and obtained ADB's clearance of such LARP.</p>	Schedule 4 LAs, Para 8		<p>Irrigation and W&S</p> <p>Complied with</p> <p>None of the works contract awarded caused involuntary resettlement.</p> <p>NHA</p> <p>Complied with</p> <p>LARP for N-95 subprojects was approved by ADB prior to contracts award.</p>
57.	<p>The Borrower shall ensure that, to the extent possible, Subprojects shall avoid or minimize land acquisition and involuntary relocation. In Subprojects where land acquisition and resettlement is required, the Borrower will ensure that:</p> <p>(a). relevant resettlement information including information from the LARF will be provided in a accessible place and in a</p>	Schedule 5 LAs, Para 17		<p>Irrigation and W&S</p> <p>Complied with</p> <p>Land acquisition and</p>

Sr. No.	Covenant	Reference in Loan Agreements (LAs) and Project Agreements (PAs)	Due date of implementation	Status of Compliance with Remarks
	<p>form and language(s) understandable, or otherwise communicated via other communication methods, to affected persons and other stakeholders promptly and in any event, within three months from the date of the loan agreement;</p> <p>(b). compensation and other entitlements have been provided to displaced persons prior to possession of lands;</p> <p>(c). no land is acquired for the purposes of any of its Subprojects based on the emergency provisions under the Land Acquisition Act (1894), as amended from time to time; and</p> <p>(d). it will enhance land acquisition staff to coordinate closely with the respective Boards of Revenue and expedite land acquisition while being compliant with the SPS and provide timely finances for land acquisition and resettlement.</p>			<p>resettlement was avoided in designing subprojects.</p> <p>NHA</p> <p>Complied with</p> <p>LARP implemented for National Highway N-95 subprojects.</p>
58.	<p>The Borrower shall ensure that all land and all rights-of-way required for the Project are made available to the Works contractor in accordance with the schedule agreed under the related Works contract and all land acquisition and resettlement activities are implemented in compliance with (a) all applicable laws and regulations of the Borrower relating to land acquisition and involuntary resettlement; (b) the Involuntary Resettlement Safeguards; and (c) all measures and requirements set forth in the LARF and LARPs, and any corrective or preventative actions set forth in the Safeguards Monitoring Report.</p>	Schedule 5 LAs, Para 18		<p>Irrigation and W&S</p> <p>Complied with</p> <p>Reconstruction has been done within existing alignment and right-of-way.</p> <p>NHA</p> <p>Complied with</p>
59.	<p>Without limiting the application of the Involuntary Resettlement Safeguards or the LARP, the Borrower shall ensure that no physical or economic displacement takes place in connection with the Project until:</p> <p>(a) compensation and other entitlements have been provided to affected people in accordance with the LARPs; and</p> <p>(b) as applicable, a comprehensive income and livelihood restoration program has been established in accordance with the LARPs.</p>	Schedule 5 LAs, Para 19		<p>Irrigation and W&S</p> <p>Complied with</p> <p>NHA</p> <p>Complied with</p>

Sr. No.	Covenant	Reference in Loan Agreements (LAs) and Project Agreements (PAs)	Due date of implementation	Status of Compliance with Remarks
				On national highway N-95 subprojects, payment has substantially been completed to the displaced people (excluding people who did not come to collect the compensation amount). NHA has allocated and deposited balance amount in bank for payment to the absent people upon request.
60.	The Borrower shall make available or cause the Project Executing Agency to make available necessary budgetary and human resources to fully implement the EARF, the LARF, EMPs and LARPs.	Schedule 5 LAs, Para 20		Complied with Adequate resources were provided to carry out social and environment assessments.
61.	The Borrower shall ensure that all bidding documents and contracts for Works contain provisions that require contractors to: (a) comply with the measures relevant to the contractor set forth in the IEE/EIA, the EMP and the LARPs (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set forth in a Safeguards Monitoring Report; (b) make available a budget for all such environmental and social measures; and (c) provide the Borrower and the EAs with a written notice of any unanticipated environmental, land acquisition and resettlement and/or social risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the IEE/EIA, the EMP and the LARPs.	Schedule 5 LAs, Para 21		Complied with
62.	The Borrower shall do the following or cause the Project Executing Agency to do the following: (a) submit Safeguards Monitoring Reports to ADB: (i) quarterly and as requested by ADB from time to time for	Schedule 5 LAs, Para 22		Complied with

Sr. No.	Covenant	Reference in Loan Agreements (LAs) and Project Agreements (PAs)	Due date of implementation	Status of Compliance with Remarks
	<p>Category A Subprojects; and</p> <p>(ii) semi-annually for all other Subprojects, and disclose relevant information from such reports to affected persons promptly upon submission;</p> <p>(b) if any unanticipated environmental, land acquisitions, resettlement and/or social risks and impacts arise during construction, implementation or operation of the relevant Subproject that were not considered in the relevant EIA/IEE, the EMP and the LARP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and update to the relevant EIA/IEE, EMP and/or LARP, as applicable, including any proposed corrective action plan; and</p> <p>(c) report any actual or potential breach of compliance with the measures and requirements set forth in the EMP and the LARP promptly after becoming aware of the breach.</p>			
63.	The Borrower shall ensure that no proceeds of the Loan are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS.	Schedule 5 LAs, Para 23		Complied with

ECONOMIC ANALYSIS

A. Introduction

1. An economic evaluation was undertaken at the close of Flood Emergency Reconstruction Project in Pakistan to estimate the anticipated economic returns based on actual costs and anticipated and visible benefits. As an emergency intervention, economic analysis was not carried out at appraisal. However, at completion, an economic internal rate of return (EIRR) is calculated for the irrigation component only. No comparison with the returns estimates at appraisal was possible since no estimates were prepared. The analysis relied on data provided by the Sindh provincial government, presented in the project performance management system, and collected during visits to subprojects during the irrigation component specific project completion review mission undertaken by the Asian Development Bank (ADB) in July 2013.

B. Methodology and Approach

2. Irrigation component included the reconstruction of the damaged irrigation and flood protection infrastructure. ADB had agreed to retroactive financing of the reconstruction works that had been awarded by 31 May 2011, subject to eligibility based on agreed selection criteria. The implementing agency submitted 962 contracts for consideration for retroactive financing within the agreed time limit. After review, ADB found 328 contracts eligible for retroactive financing (Table 2).

Table A5.1: Retroactive contracts with ADB Financing
(90%)

Civil works	Contracts received (No.)	Contracts eligible (No.)	Cost (\$ million)	ADB share (\$ million)
Flood embankments	136	133	91.31	82.18
Canals	414	185	17.98	16.18
Drains	412	10	0.91	0.82
Total	962	328	110.20	99.18

Source: Project management unit, FERP.

3. The evaluation calculated the net benefits for the subprojects of the irrigation component on the basis of actual costs and projected benefits after project completion. The data was gathered from several departments of the government of Sindh, including the agriculture and irrigation departments, as well as from farmers during the project completion review mission and the project performance management system and progress reports.

C. Assumptions

4. The main assumptions adopted for the analysis were the following:

- (i) The year in which a subproject was completed was taken as its base year.
- (ii) Each subproject was assumed to have a useful economic life of 20 years after construction based on its design, with no residual value in year 20.
- (iii) Costs, including capital and operation and management costs, were expressed at their economic prices by applying conversion factors and were taken as the local currency cost.
- (iv) The real opportunity cost of capital was 12% per annum.

- (v) The benefits of crops saved from inundation due to this project were taken at 75% in each year.
- (vi) Table A5.2: shows the main conversion factors and assumptions used.

Table A5.2

Price basis for economic analysis	2013 constant terms
Project life and period of operation	20 years, 2013–2033
Price level basis for economic valuation	domestic prices
Standard conversion factor	0.9
Domestic price escalation	2.5%
Inflation factor	1.04
Replacement cost (tenth year)	10%

D. Estimation of EIRR

5. The subprojects were undertaken to protect the crops and assets of local communities from inundation during flood events and the monsoon season. The benefits accrued for the economic internal rate of return (EIRR) were calculated as the area that has now been protected from inundation during these floods and the value of the crops that will thereby be saved from flood damage. Based on these benefits, the EIRR was calculated to be 23.57% (Table A5.3).

E. Sensitivity Analysis

6. The results of the sensitivity analysis of economic costs and benefits are in Table A5. 1. Sensitivity was tested under the following two risk scenarios, i.e. (i) an increase in costs of 10%, (ii) a decrease in benefits by 10%. Under these scenarios, the EIRRs declined to 8.14%–10.02%.

F. Financial Analysis

7. As an emergency intervention, the project was not revenue generating, and therefore, financial analysis was not undertaken at appraisal. Financial internal rate of return has not been calculated. Most of the components have an economic benefit but no measured financial return.

Table A5. 3: Project Economic Returns

Year No.	Year	Total Cost (PRs)	O&M (PRs)	Total Economic Cost (PRs)	Total Benefit (PRs)	Total Economic Benefit (PRs)	Net Benefit (PRs)	IRR
0	2012	21,104,830,000		18,994,347,000		-	18,994,347,000	23.57%
1	2013		22,160,071,500	19,944,064,350	35,693,573,859	24,093,162,355	4,149,098,005	
2	2014		22,714,073,288	20,442,665,959	36,585,913,206	24,695,491,414	4,252,825,455	
3	2015		23,281,925,120	20,953,732,608	37,500,561,036	25,312,878,699	4,359,146,092	
4	2016		23,863,973,248	21,477,575,923	38,438,075,062	25,945,700,667	4,468,124,744	
5	2017		24,460,572,579	22,014,515,321	39,399,026,938	26,594,343,183	4,579,827,862	
6	2018		25,072,086,893	22,564,878,204	40,384,002,612	27,259,201,763	4,694,323,559	
7	2019		25,698,889,066	23,129,000,159	41,393,602,677	27,940,681,807	4,811,681,648	
8	2020		26,341,361,292	23,707,225,163	42,428,442,744	28,639,198,852	4,931,973,689	
9	2021		26,999,895,325	24,299,905,792	43,489,153,813	29,355,178,824	5,055,273,031	
10	2022	2,110,483,000	27,674,892,708	26,806,838,137	44,576,382,658	30,089,058,294	3,282,220,157	
11	2023		28,366,765,025	25,530,088,523	45,690,792,225	30,841,284,752	5,311,196,229	
12	2024		29,075,934,151	26,168,340,736	46,833,062,030	31,612,316,870	5,443,976,134	
13	2025		29,802,832,505	26,822,549,254	48,003,888,581	32,402,624,792	5,580,075,538	
14	2026	-	30,547,903,317	27,493,112,986	49,203,985,795	33,212,690,412	5,719,577,426	
15	2027		31,311,600,900	28,180,440,810	50,434,085,440	34,043,007,672	5,862,566,862	
16	2028		32,094,390,923	28,884,951,831	51,694,937,576	34,894,082,864	6,009,131,033	
17	2029		32,896,750,696	29,607,075,626	52,987,311,016	35,766,434,936	6,159,359,309	
18	2030		33,719,169,463	30,347,252,517	54,311,993,791	36,660,595,809	6,313,343,292	
19	2031		34,562,148,700	31,105,933,830	55,669,793,636	37,577,110,704	6,471,176,874	
20	2032		35,426,202,417	31,883,582,176	57,061,538,477	38,516,538,472	6,632,956,296	

Sensitivity Analysis

Scenario	EIRR (%)
Increase in cost by 10%	10.02
Decrease in benefits by 10%	8.14
Both not calculable	

GENDER ACTION FRAMEWORK—TARGETS AND ACHIEVEMENTS

Objective	Activity	Indicator	Achievement
Output 2: Provincial Roads Repaired			
Women participate in and benefit from the reconstruction process.	Develop action plan for incorporating livelihood and employment option for women in infrastructure project sites.	<p>Affirmative action for women employment included in bidding and contract documents and monitoring sheets.</p> <p>Up to 10% of work force generated by civil works done by women in 15% of subprojects independently monitored.</p> <p>Dedicated grievance redress system for women with an outreach mechanism</p>	<p>Affirmative action for women employment was included in bidding and contract documents.</p> <p>Monitoring reports on road construction included the men–women employment ratio, which could not be met.</p> <p>According to the report on the study conducted by Gender Specialist hired under the project “to assess women’s participation in road construction work” under the project, three key factors prevented the project from reaching the target for participation by women in road construction, i.e. (i) Women lacked interest in undertaking intensive labor; (ii) Communities preferred that women work on rural roads nearer to their villages than on the project’s more distant provincial roads; and (iii) Contractors preferred male workers over women workers.</p> <p>A gender-inclusive grievance redress mechanism was designed. Both men and women were informed about the grievance mechanisms and procedures for registering complaints.</p>
Output 2: Provincial irrigation facilities reconstructed			
incorporating Women’s needs for irrigation water use during reconstruction	Design irrigation canals with livestock watering pool and maintenance access Women	demands and priorities addressed, irrigation systems developed that provide women access to irrigation water	<p>20% of the canal subprojects had gender provisions, exceeding the 15% target</p> <p>Washing bays were constructed and hand pumps for water supply installed.</p>

Objective	Activity	Indicator	Achievement
		for household use (time for fetching water reduced by 20% in selected project communities)	
		15% of the subprojects have gender provisions	All water supply schemes and washing bays were completed.
Output 3: Capacity-Building TA			
Strengthening the commitment and capacity of IAs and EAs Management for gender equality	Enhancing capacity of line departments in undertaking gender-sensitive measures for irrigation and civil and works department	Capacity of irrigation and civil and works departments to develop gender-sensitive projects enhanced	40 participants from the PMU and PMC were oriented by TA specialist on topics that included the concept of gender, gender mainstreaming, the role of women in irrigation sector, the water-related needs of women under the project, and gender-related precedents in similar projects. Engineers and site staff were engaged in the needs assessment and planning process for gender-specific schemes.
	Enhancing the capacity of actors involved in reconstruction to assess gender needs and concerns, and recommend related improvement in reconstruction process to address these concerns	Gender checklists for each sector published and distributed Gender analysis of 15% of subprojects carried out (selected with the following criteria: geographical location, number of beneficiaries, opportunities for women employment, smaller infrastructure	Checklist on the irrigation water-related needs of women was shared with the irrigation staff Gender analysis of subprojects was carried out per the prescribed criteria for the canal packages. Four canal and drains subprojects incorporated gender features in their design and implementation. Quarterly monitoring reports prepared until March 2012 and monthly monitoring reports initiated

Objective	Activity	Indicator	Achievement
		<p>subprojects) and shared with the stakeholders</p> <p>Monitoring reports showing action taken on recommended actions</p> <p>Training in gender-sensitive development planning at stakeholder (contractors, PMUs) levels carried out</p>	<p>from May 2012.</p> <p>Consultations were conducted with PMC on prioritizing the needs of women and the locations of washing bays considering cultural sensitivities and viability of interventions.</p>
	Gender mainstream reconstruction process	<p>Gender Specialist recruited under TA</p> <p>Gender considerations with clearly defined output and outcome indicators inform reconstruction process (GAP for 15% of subprojects)</p> <p>Budget allocated for gender-relevant initiatives in priority sectors Gender analysis conducted which informs women's livelihood needs assessment</p>	<p>Two gender specialists, one each for the CDTA and the PMC, were hired and mobilized.</p> <p>Done</p> <p>Adequate budget was allocated for the gender schemes and the pre-project need assessments and gender analysis.</p> <p>A livelihood pilot project based on women's gender needs was financed and completed in Shikarpur, one of the flood affected districts of Sindh.</p> <p>Key achievements of the pilot project were the following:</p> <p>23 participants from the community were trained in life skills, enterprise</p>

Objective	Activity	Indicator	Achievement
		One pilot women's livelihoods project designed and financing secured (\$50,000 seed financing from ADB's Regional Technical Assistance, ²⁰	<p>development techniques, disaster risk reduction, health and hygiene, and resource mobilization.</p> <p>19 community members were trained in disaster risk reduction, literacy, health and hygiene practices and gender issues.</p> <p>The community with the support of project staff, developed linkages with 15 government and nongovernment organizations and mobilized resources for their villages for flood emergency, infrastructure and social benefits.</p> <p>200 community members were trained in income-generating skills.</p> <p>(i) Health and hygiene awareness sessions were carried out, benefitting 236 women and 120 children in 4 villages.</p> <p>(ii) 65 men and 85 women of the selected villages received national identity cards.</p> <p>(iii) Additional resources worth \$50,000 were provided by Citi Bank through partnership with ADB for the same communities.</p> <p>(iv) Citibank NA provided a grant to increase economic opportunities specifically for women through enhanced skills in handicrafts making and their marketing.</p>

²⁰ ADB. 2010. *Technical Assistance for Promoting Gender-Inclusive Growth in Central and West Asia Developing Member Countries into Regional Cooperation*. Manila.