



Completion Report

Project Numbers: 37220-013, 37220-023, and 37220-033
MFF Number: 0028
Loan Numbers: 2499, 2975, and 2976
December 2019

Pakistan: Sindh Cities Improvement Investment Program

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Asian Development Bank

CURRENCY EQUIVALENTS

Currency unit – Pakistan rupee (PRe)

		At Appraisal		At Program Completion
		27 October 2008		31 May 2018
PRe1.00	=	\$0.01228		PRe1.00 = \$0.00865
\$1.00	=	PRs81.3500		\$1.00 = PRs115.6367

ABBREVIATIONS

ADB	–	Asian Development Bank
AEFS		audited entity financial statement
AOP	–	annual operational plan
APFS	–	audited project financial statement
BOD	–	board of directors
COL	–	concessional OCR lending
CRU	–	complaint registration unit
DNI	–	distribution network improvement
FCR	–	facility completion review
GAP	–	gender action plan
GOS	–	Government of Sindh
ICB	–	international competitive bidding
LGRD&HTPD	–	Local Government, Rural Development, & Housing, Town Planning Department
MFF	–	multitranchise financing facility
MGD	–	million gallons per day
NRW	–	nonrevenue water
NSUSC	–	North Sindh Urban Services Corporation Limited
O&M	–	operation and maintenance
OCR	–	ordinary capital resources
OSF	–	operational support fund
P&DB	–	Sindh Planning and Development Board
PFR	–	periodic financing request
PHED	–	Public Health Engineering Department
PPP	–	public–private partnership
PSU	–	program support unit
SCIIP	–	Sindh Cities Improvement Investment Program
SCP	–	Supreme Court of Pakistan
SWM	–	solid waste management
TA	–	technical assistance
TMA	–	taluka municipal administration
USC	–	urban services corporation
WTP	–	water treatment plant

NOTES

- (i) The fiscal year (FY) of the Government of Pakistan and its agencies ends on 30 June. "FY" before a calendar year denotes the year in which the fiscal year ends, e.g., FY2018 ends on 30 June 2018.
- (ii) In this report, "\$" refers to United States dollars.

Vice-President	Shixin Chen, (Operations 1)
Director General	Werner E. Liapetch, Director General, Central West Asia Regional Department (CWRD)
Country Director	Xiaohong Yang, Pakistan Resident Mission, CWRD
Team leader	Muzaffar H. Bukhari, Associate Project Officer, CWRD
Team members	Mian S. Shafi, Senior Project Officer, CWRD Muhammad A. Sheikh, Associate Financial Control Analyst, CWRD

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CONTENTS

	Page
BASIC DATA	i
I. PROGRAM DESCRIPTION	1
II. DESIGN AND IMPLEMENTATION	2
A. Program Design and Formulation	2
B. Program Outputs	3
C. Program Costs and Financing	7
D. Disbursements	7
E. Program Schedule	8
F. Implementation Arrangements	9
G. Technical Assistance	9
H. Consultant Recruitment and Procurement	10
I. Gender Equity	11
J. Safeguards	11
K. Monitoring and Reporting	12
III. EVALUATION OF PERFORMANCE	13
A. Relevance	13
B. Effectiveness	14
C. Efficiency	15
D. Sustainability	15
E. Development Impact	16
F. Performance of the Borrower and the Executing Agency	16
G. Performance of the Asian Development Bank	17
H. Overall Assessment	17
IV. ISSUES, LESSONS, AND RECOMMENDATIONS	17
A. Issues and Lessons	17
B. Recommendations	18
APPENDIXES	
1. Design and Monitoring Framework	19
2. Package-Wise Status of Water Supply and Sewerage Improvement	31
3. Program Cost at Appraisal and Actual	34
4. Program Cost by Financier	36
5. Disbursement of ADB Loan and Grant Proceeds	38
6. Improving Efficiency and Accountability of NSUSC	40
7. Procurement and Execution Delays	41
8. Contract Awards of ADB Loan and Grant Proceeds	42
9. Update on Gender Action Plan	44
10. Status of Compliance with Loan Covenants	52
11. Overall Program Ratings	67

BASIC DATA

A. Loan Identification

1.	Country	Islamic Republic of Pakistan
2.	MFF number and financing sources	M0028: - Loan 2499: Concessional Ordinary Capital Resources (COL) - Loan 2975: Ordinary Capital Resources (OCR) - Loan 2976: COL
3.	Program title	Sindh Cities Improvement Investment Program
4.	Borrower	Government of Pakistan
5.	Executing agency	Planning & Development Board, Sindh ¹
6.	Amount of loan	\$300 million
7.	Financing modality	Multitranche financing facility

B. Loan Data

1.	Appraisal	
	– Date started	22 January 2008
	– Date completed	4 February 2008
2.	Loan negotiations	
	Loan 2499 – PFR1	
	– Date started	29 October 2008
	– Date completed	30 October 2008
	Loan 2975/2976 – PFR2	
	– Date started	3 December 2012
	– Date completed	4 December 2012
3.	Date of Board approval	
	Loan 2499 – PFR1	19 December 2008
	Loan 2975/2976 – PFR2	18 December 2012
4.	Date of loan agreement	
	Loan 2499	6 February 2009
	Loan 2975/2976	8 May 2013
5.	Date of loan effectiveness	
	Loan 2499 – PFR1	
	– In loan agreement	6 March 2009
	– Actual	6 March 2009
	– Number of extensions	None
	Loan 2975/2976: PFR2	
	– In loan agreement	6 August 2013
	– Actual	30 July 2013
	– Number of extensions	None

¹ Formerly called Planning and Development Department.

6.	Program completion date	
	Loan 2499: PFR1	
	– Appraisal	30 June 2012
	– Actual	30 June 2014
	Loan 2975/2976: PFR2	
	– Appraisal	28 February 2017
	– Actual	28 February 2017
7.	Loan closing date	
	Loan 2499: PFR1	
	– In loan agreement	31 December 2012
	– Actual	30 June 2014
	– Number of extensions	2
	Loan 2975/2976: PFR2	
	– In loan agreement	31 August 2017
	– Actual	31 August 2017
	– Number of extensions	None
8.	Financial closing date	
	Loan 2499: PFR1	
	– Actual	31 March 2016
	Loan 2975/2976: PFR2	
	– Actual	31 May 2018
9.	Terms of loan	
	Loan 2499: PFR1	
	– Interest rate	1% per annum during the grace period and 1.5% per annum thereafter
	– Maturity (number of years)	32
	– Grace period (number of years)	8
	Loan 2975: PFR2	
	– Interest rate	LIBOR + 0.6% per annum, less credit of 0.2%
	– Commitment charges	0.15% per annum
	– Maturity (number of years)	25
	– Grace period (number of years)	5
	Loan 2976: PFR2	
	– Interest rate	1% per annum during the grace period and 1.5% per annum thereafter
	– Maturity (number of years)	32
	– Grace period (number of years)	8
10.	Terms of relending (if any)	
	Loan 2499: PFR1	
	– Interest rate	1% per annum during the grace period and 1.5% per annum thereafter
	– Maturity (number of years)	32
	– Grace period (number of years)	8
	– Second-step borrower	Government of Sindh
	Loan 2975: PFR2	

– Interest rate	LIBOR + 0.6% per annum
– Commitment charges	0.15% per annum
– Maturity (number of years)	25
– Grace period (number of years)	5
– Second-step borrower	Government of Sindh

Loan 2976: PFR2

– Interest rate	1% per annum during the grace period and 1.5% per annum thereafter
– Maturity (number of years)	32
– Grace period (number of years)	8
– Second-step borrower	Government of Sindh

11. Disbursements

a. Dates

	Initial Disbursement	Final Disbursement	Time Interval
L2499 – PFR1	19 April 2010	9 December 2014	55 months
L2975 – PFR2	1 December 2013	31 May 2018	54 months
L2976 – PFR2	12 February 2014	31 May 2018	52 months
	Effective Date	Actual Closing Date	Time Interval
L2499 – PFR1	6 March 2009	31 March 2016	84 months
L2975 – PFR2	30 July 2013	31 May 2018	58 months
L2976 – PFR2	30 July 2013	31 May 2018	58 months

b. Amount

(i) Loan 2499-PAK (COL): PFR1 (SDR thousand)

Category	Original Allocation (1)	Last Revised Allocation (2)	Amount Canceled (3)	Net Amount Available (4)	Amount Disbursed (5)	Undisbursed Balance (6=4-5)
Civil works	9,609.48	9,038.72	(570.76)	9,038.72	9,038.72	
Materials and equipment	3,670.77	3,587.49	(83.28)	3,587.49	3,587.49	
Engineering design and construction supervision	2,404.28	2,162.87	(241.41)	2,162.87	2,162.87	
Consulting services and project management	2,464.16	2,222.14	(242.02)	2,222.14	2,222.14	
Recurrent cost:						
Operational support fund	6,654.61	6,587.57	(67.04)	6,587.57	6,587.57	
Interest charge	665.00	446.71	(218.29)	446.71	446.71	
Unallocated	69.70		(69.70)			
Total	25,538.00	24,045.50	(1,492.50)	24,045.50	24,045.50	
Equivalent of \$	38,000.00	36,970.55	1,029.45	36,970.55	36,970.55	

OSF = operational support fund.

(ii) Loan 2975: PFR2 (United States dollar, thousand)

Category	Original Allocation (1)	Increased during Implementation (2)	Canceled during Implementation (3)	Last Revised Allocation (4=1+2-3)	Amount Disbursed (5)	Undisbursed Balance (6 = 4-5)
Civil works	13,499.38		(12,534.00)	965.38	965.38	
Equipment and machinery	1,140.82		475.41	1,616.23	1,616.23	
Consultants and contractors	2,650.49		(2,413.42)	237.07	237.07	

Category	Original Allocation (1)	Increased during Implementation (2)	Canceled during Implementation (3)	Last Revised Allocation (4=1+2-3)	Amount Disbursed (5)	Undisbursed Balance (6 = 4-5)
Recurrent cost:	3,599.77		378.23	3,978.00	3,978.00	
Operational support fund						
Interest charges	1,282.44		(1,021.39)	261.05	261.05	
Unallocated	2,927.09		(2,927.09)			
Total	25,100.00		(18,042.27)	7,057.73	7,057.73	

(iii) Loan 2976 – PFR2 (SDR thousand)

Category	Original Allocation (1)	Increased during Implementation (2)	Canceled during Implementation (3) ^a	Last Revised Allocation (4=1+2-3)	Amount Disbursed (5)	Undisbursed Balance (6 = 4-5)
Civil works	26,095.00		(23,958.62)	2,136.38	2,136.38	
Equipment and machinery	2,205.00		1,340.68	3,545.68	3,545.68	
Consultants and contractors	5,124.00		(4,614.75)	509.25	509.25	
Recurrent cost: OSF	6,959.00		1,343.97	8,302.97	8,302.97	
Interest charges	2,245.00		(2,051.86)	193.14	193.14	
Unallocated	5,722.00		(5,722.00)			
Total	48,350.00		(33,662.58)	14,687.42	14,687.42	
Equivalent \$	74,000.00		(53,282.40)	20,717.60	20,717.60	

OSF = operational support fund.

^a This figure also includes impact of foreign currency fluctuation amounting nearly \$5.7 million

12. Local costs (financed)

- Amount (\$) Not applicable²
- Percent of local costs
- Percent of total costs

C. Program Data

1. Program cost (\$'000 million)

Cost	Appraisal Estimate	Actual
(i) Loan 2499: PFR1		
Foreign exchange cost		
Local currency cost		
Total	50.0	49.5
(ii) Loan 2975/2976: PFR2		
Foreign exchange cost		
Local currency cost		
Total	139.2	36.7

Note: Local and foreign currency cost breakdown does not apply to this MFF.

2. Financing plan (\$'000 million)

(i) Loan 2499-PAK(COL) – PFR1

Cost	Appraisal Estimate	Actual
Implementation cost		
Borrower-financed	12.00	12.07
ADB-financed	37.01	36.29
Other external financing		
Total implementation cost	49.01	48.36

² Foreign and local split of currencies not applicable on this MFF as it was approved after 15 March 2006

Cost	Appraisal Estimate	Actual
Interest during construction costs		
Borrower-financed		
ADB-financed	0.99	0.68
Other external financing		
Total interest during construction		
cost	0.99	0.68
Total Cost	50.00	49.05

(ii) Loan 2975/2976: PFR2

Cost	Appraisal Estimate	Actual
Implementation cost		
Borrower-financed	40.06	8.97
ADB-financed	92.09	27.25
Other external financing		
Total implementation cost	135.00	36.21
Interest during construction costs		
Borrower-financed		
ADB-financed	7.00	0.53
Other external financing		
Total interest during construction		
cost	7.00	0.53
Total implementation cost	139.15	36.74

3. Cost breakdown by project component (\$'000 million)

(i) Loan 2499 – PFR1

Component	Appraisal Estimate	Actual
A. Urban planning, institutional development, and program implementation support	6.60	8.74
B. Urban water supply and wastewater improvements	16.84	21.94
C. Solid waste management improvements	6.09	3.76
D. Operational and transition support	8.00	13.92
Interest during implementation	0.99	0.69
Total base cost	38.52	49.05
Physical and price contingencies	11.48	
Total project cost	50.00	49.05

(ii) Loan 2975/2976 – PFR2

Component	Appraisal Estimate	Actual
A. Urban planning, institutional development, and program implementation support	14.91	1.26
B. Urban water supply and wastewater improvements	73.05	11.08
C. Solid waste management improvements	14.71	6.70
D. Operational and transition support	15.06	17.18
Interest during implementation	7.01	0.53
Total base cost	124.74	36.74
Physical and price contingencies	14.41	
Total project cost	139.15	36.74

4. Program schedule
(i) Loan 2499-PAK(COL) – PFR1

Item	Appraisal Estimate	Actual
Date of Contract with Consultants		
Firms:		
Mapping, Planning and Feasibility Studies	Q1 2009	Feb 2010
Program Management and Support to NSUSC	Q1 2009	Feb 2010
Mapping, Planning and Feasibility Studies	Q1 2009	Jul 2011
Review and Feasibility of Sukkur Intake	Q1 2009	Jun 2011
Management Support to P&DD	Q1 2009	May 2010
Urban Development Strategy for Sukkur	Q4 2009	Sep 2013
Construction Supervision Sewerage Khairpur	Q1 2009	Mar 2010
Independent Verifier	Q2 2009	Feb 2010
Urban Development Strategy for Larkana	Q4 2009	Sep 2013
Individual Consultants		
Regional Specialist for PSU	Q2 2009	Oct 2013
Municipal Services Specialist for PSU	Q2 2009	Dec 2009
Urban Development Specialist for PSU	Q2 2009	Jan 2010
Municipal Services Specialist (WWW) for PSU	Q2 2009	Jan 2010
Monitoring and Evaluation Specialist for PSU	Q2 2009	Jan 2012
Public Finance Specialist for PSU	Q2 2009	Feb 2012
Human Resource Specialist for PSU	Q2 2009	Mar 2012
Procurement and Contract Specialist for PSU	Q2 2009	Nov 2013
Resident Supervision Engineer	Q2 2009	May 2014
Four Assistant Resident Supervision Engineers	Q2 2009	May 2014
Four Site Inspectors		May 2014
Completion of Engineering Designs	Q2 2009	Q3 2010
Civil Works Contract		
Date of Award	Q3–Q4 2009	Q1 2010–Q3 2013
Completion of Work	Q1–Q2 2012	Q1 2011–Q2 2016
Equipment and Supplies	Q1 2010	Q2 2010–Q1 2013
Dates		
First Procurement	Q2 2009	Q3 2009
Last Procurement	Q3 2009	Q3 2013
Completion of Equipment Installation		
Start of Operations		
Completion of Tests and Commissioning	Q3 2012	Q2 2016
Beginning of Start-Up	Q3 2012	Q2 2016

NSUSC = North Sindh Urban Services Corporation, P&DD = Planning and Development Department, PSU = program support unit, Q = quarter, WWW = water and wastewater.

(ii) Loan 2975/2976 (Tranche 2)

Item	Appraisal Estimate	Actual
Date of contract with consultants		
1. Firms:		
(i) Independent Verifier	Q1 2014	Apr 2015
(ii) Detailed Engineering Design, Construction Supervision, and Energy Audit	Q1 2014	Jan 2016
(iii) A-4 – Construction Supervision – Sukkur Intake	Q2 2013	Jun 2015
2. Individual Consultants for PSU:		
(i) Regional Specialist	Q2 2014	Jul 2015
(ii) Monitoring and Evaluation Specialist	Q2 2014	Jul 2015
(iii) Municipal Services Specialist	Q2 2014	Oct 2015

Item	Appraisal Estimate	Actual
(iv) Human Resource and Communication Specialist	Q2 2014	Jul 2015
Completion of engineering designs		
Civil works contract ^a		
Date of award	Q4 2013	Dec 2013
Completion of work	Jun 2014	Aug 2017
Equipment and supplies		
Dates		
First procurement	Q2 2013	Apr 2015
Last procurement	Q1 2016	Dec 2015
Completion of equipment installation	Q1 2016	Aug 2017
Start of operations	Q2 2016	Aug 2017
Completion of tests and commissioning	Q2 2016	Aug-2017
Beginning of start-up	Q3 2016	Sep 2017

^a Only one civil works contract could be awarded for construction of new raw water intake at Sukkur.

5. Program performance report ratings

(i) Loan 2499-PAK (COL): PFR1

Implementation Period	Ratings	
	Development Objectives	Implementation Progress
From 6 Mar 2009 to 31 Jul 2009	Satisfactory	Highly Satisfactory
From 1 Aug 2009 to 31 Dec 2010	Satisfactory	Satisfactory
Rating in eOperations		
From 1 Jan 2011 to 30 Jun 2011	Potential Problem	
From 1 July 2011 to 30 Sep 2011	Actual Problem	
From 1 Oct 2011 to 31 Mar 2012	On Track	
From 1 Apr 2012 to 31 Mar 2013	Potential Problem	
From 1 Apr 2013 to 30 Jun 2014	On Track	

(ii) Loan 2975/2976 – PFR2

Implementation Period	Rating in eOperations
From 30 Jul 2013 to 30 Sep 2013	Potential Problem
From 1 Oct 2013 to 31 Dec 2013	Actual Problem
From 1 Jan 2014 to 30 Jun 2014	On Track
From 1 Jul 2014 to 30 Jun 2015	Potential Problem
From 1 Jul 2015 to 30 Sep 2015	Actual Problem
From 1 Oct 2015 to 30 Jun 2016	On Track
From 1 Jul 2016 to 30 Sep 2017	Actual Problem
From 1 Oct 2017 to 30 Sep 2018	On Track

D. Data on Asian Development Bank Missions

(i) Loan 2499-PAK(COL): PFR1

Name of Mission	Date	No. of Persons	No. of Person-Days	Specialization of Members
Appraisal 1	5–12 Jun 1998	5	40	a, b, c, d, e
Appraisal 2	17–28 Jul 1998	5	60	a, b, c, d, e
Fact-finding 22	Jan–7 Feb 2008	6	102	a, b, c, d, e, f
Consultation 1	7–14 Feb 2009	1	8	a
Consultation 2	23–25 May 2009	1	3	a
Review 1	21–26 Aug 2009	2	12	a, d

Name of Mission	Date	No. of Persons	No. of Person-Days	Specialization of Members
Inception	13–18 Dec 2009	6	36	a, d, g, h, i, j
Review 2	24–25 Feb 2010	1	2	a
Review 3	28–30 Oct 2010	1	3	a
Review 4	15 Apr 2010	1	1	a
Review 5	3–12 Nov 2010	6	60	a, d, h, j, l, m
Review 6	2–4 Feb, 6–7 Mar 2011	7	35	a, l, m, n, o, p, q
Consultation 3	29–30 May 2011	1	2	a
Midterm	21–26 Sep 2011	9	52	a, h, i, l, n, o, r, s, t
Review 7	18–26 Apr 2012	3	27	l, n, r
Review 8	3–14 Aug 2012	2	8	a, n
Review 9	28 Jan–13 Feb 2013	3	21	h, n, r
Review 10	27 Jun–1 Jul 2013	2	8	h, r
Review 11	9–13 Dec 2013	3	15	n, r, u
Review 12	9–18 Feb 2014	4	36	d, h, n, r
Project completion ^a		Not fielded		

a = principal urban development specialist, b = senior water and sanitation specialist, c = water supply and sanitation specialist, d = urban development specialist, e = development communication specialist (consultant), f = social development specialist, g = head project administration unit, h = project analyst, i = senior control officer, j = procurement consultant, k = environment specialist, l = senior environment specialist m = principal water supply and sanitation specialist, n = senior project officer, o = resident mission advisor (consultant), p = procurement officer, q = safeguards consultant, r = principal economist, s = senior safeguards officer, t = gender specialist (consultant), u = associate project officer

^a No project completion review mission was formally fielded. The Government of Sindh did not clear the mission request, citing the preoccupation of the government officials due to budget preparation. Another factor in declining the project completion report mission request by the government was the political unrest in project towns due to the closure of North Sindh Urban Services Corporation Limited on the orders of the Supreme Court of Pakistan.

Sources: Asian Development Bank.

(ii) Loan 2975/2976: PFR 2

Name of Mission	Date	No. of Persons	No. of Person-Days	Specialization of Members
Loan review 1	8–13 Dec 2013	3	15	c, d
Midterm project review	9–18 Feb 2014	9	81	a, c, d, e, g, h, i
Consultation 1	21–23 Dec 2015	2	6	e, f
Loan review 2	7–9 Oct 2015	5	14	b, c, d, f
Loan review 3	9–16 Mar 2015	3	15	d, e, f
Loan review 4	16–17 Mar 2016	2	2	d, f
Loan review 5	10–22 Feb 2016	3	26	d, f, e
Loan review 6	10–20 Jan 2017	2	20	d, f
Program completion review ^a	20–27 May 2019	2	12	f, g

a = director, b = advisor to executive director, c = urban development, d = project officer, e = procurement, f = project analyst, g = financial control, h = gender expert, i = safeguards expert.

^a The urban unit and Sindh Planning and Development Board of the Government of Sindh refused to meet the completion review mission. Because of North Sindh Urban Services Corporation Limited's closure, and the program support unit already wound up, the mission could not collect enough data on tranche 2 implementation. The mission came to know during the field visit that the assets of North Sindh Urban Services Corporation Limited and water supply and wastewater management operations have been transferred to the Public Health Engineering Department but the officials of Public Health Engineering Department were also not available to meet the mission in the month of Ramadan.

Sources: Asian Development Bank.

I. PROGRAM DESCRIPTION

1. Sindh is the second-most populous province of Pakistan. At appraisal, nearly half of its population lived in urban areas.¹ Quality and coverage of urban service delivery and urban poverty were and are the key challenges particularly in the secondary cities of Sindh facing rapid population growth.² The urban infrastructure and service delivery have not expanded in tandem with the population growth. Inadequate planning and infrastructure services management has kept the urban service costs high and quality low, impeding the economic competitiveness and livability standards of the secondary cities in Sindh. Insufficient and unreliable urban services have also damaged the urban environment, reduced the quality of life, and lowered the potential for investments in the secondary cities. Although the 2001 devolution reforms provided scope for more effective service provision, continued overlap and fragmentation of responsibilities between the local government and provincial agencies constrained the improvements. Alternative approaches are required to service provision, including separating service delivery needs from political interests, professionalizing urban management, and outsourcing to leverage private sector potential and cost recovery tariff regimes for sustainable operations.

2. Against this backdrop, the Asian Development Bank (ADB) approved a multitranche financing facility (MFF) in December 2008 for the Sindh Cities Improvement Investment Program (SCIIP) for \$300 million. The MFF will finance basic urban infrastructure improvements in Sindh's secondary towns through (i) the establishment of government-owned, professionally managed urban services corporations (USCs); (ii) support for urban sector reforms and capacity development; and (iii) priority investment in water supply, wastewater, and solid waste management (SWM) infrastructure.³ SCIIP was a 10-year program (2008–2018) aimed at improving the health and quality of life for an estimated 4 million residents in Sindh's participating secondary towns and improved economic competitiveness of the towns. The program outcome is enhanced quality, coverage, and reliability of water supply, wastewater, and SWM services for an estimated 570,000 households in the participating towns. The program outputs are elaborated in Section B of this report and summarized in Appendix 1.

3. The MFF delivered two tranches against the five as originally planned. ADB approved the first tranche for SDR25 million (\$38 million equivalent) from ADB's concessional ordinary capital resources loan (COL) on 19 December 2008, with original tranche closing date of 31 December 2012. Tranche 1 was to (i) improve urban services management, institutional development, and strengthen the Government of Sindh (GOS) capacity for strategic urban planning and reforms, and (ii) improve the management of water supply, wastewater, and solid waste management services in six participating town of North Sindh including Sukkur, New Sukkur, Khairpur, Shikarpur, Larkana, and Rohri. For tranche 2, ADB approved two loans on 18 December 2012, one for \$25.1 million from ADB's ordinary capital resources (OCR), and the other for SDR 48.4 million (\$74 million equivalent) from ADB's COL to increase the quality, reliability, and coverage of water supply, wastewater, and solid waste management services in the participating towns. The original MFF utilization period was up to 31 December 2018. ADB closed the loan account of the final tranche (tranche 2) on 31 May 2018, prior to end of the MFF utilization period. ADB fielded the facility completion review (FCR) mission in May 2019.

¹ ADB. 2004. *Technical Assistance to the Islamic Republic of Pakistan for Preparing the Sindh Basic Urban Services Project*. Manila (TA 4534-PAK, approved on 23 December 2004, supported program preparation).

² Secondary towns are the towns with population between 50,000 and 1 million.

³ ADB. 2008. *Report and Recommendation of the President to the Board of Directors: Proposed Multitranche Financing Facility and Technical Assistance Grant to the Islamic Republic of Pakistan for Sindh Cities Improvement Investment Program*. Manila.

II. DESIGN AND IMPLEMENTATION

A. Program Design and Formulation

4. The MFF program was to establish a foundation for a 10-year partnership between ADB and the GOS to revitalize Sindh's second-tier cities and avoid the piecemeal approach of past urban projects. The program was consistent with ADB's strategy for the urban sector at appraisal.⁴ ADB's country strategy and program at appraisal emphasized urban sector interventions focusing on institutional reforms and investments to improve municipal service delivery.⁵ The country partnership strategy, 2015–2019 for Pakistan also highlights institutional, policy, and regulatory reforms as core components of any infrastructure investment to ensure efficient water use and investment, and sustainable delivery of urban services.⁶ ADB financed a team of consultants to prepare a comprehensive sector assessment, and the MFF (footnote 1). The design required long-term investments with sector reforms and continued government engagement for transformative changes in urban services delivery. The MFF modality was the right financing instrument as the program allowed progressive buildup of a broad platform for engaging GOS on core reforms, and at the same time allowed the depth to avoid the piecemeal approach to urban development as practiced in the past. The program had a clear road map whereby the municipalities were to establish well-managed utilities, sound financial management, proper regularity oversight, and need-based measurable and targeted subsidies. Progress on the framework financing agreement and reforms action plan was one of the criteria for ADB's continued support under the program. It also provided the opportunity and flexibility to undertake the interrelated physical and nonphysical investments over the medium-term in a logical sequencing to support long-term GOS objectives for balanced and sustained urban development. The process adopted for program formulation was appropriate. Adequate consultations were held throughout the design stage with the provincial government, local government officials, taluka⁷ municipal administrations (TMAs), community, and nongovernment organizations which indicated broad support for the program. Focus group discussions were held with representatives of schools; labor, women, religious groups; and the business sector at taluka level. Willingness-to-pay surveying was done in 2008 following ADB guidelines, and additional consultations were held in tranche 1 towns. Taluka councils passed resolutions to participate in SCIIP after extensive consultation. ADB undertook robust risk assessments during over 5 years of program preparation period. Nevertheless the political risk associated with urban reform, based on the history of such efforts in the past and complex political economy of North Sindh were still higher than it was envisaged for making long-term commitment on urban reforms and investments through an MFF.⁸

5. The program was consistent with the country's development objectives at appraisal and at completion. The medium-term development framework (2005–2010), Pakistan's Vision 2030, and Framework for Economic Growth envisage livable cities as engines of national growth, and centers of economic activity, culture, and knowledge.⁹ At appraisal, the devolution of administration, finances, and functions to elected local governments was a major policy objective of the government. The Sindh Local Government Ordinance 2001, entrusted the TMAs with the municipal functions; but related financing, skills, and accountability mechanisms were not fully

⁴ ADB. 1999. *Urban Sector Strategy*. Manila.

⁵ ADB. 2005. *Country Strategy and Program Update: Pakistan (2006–2008)*. Manila.

⁶ ADB. 2015. *Country Partnership Strategy, Pakistan, 2015–2019*. Manila.

⁷ Taluka is a district subdivision.

⁸ ADB. 2010. *Completion Report: Mega City Development Project*. Manila.

⁹ Government of Pakistan, Planning Commission. 2007. *Vision 2030—Pakistan in the 21st Century*. Islamabad; Government of Pakistan, Planning Commission. 2011. *The Framework for Economic Growth*. Islamabad.

devolved.¹⁰ The program was aligned to address these gaps in devolved service delivery and strengthen devolved municipal institutions and functions. No design changes were introduced during implementation, except that the requirement of opening an escrow account for disbursement of operational support fund (OSF) was waved under tranche 1. The elected local governments were dissolved in 2010, and government-appointed administrators were running the city government from 2010 to 2016. No changes were made in the design to cater for this in anticipation of the re-election of the local governments that kept on getting delayed. Similarly, the construction of three landfill sites under tranche 1, were shifted in the tranche 2 scope since land for two out of three landfill sites could not be acquired during tranche 1.

B. Program Outputs

(i) Part A: Urban Planning, Institutional Development, and Program Implementation Support for Institutional Reforms

6. Part A intended support to the program support unit (PSU) and the urban policy and strategic planning unit (the urban unit) in the Sindh Planning and Development Board (P&DB), formerly called the Planning and Development Department. Part A was to support the PSU for (i) executing the reform agenda, including rolling out the regional USCs concept to other city clusters; (ii) preparing subproject appraisal and providing support on safeguards; and (iii) monitoring and evaluating the program. An urban unit was to be established and supported for urban policy, strategic regional and town planning, and information systems. The program was also to support TMAs to monitor USCs and develop town planning capacity. Tranche 1 included support to North Sindh Urban Services Corporation (NSUSC)—Pakistan's first regional public sector USC for (i) technical, financial, and organizational management; (ii) subproject identification, design, procurement and implementation; (iii) enhanced private sector participation; (iv) financial management systems; and (v) surveys, studies, and training. It also included digitized mapping of participating towns, and making these maps publicly available.

7. NSUSC started operations by end of 2010 after basic establishment and development of systems. Its initial focus on operations diluted soon with overwhelming demand for infrastructure development. Due to limited staff capacity, NSUSC was unable to absorb inputs of multiple consultancy firms hired for its operational improvements. Many outputs remained undelivered or could not be internalized in operations. ADB maintained its handhold with PSU and NSUSC to maintain focus on operations but political and GOS interest pushed it for new infrastructure development. As a result, no performance-based contracts could be executed. Full operation and maintenance (O&M) recovery-based tariffs and volumetric metering were not implemented. Larkana and Shikarpur had no tariff for any service. Continued weak performance of board of directors (BOD), high turnover of senior management, and resignation, or removal of mid-level staff in 2014 by GOS, further deteriorated NSUSC performance during tranche 2. In March 2017, the Supreme Court of Pakistan (SCP) ordered to close NSUSC after completing the works and handing over assets to the Public Health and Engineering Department (PHED) for operations.¹¹

8. The GOS established urban unit, with a delay of 12 months. The urban unit prepared city development strategies for Sukkur and Larkana under tranche 1, and developed digitized maps of all participating towns. The urban unit was also to support the participating TMAs in monitoring USC performance for which dedicated staff was hired under PSU. Many critical actions included

¹⁰ Government of Sindh. 2001. *Sindh Local Government Ordinance 2001*. Karachi.

¹¹ SCP ordered the closure of NSUSC while disposing of a constitutional petition filed by a lawyer from Shikarpur, complaining about poor water supply, wastewater, and SWM services across Sindh.

in the framework for reforms remained undelivered, as the GOS started losing interest in the local governments and dissolved local government assemblies in 2010. Also, some reforms like tariff revisions could not be introduced, although different proposals were developed for these changes, because GOS did not have the political will and improvement in services was also limited to selected areas only. The urban unit was to support the participating TMAs in monitoring USC performance and developing town planning capacity, but this was partly achieved. The urban unit, undertook city development strategies for Sukkur and Larkana under tranche 1, and prepared digitized maps of all participating towns but these maps are not made publicly available.

9. Part A of tranche 2 included support to PSU in (i) providing consultancy for detailed engineering design and construction supervision for tranche 3, and preparing tranche 4; (ii) hiring independent verifier and individual consultants, and (iii) organizing studies and training programs. For NSUSC, it included (i) consultancy for detailed engineering design and construction supervision, (ii) consultancy for technical and operations support, and (iii) international and national individual consultants. Throughout the implementation, the GOS was weighing whether to continue or discontinue the program. The GOS did not allow the PSU to hire the consultants for tranches 3 and 4. Later on, ADB dropped the two tranches because of diminishing interest of GOS and inadequate time left for MFF utilization. PSU hired an independent verifier and six individual consultants, with 2 years' delay but could not conduct studies or training programs. The NSUSC could only hire consultants for detailed engineering design, construction supervision and energy audit, and for the construction supervision of Sukkur raw water intake works. The NSUSC BOD did not permit hiring of the operational support and performance benchmarking consultants. As NSUSC senior management was replaced and mid-management resigned, there was a sudden loss of capacity. Service quality further deteriorated during tranche 2, as NSUSC got embroiled in the SCP's hearing regarding GOS's poor performance in the services delivery, and related investigation by the National Accountability Bureau. Complaints about NSUSC operations and concerns of political leadership, district administration, and the population of the participating towns substantially increased in the process. During tranche 2, the urban unit remained detached from the project, mainly because there was no funding to support urban unit's activities.

(ii) Part B: Water Supply and Wastewater Management Improvements

10. Part B focused on water supply and wastewater management, including system mapping and planning; source identification, development, improvement, and augmentation; raw water transmission, storage, and treatment; treatment plant rehabilitation; treated water storage, transmission, distribution network and service connection improvement; reduction in nonrevenue water (NRW); bulk and individual water metering; water quality monitoring; drainage and sewerage network improvements; and wastewater treatment plant rehabilitation and construction. Tranche 1 financed (i) investments in water supply system augmentation and rehabilitation; (ii) pilot distribution network improvement (DNI) schemes in specific urban council of Khairpur, New Sukkur, Rohri, and Sukkur; (iii) groundwater monitoring in Larkana and Shikarpur; (iv) improvements to wastewater management in Khairpur and Rohri; and (v) small-scale investments in drainage and sewerage networks. At completion, one water treatment plant (WTP) was completed and potable water was supplied in Khairpur meeting national quality standards, while the works on three water treatment plants and metering were partially completed mainly due to delays in procurement, tax issue in payments to contractors, and interference of board of directors (BOD) in operational decisions.¹² These works were completed under tranche 2, expanding the potable water supply to 3,411 households. However, at the time of FCR, the treatment plant at

¹² These include two ICB contracts for rehabilitation of three WTPs and six DNI zones, and two national competitive bidding contracts for the rehabilitation of a rapid sand water filter and small capital works.

Khairpur was not functioning due to PHED's poor maintenance of the filter beds and nozzles. The treatment plant at Bandur road Sukkur was also being operated beyond its treatment capacity causing water quality issues. NSUSC procured 12,000 meters against a target of 18,000 meters. Of this, 2,752 meters were installed but were not being used. The NSUSC board stopped its management from installing the remaining meters. The improvement of water supply intake for about 6,000 households of Rohri, could not be achieved since works for shifting wastewater disposal upstream of the Rohri water intake were not executed. Tranche 1 aimed to increase revenues through updating the consumer database, reducing illegal connections and NRW, and developing a groundwater quality monitoring system. At completion, the household coverage increased by 30%. Average recovery was 42% of the amount billed, and NSUSC remained dependent on OSF. At the time of FCR, the average recovery against billing was 47% in Rohri, 42% in Sukkur, and only 13% in Khairpur. The abnormally low recovery in Khairpur was due to inadequate and poor water supply (Table A1.8, Appendix 1). The borrower reported an unverifiable NRW range of 45%–55% against the 10% reduction target (from 50% to 40%).¹³ Similarly, against a target of providing portable water to 18,000 households for more than 20 hours per day on average in six DNI zones, 3,411 (19%) households in four DNI zones were receiving potable water for 10 to 12 hours per day (Appendix 1).

11. NSUSC awarded eight contracts under tranche 1 to rehabilitate 13 wastewater disposal stations in Larkana, Khairpur, and Shikarpur, along with related sewerage and drainage networks. The scope of sanitation in Sukkur, New Sukkur, and Rohri was limited as GOS continued financing sanitation works that were not in line with investment plans developed by NSUSC, but NSUSC was forced to takeover this poor quality work after PHED completed it. At completion of tranche 1, more than 20,000 households in Khairpur had improved sewerage flow, against the target of 27,500 households. NSUSC did not award any works for wastewater treatment under tranche 1.

12. Part B of the tranche 2 included investments in (i) water supply improvements in Sukkur, New Sukkur, Rohri, Jacobabad, and Khairpur; and (ii) wastewater management improvements in Sukkur, New Sukkur, Rohri, Khairpur, Larkana, Shikarpur, Ghotki, and Jacobabad. Tranche 2 also included eight subprojects for water supply improvement including water treatment plants, transmission lines and distribution network, bulk and household metering, DNI zones, reduction in NRW, and augmentation of raw water intake. NSUSC could award only one contract for Sukkur raw water intake while other contracts were not awarded due to lack of strong government commitments. At NSUSC's closure, three additional water supply improvement contracts were at final stage of awards and were expected to be awarded in March 2017. (Table A2.1, Appendix 2).

13. The raw water intake subproject under tranche 2 provided up to 40 million gallons per day (MGD) of additional water to Sukkur. However, as no contract could be awarded for rehabilitating or enhancing the capacities of the existing WTPs, the water provided to the households is partially treated. Incomplete works of tranche 1 packages—international competitive bidding (ICB) 3 and ICB4—were also completed under tranche 2. However, due to poor maintenance, lack of staff and capacity of TMA Sukkur, to which these works were handed over, the Sukkur intake works were out of operation at the time of the FCR, and the water filtration plants rehabilitated under tranches 1 and 2 were supplying partially treated water due to overloading.¹⁴ The Sukkur water intake was dysfunctional as four of its pumping stations were in disrepair.

¹³ Government of Sindh, Planning and Development Department. 2016. *Sindh Cities Improvement Investment Program – Tranche 1 Completion Report*. Karachi. Data cannot be verified as NSUSC closed in March 2017.

¹⁴ TMA Sukkur is managing the municipal services itself; in all other towns (except SWM), PHED manages these operations. Cumulative treatment capacity of two WTPs in Sukkur is 10 MGD versus the actual need of 20 MGD.

14. Part B of tranche 2 also included the procurement of eight packages for the improvement in sewerage and drainage systems of the participating towns. At completion, NSUSC could procure two packages for supply of sewerage and drains cleaning equipment. Of these two packages, one (B-13) was merged with another contract under Part C: solid waste management, and procured through ICB, whereas, the second package (with nine lots) was procured through shopping. Details are in Table A2.2, Appendix 2. The remaining contracts were not awarded because the engineering designs of these contracts were not prepared in time as NSUSC focus remained on the design and award of water supply improvement work only.

(iii) Part C: Solid Waste Management Improvements

15. Part C of the MFF focused on investments in primary and secondary storage and collection, waste reduction, recycling, reuse and recovery, treatment, and final sanitary disposal of solid waste. Tranche 1 included (i) construction of landfill facilities in Khairpur, Larkana, Shikarpur, and Rohri; (ii) procurement of solid waste collection and disposal equipment; and (iii) provision of improved communal bins for waste storage. At completion, 300 ramps were constructed against a target of 520 that were rarely used due to steep gradients. NSUSC completed studies for four landfill sites but the landfills could not be constructed because of land acquisition issues and cost overrun. The landfill sites were subsequently shifted into the tranche 2 scope. NSUSC procured equipment for primary and secondary collection with a capacity to transport more than 800 tons of waste daily (70% of household waste). Nevertheless, NSUSC continued to dump the solid waste in the open spaces due to lack of proper land-fill sites

16. Part C of subsequent tranches was to finance similar investments in collection, final disposal, and management of solid waste by building on the results of earlier tranches, particularly on private sector participation for SWM. Under tranche 2 specialized equipment for solid waste collection, transportation and sewer cleaning was procured which further improved the waste collection capacity of NSUSC. Tranche 2 also included the development of 3 sanitary landfill sites for Khairpur, Shikarpur, and combined facility for Sukkur, New Sukkur, and Rohri. However, the contracts for landfill sites could not be awarded, primarily because the land could not be acquired for Shikarpur, Sukkur, and Rohri due to delay in the provision of funds for land acquisition. Land for Khairpur landfill site was acquired but the work was not awarded because NSUSC could not prepare the transaction documents to engage the private sector concessioner in the absence of operations support consultants, which were not hired due to indecision by GOS. However, the procurement of equipment for primary and secondary collection further enhanced the capacity of the TMAs to collect 70% of the generated solid waste (Table A1.2, Appendix 1). Only TMA Sukkur outsourced solid waste collection services to a private company in May 2019. However, solid waste continued to be disposed in open dumps and leased plots in the absence of landfill sites.

(iv) Part D: Operational and Transition Support Funding

17. Part D provided financing for (i) bridging the short-to-medium term operational cash shortfalls of the USCs with GOS grant funds, and (ii) transition support funding to bridge the short-term operational cash shortfalls of the USCs with GOS loan funds. Part D financing was estimated at \$30 million for the MFF including (i) \$8 million under tranche 1, (ii) \$13.5 million under tranche 2, and (iii) \$9 million under the remaining three tranches to be provided, on a declining basis.

18. At completion, tranche 1 OSF expenditure were \$11.1 million equivalent—39% above appraisal estimates. Under tranche 2, the actual OSF expenditure stood at \$16.0 million—19% higher than the estimates. The OSF was to be provided on a declining basis with the improvement in USC's financial health. However, NSUSC always remained in operating deficit due to

inadequate revenue collection, limited improvement in service quality, and lack of will of the GOS to introduce cost recovery tariff or a subsidy mechanism. The GOS did not provide transition support loan to NSUSC since the NSUSC did not earn enough revenues for debt servicing.

C. Program Costs and Financing

19. **Multitranche financing facility.** The appraised program cost was \$400 million through five tranches consisting of \$300 million (75%) ADB financing and \$100 million (25%) GOS share.¹⁵ However, only two tranches for \$137.1 million equivalent could be delivered.¹⁶ Due to delays of earlier tranches, and the lack of commitment of the GOS, no further tranches were processed. At completion, the program cost was \$85.8 million including ADB financing of \$65.8 million (75%) and GOS financing of \$21.0 million (25%) (Appendixes 3 and 4).¹⁷

20. **Tranche 1.** The appraised cost was \$50 million, including \$38 million (76%) ADB financing and \$12 million (24%) GOS financing. Tranche 1 completed at \$49.1 million, comprising \$37 million equivalent (75%) financed by ADB's COL and \$12.1 million equivalent (25%) by the GOS. Civil works completed with \$19.2 million—40% above appraisal estimates.¹⁸ Because of this, landfill sites were dropped and included in tranche 2 scope. OSF expenses stood at \$11.1 million—28% above the appraisal estimates. Consultancy cost increased to \$6.8 million—18% above estimates. The increase was due to the 24 months extension in implementation. Tranche 1 completed at 2% lower than the estimated cost, as some works remained incomplete due to nonpayment to contractors on account of tax and site handover issues.¹⁹

21. **Tranche 2.** The appraised tranche 2 cost was \$139.8 million, including \$99.1 million (71%) ADB financing and \$40.7 million (29%) GOS financing.²⁰ At completion, tranche 2 cost was \$36.7 million, of which \$27.8 million (76%) was from ADB financing and \$9.0 million (24%) was the GOS contribution. The tranche 2 cost was under-utilized since the GOS remained indecisive about continuing or discontinuing NSUSC, which deteriorated NSUSC performance and profile beyond repair and ultimately resulted in its closure on the orders of the SCP. Despite ADB's repeated requests to clarify about Project's fate, the GOS did not come up with any alternate proposal for continuing the project. Accordingly, ADB cancelled the unspent amount of \$71.3 million equivalent for tranche 2 and closed tranche 2 on 28 May 2018 after settling all outstanding liabilities.

D. Disbursements

22. Disbursements followed the ADB's *Loan Disbursement Handbook* (2007, as amended from time to time). ADB used the direct payment procedure for payments exceeding \$100,000, and advance fund to pay operational expenses and small payments of less than \$100,000. The loan account for tranche 1 was closed with 17 months delay and for tranche 2 with 5 months delay because the refund of the unspent advance was not timely completed. The baseline disbursement projections were followed for tranche 1 except in 2012, when only \$12 million was disbursed against the projected \$22 million. The delays in contracts awards, slow disbursement of OSF, and delays on ongoing works led to this shortfall (footnote 19). ADB initially disbursed the OSF through an escrow account co-signed by the PSU, with payments verified by an independent verifier. This not only caused significant delays and affected operations but was also not

¹⁵ ADB financing included \$262 million from ADB's OCR and \$38 million from ADB's concessional OCR (COL).

¹⁶ This includes \$112 million from ADB's COL and the remaining \$25.1 million from ADB's OCR.

¹⁷ ADB cost at completion comprised of \$58.7 million from ADB's OCR and \$7.1 million equivalent from ADB's COL.

¹⁸ Increased after completion of engineering design and price escalation due to 2-years extension in tranche closing.

¹⁹ Includes the construction of (i) four WTPs in Sukkur and Khairpur, and (ii) six DNI zones in four cities.

²⁰ ADB financing included (i) a loan of \$25.1 million from ADB's OCR, and a loan of SDR48.4 million from ADB's COL.

consistent with government procedures. Subsequently, ADB eliminated the escrow account and allowed use of advance fund for OSF disbursements, which improved disbursements. However, the delays in the approval of annual operational plans (AOPs) continued to affect the process.

23. The original tranche 2 disbursement schedule was often not followed mainly due to the (i) delayed commencement of the only civil works contract awarded under tranche 2 due to the delay in the hiring of supervision consultants,²¹ (ii) delay in hiring of design and supervision consultants leading to the delay in engineering design and bidding of remaining subprojects,²² (iii) delays in procurement due to weak capacity of NSUSC in procurement and consultant recruitment,²³ and (iv) failure to hire the operations support consultancy due to GOS indecision. ADB hired a staff consultant (procurement specialist) to help NSUSC in preparing bidding documents, request for proposals, and evaluation reports; and facilitate NSUSC in contract negotiations. This significantly improved the situation, and by Q1 2017, procurement of three major civil works contracts was at the final stage of award before the NSUSC was closed by SCP. The comparison of projected and actual disbursements under tranche 2 is provided in Appendix 5.

E. Program Schedule

24. At appraisal, tranche 1's planned schedule was from January 2009 to June 2012. However, this had to be extended initially to June 2013 and then to June 2014. The key reasons for the extensions were (i) substantial delay in fully staffing NSUSC and PSU; (ii) persistent issues with contractors on taxes and payments—some of these issues remained unsettled even at the closure of tranche 1; (iii) delay in land acquisition for subprojects; (iv) delays in releases of counterpart funds; (v) delays in procurement and execution of civil works; (vi) delays in recruitment and subsequent termination of design and engineering consultants due to poor performance; and (vii) delayed decisions by the BOD and GOS. Four contracts for water supply improvement remained incomplete at closure of tranche 1 (footnote 12). ADB closed the loan account under tranche 1 in March 2016—18 months after the winding up period ended in October 2014. Delayed financial closure was due to delay in refund of unspent advance fund by the GOS.

25. ADB approved tranche 2 in December 2012 and scheduled to complete in August 2017. Tranche 2 faced abnormal implementation delays. A major challenge was the absence of elected local governments and political push by certain elements initially to close NSUSC and to revert to the old institutional arrangement relying on PHED. The restructuring of NSUSC followed, which started in early 2013, and involved the appointment of the new BOD with reduced members, removal of NSUSC top management, and subsequent resignations of the mid-management. This process took more than 2 years. This uncertainty and capacity gap damaged NSUSC credibility and its performance. The procurement of goods (primarily the solid waste equipment) was completed in Q4 2015—against the original schedule of Q1 2016. NSUSC awarded the first civil works contract in December 2013. However, the physical work could only be commenced in June 2015—after 18 months delay as the hiring of consultants for its construction supervision was delayed. Award of the consultancy contract for detailed engineering design and energy audit was also delayed by 24 months. Accordingly, the engineering design of the six critical civil works contracts (B1–B6) was completed in Q2 2016, and the bidding was carried out in Q4 2016—just 10 months before the tranche 2 closing date of 17 August 2017. ADB approved the bid evaluation

²¹ NSUSC awarded Package B-7 for the construction of new raw water intake at Indus river in Sukkur in July 2013, but the actual work commenced 24 months later, after hiring of the supervision consultants (Package A-4) in June 2015.

²² NSUSCF awarded the design and supervision consultancy in January 2016—30 months after tranche 2 effectiveness.

²³ First contract for supply of SWM equipment was awarded in November 2015 – 29 month after tranche 2 effectiveness.

reports of four contracts (B3–B6) in February 2017. However, the contracts could not be awarded because of the closure of NSUSC on SCP’s orders (para. 7). The physical works on the Sukkur raw water intake contract was completed in August 2017. ADB closed the loan accounts on 31 May 2018 with a 5-month delay, again due to the delay in the refund of the unspent advance fund.

F. Implementation Arrangements

26. P&DB, GOS, through PSU was the executing agency of the program.²⁴ The PSU was to lead the work on reforming city governance, rolling out of the USC model to new town clusters, conducting monitoring and evaluation, and ensuring safeguard compliance. The program established the NSUSC as the main implementing agency responsible for planning and operations in the participating towns of tranches 1 and 2.²⁵ Under tranche 1, an urban policy and strategic planning unit (the urban unit) was established within P&DB to provide strategic policy and planning guidance for province-wide reforms to support more effective urbanization. There was no change in the implementation arrangements during the life of the MFF, except a minor change in the funds flow mechanism under tranche 1 and the shifting of the construction of sanitary landfill sites from tranche 1 to tranche 2. ADB proposed different options to improve the institutional arrangements and restructuring of the project, however even the limited improvements the GOS agreed to, were not implemented fully. GOS closed the NSUSC in March 2017 and operations transferred, first to respective TMAs and then to PHED (para. 7).

G. Technical Assistance

27. ADB approved a project preparatory technical assistance (TA) grant of \$1.7 million in December 2004 (footnote 1), comprising (i) \$0.7 million financed by ADB’s Technical Assistance Special Fund, (ii) \$0.8 million by the Japan Special Fund, (iii) \$0.1 million by the Cooperation Fund for the Water Sector, and (iv) \$0.1 million by GOS. The TA achieved most of the outputs and was successful. The TA prepared the MFF program for ADB financing, supported subproject preparation, associated safeguards work, and proposed institutional and implementation arrangements. The TA closed on 24 November 2009 at a cost of \$1.6 million including the two supplementary TAs – one approved in March 2017, and the other in January 2008.

28. The program included an associated TA grant of \$2.5 million to improve the efficiency and accountability of NSUSC. The TA’s outcome and outputs were *partially achieved* and comprised on account of: (i) NSUSC’s focus on infrastructure development, (ii) poor performance of the design and construction supervision consultants at start, and (iii) delay in staffing of NSUSC. (Appendix 6). The TA was *partly successful* as it could not deliver all the outputs and the quality of the many outputs was substandard.²⁶ The TA consultants developed performance parameters only for some services, but these parameters were not internalized in NSUSC operations. The TA consultants conducted baseline perception survey and citizen report cards only at startup stage and were left incomplete. The TA scope was relevant, but the TA was *less efficient* as it was unable to complete all outputs, and *less effective*, since the outcome was *partially achieved*. ADB performance was *satisfactory* as it provided useful guidance to the TA consultants. The performance of the executing agency and the implementing agency was *less than satisfactory*, as they were unable to mainstream TA work in the program. The TA outcomes were rated *likely sustainable* as they were to be refined and institutionalized under tranche 2. However, because

²⁴ Formerly known as Planning and Development Department.

²⁵ NSUSC, Pakistan’s first regional USC, was established under Section 42 of the Companies Ordinance 1984.

²⁶ ADB. 2014. *Technical Assistance Completion Report: Improving Efficiency and Accountability of North Sindh Urban Services Corporation Limited*. Manila.

of the delays in program implementation, and subsequent closure of NSUSC, no sustainable institutional arrangement could be put in place.

H. Consultant Recruitment and Procurement

29. The consultants' recruitment followed ADB *Guidelines on the Use of Consultants* (2007 as amended from time to time) and the respective procurement plans. Under tranche 1, four international and four national consulting firms, and 10 individual consultants were hired for a total of 1,276 person-months input of which 1,062 person-months were consumed at completion. The poor capacity of the PSU and NSUSC substantially delayed hiring of consultants. On average, it took 513 days to hire the consulting firms which also led to tranche 1 implementation delays.²⁷

30. Procurement of works and goods followed the ADB Procurement Guidelines (2007, as amended from time to time) and the approved procurement plan. The procurement and completion of contracts was substantially delayed because neither the implementing agencies nor the consultants were able to attract quality procurement staff throughout implementation. NSUSC and PSU took 5 months on average to award, whereas completion of ICB contracts was delayed by 20 months. For the national competitive bidding contracts, the award took an average of 4 months and the completion was delayed by an average of 15 months. Details of tranche 1 subprojects is presented in Appendix 7. ADB provided continuous training and guidance to the PSU and NSUSC to offset the lack of procurement capacity in these organizations. The baseline projections for contracts awards were followed only for 2010–2011 where average achievement of contract awards targets was 90% (\$24 million against \$26 million). In 2012, the actual contracts were only 69% of the projections (\$9 million against the target of \$14 million).

31. The design and construction supervision consultants were replaced due to poor performance, which further delayed the project, caused irreparable loss of NSUSC's credibility, and seriously damaged its image in the eyes of the political leaders, GOS and the population of the participating towns. Inadequate design resulted in contract variations. The operational consultancy support was weak. Tariff structures could not be finalized, no services were outsourced, and performance-based systems were partially developed but not deployed to allow NSUSC to shift from input- to output-based budgets to attain financial viability. The AOPs with no clear performance and service targets delayed the release of AOP budget, undermining NSUSC's performance. The consultants performed no substantial work on project monitoring. No performance baseline was established, except citizen report cards. Delays in procurement and execution of subproject lead to a cumulative extension of 24 months in tranche 1 completion date. Despite this, four contracts remained incomplete by tranche 1 closure, undermining the achievements of tranche 1 outputs and outcome (footnote 12).

32. **Tranche 2.** The challenges of tranche 1 were also relevant to tranche 2. Of the six consulting firm packages, only three could be awarded.²⁸ The consultancy for tranches 3 and 4 could not be awarded because of initial startup delays of about 24 months, and later on, due to (i) poor performance of tranche 2, and (ii) indecision by the GOS about continuing the program. Despite ADB's regular follow-up, NSUSC could not award the most important consultancy contract for technical and business operational support as initially, the NSUSC BOD and then the GOS did not allow it to do so. PSU and NSUSC were supposed to hire various national and international individual consultants. However, only PSU could hire six national individual

²⁷ The shortest period for hiring a consulting firm was 250 days, and the longest period was 931 days.

²⁸ Includes (i) package A-1-3: independent verifier; (ii) package A-2: detailed engineering design, construction supervision, and energy audit; and (iii) package A-4: construction supervision of Sukkur intake works.

consultants, who except for performing daily operations of PMU did not perform their assigned role. The exception was a regional specialist who regularly reported on NSUSC's performance and coordinated the NSUSC work with TMAs and the local government. No individual consultant could be hired by NSUSC. The weak procurement capacity of the NSUSC and interference by BOD resulted to the delayed hiring of the independent verifier and construction supervision consultants of Sukkur intake (A-4) by 13 months, and the delayed awarding of the design and supervision consultancy for tranche 2 (A-2) by 23 months. The A-4 consultancy was not included in the procurement plan and was added later since the Sukkur intake subproject was already awarded but the construction supervision consultants (A-2) were not hired yet. The PSU did not manage the independent verifier's contract well as performance monitoring work included in their contract remained undelivered. The performance of A-2 consultants was *less than satisfactory*. Their designs went through many revisions, and they were unable to provide any procurement support to NSUSC. Construction supervision by A-4 consultants was *generally satisfactory*.

33. The delay in the hiring of A-2 consultants delayed the detailed design and bidding process. Poor procurement capacity of NCUSC and the A-2 consultants further delayed procurements. To mitigate this, ADB provided services of a staff consultant (procurement specialist) to guide NSUSC's procurement. NSUSC awarded only one civil works contract (B-7), one package for the supply of SWM and sewer cleaning equipment (Package B13/C2), and one package for sewer cleaning equipment (Package: B-18-I, with nine lots). Due to design issues and the addition of incomplete works of tranche 1 in the scope of the B-7 package, Upon NSUSC's request, ADB approved two contract variations and extension of time to complete the works. Per NSUSC's request, the supply of equipment was delayed as it did not have the space to store the equipment. As a result of these delays, the contract award projections were not achieved. (Appendix 8).

I. Gender Equity

34. The program was classified as *effective gender mainstreaming*. Most gender action plan (GAP) targets were not achieved, yet tranche 1 had generally positively impacted gender aspects. NSUSC's recruitment policy was gender-sensitive and it hired women from remote areas who worked comfortably in NSUSC. Female staff of the complaint registration unit CRU attended skill training programs enhancing their confidence and improving NSUSC interface with its women clientele. Women representation in NSUSC's BOD remained between 5% to 10% against a target of 33% mainly due to lack of interest instigated by controversies surrounding NSUSC operations. Women were not involved in program design, implementation, and monitoring. The tranche 2 performance of GAP implementation was *unsatisfactory*. NSUSC could not achieve target of hiring 33% women staff and had only 5% women employees at closure. (Appendix 9). TMA staff deputed to NSUSC also included only 13% women. No women groups were formed for monitoring of water supply. NSUSC did not arrange training programs on gender-sensitive planning and implementation for its management and staff against the GAP target of training 80% staff. NSUSC or PSU did not hire a gender specialist to facilitate and monitor GAP implementation, although it was agreed during the tranche 2 inception mission. ADB continued to push for this and helped finalize terms of reference for the gender specialist. The NSUSC's management wanted to hire the consultant after awarding major contracts, which did not happen. ADB was instrumental in revising the complaint tracking system to capture gender-desegregated data.

J. Safeguards

35. The NSUSC was in compliance with applicable laws and regulations of the country, the province, ADB Safeguard Policy Statement (2009), and the safeguard frameworks agreed in the framework financing agreement.

36. **Land acquisition and resettlement.** Tranches 1 and 2 were *category B* for involuntary resettlement, and *category C* for indigenous people. NSUSC prepared resettlement plans for sanitary landfill sites at Khairpur, Shikarpur, Sukkur and Rohri under tranche 1. Due to the delay in land acquisition, these subprojects were transferred to tranche 2. NSUSC could only acquire 10.2 hectares of land for the Khairpur landfill site after making full payment to the 41 affected persons identified in the resettlement plans. No persons were displaced, and no structures were dismantled. Land for the remaining landfill sites was not be acquired because of unavailability of funds. NSUSC updated the land acquisition and resettlement framework and resettlement plans and disclosed at appraisal of tranche 2, regularly provided due diligence report and resettlement plans updates. However, the GOS capacity to implement the resettlement plans remained weak—with this, none of the subproject requiring land acquisition could be implemented.

37. **Environment.** Tranche 1 was *category B* whereas tranche 2 was *category A* for the environment because the site for Sukkur raw water intake at Bhakkar island was located within the non-core area of a declared protected area (the Indus Dolphin Reserve), also a Ramsar site. Accordingly, NSUSC prepared an environmental impact assessment report, duly cleared by ADB and approved by the Sindh Environmental Protection Agency. For the remaining subprojects, NSUSC prepared initial environmental examinations and the Sindh Environmental Protection Agency approved them. NSUSC monitored the site-specific environment management plans and submitted the biannual monitoring reports to ADB which were disclosed on ADB's website. The subprojects under the MFF had no direct adverse environmental impacts during construction or rehabilitation. However, disposal of untreated wastewater in natural water bodies continued unabated as no wastewater treatment facility was developed. Similarly, dumping of solid waste in open fields also continued as no landfill site could be developed under the program.

K. Monitoring and Reporting

38. Compliance with tranches 1 and 2 covenants remained *less than satisfactory*. 59% of the tranche 1 covenants were complied with, the remaining 41% were either partly complied with or not complied with. Critical covenants in partial or noncompliance are (i) the implementation of action plan for reforms; (ii) provision of land required for subprojects; (iii) recruitment of project director, PSU and managing director, NSUSC through a competitive process; (iv) timely provision of counterpart funds and salaries of TMA staff deputed to NSUSC; and (v) establishment of performance management system, collection of baseline data, and periodic updating.

39. For tranche 2, of the 87 covenants, 46 were complied with, 32 partly complied with, 8 not complied with, and 1 was not applicable. The critical covenants that were not complied or partially complied with include (i) providing NSUSC with enforcement powers to collect service fees, (ii) tariff revision and allocation of OSF using output-based criteria, (iii) continuity of NSUSC to operate as a municipal services provider, (iv) appointment of the managing director (MD) and key management staff of NSUSC in consultation with ADB, (v) O&M of program facilities, (vi) timely provision of counterpart funds and land for subprojects, (vii) full implementation of GAP, and (viii) performance benchmarking for monitoring. One covenant that was “not applicable” pertained to the submission of audited project financial statements (APFS) by TMAs since TMAs did not have any direct financing under tranche 2. Details of compliance to loan covenants is in Appendix 10.

40. Key reasons for poor compliance were (i) lack of political support and commitment of the GOS, (ii) weak capacity of NSUSC and ineffective BOD, (iii) weak PMU oversight, and (iv) extensive engagement of judicial and accountability authorities with NSUSC's operations. ADB continued to highlight these issues during the project and portfolio reviews. The ADB team worked closely with NSUSC in developing performance benchmarks and systems to improve operational

efficiencies, including support in procurement and hiring throughout implementation. ADB team remained constantly embroiled in warding off political interference in the operations of NSUSC and ensuring that other entities are not allowed to create parallel systems in the NSUSC's mandated areas. Persistent undermining of NSUSC operation by multiple entities on one pretext or another still remained a challenge for continuity and quality of NSUSC operations. The delay in providing counterpart funds affected NSUSC operations and land acquisition. In the absence of benchmark and a performance management system, NSUSC was not able to demonstrate before the SCP and the National Accountability Bureau, the improvements it brought about in municipal service delivery, which ultimately resulted in the closure of the NSUSC.

41. Reporting requirements were *partly complied*. ADB received all required reports during tranche 1. Under tranche 2, reporting remained an issue. ADB received the APFS for PSU and audited entity financial statements (AEFSs) for NSUSC for tranche 1 with an average delay of 6 months and tranche 2 with an average delay of 10 months. Three APFSs were *qualified* because the financial record was not appropriately maintained and furnished to auditors in time. Of seven AEFS received, three were *unqualified*, three were *qualified* due to incomplete gratuity accrual, and for not providing records to the auditors in one case. The audit for FY2017 is still outstanding.

III. EVALUATION OF PERFORMANCE

A. Relevance

42. The program design is rated *less than relevant*. The outcome and outputs were relevant to the problems faced by the population of secondary cities of Sindh (para.1), to the ADB country strategy, and Pakistan's development objectives at appraisal and completion (paras. 4–5). The selection of MFF modality was appropriate (para. 4). The project design incorporated the lessons learned on earlier urban sector projects and provided an innovative urban service delivery mechanism through a professionally managed public utility company. The program design also included the much needed institutional and sector reforms (footnote 3). The results chain was designed appropriately. The program's intended outcomes had a logical linkage with the program outputs. However, the institutional arrangements were not feasible and the diminishing commitment of the GOS to the urban reforms over time reduced the program's relevance and caused implementation delays (para. 8). At midterm, the outputs of Part C of tranche 1 were curtailed, as land acquisition for proposed landfill sites could not be completed and there were also cost overruns in civil works (para. 20). This further reduced tranche 1 relevance, as, with the new solid waste collection equipment, the primary and secondary collection increased, and the collected waste was dumped in the open spaces creating serious environmental hazards (para. 15). Category reallocation of tranche 1's proceeds was made to meet shortfalls in the civil works, construction supervision, and OSF. This increase in OSF, however, reduced pressure on the NSUSC and GOS to improve cost recovery, performance, and operational efficiency. The dual role of infrastructure development and service delivery in three core areas of municipal services, thinly spread in six cities was beyond the capacity of the newly established NSUSC. The NSUSC's focus remained on capital works and less on operations during tranche 1 (para. 7). ADB and the GOS agreed to address these gaps by restructuring NSUSC and offloading responsibility for SWM partly back to the TMAs, which the GOS did not implement.

43. The program was anchored at P&DB instead of the Local Government, Rural Development & Housing, Town Planning Department (LGRD&HTPD)—the custodian of the municipal services in Sindh. Selecting P&DB as the executing agency, and weak coordination of the PSU, the urban unit, and NSUSC with LGRD&HTPD; and no direct investments for capacity building of the TMAs, resulted in the lack of ownership by the TMAs and the LGRD&HTPD. ADB

identified risks at appraisal, like delays in implementation, tariff increases, and replicating USC model, changes in the Sindh Local Government Ordinance 2001, bureaucratic constraints, and weak coordination among the GOS agencies and parallel investment in NSUSC cities. However, the mitigation measures were inadequate, and these issues simultaneously confronted by NSUSC became beyond redressal. The political complexities of selecting towns like Sukkur, Khairpur, and Larkana were analyzed. However, during implementation, the political elite of the project areas turned against the urban reforms and the concept of USCs (para. 25). BOD interference and micromanagement of NSUSC also constrained its ability to operate as a corporate entity managed by professionals. ADB sought to reduce the size of the BOD and improve its constitution, but this process was slow, and influenced by the political elite of North Sindh. Sequencing and prioritization of investments (DNI zones prior to provision of additional water) did not recognize interdependence. Resultantly, the outcome of tranche 1 could not be realized and tranche 2 scope remained substantially incomplete. The program failed to achieve most of the outputs (para.6–8).

B. Effectiveness

44. The overall program is rated *less than effective*. The rating is based on the outcome targets achieved against funds utilized. The outcome targets related to the improvement in water supply wastewater treatment could not be achieved. However, the targets for improvement in the coverage of SWM services was *partially met* (para. 16). Similarly, outputs of Part A of the MFF were also *partially achieved*. NSUSC and the urban unit were established however, performance-based contracting and O&M cost recovery-based water charges could not be achieved (para. 7). The output targets for Part B: water supply and wastewater improvement were also *partially achieved* with some improvement in the quantity of water and partial improvement in the quality, along with the extension of sewerage network (paras. 10–14). The output of Part C was *partially achieved* by providing SWM services to 72% of the households against the 80% target, whereas, at the time of FCR, about 70% of the estimated generated solid waste was being collected but dumped in available open space (para. 16). The inability to fully achieve envisaged outputs and outcome is largely due to inadequate readiness and risks mitigated at the design.

45. **Tranche 1.** Tranche 1 was rated *less than effective*. The outputs under Part A were *partly achieved*. Performance-based contracting with the private sector and tariff increase were not achieved, whereas the increase in households water bill collection could not be accessed due to the absence of credible data. Compliant management has improved. The outputs related to urban policy reforms and planning were achieved. The GOS established an urban unit in P&DB, that developed a strategic urban vision, and also prepared digitized maps for all six participating towns. Under Part B, the household water connections were at 30% against a baseline of 37% and a target of 52%. The lower percentage of household connections is also attributed to increase in population due to the influx of people in the participating towns post-2010 floods. The target of providing portable water supply for more than 20 hours to 18,000 households in DNI zones was also partially met. After handing over operations to the PHED, even the households earlier getting potable water, started to get partially treated water due to the overloading of rehabilitated water filtration plant in Khairpur (para. 10). Sewerage flow was improved for 20,000 households against the target of 27,000 but it was being disposed without treatment (para.11). Solid waste collection was at 72% against a target of 80% but it continued to be disposed in open plots as sanitary landfill sites were not constructed due to land acquisition issues (paras. 15–16)

46. **Tranche 2.** Tranche 2 was rated *ineffective*. The only significant achievement is the increase in intake capacity of Sukkur by 40 MGD. The target of providing improved water supply to 31,500 households was not achieved as the water being supplied is not safe (paras.10 and

13). Sukkur and Rohri could not get 22 MGD treated water as planned (para.12). The outputs related to cost recovery tariff, performance-based contracting with private operators, increase in households paying bills, water metering, volumetric billing, and reduction in NRW were also not achieved (para. 7). The GAP implementation was ineffective, and many GAP targets were either not achieved or partially achieved (para. 34). The interventions were ineffective because increased wastewater and solid waste collection was creating secondary environmental hazards due to insanitary disposal of waste (para. 37).

C. Efficiency

47. The program is rated *inefficient*. ADB did not conduct an economic analysis of tranche 1 because: (i) due to NSUSC closure, data was not available, and (ii) the physical works under tranche 1 remained incomplete by tranche closure (para.10). There was continued unrest in the tranche 1 towns as former employees of NSUSC resorted to strikes against its closure, due to which GOS did not clear ADB's request for fielding tranche 1 completion review mission.

48. The economic analysis of tranche 2 was also not undertaken because: (i) data was not available due to NSUSC's closure; (ii) no participating town under the MFF reported increase in service tariffs; (iii) the assets created by NSUSC were handed over to TMAs, and later on, to the PHED who could not maintain the infrastructure and most of it was either not operational or partially operational at FCR (para. 10). As a result, neither the water being supplied is potable, nor the wastewater disposal is done in an environment-friendly manner (para. 37). Collection of the solid waste improved, but reliable data for economic analysis was not available. Process efficiency analysis also supports the *inefficient* rating. Tranche 1 was completed with a 2-year delay, which resulted in the increased cost of works leading to the reduction in the scope and outputs of tranche 1 (paras. 15 and 24). Further, many works remained incomplete by tranche 1 closure that were completed under tranche 2 (para. 10). Similarly, due to the delay in the hiring of design and construction supervision consultants, the contracts for water supply and wastewater improvements could not be awarded.

D. Sustainability

49. The program is *unlikely sustainable*. ADB did not conduct the financial analysis of tranche 1 as the data on the cost of production and revenue from operations was not maintained after NSUSC closure. The PHED, which is currently running the operations, also remained inaccessible to the FCR mission. Considering the (i) extremely low tariffs for water services, (ii) no tariff for solid waste management services, (iii) very low collection efficiency of the water billing (para. 10), and (iv) inefficient operations with poor performance parameters and incentives, it is obvious that the operation of investment made under the program are financially unsustainable and will continue to run mainly through subsidies.

50. After taking over the operations from TMAs, the PHED that is totally dependent on provincial subsidies, also failed to maintain the filtration plants rehabilitated and upgraded under tranche 1, and the pumping station of Sukkur raw water intake at river Indus under tranche 2 (paras. 10 and 13). Four of the seven vertical pumping motors were out of operation due to poor maintenance at FCR stage. Similarly, the filtration plant at Khaki Shah, Khairpur was also not providing treated water because of poor maintenance (para. 10). The PHED, in terms of its technical capacity, is also dependent on TMA's staff for the operations of completed facilities. The operations of assets created by SCIIP are unlikely to sustain both financially and technically.

E. Development Impact

51. The overall impact of the program is *unsatisfactory*. The capacities for city planning, management, and urban service delivery have not been enhanced. Tranche 1 was expected to increase the per capita monthly income in interior Sindh by 2018 from the baseline of PRs1,446 in 2008; according to secondary data, the average monthly per capita income had increased substantially to PRs4,545 in 2016.²⁹ However, this cannot be attributed to the program. The diarrhea in children under 5 years of age was also reduced to 8.9% in 2016, against a target of below 10% under both tranches. However, there is no obvious relationship between this reduction and the program's interventions because treated water is still unavailable to the households of the participating towns (para. 10). Social safeguards were generally complied, so the program had no negative social impacts (paras. 35–36). Tranche 2 was to provide safe and reliable water supply to 70% of the population in participating towns. However, at completion, 32% of the population was provided partially treated or untreated water. Although the environment safeguards were complied with in the construction phase, the disposal of untreated wastewater into bodies of water and the dumping of solid waste in open fields had adverse impacts on the environment (para. 37). The program had a positive impact on institutional structure by creating the urban unit, however, it was unable to deliver a viable urban service delivery model (para. 8).

F. Performance of the Borrower and the Executing Agency

52. The performance of the borrower and the executing and implementing agencies is *unsatisfactory*. The GOS promptly established the Urban Unit, PSU, NSUSC, the steering committee; and met the effectiveness conditions. However, the commitment—particularly to reforms program—declined over time (para. 8). The GOS continued parallel investments in drainage and sewerage improvement in participating towns. Such schemes created unnecessary liability for the already overburdened NSUSC since operations was NSUSC's responsibility (para. 43). Similarly, despite giving special assurance, the GOS did not fully implement the strategic action plan for reform and investment under tranche 1, which was part of the urban sector road map and investment program (footnote 3). Critical actions on the action plan were either *partly complied with* or *not complied with* (para. 8). The SCP closed NSUSC with the consent of the GOS. The GOS also established the Sindh Solid Waste Management Board with a mandate to undertake SWM in the entire Sindh without informing ADB. The PSU facilitated establishing NSUSC and transferring operations from TMAs to NSUSC. However, it failed on its key role of monitoring and evaluating NSUSC performance and creating an effective interface with TMAs. The business and operational plans of NSUSC approved by the GOS did not have any measurable performance targets (para. 31). The PSU and NSUSC were mostly understaffed with high staff turnover. The NSUSC operated without a dedicated managing director for a significant period, and project directors (PDs) of PSU were given the acting charge of managing director NSUSC on many occasions, which was a conflict of interest. PD PSU and the director of the urban unit were not appointed through open competition, in violation of the covenants. All these gaps delayed implementation, affected the quality of operations, and above all, damaged NSUSC's reputation. Both tranches followed ADB's guidelines on financial management, safeguards, disbursements, and procurement. NSUSC implemented the site-specific safeguards plans. Compliance with covenants and overall reporting remained poor. The GAPs of both tranches were not fully implemented. The circulation of the facility completion report is delayed because of the unavailability of data after closure of NSUSC. The GOS avoided clearing the mission apparently due to budget reasons, but it seems as if the GOS did not want to talk about an unsuccessful project where it knew that the onus of the failure will go back to the government.

²⁹ Pakistan Bureau of Statistics. 2016. *Household Integrated Economic Survey (HIES) 2015–16*. Islamabad.

G. Performance of the Asian Development Bank

53. ADB's performance remained *less than satisfactory*. For the first time in Pakistan, ADB used this innovative approach of delivering municipal services through a publicly owned utility company. Due to the complex program design and the limited capacity of some government counterparts, ADB had to handhold the executing and implementing agencies and continued to provide training programs and technical and administrative support to assist NSUSC and PSU in meeting obligations throughout program implementation. This approach allowed the program to continue but limited the institutional growth of NSUSC and increased its dependency. It also limited the interest of the GOS to start taking more ownership of the program. ADB's intervention resisted the introduction of vertical government programs to the NSUSC operational areas. Other than the fund flow procedures, ADB did not introduce changes in the tranche 1 to address design gaps hampering tranche 1 performance (para. 5). Similarly, ADB also failed in its effort to restructure the institutional arrangement of the program even after multiple efforts. Under tranche 2, ADB support improved NSUSC's procurement reviews. ADB fielded regular missions to review the implementation progress, recommended actions, and helped the PSU and NSUSC to overcome implementation issues. ADB also helped in preparing performance-based AOPs with defined targets and outputs. However, ADB was unable to convince the GOS to continue urban sector reforms. By end of 2014, it was fairly clear that no more MFF tranche can be processed. However, ADB did not cancel the uncommitted MFF amount of \$163 million which is 54% of the approved MFF).

H. Overall Assessment

54. The program is rated *unsuccessful*. Program design was *less than relevant* (paras. 42–43). The GOS commitment to the service delivery model and urban reforms diminished over time, and no design changes were introduced to address these issues. The program was *less than effective* for partly achieving outcomes and outputs (para. 44), and *inefficient* in achieving outcome and outputs, due to delays and lack of improvement in operations (paras. 47–48). GOS introduced policy and institutional reforms but not fully implemented (paras. 7–9). With NSUSC closed, and operations managed by PHED without cost recovery tariffs, operations are *unlikely sustainable* (paras. 49–50). The overall ratings of the MFF and its tranches is in Appendix 11.

IV. ISSUES, LESSONS, AND RECOMMENDATIONS

A. Issues and Lessons

55. The program design was ambitious. Political complexities and social realities of North Sindh were not properly assessed. NSUSC, despite the lack of capacity, was given dual role of infrastructure development and service delivery. A phased approach of transferring operations after infrastructure development would have been more appropriate for recognizing NSUSC and reducing political resistance. Initially, infrastructure development could have been outsourced or entrusted to another entity with NSUSC oversight and control over the plans so that the NSUSC could have focused on improvements in operations. Anchoring of SCIIP was also a design issue (para. 43). The program should have been anchored in LGRD&HTPD instead of P&DB, to enhance ownership and reduce internal resistance. The overlapping roles of PSU and urban unit could have been avoided by establishing only the urban unit mandating it with program implementation, and planning future urban projects. This would have increased ownership of the urban unit and avoided its detachment from the program after tranche 1 (para. 9).

56. NSUSC had a large geographic area including cities of Larkana and Shikarpur with no tariff structure. With limited resources, NSUSC mainly focuses on priority investments only, limiting impact of interventions because of interdependence of outcome of one investment on the other (para. 13). It would have been better to focus on one or two cities in the first tranche with more comprehensive packages to yield tangible results and build a constituency for NSUSC. Absence of benchmark service standards, and service improvement targets, made it almost impossible to measure NSUSC's performance. The agreements between the TMA and NSUSC should have clearly laid down service-level standards and performance indicators to measure the performance and remove any ambiguity or over expectations—which was one of the main reasons for the stakeholders' dissatisfaction with NSUSC's performance. Outsourcing was not achieved although it was included in the program with adequate market analysis. Decision makers need to be sensitized on importance of gender mainstreaming in project implementation.

B. Recommendations

57. Investment in the urban sector cannot be sustained without the accompanying structural reforms covering both institutional and financial aspects. Considering the experience of SCIP, ADB should only engage in the urban services projects if the institutional and financial reforms are implemented ahead of the project approval. For urban projects involving land acquisition and sustainability issues, it is necessary that safeguard matters and operations or business models are handled upfront at design stage, as part of project readiness filters before loan approval. The urban unit can play an important role in taking the urban reforms agenda forward by generating urban data and studies to inform the process of urban structural reforms in Sindh. ADB may consider providing soft support to the urban unit for stakeholder consultation on developing urban policy directions in Sindh to help the GOS define its vision and direction for urban development. The inception missions should hold gender sensitization workshops for decision makers and executing and implementing agencies to secure their support for gender mainstreaming.

58. **Covenants.** The covenants related to NSUSC and TMAs have become redundant, as the NSUSC has been disbanded and the water supply and wastewater management functions have been transferred to the PHED. SWM is still with TMAs except for TMA Sukkur that had outsourced this to a private sector company. However, some conditions are still relevant such as tariff revision to maximize operational viability of investments already made.

59. **Further action or follow-up.** To make the urban unit an effective institution, it is important to properly staff it with qualified professionals. Getting the right people in the urban unit would pave the way for downstream work on urban development. ADB may also consider engaging with TMAs on PPP and outsourcing option through its ongoing PPP project in Sindh. This will create opportunities to develop partnerships with the private sector in service delivery, which if successful, can inform future investments in urban service provision in Sindh. These recommended actions will be regularly followed during urban policy dialogue with the GOS.

60. **Timing of the program performance evaluation report.** No major change is expected in the urban makeup of Sindh in the short term. Therefore, the program performance evaluation report may be conducted as and when required.

DESIGN AND MONITORING FRAMEWORK

Table A1.1: Multitranche Financing Facility

Design Summary	Performance Indicators and Targets	Program Achievements
<p>Impact Improved health, quality of life in and economic competitiveness of participating towns</p>	<p>Increase in per capita monthly income by 2018 in interior Sindh.</p>	<p>Average monthly per capita income in Sindh increased to PRs4,545 in FY2016.^a However, the Program has no direct correlation with this rise in per capita income.</p>
	<p>Percentage of children under 5 years old suffering from diarrhea in last 30 days reduced from 19% in urban areas of Sindh (excluding Karachi and Hyderabad) in FY2005 to <10% by 2018</p>	<p>The percentage of children under 5 years of age suffering from diarrhea decreased to 8.9% in urban Sindh (excluding Karachi and Hyderabad).^b However, the decrease in diarrhea cases cannot be fully attributed to the Program—as the potable water could only be provided in DNI zones of Khairpur to only 3,411 households – that too, for about two and a half year. In the remaining cities of Sukkur and Rohri, the water was only partially treated before supplying to households, and did not meet the WHO or national standards</p>
<p>Outcome Increased quality, reliability, and coverage of water supply, wastewater, and solid waste management services in participating towns</p>	<p>Population of participating towns served by household water connections increased from approximately 55% in 2008 to 80% in 2018</p>	<p>Not achieved.</p> <p>Tranche 1. The average population of Sukkur, Rohri, and Khairpur served under Tranche 1 towns was only 30% as reported in the tranche 1 completion report.</p> <p>Tranche 2. As of March 2017, of the total 115,017 households in the above three towns, only 36,409 (32%) were connected to water supply. (Table A1.3, Annexure 1)</p>
	<p>• Average hours per day of water supply increased from 2 to 4 hours in 2008 to >12 hours in 2018</p>	<p>Not achieved.</p> <p>Tranche 1. Average hours per day of water supply was around 4 hours in Rohri, and 2.1 hours in Khairpur. The actual hours of supply ranged from 0.5 hours to 12 hours in different locations. For 5,596 houses in the DNI zones, water supply was provided for more than 10 hours per day. Data for Sukkur was not available.</p> <p>Tranche 2. The average hours per day of water supply have decreased in Khairpur DNI zone where water was being supplied for only one hour on an average. However, in Sukkur and Rohri, the water supply is available for four to six hours.</p>
	<p>Wastewater treated increased from <5% in 2008 to 40% by 2018</p>	<p>Not achieved.</p> <p>No work could be awarded and executed for wastewater treatment.</p>
	<p>Household access to solid waste management (SWM) services increased to 80% by 2018</p>	<p>Partially achieved.</p> <p>Tranche 1. PCR of tranche 1 reported increase in household access to secondary solid waste management services up to 72%. However, due to the failure to construct sanitary landfill sites, the</p>

Design Summary	Performance Indicators and Targets	Program Achievements
		<p>solid waste was being dumped in the available open space, plots and private lands.</p> <p>Tranche 2. The solid waste collection in Khairpur, Sukkur and Rohri), 330 tons of solid waste was being collected which is 70% of the estimated 470 tons of generated waste. (Table A1.4 Annexure 1)</p>
<p>Outputs Part A: Improved Urban Service Management and Planning</p> <p>A.1 Creation of effective and sustainable urban services providers</p>	<p>Establishment of sustainable urban service corporations</p>	<p>Not Achieved.</p> <p>The NSUSC was established as a section 42 company to provide urban services in the participating towns on an efficient and sustainable basis. However, it was never financially sustainable and throughout the program faced operating deficit and ran its operations through operational support fund. However, NSUSC has been closed and is currently under liquidation on the orders of the Supreme Court of Pakistan in response to a constitutional petition filed by a local lawyer complaining about the poor performance Sindh and NSUSC about municipal services.</p>
	<p>Full operation and maintenance cost recovery of water services through user charges</p>	<p>Not achieved.</p> <p>Increase in tariff was subject to improvement in services. Accordingly, the tariff was not revised under tranche 1 since the water supply services could not be fully improved in any of the three towns where investment for water supply improvements were made.</p> <p>The same is true for tranche 2 as well. Although the quantity and duration of water supply increased in Sukkur and Rohri, yet the quality of water did not improve.</p>
	<p>Performance-based contracts between USCs and private operators identified</p>	<p>water supplied did not meet WHO or national quality standards.</p> <p>Recently, TMA Rohri has approved and implemented a slightly revised tariff structure. However, the increase is not substantial and adequate enough to provide full O&M and cost recovery of the services.</p> <p>Not achieved.</p> <p>No function could be outsourced despite efforts made by the NSUSC during program implementation.</p>

Design Summary	Performance Indicators and Targets	Program Achievements
A.2 Urban policy and strategic planning unit (urban unit) sustainable; program support unit sustainable throughout investment program implementation, providing effective support to local government department and taluka municipal administrations (TMAs)	Urban unit functioning, operational, fully staffed, and sustainable in 2018	An urban unit is established within P&DB and is a going concern.
	Implementation of the strategic urban vision and planning processes for participating towns by 2018	Partially achieved. Strategic urban vision was adopted in 2012, and city master planning for the tranche 1 towns was completed. However, no such planning was done for Jaccobabad under tranche 2. And due to vertical programs by GOS, the investments in participating towns were not aligned with master plans.
	Accurate (digitized) maps for each TMA publicly available and being used	Partially achieved. Digitized maps prepared for tranche 1 and 2 towns. However, these are not shared publicly. Moreover, there is high probability that these maps will not be used in future for planning purposes.
	Planning officials posted and urban plans developed at city-level for major secondary towns	Partially achieved. For most of the program implementation period planning officers' positions remained vacant for many participating towns.
Part B: Investments in Water Supply and Wastewater Management Improvements B.1 Rehabilitation and expansion of existing piped- water supply systems, water works, and treatment facilities in participating towns; groundwater quality monitoring system developed in participating towns.	Connected households with water meters increases from 0% in 2008 to >80% by 2018.	Not Achieved. Under tranche 1, a total of 2,752 meters were installed in DNI zones of Khairpur city. But the meters were never operational, and billing was based on flat rates, instead of volumetric supplies.
	<ul style="list-style-type: none"> • Reduced system leakage; unaccounted for water from >40% to <25% by 2018 	No more domestic water meters were installed under tranche 2 as the BOD of NSUSC did not want to do it. No credible data available, bulk meters were not installed, a volumetric tariff was not adopted, and a meter-reading regime was not put into place.
B.2 Rehabilitation and expansion of sewerage and drainage networks and wastewater treatment completed in participating towns	<ul style="list-style-type: none"> • At least 80% of households connected to underground sewers or covered drains by 2018 	Not achieved. Tranche 1. Over 20,000 households in Khairpur had improved sewerage flow which is 94% of the total 21,227 households in the city. However, no work was undertaken for sewers or covered drains in the remaining five tranche 1 towns. Tranche 2. No contract could be awarded for sewerage/drainage improvement.
	Percentage of wastewater treated in project towns increased from <5% to >40% by 2018	Not achieved. No associated works were awarded under both tranches, except for rehabilitation of wastewater disposal stations with inadequate water stabilization.

Design Summary	Performance Indicators and Targets	Program Achievements
<p>Part C: Investments in Solid Waste Management Improvements</p> <p>C.1 Development of sanitary landfills and provision of secondary collection (including equipment and services)</p>	<p>Sanitary landfills are operational, sustainable and under private sector arrangement</p> <p>At least 80% of households with access to secondary collection of solid waste by 2018</p>	<p>Not achieved.</p> <p>Land for Khairpur landfill site was acquired with substantial delay during tranche 1. However, it was taken out from the tranche's scope because of funding constraints and included in the scope of tranche 2. However, in tranche 2, due to delay in recruitment of consultants, and priority for awarding works related to water supply and sewerage improvements, no work could be initiated for construction of the landfill site in Khairpur.</p> <p>No landfill sites could be acquired for the Sukkur, Rohri, and Shikarpur.</p> <p>Not achieved.</p> <p>Only 55 % of the generated waste was collected from six tranche 1 towns, whereas 70% of the waste generated in Khairpur, Rohri, and Sukkur was collected under tranche 2 (Table A1.4, Annexure 1).</p>

BOD = board of directors, DNI = distribution network improvement, FY = financial year, NSUSC = North Sindh Urban Services Corporation, O&M = operation and maintenance, P&DB = planning and development board, PCR = project completion report, TMA = taluka municipal administration, USCs = urban services corporations

^a Pakistan Bureau of Statistics. 2016. *Household Integrated Economic Survey (2015-16)*. http://www.pbs.gov.pk/sites/default/files//pslm/publications/hies15-6/write%20up%2015-16-HIES-final_0.pdf. Table 25 reports average monthly household income in Sindh as PRs32,271. Using the average household size of Sindh as 7.1, the per capita income is calculated as 32,271/7.1 = PRs4,545.0.

^b Government of Pakistan. Statistics Division, Pakistan Bureau of Statistics. 2016. *Pakistan Social and Living Standards Measurement Survey 2014-15*. Islamabad.

Sources: Completion Report for Sindh Cities Improvement Investment Program; NSUSC's Field Survey for IPPMS; Asian Development Bank Estimates.

Table A1.2: Tranche 2

Design Summary	Performance Targets / Indicators	Status at Completion
<p>Impact Improved health, quality of life in and economic competitiveness of participating towns</p>	<p>70% urban population provided with safe and reliable water supply by 2018.</p> <p>Percentage of children under 5 years old suffering from diarrhea in last 30 days reduced from 19% in urban areas of Sindh (excluding Karachi and Hyderabad) in FY2005 to <10% by 2018</p>	<p>Not achieved.</p> <p>Only 32% of the population residing in Sukkur, Rohri, and Khairpur were receiving water supply, which is neither safe, nor reliable since untreated or partially treated water is being supplied.</p> <p>The last PSLM survey was undertaken for FY2016 that reported children under 5 years of age suffering from diarrhea to be 8.9% in urban Sindh (excluding Karachi and Hyderabad). However, the decrease in diarrhea cases cannot be fully attributed to the Program—as the potable water could be provided only to 3,411 households – that too, for about two and a half year. In the remaining cities of Sukkur and Rohri, the water was only partially treated before supplying to households and did not meet the WHO or national standards.</p>
<p>Outcome Increased quality, reliability, and coverage of water supply, wastewater, and solid waste management services in participating towns</p>	<p>Population with household water connections increased to 65% by 2016 from 40% in 2012 at Sukkur, New Sukkur, Rohri and Khairpur.</p> <p>Water distribution network access increased from 37% in 2012 to 80% of the population by 2016 in Sukkur, New Sukkur, Rohri and Khairpur.</p> <p>Average hours per day of water supply increased from 4 hours in 2012 to over 10 hours for 65% of population by 2016 in Sukkur, New Sukkur, Rohri and Khairpur</p> <p>Household access to secondary SWM services increased on average from 65% in 2012 to 85%</p>	<p>Not achieved.</p> <p>The populations coverage with household connections increased from 30% in 2016 (as reported in tranche 1 completion report), to 32% by end of program implementation.</p> <p>Not achieved</p> <p>Related contracts could not be awarded.</p> <p>Not achieved.</p> <p>The average hours per day of water supply have decreased in Khairpur DNI zone where water was being supplied for only one hour. However, in Sukkur and Rohri, the water supply is available for four to six hours.</p> <p>Partially achieved. According to an assessment made in 2017, the collection percentage of solid waste ranges from 58% to 75% in</p>

Design Summary	Performance Targets / Indicators	Status at Completion
	by 2016 at Sukkur, New Sukkur, Rohri and Khairpur	Khairpur, Rohri, and Sukkur. Overall, 70% of the total estimated solid waste generated in these three towns was being collected.
<p>Outputs</p> <p>1. NSUSC provides effective and more sustainable services in participating towns</p>	<p>Performance-based contracts between NSUSC and private operators for landfill site design, build and operate by 2016</p> <p>Increase in recovery of operation and maintenance cost through user charges from 1% in 2012 to at least 10% by 2016 in Sukkur, New Sukkur, Rohri and Khairpur</p> <p>Average percentage of connected households paying water bill increases from 55% in 2012 to 70% by in 2016 Sukkur, New Sukkur, Rohri and Khairpur</p> <p>NRW reduced from 60% in 2012 to 35% by 2016 in Sukkur, New Sukkur, Rohri and Khairpur</p> <p>Gender sensitive employment policies implemented with at least 15 women staff in NSUSC by 2015</p>	<p>Not achieved.</p> <p>No contracts were awarded for construction of landfill sites.</p> <p>Not achieved.</p> <p>Increase in tariff was subject to improvement in services. Although the quantity and duration of water supply increased in Sukkur and Rohri, yet the quality of water did not improve because no work could be awarded rehabilitation or upgradation of the treatment plants. TMA Rohri has approved and implemented a slightly revised tariff structure which still cannot provide full O&M and cost recovery of the services.</p> <p>The percentage of households paying water bills is not available. However, collection efficiency of the billed amount for FY2019 was 42% in Sukkur, 47% in Rohri, and only 13% in Khairpur.</p> <p>Not achieved since no intervention could be made to reduce the NRW.</p> <p>Achieved.</p> <p>Of NSUSC's total 965 employees, 55 (5%) were women.</p>
<p>2. More informed urban policies and planning</p>	<p>Land use base map for municipal services in digitized form for 8 participating towns in north Sindh publicly available by 2013</p> <p>Masterplans of central Sindh six cities water/wastewater by June 2013</p> <p>Digitized maps of central Sindh cluster by June 2013</p>	<p>Achieved.</p> <p>Achieved</p> <p>Achieved.</p>

Design Summary	Performance Targets / Indicators	Status at Completion
3. Timely and transparent operations support funding for NSUSC to cover eligible shortfall	NSUSC monthly staff payroll met by December 2012	Achieved.
	NSUSC suppliers paid as agreed by June 2013	Partially achieved. Many contractors (out of operational budget) were not paid despite ADB's rigorous follow up. NSUSC stands closed now, and under liquidation. AT the time of NSUSC closure, PKR 270 million were to be paid by the NSUSC to suppliers, and contractors in addition to another PKR 130 million due to be paid to the NSUSC's employees.
	Electricity bills paid as agreed by December 2014 after reconciliation and meter installation in eight towns	Achieved. All electric bills were reconciled and paid/adjusted in seven town. Operations of one town (Ghotki) was not taken over by NSUSC.
4. Improved water supply, wastewater and solid waste management services in participating towns	Additionally, 14,000 households in Sukkur with improved water supply through 4 DNIs by 2014	Not achieved Water supplies could not be improved as the full scope of the water supply improvement works could not be awarded.
	Additionally, 7,000 households in Rohri with 2 DNIs to improved water supply by 2016	Not achieved. Two DNI zones were established under Tranche 1, but could not be operationalized since the related works could not be awarded under tranche 2.
	Additionally, 10,500 households in Khairpur with improved water supply through 3 DNIs by 2014 .	Not achieved since no work could be awarded for Khairpur under Tranche 2.
	Additionally, 22 MGD treated water in Sukkur and Rohri added to the system by 2014.	Not achieved. No treated water is being supplied in Sukkur or Rohri. The treatment is partial.
	Increased intake capacity to 40 MGD at river Indus by March 2014	Achieved. The Sukkur intake subproject completed under tranche 2 has a capacity to lift 40 MGD water from river Indus.

Design Summary	Performance Targets / Indicators	Status at Completion
	Increased and improved access to sewerage system network and disposal in Larkana and Shikarpur to 70,000 households from 30% in 2008 to 65% in 2016	Not achieved. No related contract could be awarded in Larkana and Shikarpur.
	<p>Percentage of solid waste collected increases in Ghotki on average from 7% in 2012 to at least 80% by 2015. Gap in tranche 1 towns will be improved Also.</p> <p>Public satisfaction with water supply sewerage and solid waste services in tranche 1 towns increased about 20% above CRC base line</p>	<p>Not achieved.</p> <p>Ghotki was not taken over by NSUSC.</p> <p>Overall collection of solid waste in tranche 1 towns improved from overall 55% to 70% of the generated waste in Sukkur, Rohri, and Khairpur. Data for remaining towns is not available.</p> <p>Partially achieved.</p> <p>Full public satisfaction with water supply services decreased in Khairpur and Sukkur. However, it remained constant in Rohri.</p> <p>Full public satisfaction with wastewater services increased only in New Sukkur (from baseline of 16% to 32%, registering a 50% increases)</p> <p>Full public satisfaction with solid waste management services increased in Khairpur by 79%, in Larkana by 26%, and in Shikarpur by 12%.</p>
5. Management structure and capacity for WSS operations improved	<p>NSUSC technical, financial, and operational efficiency improvement (business process, systems, training) by 2014</p> <p>Sex-disaggregated consumer data base developed and implemented with efficient customer care system by 2013</p> <p>Financial management system and business processes developed and implemented in all regional offices and head offices by 2013</p>	<p>Not achieved.</p> <p>NSUSC did not hire Business and Operational Support Consultants.</p> <p>Achieved.</p> <p>Partially achieved.</p> <p>Financial accounting system, consumer database, billing, and complaint management system were developed and deployed. However, a proper asset management system, and performance system was not in place.</p>

Design Summary	Performance Targets / Indicators	Status at Completion
	IPPMS and IBNet benchmarking system in place and performance benchmarking developed and implemented (annual) by 2014	Not achieved. Performance indicators were developed with the help of ADB. However, no proper reporting was done on the IPPMS.
	<p>Gender sensitive communication strategy developed, and implementation by 2013</p> <p>Reorganization and restructuring of NSUSC with business orientation and delivery of services completed by 2013.</p> <p>O&S system procedures and facilities developed and implemented for SWM, water and wastewater assets and operations by 2014</p>	<p>Not achieved.</p> <p>A gender specialist could not be hired under the tranche 2.</p> <p>Partially done. The management and BoD was completed replaced. However, the board lacked professional members and private sector participation. However, the business and operational support consultants were not hired.</p> <p>Not achieved.</p> <p>All Program facilities could not be developed that were in the scope of the tranche 2.</p> <p>No proper protocols, and procedures were developed for professional managing the municipal infrastructure, and services.</p>

BOD = board of directors, FY = financial year, DNI = distribution network improvement, IBNet = international benchmarking network, IPPMS = investment program performance monitoring system, MGD = million gallon per day, NSUSC = North Sindh Urban Services Corporation, O&M = operation and maintenance, PKR = pak rupee, PSLM = Pakistan social and living standards measurement, SWM = solid waste management system, TMA = taluka municipal administration, Source: Asian Development Bank.

SERVICE DELIVERY PERFORMANCE

Table A1.3: Population Coverage for Water Supply

Towns	2010 - Baseline		At Tranche 1 Completion		Total HH ^a	At Completion	
	HH connections	% coverage	HH connections	% coverage		HH Connections	% coverage
Sukkur	18,897	26%	20,708	29%	85,162	24,966	29%
Rohri	4,514	46%	5,091	52%	8,628	5,008	58%
Khairpur	4,821	19%	5,326	21%	21,227	6,435	30%
Total	28,232	26%	31,125	29%	115,017	36,409	32%

HH = households

^a Number of households are derived by dividing the 2018 population of the cities with the average household size of Sindh Urban i.e. 5.87 per household.

Source: Completion Report, SCIP Tranche 1, and data provided by TMAs of Sukkur Rohri, and Khairpur.

Table A1.4: Solid Waste Generation and Collection
(metric tons)

Sukkur	At tranche 1 closure			At NSUSC's closure (2017)		
	SW Generated	SW Collected	%	SW Generated	SW collected	%
Sukkur/ New Sukkur	371	167	45%	309	220	71%
Khairpur	124	74	60%	99	74	75%
Rohri	85	42	50%	62	36	58%
Larkana	366	183	50%			
Shikarpur	149	134	90%			
Total	1,094	601	55%	470	330	70%

-- = data not available, MFF = multi-tranche financing facility, SW = solid waste

Table A1.5: Public Satisfaction with Water Supply Services

City	IBA Survey 2012			SCIP Survey – 2016			Remarks
	Satisfied	Not Satisfied	Indifferent	Satisfied	Not Satisfied	Partially satisfied	
Khairpur	60.3%	27.4%	12.3%	54.0%	20.0%	26.0%	Full public satisfaction decreased from 60.3% to 54%
New Sukkur	37.1%	51.6%	11.3%	8.0%	75.0%	17.0%	Full public satisfaction decreased from 37.1% to 8%
Rohri	33.7%	51.5%	14.8%	33.0%	43.0%	24.0%	Full public satisfaction remained consistent i.e. 33.7%
Sukkur City	73.6%	14.8%	11.6%	3.0%	96.0%	1.0%	Full public satisfaction decreased from 73.6% to 3%

Table A1.6: Public Satisfaction with Wastewater Management Services

City	IBA Survey 2012			SCIIP - 2016			Remarks
	Fully Satisfied	Not Satisfied	Indifferent	Fully Satisfied	Not Satisfied	Partially satisfied	
Khairpur	34.2%	50.8%	15.0%	31.0%	31.0%	38.0%	Full public satisfaction decreased from 34.2% to 31%
New Sukkur	15.8%	61.7%	22.5%	32.0%	41.0%	27.0%	Full public satisfaction increased from 15.8% to 32%
Rohri	70.0%	16.7%	13.3%	15.0%	62.0%	23.0%	Full public satisfaction decreased from 70% to 15%
Sukkur City	66.0%	21.0%	13.0%	37.0%	36.0%	27.0%	Full public satisfaction decreased from 66% to 37%

SCIIP = Sindh cities improvement investment program
Source: North Sindh Urban Services Corporation

Table A1.7: Public Satisfaction with Solid Waste Management Services

City	IBA Survey 2012			SCIIP - 2016			Remarks
	Fully Satisfied	Not Satisfied	Indifferent	Fully Satisfied	Not Satisfied	Partially satisfied	
Khairpur	26.3%	51.7%	22.0%	47.0%	9.0%	44.0%	Full public satisfaction increased from 26.3% to 47%
Larkana	26.9%	50.4%	22.7%	34.0%	28.0%	28.0%	Full public satisfaction increased from 26.9% to 34%
New Sukkur	47.0%	40.6%	12.4%	13.0%	59.5%	28.0%	Full public satisfaction decreased from 47% to 13%
Rohri	49.6%	29.6%	20.80%	41.0%	29.0%	30.0%	Full public satisfaction decreased from 49.6% to 41%
Shikarpur	17.9%	66.7%	15.4%	20.0%	33.0%	47.0%	Full public satisfaction increased from 17.9% to 20%
Sukkur City	52.6%	29.9%	17.5%	29.0%	29.9%	41.1%	Full public satisfaction decreased from 52.6% to 29%

SCIIP = Sindh cities improvement investment program
Source: North Sindh Urban Services Corporation

Table A1.8; Billing and Collection Performance
FY 2019 (10 months)

	Sukkur			Khairpur			Rohri	
	Basis	Reported	Annualized	Basis	Reported	Annualized	Basis	Reported
Billing	Yearly demand	14.728	14.728	6 months demand, annualized	2.298	4.596	Total demand (including arrears)	6.294
Recovery	July-18 to Apr-19 (10 months), annualized	5.155	6.186	6 months recovery, annualized	0.297	0.595	Total recovery with arrears up to 21 May 2019	2.952
Recovery %			42%			13%		47%

Sources: Taluka municipal corporation's records – Sukkur, Khairpur, and Rohri; Asian Development Bank estimates

Table A1.9: Revenue to Expenses – Wastewater Services

Item	Sukkur		Khairpur		Rohri	
	FY2019	FY2018	FY2019	FY2018	FY2019	FY2018
Estimated revenue from water and sanitation charges	14.728	14.728	4.014	0.918	2.350	2.295
Salaries and allowances including pension	63.908	60.160	124.386	121.578	48.869	36.219
Operational expenses	170.510	177.701	25.190	18.543	25.735	16.072
Total Expenditure	234.418	237.861	149.576	140.121	74.604	52.291
Percentage Contribution from Water revenue to Expenses	6.3%	6.2%	2.7%	0.7%	3.1%	4.4%
Shortfall	(219.690)	(223.133)	(145.562)	(139.203)	(72.254)	(49.996)
Percentage Shortfall	93.7%	93.8%	97.3%	99.3%	96.9%	95.6%

FY = financial year

Source: Budget books and billing records of TM/A Sukkur, Rohri, and Khairpur.

PACKAGE-WISE STATUS OF WATER SUPPLY AND SEWERAGE IMPROVEMENT

Table A2.1: Original Scope and Status at Completion -- Water Supply Improvement

Contract ID	Name of package	Estimated Cost (At appraisal (\$ million)	Mode of Procurement	Status at Completion
B-1	Extension of Numaisghah water treatment plant (18 MGD) with forced main to Adam Shah reservoir at Sukkur	8.5	ICB	Contract advertised, bids received and evaluated by the NSUSC in Q1 2017. However, BER was not sent to ADB since by that time, the Supreme Court of Pakistan (SCP) had already ordered to close down the NSUSC.
B-2	Replacement of old mains and supply laying of all new mains/transmission lines including flow meters installation of leakage detection equipment NRW equipment at Sukkur, New Sukkur, Rohri and Khairpur	9.0	ICB	Same as above.
B-3	Installation of new ring/trunk mains including bulk meters, and refurbishment of elevated tank and additional HSR	9.0	ICB	Approved for Award. BER was approved by ADB on 10 February 2017 for contract award to the successful bidder. However, while the contract document was being finalized, the NSUSC was closed on orders of the SCP.
B-4	Rehabilitation of water treatment plant at Sukkur airport (6 MGD), and enhancement of storage lagoons and alternative supply of treated water	8.5	ICB	Contract Negotiations approved. The lowest evaluated, substantially responsive bidder had quoted bid 23.4% higher than the engineers' estimates. ADB approved BER for negotiating the contract with the lowest evaluated, substantially responsive bidder on 13 February 2017. Negotiations were underway when the NSUSC was closed.

Contract ID	Name of package	Estimated Cost (At appraisal (\$ million))	Mode of Procurement	Status at Completion
B-5	Nine additional DNI zones in Sukkur, Rohri and Khairpur, replacement of transmission lines, and household connections	6.0	ICB	Rebidding Approved. Bidding was done for this contract, but none of the received bids were responsive. ADB approved BER and rebidding of the package on 10 February 2017. However due to closure of NSUSC, rebidding was not undertaken.
B-6	Construction of rapid gravity sand filter (6 MGD), distribution network, transmission line and laboratory,	6.3	ICB	Contract Negotiations approved. The lowest evaluated, substantially responsive bid was 19.7% higher than the engineers' estimates. ADB approved BER and negotiating bid price on 27 February 2017, and while the negotiations were being finalized, the NSUSC was closed in March 2017.
B-7	Sukkur water supply intake pump station and allied pipe works.	4.5	ICB	Awarded and Completed. Contract was awarded in December 2013 and completed in August 2017.
B-15	Establishment of NRW reduction and pressure management zones (Sukkur, New Sukkur, Rohri, Khairpur and Jaccobabad	2.6	NCB	Not advertised, as the detailed engineering design was not prepared by the time the NSUSC was closed.
Total		54.4		

BER = bid evaluation report, DNI = distribution network improvement, HSR = high surface reservoir, ICB = international competitive bidding, MGD = million gallons per day, NRW = non-revenue water, NSUSC = North Sindh Urban Services Corporation

Source: Asian Development Bank.

Table A2.2: Original Scope and Status at Completion—Sewerage Improvement Services

Contract ID	Name of package	Estimated Cost (At appraisal (\$ million))	Mode of Procurement	Status at Completion
B-18-1	Regional Office– Sewerage Cleaning Equipment	1.0	Shopping	Nine shopping packages procured for a cumulative value of \$1.5 million equivalent.
B-13	Supply of Sewer and Drains cleaning equipment	1.8	NCB	Package was merged with another package under Solid Waste Management component (C-2) and procured through ICB.
B-8	Shikarpur Sewerage treatment rehabilitation of drains, force mains and three disposal stations	2.4	ICB	Bidding not initiated.
B-9	Larkana rehabilitation and improvement of sewerage and drainage system	6.8	ICB	Bidding not initiated.
B-10	Rohri improvement of sewerage system and wastewater treatment system.	3.0	NCB	Bidding not initiated.
B-12	Khairpur wastewater diversion from all disposal stations from Mirwah canal	1.2	NCB	Bidding not initiated.
B-17	Installation of SCADA of WS and WW facilities	0.3	NCB	Bidding not initiated.
B-14	Small capital works for WS and Sewerage Operations (Jacobabad and Ghotki)	1.9	NCB	Bidding not initiated.
Total:		18.4		

ICB = international competitive bidding, NCB = national competitive bidding, SCADA = supervisory control and data acquisition, WS = water supply, WW = wastewater

Source: Asian Development Bank.

PROGRAM COST AT APPRAISAL AND ACTUAL

Table A3.1: Financing Plan at Appraisal and Actual

(\$ million)

Source	At MFF Appraisal		At MFF Completion	
	Amount	Share (%)	Amount	Share %
Asian Development Bank	300.0	75	64.8	76
Government	100.0	25	21.0	24
Total	400.0	100	85.78	100

MFF = multitranches financing facility.

Source: Asian Development Bank.

Table A3.2: Tranche 1

(\$ million)

Source	At Appraisal		At Completion	
	Amount	%	Amount	%
Asian Development Bank	38.0	76	37.0	75
Government	12.0	24	12.0	25
Total	50.0	100	49.0	100

Source: Asian Development Bank.

Table A3.3; Tranche 2

(\$ million)

Source	At Appraisal		At Completion	
	Amount	%	Amount	%
Asian Development Bank	99.10	71	27.78	76
Government	40.70	29	8.97	24
Total	139.80	100	36.74	100

Source: Asian Development Bank.

Table A3.4: Tranche 1 Cost at Approval and Completion
(\$ million)

Item	At Appraisal	At completion
A. Base Cost		
1. Land Acquisition	0.39	0.27
2. Civil Works	11.49	19.20
3. Mechanical, Equipment and Materials	5.92	5.60
4. Engineering Design, Mapping and Feasibility	1.95	3.32
5. Consultancy - PM&CD	3.80	3.44
6. Incremental Administration	0.77	1.37
7. Recurrent-Operational Support Fund	8.00	11.14
Subtotal (A)	32.32	44.34
B. Taxes	6.10	4.02
C. Contingencies	10.59	
D. Interest	0.99	0.68
Total	50.00	49.04

PM&CD = project management and capacity development
Source: Asian Development Bank.

Table A3.5: Tranche 2 Cost at Approval and Completion
(\$ million)

Item	At Appraisal	At Completion
A. Base Cost		
1. Land Acquisition		
2. Civil Works	78.22	11.08
3. Mechanical, Equipment and Materials	3.71	6.70
4. Engineering Design, Mapping and Feasibility		
5. Consultancy - PM&CD	10.47	1.26
6. Incremental Administration	13.50	15.91
7. Recurrent-Operational Support Fund	2.95	1.27
Subtotal (A)	108.85	36.21
B. Taxes	11.25	
C. Contingencies	12.69	
D. Interest	7.01	0.53
Total	139.80	36.74

PM&CD = project management and capacity development
Source: Asian Development Bank.

PROGRAM COST BY FINANCIER

Table 4.1: Tranche 1 Cost by Financier

Item	Tranche 1					Tranche 1				
	Total	ADB		Government		Total	ADB		Government	
		Amount	%	Amount	%		Amount	%	Amount	%
A. Base Cost										
1. Land Acquisition	0.39			0.39	100	0.27			0.27	100
2. Civil Works	11.49	8.76	76	2.73	24	19.20	13.66	71	5.54	29
3. Mechanical, Equipment and Materials	5.92	5.92	100			5.60	5.56	99	0.04	1
4. Engineering Design, Mapping and Feasibility	1.95	1.95	100			3.32	3.32	100		
5. Consultancy - PM&CD	3.80	3.80	100			3.44	3.43	100	0.01	0
6. Incremental Administration	0.77			0.77	100	1.37			1.37	100
7. Recurrent-Operational Support Fund	8.00	8.00	100			11.14	10.31	93	0.83	7
Subtotal (A)	32.32	28.43	88	3.89	12	44.34	36.28	82	8.06	18
B. Taxes	6.10			6.10	100	4.02			4.02	100
C. Contingencies	10.59	8.58	81	2.01	19					
D. Interest	0.99	0.99	100			0.68	0.68	100		
Total	50.00	38.00	76	12.00	24	49.04	36.96	75	12.08	25

PM&CD = project management and capacity development
Source: Asian Development Bank estimates.

Table 4.2: Tranche 2 Cost by Financier
(\$ million)

Item	At Appraisal					At Completion					
	ADB		Government			ADB		Government			
	Total	Amount	%	Amount	%	Total	Amount	%	Amount	%	
A. Base Cost											
1. Land Acquisition											
2. Civil Works	78.22	56.21	72	22.01	28	11.08	3.92	35	7.15	65	
3. Mechanical, Equipment and Materials	3.71	3.71	100			6.70	6.47	96	0.24	4	
4. Engineering Design, Mapping and Feasibility											
5. Consultancy - PM&CD	10.47	10.47	100			1.26	0.95	76	0.31	24	
6. Incremental Administration	13.50	13.50	100			15.91	15.91	100			
7. Recurrent-Operational Support Fund	2.95			2.95	100	1.27			1.27	100	
Subtotal (A)	108.85	83.89	77	24.96	23	36.21	27.25	75	8.97	25	
B. Taxes	11.25			11.25	100						
C. Contingencies	12.69	8.20	65	4.49	35						
D. Interest	7.01	7.01	100			0.53	0.53	100			
Total	139.80	99.10	71	40.70	29	36.74	27.78	76	8.97	24	

PM&CD = project management and capacity development
Source: Asian Development Bank estimates.

DISBURSEMENT OF ADB LOAN AND GRANT PROCEEDS

Table 5.1: Annual and Cumulative Disbursement of ADB Loan Proceeds^a
(\$ million)

Year	Annual Disbursement		Cumulative Disbursement	
	Amount (\$ million)	% of Total	Amount (\$ million)	% of Total
2013	0.015	0.1%	0.015	0.1%
2014	5.685	20.5%	5.700	20.5%
2015	6.152	22.2%	11.852	42.7%
2016	10.542	38.0%	22.394	80.6%
2017	4.210	15.2%	26.604	95.8%
2018	1.172	4.2%	27.776	100.0%
Total	27.776	100.0%		

ADB = Asian Development Bank.

Source: Project Record in the Asian Development Bank Oracle-based database (eOperations)

Figure 5.1: Projection and Cumulative Disbursement of ADB Loan Proceeds
(\$ million)

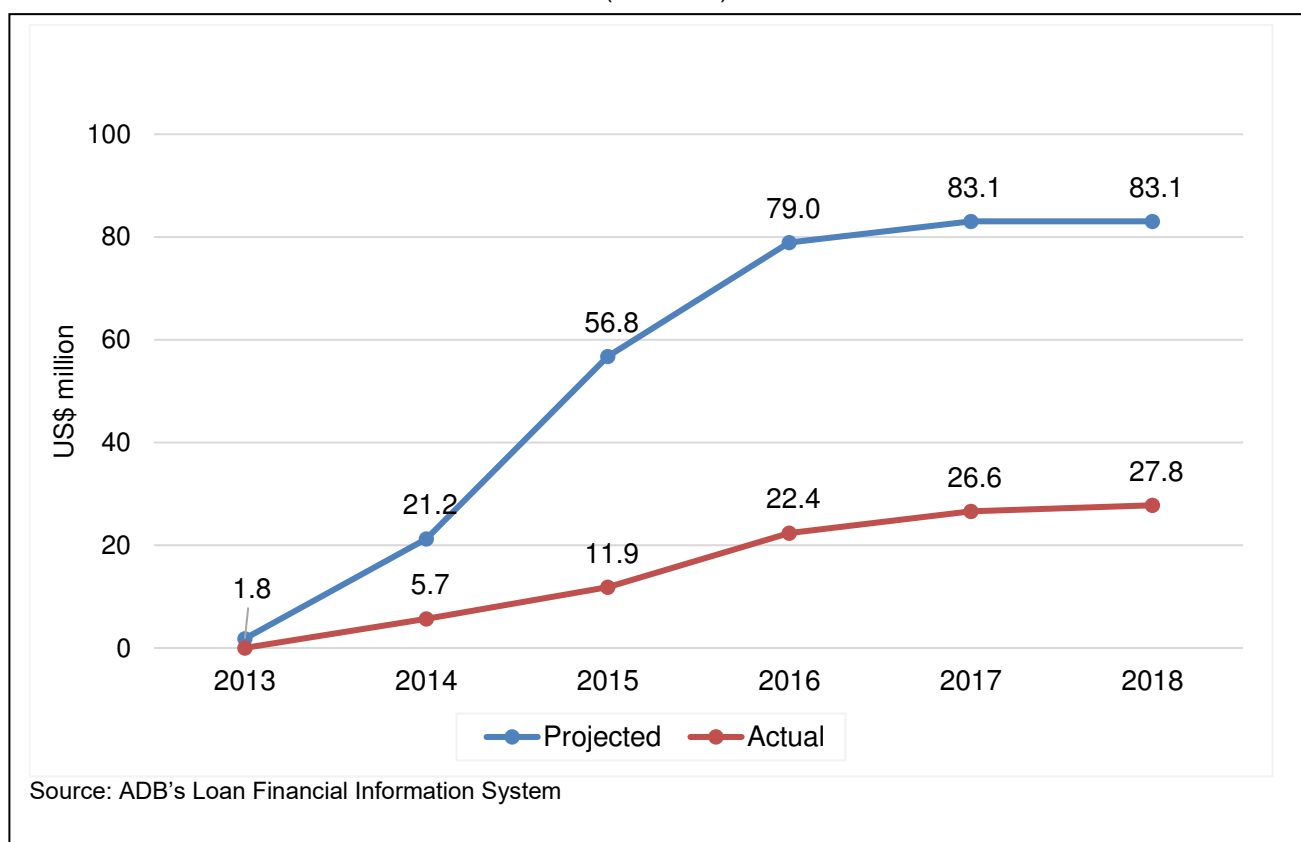


Table A5.2: Record of Changes in Disbursement Projections
(\$ million)

No.	Revision in Disbursement Projections	Years					Total	
		2013	2014	2015	2016	2017		2018
1	Version 1 (as of Project Effectiveness)	1.83	19.40	35.54	22.18	4.10	83.05	
2	Version 2 (as of 31 Dec 2013)	0.02	37.72	35.54	22.18	4.10	99.56	
3	Version 3 (as of 1 April 2014)	0.02	6.73	17.62	36.10	38.90	99.38	
4	Version 4 (as of 8 Dec 2014)	0.02	6.73	5.99	28.65	55.39	96.78	
5	Version 5 (as of 31 Dec 2014)	0.02	5.68	5.55	28.65	55.39	95.29	
6	Version 6 (as of 31 Dec 2015)	0.02	5.68	6.15	25.29	55.39	92.53	
7	Version 7 (as of 26 April 2016)	0.02	5.68	6.15	25.29	55.12	92.26	
8	Version 8 (as of 31 Dec 2016)	0.02	5.68	6.15	10.54	68.58	90.97	
9	Version 9 (Partial Cancellation - as of 18 Jan 2018)	0.02	5.68	6.15	10.54	10.28	32.68	
10	Version 10 (Partial Cancellation - as of 20 Jul 2018)	0.02	5.68	6.15	10.54	4.21	3.39	29.99
12	Version 11 (Product Closing of 20 Jul 2018)	0.02	5.68	6.15	10.54	4.21	1.17	27.78

Source: Asian Development Bank

IMPROVING EFFICIENCY AND ACCOUNTABILITY OF NSUSC

1. The impact of the TA was increased quality, reliability, and coverage of municipal services in participating cities. The TA's outcome was support to NSUSC for providing effective and more sustainable municipal services through a service oriented commercially run utility.
2. The outputs of the TA were divided into two components. Component A was to develop the organizational structure, operational capacity, and improve technical and financial performance. For NSUSC, outputs included technical and financial baselines, enhanced technical capacity, enabling outsourcing and public-private partnerships (PPP). Component B was to embed transparency and accountability between NSUSC and its consumers and shareholders. The outputs included a system of communication, public awareness, transparent public monitoring, and computerized redressal systems regarding municipal services and reforms.
3. Achievements under Component A of the TA include: (i) indicator set for an information system prepared and baselines established only for SWM; (ii) technical capacity and operational trainings undertaken; (iii) limited reporting on technical and financial performance done; (iv) outsourcing policy endorsed by the Board, models and contract documents prepared and advertised, but no qualified parties responded; and (v) preparatory work undertaken on PPP options but not implemented as planned investment was transferred to Tranche 2 (T2). In addition, individual consultants prepared a report on the implications of a new local government ordinance and on options for restructuring and decentralizing NSUSC. The report's recommendations were endorsed by the EA.
4. Under Component B, the status of outputs and activities is: (i) campaign for customer awareness completed; (ii) communication materials in electronic and print media produced and advertised although not used as a tool for consensus building; (iii) computerized customer redressal system established; (iv) website established for NSUSC but public monitoring systems not in place; and (v) citizen report card survey delayed, and conducted once (not twice), and limited priority given to low-income households.
5. TA completed on 31 December 2013, and financially closed on 18 June 2014. The TA cost at completion was \$2.4 million. However, the TA's impact was seriously compromised on account of NSUSC's preoccupation with infrastructure development and specifically the challenge NSUSC faced by having a poorly performing design consultant team from the start. As well, the points already highlighted in the main report, and the slow staffing of the NSUSC in key areas also impacted the transfer of knowledge and expertise.

PROCUREMENT AND EXECUTION DELAYS

Tranche 1

No	Contract Name	Procurement Method	Contract Amount (PKR million)	Time taken from IFB to award (Months)	Delay in contract completion (Months)
1	Solid Waste collection equipment. (Lot 1 SWCE-01)	ICB	194.2	4.2	9.2
2	Jetting machine and suction machine (ICB-02)	ICB	108.4	4.5	0.6
3	ICB-03: Rehabilitation of two 2.5 MGD, one 3 MGD and one 5 MGD WTP at Khaki Shah Khairpur & Sukkur ^a .	ICB	1,033.2	8.1	42.6
4	ICB-04: 24/7 Safe drinking water through DNI to approximately 35916 household. ^a	ICB	716.5	3.7	30.4
Average time (ICB Contracts)				5.1	20.7
5	Improvement and rehabilitation of 13 sewerage disposal stations in Khairpur	NCB	192.1	2.9	11.0
6	Locating and setting out of 6 test well sites, mobilization of drilling rigs and equipment.	NCB	20.7	3.6	0.4
7	Improvement and rehabilitation of 13 sewerage disposal stations in Larkana	NCB	295.7	4.4	30.1
	Installation of 300 Skips platforms for solid waste collection/disposal.	NCB	38.1	3.7	7.0
8	Provision of 11 sets of diesel generators of Khairpur and Shikarpur.	NCB	23.9	4.2	1.0
9	Solid waste collection equipment (Lot 2 – SWCE -02)	NCB	39.2	4.8	8.6
10	Khaki Shah RSFP: rehabilitation of the 2.5 MGD plant at Khairpur. ^a	NCB	12.5	3.9	31.0
11	Small capital work to uplift various disposal stations water works at Sukkur, Rohri and Khairpur. ^a	NCB	16.2	5.3	30.4
Average time (ICB Contracts)				4.1	14.9
12	Construction of brick lined channel at Jamali Goth, Khairpur.	Shopping	4.9	2.8	0.5
13	Provision of dewatering Collection equipment.	Shopping	6	2.6	2.5
Average time (Shopping Contracts)				2.7	1.5
Average of all type of contracts				4.0	12.4

DNI = distribution network improvement, ICB = international competitive bidding, MGD = million gallon per day, NCB = national competitive bidding, RSFP = rapid sand filtration plant, WTP – water treatment plant

^a These contracts remained incomplete by close of Tranche 1 and were completed under Tranche 2 in quarter two of 2016.

Source: Asian Development Bank.

CONTRACT AWARDS OF ADB LOAN AND GRANT PROCEEDS

Table 8.1: Annual and Cumulative Contract Awards of ADB Loan Proceeds
(\$ million)

Year	Annual Contract Awards		Cumulative Contract Awards	
	Amount (\$ million)	% of Total	Amount (\$ million)	% of Total
2014	7.971	28.7%	7.971	29.3%
2015	16.729	60.2%	24.700	90.6%
2016	1.145	4.1%	25.845	94.9%
2017	1.016	3.7%	26.861	98.6%
2018	0.386	1.4%	27.247	100.0%
Total	27.247	100.0%		

Source: Asian Development Bank.

Figure 8.1: Projection and Cumulative Contract Awards of ADB Loan Proceeds
(\$ million)

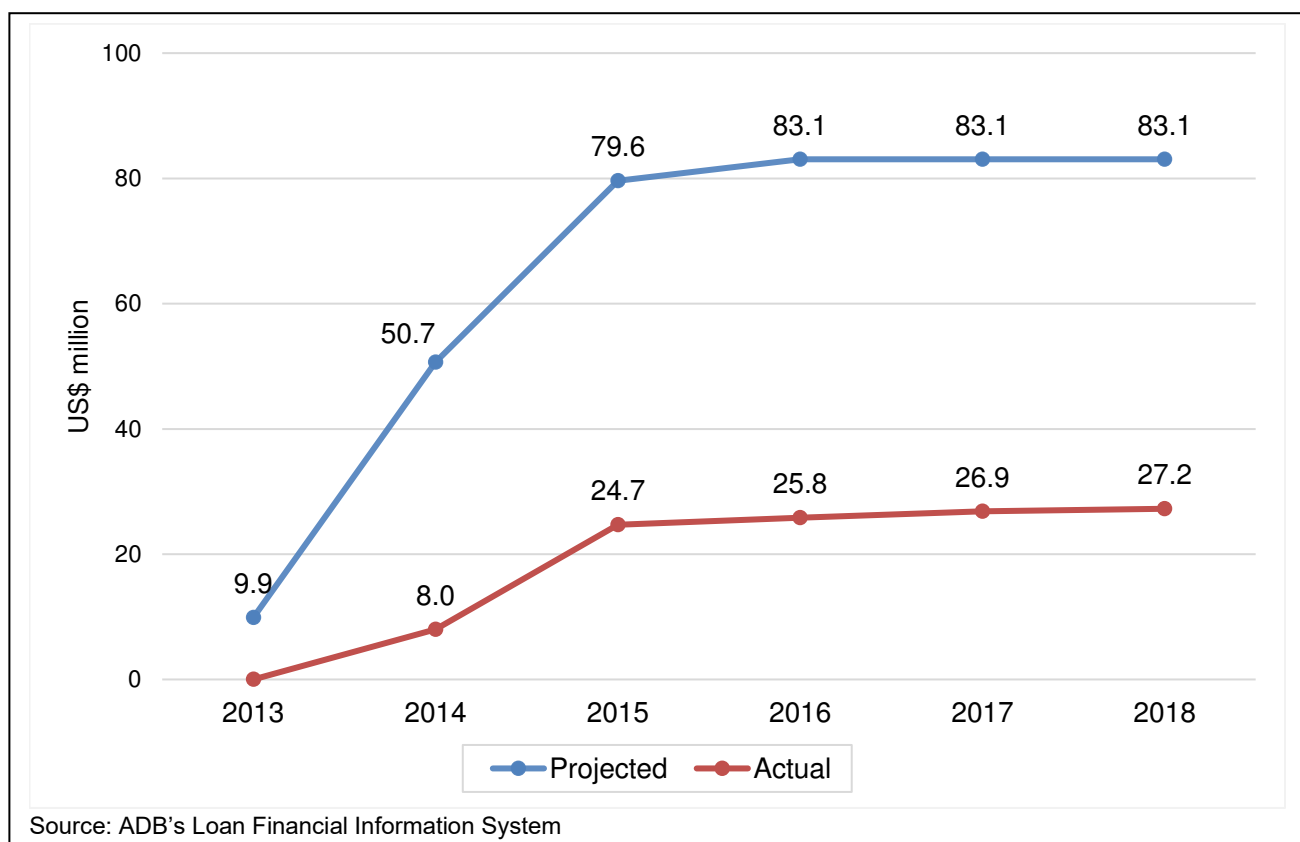


Table A8.2: Record of Changes in Contract Awards Projections
(\$ million)

No	Revision in Contract Awards Projections	Years						Total
		2013	2014	2015	2016	2017	2018	
1	Version 1 (as of Project Effectiveness)	9.88	40.79	28.93	3.45			83.05
2	Version 2 (as of 31 Dec 2013)		62.44	28.93	3.45			94.82
3	Version 3 (as of 1 April 2014)		9.31	15.55	42.96	26.83		94.65
4	Version 4 (as of 8 Dec 2014)		9.31	13.74	38.68	30.45		92.17
5	Version 5 (as of 31 Dec 2014)		7.44	14.19	38.68	30.45		90.75
6	Version 6 (as of 31 Dec 2015)		7.32	16.70	33.67	30.45		88.14
7	Version 7 (as of 26 April 2016)		7.32	16.70	31.50	32.36		87.88
8	Version 8 (as of 31 Dec 2016)		7.33	16.76	2.60	59.97		86.67
9	Version 9 (Partial Cancellation - as of 18 Jan 2018)		7.33	16.76	2.60	4.54		31.24
10	Version 10 (Partial Cancellation - as of 20 Jul 2018)		7.97	16.73	1.15	1.65	1.06	28.55
11	Version 11 (Product Closing of 20 Jul 2018)		7.97	16.73	1.15	1.02		26.86
12	Version 1 (as of Project Effectiveness)		7.97	16.73	1.15	1.02	0.39	27.25

Source: Asian Development Bank

UPDATE ON GENDER ACTION PLAN

1. Since the Program could not deliver the intended outcome, as most of the outputs were not or only partially met, this also reflected upon implementation of the gender implementation plan (GAP). On the whole, the GAP implementation was *less than satisfactory* for the overall MFF and tranche 1 since out of the six targets, five were partially achieved whereas one was not achieved. However, for the tranche 2, the GAP implementation performance was unsatisfactory as most of the gender targets were not achieved, only some were partially achieved.

2. **Tranche 1.** Although the tranche 1 GAP implementation was *less than satisfactory*, as most of the GAP targets were not or partially achieved, yet in general, tranche 1 had positive impacts on gender. The recruitment policy of North South Urban Services Corporation (NSUSC) was gender responsive, and the program was successful in encouraging women from conservative, remote areas to work in NSUSC and providing them with a decent working environment and economic benefits. More than 60% of the staff members working for the complaint registration unit (CRU) and 18% of sanitation workers were women. There was a significant increase in the salaries of sanitation staff (including women) after joining the program—contractual sanitation workers were paid PRs 2,700.0 (initially in 2010), which was increased to PRs 11,000.0 by 2014. Sanitation staff showed satisfaction regarding their timely and regular salary payments.

3. Through its capacity building and skill training programs the program enhanced the confidence and communication skills of female staff working for the CRU. Communication and publicity material were gender sensitive and promoted equal participation of both men and women. It was observed that having women staff at front desks of CRU was effective when women consumers registered complaints, as they were more comfortable interacting with female customer care officers.

4. **Tranche 2.** GAP implementation performance of tranche 2 was unsatisfactory. Women workers in sanitation for primary collection were only 13% against the original GAP target of 35%. No civil society organizations were engaged for mobilization of youth and women. No women groups were formed, No women trained. Only one female staff of NSUSC was sent for training on inventory management in NED. Citizen report cards survey not conducted. Although, about 14 About 14 events were organized for community members on awareness raising about NSUSC, its functions, and citizens' responsibility, yet the number of women participants is not known. No consultation with women was undertaken during tranche 2 implementation. Since the tranche 2 did not deliver its intended outputs, no assessment was conducted on the gender-specific impact of the tranche 2 implementation. No gender staff or consultant (gender specialist) was engaged either at PSU or NUSC level despite ADB's continuous follow-up. The NSUSC was finally convinced to hire a gender specialist. ADB helped develop terms of reference for the expert, but in the meantime the Supreme Court of Pakistan ordered to close down the NSUSC in March 2017.

5. **Lessons learned.** Following are the key lessons learned with respect to the mainstreaming gender in the urban sector initiatives.

- (i) There is a general lack of appreciation of gender issues within the public sector and people are not adequately sensitized about the gender issues and the need for mainstreaming gender in development.
- (ii) Generally, the GAP targets are vague, general in nature, and cannot be measured. Special attention should be given in preparation of GAP and its monitoring targets.

- (iii) A little or no attention is given by the EAs/IAs to appointment of gender staff which affects implementation of the GAP and reporting on its implementation.

6. **Recommendations.** Based on the lessons learned under the program, the following are the recommendations for consideration during design of the future projects.

- (i) The project inception missions should include holding of gender sensitization workshop for the key official of the EA and the IAs so that the decision makers appreciate the need for gender mainstreaming and facilitate the process during implementation.
- (ii) GAP targets, just like the performance indicators of DMF, needs to be SMART i.e. specific, measurable, achievable, realistic, and timebound. Currently, the GAP targets lack these characteristics.
- (iii) Appointment of a qualified gender specialist acceptable to ADB, should be made a disbursement condition like it is made condition to appointment of qualified finance / accounting staff acceptable to ADB.

Table A9.1: Gender Action Plan for the Facility

No	Activity	Task	Indicator	Target Group	Action By	Status at Completion
1	Incorporate gender perspective in capacity development and public awareness program	Incorporate gender perspective in training and capacity development activities	Training and public awareness programs: <ul style="list-style-type: none"> • contain a gender perspective • are gender sensitive • involve an increasing number of women 	Staff of Urban Services Corporations and Taluka Municipal Administrations	Urban Services Corporations	Partially achieved. Tranche 1: Training module developed for employees of the CCU included a gender perspective but did not incorporate separate sessions on gender sensitivity issues and concepts More than 60% of the CRU staff were women, who were trained in complaint handling and communication skills 18% of the sanitation workers were women. Salaries of sanitation workers (including women) working under contractual agreement increased by more than 300%. ¹ However, no information is available on training to staff of TMAs. Tranche 2: No trainings were imparted during tranche 2.

¹ ADB. 2017. *Completion Report for Sindh Cities Improvement Investment Program – Tranche 1*. Manila

No	Activity	Task	Indicator	Target Group	Action By	Status at Completion
2	Participation, consultation, grievance resolution, activities takes into account gender issues	Ensure (i) increased participation of women in program-related consultations, gender-sensitive design of grievance procedures and (ii) specific all-women consultations	Participation and consultation raise awareness of gender issues and target women • Women participating in program design, implementation and monitoring	Women in program Areas	Urban Services Corporations and Program Support Unit	<p>Partially achieved.</p> <p>Tranche 1: The program carried out many formal awareness-raising campaigns through advertising on cable TV, radio programs, and public consultations, including with women. The communication material developed was gender sensitive and promoted equal participation. The communication strategy of NSUSC was gender sensitive. For instance, cable TV tickers were run to create awareness and inform women at the household level about NSUSC services. Workshops on DNI zones were conducted to raise public awareness, particularly women's awareness in Sukkur, Rohri, and Khairpur. There was minimal participation by women in program design, implementation and monitoring. However, the participation of women in the Citizen Report Card survey was ensured to assess their level of satisfaction with program services delivery.</p> <p>However, women participation in project design, implementation and monitoring was missing.</p> <p>Tranche 2: Neither any trainings were organized under tranche 2, nor women participation in project design, implementation and monitoring.</p>
3	Gender disaggregated data collected and used during Investment	Include and collect gender disaggregated data in baseline and in	Disaggregated data is collected for developing compensation packages	Project-affected women and men and program consumers	Urban Services Corporations and Program Support Unit	<p>Partially achieved:</p> <p>Resettlement Plans included gender disaggregated data. However, no gender</p>

No	Activity	Task	Indicator	Target Group	Action By	Status at Completion
	Program implementation and monitoring	follow up and resettlement surveys. Build requirements into terms of reference for statisticians, surveyors, IT consultants and Urban Services Corporation staff.	<ul style="list-style-type: none"> • Land Acquisition and Resettlement Plans note, where relevant, compensation selected by women and addresses concerns of female-headed households, widows, and elderly • Disaggregated data collected and analyzed for monitoring and evaluation and subsequent tranche design 			<p>disaggregated data was collected, and analyzed for monitoring and subsequent tranche designs.</p> <p>Tranche 1:</p> <p>No women were affected by program land acquisition (four sites were selected, two were government-owned, and the other two had no women with entitlements)</p> <p>The MIS developed for registration of customer complaints was gender disaggregated. However, no information is available on data disaggregated by gender in the complaints system of NSUSC.</p> <p>Tranche 2:</p> <p>Neither any data was collected for monitoring of project implementation, nor any reports on gender disaggregated data from complaint management system were in tranche 2.</p>
4	Gender disaggregated data collected and used for analysis of urban sector at province level	Include and collect gender disaggregated data in baseline, follow-up and other surveys conducted as part of developing management information system for Sindh urban sector	Disaggregated data collected and analyzed for urban sector analysis and planning	Women in Sindh urban areas	Urban Unit and Program Support Unit	Not achieved.
5	Gender Action Plan	Review impact of Gender Action Plan; adjust plan at each tranche consideration	<p>Status reports prepared on Gender Action Plan</p> <ul style="list-style-type: none"> • Strengthened capacity of agencies to promote gender equality 	Women in Program area	Program Support Unit, Urban Unit; Urban Services Corporations	<p>Partly Achieved:</p> <p>Tranche 1:</p> <p>Status report on GAP was prepared and submitted to ADB.</p>

No	Activity	Task	Indicator	Target Group	Action By	Status at Completion
						Capacity building in gender sensitivity was not carried out. Tranche 2: No status report on GAP implementation was prepared. Similarly, capacity building in gender sensitivity was also not carried out.
6	Urban Services Corporation Governance	Encourage diversity and consideration of gender balance on Urban Services Corporations Boards of Directors	At least one-third of Independent Board Directors are qualified women	Women in Program area	Urban Services Corporations shareholders	Partly achieved: The proportion of women serving as members of the Board of Directors changed over the time but was generally 5% – 10% vs. a target of 33%. Under tranche 2, the situation remained almost the same whereby, out of 13 board members, only one was female.

DNI = distribution network improvement, CCU = customer care unit, CRU = complaints registration unit, GAP = gender action plan, IT = information technology, MIS = management information system, NUSC = North Sindh Urban Services Corporation, TMA = taluka municipal administration,

Note: Status at completion for Tranche 1 has been taken from the completion report for Sindh Cities Improvement Investment Program – Tranche 1

Source: Asian Development Bank.

Table A9.2: Gender Action Plan—Tranche 2

Objective	Activity	Indicator	Target Group	Responsibility	Status at Completion
Output 1: NSUSC provides effective and more sustainable services in participating towns					
Gender fair HR policies are implemented and reinforced	1) Implement gender sensitive employment policies (equal pay for equal work, equal career development and training opportunities, zero harassment etc.)	Gender sensitive employment policy implemented. HR gender focal point is appointed. 15 new recruitment for women provided of the 3,400 staff deputed in 6 towns, 1,200 will be women workers in sanitation for primary collection of solid wastes.	Women Staff	IA	Partly achieved. Employment policy was gender sensitive. Women were encouraged to apply for announced jobs. But the response was very poor. HR gender focal was not appointed. Of NSUSC's total 965 employees, 55 (5%) were women. Of total 2,582 TMA staff deputed, 337 (13%) were women. The original requirement was that female workers be 35% of the total workers in sanitation for primary collection of solid waste.
Output 4: Improved water supply, wastewater and solid waste management services in participating towns					
Women's participation in program implementation and monitoring strengthened.	1) Identify and train women groups to monitor water supply continuity and pressure 2) Ensure Citizen Report Card (CRC) survey is gender balanced	One women group in each catchment area formed and active in water supply monitoring. 50% of all domestic customers surveyed through CRC are women.	Women customers in participating towns.	Social and Gender Officer, IA	No trainings were conducted for women. CRC survey was not undertaken under tranche 2. CSOs were not engaged. One of the reasons for not no progress on these tasks was non appointment of a Gender Specialist who could have helped in implementation of activities identified in the GAP.
Participation of CSOs (especially women led CSOs) and corporate sector in improving community participation and ownership strengthened	1) Engage CSOs in mobilizing youth and women groups 2) Collaborate with corporate sector in increasing awareness	One youth and women group in each catchment area mobilized by CSOs. Five awareness raising events conducted in each program city in collaboration with corporate sector organizations. The context is outlined as follows: (i) gender analysis of projects and planning in capital works; (ii) gender sensitive consultation for project and operations improvement; (iii) gender sensitive practices at	Customers in participating towns.	Social and Gender Officer, IA	Partly achieved. About 14 events were organized on awareness raising about NSUSC, its functions, and citizens' responsibility.

Objective	Activity	Indicator	Target Group	Responsibility	Status at Completion
		work; (iv) gender central languages in policies, program, and reporting and communication; (v) improving operational practices and local laws on gender mainstreaming in NSUSC and gender action plan of NSUSC; (vii) sensitization and awareness about gender in TMA staff; and (viii) gender sensitive complaint and customer care Communication			
Output 5: Management structure and capacity for WSS operations improved					
Capacity of IAs in gender sensitive planning, implementation and monitoring strengthened	1) Impart training to IA staff in gender sensitive planning and implementation	80% of NSUSC management and operational staff (including regional offices) staff trained in gender sensitive planning and implementation.	Women customers in participating towns	Social and Gender Officer, IA	No such training was undertaken.
	2) Produce periodic gender progress reports	Program gender updates are available			Not achieved.
	3) Provide capacity building opportunities to women staff	80% of women staff (at management and operational level) provided with capacity building opportunities.			One female staff member was sent for training on inventory management in NED.
Gender sensitive Communication strategy developed	1) Develop gender sensitive promotional material	Posters, leaflets, handouts (1 each) published with gender sensitive design and information.	Women customer in participating towns	Social and Gender Officer, IAs	No strategy was developed under tranche 2.
	2) Conduct consultations and meetings with women for information sharing	120,000 of women customers aware about program services. ¹			No women consultation were undertaken.
	3) Include women in awareness raising programs/ campaigns	50% of the public consultations are held with women.			Not achieved.

¹ Presently, baseline of women customers who are aware about program services is not available..

Objective	Activity	Indicator	Target Group	Responsibility	Status at Completion
Collection, analysis, dissemination and use of gender specific data strengthened	1) Generate sex disaggregated reports of complaint data	Sex disaggregated complaint data is available for analysis and utilization. ²			Not done.
	2) Analyze and utilize complaint data for planning and decision making	Baseline surveys include gender specific information and analysis. Gender impact studies are available. ³			Monthly meetings were conducted to discuss the trends of complaints and actions were agreed for improvement and good performance was appreciated. Recurring problems were dealt with by providing permanent solutions.
	3) Incorporate gender sensitive indicators in baseline surveys		Women customers in participating towns	Social and Gender Officer, IA	No baseline survey was done.
	4) Conduct gender analysis of baseline surveys and utilize this information for future planning				Not baseline survey was done.
	5) Conduct-gender specific impact assessment of program services				Not conducted.

CRC = citizen report card, CSO = civil society organization, HR = human resource, IA = implementing agency, NSUSC = North Sindh Urban Services Corporation, TMA = taluka municipal administration,
Source: Asian Development Bank.

² Data analysis to assess the type wise frequency of complaints made by women customers and response to the complaints. Data utilization to assess the reason of less complaints from women in a particular area and improve the outreach and increase women's access to information.

³ Baseline information = parameters such as gender role of women in water and solid waste management (SWM), problems and issues faced by women related to water and SWM, women's participation in water and SWM committees, etc.

STATUS OF COMPLIANCE WITH LOAN COVENANTS

1. A detailed assessment of compliance of Loans 2499 (PFR-1) is covered in the tranche 1 completion report.¹ The following table provides update on compliance of the tranche 2 covenants.

Table A6.1: Compliance Status of Tranche 2 Covenants

Covenant	Reference in Loan/Project Agreement	Status of Compliance
A. Loan Agreement: L2975-PAK		
(a) The Borrower shall cause the Project to be carried out with due diligence and efficiency and in conformity with sound applicable technical, financial, business, and development practices.	Section 4.01	Partly complied with. Project was not implemented efficiently, and in conformity with sound technical and financial practices
(b) 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 the Special Operations Loan Agreement and the Schedule to the Project Agreement.	Section 4.01	Partly complied with. Many obligations were in partial or non-compliance. Most notably - timely provision of counterpart funds, provision of land for landfill sites, establishment of IPPMS. Also, no timely actions were taken by the Borrower, or Sindh to resolve the issue of non-performing BOD, and appointment of a new BOD resulting in inordinate delays in the project execution.
The Borrower shall make available, or cause to be made available, promptly as needed, and on terms and conditions acceptable to ADB, 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	Partly complied with. There have been delays in provision of counterpart funds for the Project by the GoS. Due to delay in release of funds for landfill sites, the land acquisition process was significantly delayed and could not be completed. Only one (Khairpur 25 acres) out of the three landfill sites could be handed over to NSUSC.
The Borrower shall enable ADB's representatives to inspect the Project, the Goods and Works, and any relevant records and documents.	Section 4.03	Complied with
The Borrower shall take all actions which shall be necessary on its part to enable Sindh and NSUSC to perform their respective obligations under the Project Agreement and shall not take or permit any action which would interfere with the performance of such obligations.	Section 4.04	Partly complied. In addition to update provided under item 2 above, the borrower violated provision of this covenant by not raising any concern over Government of Sindh's extending mandate of the Sindh Solid Waste Management Board to the Project cities.
Notwithstanding any other provision of this Loan Agreement, no withdrawals shall be made from the Loan Account in respect of Works to be carried out in Ghotki and Jacobabad until: (a) the TMA in each of	Schedule 2: Para 6	Complied with.

¹ ADB. 2017. *Completion Report: Sindh Cities Improvement Investment Program - Tranche 1 in Pakistan*. Manila.

Covenant	Reference in Loan/Project Agreement	Status of Compliance
<p>Ghotki and Jacobabad shall have entered into a Service and Asset Management Agreement with NSUSC, in form and substances acceptable to ADB; and (b) Sindh, NSUSC and the TMA in each of Ghotki and Jacobabad shall have entered into the Tripartite Operational Support and Capital Investment Grant Agreement, in form and substances acceptable to ADB.</p>		<p>Only operations of Jacobabad were taken over by NSUSC. Ghotki could not be part of the Tranche.</p>
B. Loan Agreement: L2976-PAK(COL)		
<p>In the carrying out 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 and the Schedule to the Project Agreement.</p>	Section 4.01	<p>Partly complied with.</p> <p>Many obligations of the borrower were in partial or non-compliance. Most notably, timely provision of counterpart funds, provision of land for landfill sites, establishment of IPPMS. Also, no timely actions were taken by the Borrower, or Sindh to resolve the issue of non-performing BOD, and appointment of a new BOD resulting in inordinate delays in the project execution.</p>
<p>The Borrower shall enable ADB's representatives to inspect the Project, the Goods and Works, and any relevant records and documents.</p>	Section 4.02	Complied with.
<p>The Borrower shall take all actions which shall be necessary on its part to enable Sindh and NSUSC to perform their respective obligations under the Project Agreement and shall not take or permit any action which would interfere with the performance of such obligations.</p>	Section 4.03	<p>Partly complied with.</p> <p>No actions were taken by the Borrower, or Sindh to resolve the issue of non-performing Board of Directors (BOD), and timely appointment of a new BOD resulting in inordinate delays in the project execution.</p> <p>Similarly, extending mandate of the Sindh Solid Waste Management Board to the Project cities is a violation of the loan agreement. But the borrower has not raised issue on this action of the Sindh Government.</p>
<p>Notwithstanding any other provision of this Loan Agreement, no withdrawals shall be made from the Loan Account in respect of Works to be carried out in Ghotki and Jacobabad until: (a) the TMA in each of Ghotki and Jacobabad shall have entered into a Service and Asset Management Agreement with NSUSC, in form and substances acceptable to ADB; and (b) Sindh, NSUSC and the TMA in each of Ghotki and Jacobabad shall have entered into the Tripartite Operational Support and Capital Investment Grant Agreement, in form and substances acceptable to ADB.</p>	Schedule 2: Para 6	<p>Complied with.</p> <p>Only operations of Jacobabad were taken over by NSUSC. Ghotki could not be part of the Tranche.</p>
<p>The procurement of Goods, Works and Consulting Services shall be subject to and governed by the Procurement Guidelines, and the Consulting Guidelines, respectively.</p>	Schedule 4: Para 1	Complied with.

Covenant	Reference in Loan/Project Agreement	Status of Compliance
Except as ADB may otherwise agree, Goods and Works shall only be procured on the basis of the methods of procurement set forth below: International Competitive Bidding; National Competitive Bidding; and Shopping.	Schedule 4: Para 3	Complied with.
The methods of procurement are subject to, among other things, the detailed arrangements and threshold values set forth in the Procurement Plan. The Borrower may only modify the methods of procurement or threshold values with the prior agreement of ADB, and modifications must be set out in updates to the Procurement Plan.	Schedule 4: Para 4	Complied with.
The Borrower and ADB shall ensure that, prior to the commencement of any procurement activity under national competitive bidding, the Borrower's national competitive bidding procedures are consistent with the Procurement Guidelines. Any modifications or clarifications to such procedures agreed between the Borrower and ADB shall be set out in the Procurement Plan. Any subsequent change to the agreed modifications and clarifications shall become effective only after approval of such change by the Borrower and ADB.	Schedule 4: Para 5	Complied with.
NSUSC shall not award any Works contract for a Subproject which involves environmental impact until: (a) the EIA or IEE (as applicable) has been approved by the appropriate authority of the Borrower; and (b) NSUSC has incorporated relevant provisions from the EMP into the Works contract.	Schedule 4: Para 6	Complied with. Only one civil work was awarded under tranche 2, for which the IEE was prepared and approved by the provincial EPA.
NSUSC shall not award any Works contract which involves involuntary resettlement impacts for a Subproject until NSUSC has prepared and submitted to ADB the final LARP for such Subproject based on the Subproject's detailed design and obtained ADB's clearance of such LARP.	Schedule 4: Para 7	Complied with. The only civil works contract (Sukkur Intake) did not involve any land acquisition or involuntary resettlement.
Sindh or NSUSC (as applicable) shall apply quality- and cost-based selection for selecting and engaging Consulting Services.	Schedule 4: Para 8	Complied with. Consultants were hired as provided in the Procurement Plan.
Sindh shall recruit the individual consultants for the program support unit in accordance with procedures acceptable to ADB for recruiting individual consultants.	Schedule 4: Para 9	Complied with. Same as above.
(a) Sindh or NSUSC (as applicable) shall ensure that all Goods and Works procured by it (including without limitation all computer hardware, software and systems, whether separately procured or incorporated within other goods and services procured) do not violate or infringe any industrial property or intellectual property right or claim of any third party.	Schedule 4: Para 10	Partly complied with. Project was in violation of the copyrights of Microsoft for using pirated copies of MS windows and MS Office.
(b) Sindh or NSUSC (as applicable) shall ensure that all of its contracts for the procurement of Goods and	Schedule 4: Para 10	Complied with.

Covenant	Reference in Loan/Project Agreement	Status of Compliance
Works contain appropriate representations, warranties and, if appropriate, indemnities from the contractor or supplier with respect to the matters referred to in subparagraph (a) of this paragraph.		All contracts had the appropriate clauses to ensure this.
Sindh or NSUSC (as applicable) shall ensure that all of its ADB-financed contracts with consultants contain appropriate representations, warranties and, if appropriate, indemnities from the consultants to ensure that the Consulting Services provided do not violate or infringe any industrial property or intellectual property right or claim of any third party.	Schedule 4: Para 11	Complied with. All contracts had the appropriate clauses to ensure this.
Contracts procured under international competitive bidding procedures and contracts for Consulting Services shall be subject to prior review by ADB, unless otherwise agreed between the Borrower and ADB and set forth in the Procurement Plan.	Schedule 4: Para 12	Complied with. ADB review was guided by the provisions of the Procurement Plan.
In the case of a contract for Goods or Works which is subject to ADB's prior review, Sindh or NSUSC (as applicable) shall seek ADB's prior approval of any modification or waiver of the terms and conditions of the contract, including: (a) granting an extension of the stipulated time for completion of a contract for a period of 1 month or more, or which is likely to require an extension of the Loan Closing Date, and (b) increases in aggregate the original price by more than 5% (for the avoidance of doubt, such increase shall take into account any previous change under such contract).	Schedule 4: Para 13	Complied with. All such modifications were done with ADB's prior approval.
In the case of a contract for Goods or Works which is subject to ADB's post review, ADB shall review the required contract modification or waiver and respond to Sindh or NSUSC (as applicable) as soon as practicable, but not later than 1 month after the receipt of the required document.	Schedule 4: Para 14	Complied with. ADB's prior review was obtained by NSUSC even for modifications in all contracts even those, procured through Shopping method.
Sindh or NSUSC (as applicable) shall provide to ADB copies of all time extensions, modifications or waivers to the contracts (including charge orders) within 1 month following amendment of the contract.	Schedule 4: Para 15	Complied with.
The Borrower 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: Para 1	Complied with.
The Borrower shall (a) comply with ADB's Anticorruption Policy (1998, as amended to date) and acknowledges that ADB reserves the right to investigate directly, or through its agents, any alleged corrupt, fraudulent, collusive or coercive practice	Schedule 5: Para 2	Complied with.

Covenant	Reference in Loan/Project Agreement	Status of Compliance
relating to the Project; and (b) cooperate with any such investigation and extend all necessary assistance for satisfactory completion of such investigation.		
The Borrower shall 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 Sindh and NSUSC and all contractors, suppliers, consultants, and other service providers as they relate to the Project.	Schedule 5: Para 3	Complied with. Appropriate conditions were part of the contracts.
C. Project Agreement		
(a) Each of Sindh and NSUSC shall carry out the Project with due diligence and efficiency, and in conformity with sound applicable technical, financial, business, and development practices.	Section 2.01	Partly complied with. The project was not out fully carried in accordance with sound business and financial practices.
(b) In the carrying out of the Project and operation of the Project facilities, each of Sindh and NSUSC shall perform all obligations set forth in the Loan Agreements to the extent that they are applicable to such party, and all obligations set forth in the Schedule to this Project Agreement.	Section 2.01	Partly complied with. Many obligations were not met. For example, benchmarking and development of IPPMS, tariff revisions, and investment on water supply, wastewater, and solid waste management in NSUSC cities with prior clearance of NSUSC to ensure that these investments are in line with cities' master plans developed under the SCIIP.
Each of Sindh and NSUSC shall make available, promptly as needed, and on terms and conditions acceptable to ADB, the funds, facilities, services, land and other resources as required, in addition to the proceeds of the Loans, for the carrying out of the Project.	Section 2.02	Partly complied with. Significant delays occurred in release of counterpart funds. Land was also not provided to NSUSC in a timely manner and for all landfill sites. It was provided at a very belated stage for one out of three landfill sites.
(a) In the carrying out of the Project, each of Sindh and NSUSC 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	Complied with.
(b) Except as ADB may otherwise agree, each of Sindh and NSUSC shall procure all items of expenditures to be financed out of the proceeds of the Loans in accordance with the provisions of Schedule 4 to the Special Operations Loan Agreement. ADB may refuse to finance a contract where any such item 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	Complied with.
Each of Sindh and NSUSC shall carry out the Project in accordance with plans, design standards, specifications, work schedules and construction methods acceptable to ADB. Each of Sindh and	Section 2.04	Complied with.

Covenant	Reference in Loan/Project Agreement	Status of Compliance
NSUSC 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.		Various changes in construction method of Sukkur intake subproject were approved by ADB.
(a) Each of Sindh and NSUSC shall take out and maintain with responsible insurers; or make other arrangements satisfactory to ADB for, insurance of Project facilities to such extent and against such risks and in such amounts as shall be consistent with sound practice.	Section 2.05	Not complied. No project facility or vehicles and equipment were insured.
(b) Without limiting the generality of the foregoing, each of Sindh and NSUSC undertakes to insure, or cause to be insured, the Goods to be imported for the Project 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 such Goods.	Section 2.05	Complied with. This was followed in case of import of vehicles and other equipment for solid waste management, procured internationally.
Each of Sindh and NSUSC shall maintain, or cause to be maintained, records and accounts adequate to identify the 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	Complied with.
(a) ADB and each of Sindh and NSUSC shall cooperate fully to ensure that the purposes of the Loans will be accomplished.	Section 2.07	Partly complied. Sindh did not provide required support to the project and project implementation was delayed significantly, among others, also because of lack of ownership of GOS.
(b) Each of Sindh and NSUSC 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 Loans.		Partially Complied. There was no formal reporting on Project implementation, problems encountered, and proposed solutions etc.
(c) ADB and each of Sindh and NSUSC shall from time to time, at the request of any party, exchange views through their representatives with regard to any matters relating to the Project, Sindh, NSUSC and the Loans.		Complied with.
(a) Each of Sindh and NSUSC shall furnish to ADB all such reports and information as ADB shall reasonably request concerning (i) the Loans and the expenditure of the proceeds thereof; (ii) the items of expenditure financed out of such proceeds; (iii) the Project; (iv) the administration, operations and financial condition of	Section 2.08	Partly complied. No regular reporting was done by Sindh or NSUSC during project implementation.

Covenant	Reference in Loan/Project Agreement	Status of Compliance
Sindh and NSUSC; and (v) any other matters relating to the purposes of the Loans.		
(b) Without limiting the generality of the foregoing, Sindh shall furnish to ADB periodic 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 period under review, steps taken or proposed to be taken to remedy these problems, and proposed program of activities and expected progress during the following period.	Section 2.08	Not complied. No periodic reports were received under tranche 1 either by PSU or NSUSC. Although ADB developed a reporting format and guideline to be used for preparation of quarterly progress report (QPR), but only one QPR was submitted by the PSU. No such report was ever furnished by NSUSC during the life of Tranche 2.
(c) Promptly after physical completion of the Project, but in any event not later than 3 months thereafter or such later date as ADB may agree for this purpose, 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 operation of the Project, including its cost, the performance by Sindh and NSUSC of their respective obligations under this Project Agreement and the accomplishment of the purposes of the Loans.	Section 2.08	Not complied. No completion report was provided by Sindh, or NSUSC. The Government of Sindh even refused to meet the PCR mission citing government's pre-occupations due to budget preparation as the reason. PSU and NSUC were also closed at the time of PCR Mission. The Mission faced extreme difficulty in getting the information required for the facility completion report by ADB.
(a) Each of Sindh and NSUSC shall (i) maintain separate accounts and records for the Project; (ii) prepare annual financial statements for the Project in accordance with accounting principles acceptable to ADB; (iii) have such financial statements for the Project audited annually by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB, in accordance with international standards for auditing or the national equivalent acceptable to ADB; (iv) as part of each such audit, have the auditors prepare a report (which includes 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 the imprest account(s) and statement of expenditures) and a management letter (which sets out the deficiencies in the internal control of the Project that were identified in the course of the audit, if any); and (v) furnish to ADB, no later than 6 months after the close of the fiscal year to which they relate, copies of such audited financial statements, audit report and management letter, all in the English language, and such other information concerning these documents and the audit thereof as ADB shall from time to time reasonably request.	Section 2.09	Partly complied. APFS were received, but initially with delay of five months.
(b) ADB shall disclose the annual audited financial statements for the Project and the* opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website.	Section 2.09	Complied with.

Covenant	Reference in Loan/Project Agreement	Status of Compliance
(c) In addition to annual audited financial statements referred to in subsection (a) hereinabove, NSUSC shall (i) provide its annual financial statements prepared in accordance with national accrual-based financing reporting standards acceptable to ADB; (ii) have its financial statements audited annually by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB, in accordance with international standards for auditing or the national equivalent acceptable to ADB; and (iii) furnish to ADB, no later than 1 month after approval by the relevant authority, copies of such audited financial statements in the English language and such other information concerning these documents and the audit thereof as ADB shall from time to time reasonably request.	Section 2.09	AFS were also received but with delays, ranging from 11 to 23 months.
(d) Each of Sindh and NSUSC shall enable ADB, upon ADB's request, to discuss the financial statements for the Project and its financial affairs where they relate to the Project with the auditors appointed by Sindh and NSUSC pursuant to subsections (a)(iii) and (c) hereinabove, and shall authorize and require any representative of such auditors to participate in any such discussions requested by ADB. This is provided that such discussions shall be conducted only in the presence of an authorized officer of each of Sindh and NSUSC, unless either Sindh or NSUSC shall otherwise agree.	Section 2.09	Complied with.
Each of Sindh and NSUSC shall enable ADB's representatives to inspect the Project, the Goods and Works and any relevant records and documents.	Section 2.10	Complied with.
(a) Each of Sindh and NSUSC shall promptly as required, take all action within its powers 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. NSUSC shall, promptly as required, take all action within its power to maintain its corporate existence.	Section 2.11	Partly complied with. With closure of NSUSC, the Sindh failed to ensure its sustainability of operations. Sindh also failed to provide necessary political and administrative support for smooth running of NSUSC as a section 42 company for municipal services delivery. There were substantial delays in appointment of new BOD and senior and mid-level management of NSUSC after the recommended institutional changes in 2013.
(b) Each of Sindh and NSUSC shall at all times conduct its operations in accordance with sound applicable technical, financial, business, development and operational practices, and under the supervision of competent and experienced management and personnel.	Section 2.11	Partly complied with. NSUSC did not carry out its operations fully in line with sound technical, financial and business development and operational practices.
(c) Each of Sindh and NSUSC 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 applicable technical, financial,	Section 2.11	Not complied. NSUSC is closed down on SCP orders. And all project facilities were initially handed over to MCs of the respective towns, but effective

Covenant	Reference in Loan/Project Agreement	Status of Compliance
business, development, operational and maintenance practices.		January 2019, these have been handed over to PHED, in light of the SCP orders, except in Sukkur where operations are still with MC Sukkur. But eventually Sukkur will also have to handover the project facilities, including plants and equipment for operation to PHED that has a history of inefficient and ineffective water supply and sanitation services delivery.
Except as ADB may otherwise agree, each of Sindh (including P&DD and its other departments) and NSUSC 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	Partly complied. The project facilities have been handed over to PHED without ADB's consent and based on the prior experience of working with PHED, the operations are not likely to sustain. Some of the plants have already stopped functioning because of inadequate maintenance.
Except as ADB may otherwise agree, each of Sindh and NSUSC shall apply the proceeds of the Loans to the financing of expenditures on the Project in accordance with the provisions of the Loan Agreements and this Project Agreement, and shall ensure that all items of expenditures financed out of such proceeds are used exclusively in the carrying out of the Project.	Section 2.13	Complied with.
NSUSC shall promptly notify ADB or any proposal to amend, suspend or repeal any provision of its Charter, which, if implemented, could adversely affect the carrying out of the Project or the operation of the Project facilities. NSUSC shall afford ADB an adequate opportunity to comment on such proposal prior to taking any affirmative action thereon.	Section 2.14	Not complied. The closure of NSUSC was done without consultation with ADB or providing ADB a chance to comment on the decision or suggesting any alternate course of action to carry on with the Project. This decision has done havoc with the Project, and all investments made under the MFF have gone down the drain.
<p>Implementation Arrangements</p> <p>Each of Sindh and NSUSC 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 Project Agreement, the provisions of this Project Agreement shall prevail.</p>	Schedule to the Project Agreement (PA), Para 1	Partly complied. The Project was not implemented fully in line with provisions of PAM and as envisaged. NSUSC closure on orders of SCP is a serious violation of the PAM provisions and the Loan and Project Agreements.
<p>NSUSC</p> <p>Sindh shall allow NSUSC to operate as a limited liability company in accordance with (a) the prevailing laws and regulations of Pakistan, including the Companies Ordinance; and (b) constitutional documents of NSUSC. Without limiting the generality of the foregoing, Sindh shall ensure that that the recently enacted SPLGA does not affect the legal continuity of NSUSC or any similar urban services corporation existing or formed in the future in connection with the Investment Program.</p>	Schedule to the PA, Para 2	Partly complied with. The closure of NSUSC is a serious violation of this covenants.

Covenant	Reference in Loan/Project Agreement	Status of Compliance
Sindh shall provide the necessary resources needed to ensure that (a) NSUSC will be an effective and sustainable vehicle for the delivery of water supply, wastewater and solid waste management services; and (b) the Project facilities will continue to be in good condition during and after completion of the Project.	Schedule to the PA, Para 3	Partly complied. Delays in release of counterpart funds, suffered NSUSC's operations, and closure of NSUSC lead to a situation where none of the filtration plant, or wastewater disposal system is in good condition anymore, since the TMA and PHED has neither adequate resources, nor any incentives for operation and maintenance of these facilities.
Sindh shall provide NSUSC with timely assistance and support through the provision of capital investment and Operational Support Funding, under the Tripartite Operational Support and Capital Investment Grant Agreements.	Schedule to the PA, Para 4	Partly complied with. There were delays in release of counterpart funds, acquisition of land.
Sindh shall ensure that NSUSC will have adequate enforcement mechanism to effectively collect service fees and penalize defaulters in order to improve collection efficiency, deter non-payment and ensure sustainability of NSUSC operations.	Schedule to the PA, Para 5	Not complied. NSUSC was not given adequate enforcement powers to take action against the defaulters to improve collection of service fee.
Sindh shall cause NSUSC to ensure that its managing director shall (a) be recruited from open market on a competitive basis in a manner acceptable to ADB; and (b) have a minimum of 10 years of work experience in managing service delivery and other relevant qualifications to be agreed upon between ADB and Sindh.	Schedule to the PA, Para 6	Partly complied. The position of MD remained vacant throughout tranche life. However, an Acting MD was appointed and given charge of the position of MD. Only shortlisting of the candidates was shared with ADB, no consultation was made for selection.
Sindh shall cause NSUSC to ensure that its safeguards and capital works units are maintained to the satisfaction of ADB.	Schedule to the PA, Para 7	Complied with. Safeguard unit was established within NSUSC although it was understaffed.
Sindh shall cause NSUSC to ensure that its key management staff is duly appointed and that it is adequately staffed in accordance with the PAM.	Schedule to the PA, Para 8	Partly complied. Most of the time the key positions remained vacant and appointments were not made. The position of MD remained vacant and an Acting MD ran the business with no previous experience of running a utility company as the chief executive.
Taluka Municipal Administration Sindh shall ensure that (a) the participating T MAs will be adequately staffed and (b) the necessary budgetary resources to fund the TMA staff deputed to NSUSC and other budgetary requirements pursuant to the Service and Asset Management Agreement will be fulfilled.	Schedule to the PA, Para 9	Partly complied with. TMAs remained understaffed. And there were issues in providing funds for salaries of the TMA staff deputed at NSUSC, which resulted in disruption in NSUSC's operations.
Construction Quality; Operation and Maintenance Each of Sindh and NSUSC shall ensure that the Project is carried out in accordance with the applicable design and technical specifications in accordance with the national standards and satisfactory to ADB; and that the construction supervision, quality control and contract management are in accordance with internationally accepted standards and practices.	Schedule to the PA, Para 10	Complied with.

Covenant	Reference in Loan/Project Agreement	Status of Compliance
Each of Sindh and NSUSC shall ensure that the Project facilities are operated, maintained and repaired in accordance with sound administrative, financial, engineering, social, environmental, technological, operational and maintenance practices.	Schedule to the PA, Para 11	Not complied. After closure of NSUSC, most of the project facilities are no more operational as the TMAs and the PHED has neither adequate number of staff and financial resources, nor any incentives for operation and maintenance of these facilities. Nowhere in tranche 2 towns, potable water is being supplied to the end-users. Filter beds of filtration plants have choked, water storage lagoons have cumulated silt, and turbines are water pumping stations have stopped working because of poor or no maintenance.
Protect Implementation and Counterpart Funding Sindh shall ensure timely implementation of the agreed reforms set forth in the action plan for reform and investment, which is part of the urban sector roadmap.	Schedule to the PA, Para 12	Partly complied with. Many actions agreed in the action plan for reforms were not taken, that includes revision in tariff, and establishment of benchmarking and baseline collection.
To ensure operational alignment and legal compliance with the recently enacted SPLGA and efficient commercial services, Sindh shall, in collaboration with ADB, undertake a review of the institutional framework of the Investment Program, such review to be completed by 30 June 2013. This review will assess institutional structure for efficient service and delivery and performance. Any restructuring and organizational change to improve service delivery recommended as part of such review shall be implemented after the approval of the Government of Sindh by no later than 30 December 2013.	Schedule to the PA, Para 13	Complied with.
To support the Investment Program objective of sustainability, and the efficient operations of NSUSC and the Operational Support Funding, Sindh shall ensure that (i) revised tariff schedules covering water supply and wastewater management and solid waste management in each of the towns covered by the Project, in line with the NSUSC operating guidelines, shall be notified by Sindh prior to 30 June 2013; and (ii) Operational Support Funding output based criteria shall be prepared by 30 December 2013 and approved by Sindh, for phased implementation by 30 June 2014, with such output based criteria reflected through appropriate amendments to the condition specified in Schedule 9 of the Service and Asset Management Agreement.	Schedule to the PA, Para 14	Not complied. Tariff was not revised during the life of tranche 2. However, recently Rohri MC has done a little revision in water and other services charges for all categories of customers, which is not adequate enough to cover the O&M costs. OSF funding was not allocated on output-based criteria.
Sindh shall ensure that, prior to entrustment of services to NSUSC pursuant to the Service end Asset Management Agreement, each of Ghotki and Jacobabad shall have installed and have functioning electricity meters.	Schedule to the PA, Para 15	Compiled with for Jacobabad. Ghotki was not taken over by NSUSC.
Sindh shall ensure the availability and timely release of counterpart funding for the timely implementation of each Subproject. The counterpart funds to be provided by Sindh shall include, but not be limited to, in-kind	Schedule to the PA, Para 16	Partly complied. There were delays in release of counterpart funds to the Project. Land was also not

Covenant	Reference in Loan/Project Agreement	Status of Compliance
contributions of land, counterpart staff, office space and vehicles.		provided for landfill sites. Of the three proposed landfill sites, land was made available only in Khairpur, that too, at a very late stage.
<p>Environment</p> <p>Each of Sindh and NSUSC shall ensure that the preparation, design, construction, implementation, operation and decommissioning of each Subproject 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 IEE or EIA (as applicable) and EMP, and any corrective or preventative actions set forth in a Safeguards Monitoring Report. Land Acquisition and Involuntary Resettlement.</p>	Schedule to the PA, Para 17	<p>Complied with.</p> <p>Only one civil works project could be awarded which was compliant to environment safeguard requirements.</p>
<p>Each of Sindh and NSUSC shall ensure that all land and all rights-of-way required for each Subproject and all Project facilities 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; (c) the LARF; and (d) all measures and requirements set forth in the respective LARP, and any corrective or preventative actions set forth in a Safeguards Monitoring Report.</p>	Schedule to the PA, Para 18	<p>Partly complied with.</p> <p>Land for all landfill site was not made available to the NSUSC. The land was provided only for Khairpur landfill site, that too, with substantial delays.</p>
<p>Without limiting the application of the Involuntary Resettlement Safeguards, the LARF or the LARP, each of Sindh and NSUSC shall ensure that (a) no land shall be acquired for the purposes of the Project under the emergency acquisition provisions of the Borrower's Land Acquisition Act (1984), as amended, and (b) no physical or economic displacement takes place in connection with the Subprojects until: (a) compensation and other entitlements have been provided to affected people in accordance with the LARP; and (b) a comprehensive income and livelihood restoration program has been established in accordance with the LARP (if applicable).</p>	Schedule to the PA, Para 19	<p>Complied with.</p> <p>No emergency procedures for land acquisition were used under the Project.</p>
<p>Indigenous Peoples</p> <p>Each of Sindh and NSUSC shall ensure that the Project does not have any indigenous peoples impacts within the meaning of the Safeguard Policy Statement. in the event that the Project does have any such impact, each of Sindh and NSUSC shall take all steps required to ensure that the Project complies with the applicable laws and regulations of the Borrower and the Safeguard Policy Statement.</p>	Schedule to the PA, Para 20	<p>Complied with.</p> <p>No indigenous peoples are affected by the Project.</p>
Human and Financial Resources to Implement Safeguards Requirements	Schedule to the PA, Para 21	Complied with.

Covenant	Reference in Loan/Project Agreement	Status of Compliance
Each of Sindh and NSUSC shall make available necessary budgetary and human resources to fully implement the EMP and the LARP.		The only civil works of Sukkur Intake had no LARP. However, EMP was prepared and implemented.
<p>Safeguards — Related Provisions in Bidding Documents and Works Contracts</p> <p>Each of Sindh and NSUSC shall ensure that all bidding documents and contracts for Works contain provisions that require contractors to:</p> <p>(a) comply with the measures and requirements relevant to the contractor set forth in the IEE or EIA (as applicable) the EMP and the LARP (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set out in a Safeguards Monitoring Report;</p> <p>(b) make available a budget for all such environmental and social measures;</p> <p>(c) provide Sindh and NSUSC with a written notice of any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the IEE or EIA (as applicable), the EMP or the CARP;</p> <p>(d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.</p>	Schedule to the PA, Para 22	<p>Complied with.</p> <p>Appropriate provisions were included in the bidding documents.</p>
<p>Safeguards Monitoring and Reporting</p> <p>Each of Sindh and NSUSC shall do the following:</p> <p>(a) submit semi-annual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission; (b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the EIA or IEE (as applicable), the EMP or the LARP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan;</p> <p>(c) no later than three months after the Effective Date, engage qualified and experienced external experts or qualified NGOs under a selection process and terms of reference acceptable to ADB, to verify information produced through the Project monitoring process, and facilitate the carrying out of any verification activities by such external experts; and report any actual or potential breach of compliance with the measures and requirements set forth in the EMP or the LARP promptly after becoming aware of the breach.</p>	Schedule to the PA, Para 23	Complied with.
<p>Prohibited List of Investments</p> <p>Each of Sindh and NSUSC shall ensure that no</p>	Schedule to the PA, Para 24	Complied with.

Covenant	Reference in Loan/Project Agreement	Status of Compliance
proceeds of the Loans are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS.		Under SCIIP, there was no activity that is included in the list of prohibited investment activities as defined in Appendix 5 of the SPS.
<p>Labor and Gender</p> <p>Each of Sindh and NSUSC shall ensure that the civil works contracts incorporate provisions to the effect that the contractors will: (a) comply with applicable core labor standards and labor laws, and incorporate applicable workforce occupational and safety norms; (b) not differentiate payment between men and women for work of equal value; (c) not employ child labor; (d) abstain from employment discrimination; (f) allow for freedom of association; (g) to the extent possible, maximize employment of local poor and disadvantaged persons for project constructions purposes, provided that the requirements for job and efficiency are adequately met; and (h) provide safe working conditions.</p>	Schedule to the PA, Para 25	Complied with. Appropriate provisions were included in the condition of contracts.
Each of Sindh and NSUSC shall ensure that civil works contractors disseminate information (in local languages) on the risks of sexually transmitted diseases, including HIV/AIDs, in health and safety programs for all construction works at campsites. Each of Sindh and NSUSC shall ensure that specific provisions to this effect will be included in the bidding documents and civil works contracts, and that compliance will be strictly monitored by Sindh and NSUSC.	Schedule to the PA, Para 26	Partly complied. Appropriate provisions were included in the bidding documents. But compliance by contractors was partial.
Each of Sindh and NSUSC shall ensure that the Gender Action Plan is fully implemented and monitored in a timely manner in accordance with its terms (including the representation of qualified women on the board of directors of NSUSC), related regulations of the Borrower, and ADB's Policy on Gender and Development (1998) and adequate resources are allocated for this purpose.	Schedule to the PA, Para 27	Partly complied. Many provisions of GAP could not be implemented. No resources were allocated by the NSUSC for implementing and monitoring of GAP progress.
Each of Sindh and NSUSC shall monitor the impact of each Subproject on women during implementation of such Subproject, including where relevant, with gender disaggregated data collected pursuant to the monitoring and evaluation system and the Gender Action Plan.	Schedule to the PA, Para 28	Not complied. No such monitoring was undertaken. No gender specialist hired under the Project.
<p>Policy Dialogue</p> <p>Each of Sindh and NSUSC shall ensure that ADB is kept informed on policies and programs related to municipal services in the Project area and other policies and programs that will materially affect the financial viability of the Project.</p>	Schedule to the PA, Para 29	Not complied. GoS established Sindh Solid Waste Management Board without consultation with ADB and mandated it to provide these services in entire Sindh, in clear violation of this agreement that requires only NSUSC to operate in the participating towns.
<p>Governance and Anticorruption</p> <p>Each of Sindh and NSUSC shall (a) comply with ADB's Anticorruption Policy (1998, as amended to date) and acknowledge that ADB reserves the right to</p>	Schedule to the PA, Para 30	Complied with. ADB carried out many investigations on different complaints, and NSUSC always cooperated to the ADB investigators and the

Covenant	Reference in Loan/Project Agreement	Status of Compliance
investigate directly, or through its agents, any alleged corrupt, fraudulent, collusive or coercive practice relating to the Project; and (b) cooperate with any such investigation and extend all necessary assistance for satisfactory completion of such investigation.		Project staff and provided the requested information.
Each of Sindh and NSUSC shall 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 Sindh and NSUSC and all contractors, suppliers, consultants, and other service providers as they relate to the Project.	Schedule to the PA, Para 31	Complied with. Appropriate provisions were included in the bidding documents.
Each of Sindh and NSUSC shall ensure that updated information on the Project is included on the websites and the bulletin boards at the offices of the participating TMAs, the NSUSC regional office(s) and the NSUSC customer service units in at town-level. Such information will reflect the performance of the Project, business opportunities, bidding process and guidelines, lists of participating bidders, outcome of biddings, contract values and summary progress reports of the Project.	Schedule to the PA, Para 32	Partly complied with. Not all participating TMAs had dedicated websites. NSUSC establishes its own website but it did not contain all requisite information as stipulated in this covenant.
In addition to the obligations set forth in Section 2.09 of this Project Agreement, NSUSC shall ensure that (a) separate accounting records will be maintained for each of the participating TMAs; (b) an independent audit will be conducted on the project account and financial statement annually by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB, in accordance with the Companies Ordinance; (c) as part of each such audit, have the auditors prepare a report (which includes the auditors' opinion on the use of the Loan proceeds and compliance with the financial covenants of the legal documents and a management letter (which sets out the deficiencies in the internal control of the Project that were identified in the course of the audit, if any); and (d) furnish to ADB, within six months after the close of each fiscal year during project implementation, copies of such audited financial statements, audit report and management letter, all in the English language, and such other information concerning these documents and the audit thereof as ADB will from time to time reasonably request.	Schedule to the PA, Para 33	Not applicable. There was no direct investment with TMAs by the NSUSC as such no audits of TMA accounts were conducted for the Project.

BOD = board of directors, COL = concessional ordinary capital resource, EARF = environmental assessment review framework, EIA = environmental impact assessment, EMP = environmental management plan, EPA = environment protection agency, GAP = gender action plan, GoS = Government of Sindh, IEE = initial environmental examination, IPPMS = investment program performance monitoring system, LA = loan agreement, LARF = land acquisition and resettlement framework, LARP = land acquisition and resettlement plan, MC = municipal corporation, MD = managing director, MFF = multi-tranche financing facility, NSUSC = North Sindh Urban Services Corporation, O&M = operation and maintenance, OSF = operations support fund, PA = project agreement, PAM = project administration manual, PCR = project completion review, PSU = program support unit, SCP = supreme court of Pakistan, SPLGA = Sindh provincial local government Act, SPS = safeguard policy statement, PHED = public health engineering department, TMA = taluka municipal administration

Source: Asian Development Bank

OVERALL PROGRAM RATINGS

Criteria	Rating		
	Tranche 1 (per PCR)	Tranche 2 (Final Tranche)	MFF
Relevance	Less than relevant	Less than relevant	Less than relevant
Effectiveness	Less than effective	Ineffective	Less than effective
Efficiency	Less than efficient	Inefficient	Inefficient
Sustainability	Less than likely sustainable	Unlikely sustainable	Unlikely sustainable
Overall Assessment	Less than successful	Unsuccessful	Unsuccessful
Development impact	Less than satisfactory	Unsatisfactory	Unsatisfactory
Borrower and executing agency	Less than effective	Unsatisfactory	Unsatisfactory
Performance of ADB	Less than effective	Less than Satisfactory	Less than Satisfactory

MFF = multitranche financing facility.

Source: Asian Development Bank