

METHODOLOGY OF THE QUESTIONNAIRE SURVEY OF ONGOING URBAN SECTOR PROJECTS

1. In May 2005, a list of all 54 approved loans pertaining to urban sector projects supported by the Asian Development Bank (ADB) loans was compiled. Project officers from ADB headquarters and resident missions were informed of the survey and were requested to provide their contact information. As some project officers believed that their respective projects had been very recently established, the total number of urban projects included was reduced to 51. Later on, one more project from India (Gujarat Earthquake Rehabilitation and Reconstruction Project) was included in the survey as it had a very sizeable urban sector component in it, leading to a total of 52 projects, from which a response was requested.

2. The questionnaire consisted of 19 questions divided into three parts: multiple choice questions on the project, its project office, and capacity development. The answers to most questions were suggested for consistency, and they could be ticked in boxes (multiple choice format).

3. Between June and July 2005, the questionnaires were sent by e-mail and fax, together with a brief explanatory letter about the survey background and objectives, including a request for the project directors to forward copies of the questionnaire to other project offices and/or project implementation units involved in the project. In some cases, questionnaires were compiled by the main project office before they were returned to the survey team. Follow-up calls and e-mails were made to project offices that did not respond. The total number of projects that responded with at least one questionnaire return was 44 (85%) while the total number of project offices responding was 88 (75%) out of a total of 117 questionnaires circulated to known project offices by either the study team or the main project office of their own accord. Details on the origin of the responses are shown in Table A1.1. A complete list of the projects surveyed is in Table A1.2.

Table A1.1: Projects Ongoing in June 2005, and Response to Questionnaire Survey

Country	No. of Projects	Projects with Response	Total Respondents
Azerbaijan	1	1	1
Bangladesh	1	1	1
Bhutan	1	1	1
Cambodia	2	2	3
Cook Islands	1	0	0
Fiji Islands	1	1	1
India	7	7	10
Indonesia	2	2	2
Kiribati	1	1	1
Kyrgyz Republic	1	0	0
Lao People's Dem. Rep.	4	3	17
Mongolia	3	3	3
Nepal	4	3	3
Pakistan	2	1	1
Papua New Guinea	1	1	1
Philippines	6	6	13
PRC	5	5	12
Samoa	1	0	0
Sri Lanka	3	2	5

Country	No. of Projects	Projects with Response	Total Respondents
Uzbekistan	1	0	0
Viet Nam	4	4	13
Total	52	44	88

PRC = People's Republic of China.

Source: Special Evaluation Study on Urban Sector Strategy and Operations.

4. Of the 21 countries covered by the survey, the highest number of responses came from the Lao People's Democratic Republic, where one project submitted 14 questionnaires from its project implementation units and other project offices. The good response rate from India, People's Republic of China, and Philippines was in part due to the follow-up and interviews by the study teams for the country case studies. Some projects and/or respondents had difficulty communicating with the survey team during distribution of the questionnaires. In the case of Viet Nam projects, questionnaires were coursed through the resident mission office for translation and facilitation of responses. Communication problems were also evident in the answers provided by some respondents. Some questions had to be left blank and some answers needed to be validated with information from the projects' reports and recommendations of the President. This led to variable numbers of valid responses, which has been taken into account in the statistical analysis (averages are drawn only from valid responses). Aside from the language barrier, lack of internet access in the project offices prevented some of the respondents from answering completely as some questions from faxed questionnaires were no longer readable.

5. The analysis of the response was done in two ways: (i) by main offices, i.e., by project directors in the main executing agencies (44); and (ii) by all respondents, including main and subsidiary offices (88). The choice of the type of respondent depended on the question, but all questions reflecting perceptions were analyzed from the perspective of the replies by all respondents. Given the limited number of questionnaires, simple cross-tabulations and tables with means were used as the main sources for the statistical analysis.

Table A1.2: List of Projects Surveyed

Country/Loan No./Project Title		Questionnaires Returned
Azerbaijan		
1.	2119/20 Urban Water Supply and Sanitation Project	1
Bangladesh		
2.	1947 Urban Governance and Infrastructure Improvement Project	1
Bhutan		
3.	1625 Urban Infrastructure Improvement Project	1
Cambodia		
4.	1725/2013 Provincial Towns Improvement Project	2
5.	1969 GMS: Mekong Tourism Development Project	1
Cook Islands		
6.	1832 Waste Management Project	0
Fiji Islands		
7.	2055 Suva Nausori Water Supply & Sewerage Project	1
India		
8.	1647 Rajasthan Urban Infrastructure Development Project	3
9.	1704 Karnataka Urban Development and Coastal Management	2
10.	1720 Urban and Environmental Infrastructure Facility	1
11.	1759/61 Housing Finance II Project	1
12.	1813 Calcutta Environmental Improvement Project	1
13.	1826 ^a Gujarat Earthquake Rehabilitation and Reconstruction Project	1
14.	2046 Urban Water Supply and Environmental Improvement in Madhya Pradesh	1
Indonesia		
15.	1587 Metropolitan Medan Urban Development Project	1
16.	2072/73 Neighborhood Upgrading and Shelter Sector Project	1
Kiribati		
17.	1648 Sanitation, Public Health, and Environmental Improvement Project	1
Kyrgyz Republic		
18.	1742 Community-Based Infrastructure Services Sector Project	0
Lao People's Democratic Republic		
19.	1525 Secondary Towns Urban Development	1
20.	1710 Water Supply and Sanitation Sector Project	14
21.	1834 Vientiane Urban Infrastructure Services Project	0
22.	1994 Small Towns Development Project	2
Mongolia		
23.	1736 Cadastral Survey and Land Registration Project	1
24.	1847 Housing Finance (Sector) Project	1
25.	1907 Integrated Development of Basic Urban Services in Provincial Towns	1
Nepal		
26.	1755 Small Towns Water Supply and Sanitation Sector Project	0
27.	1820 Melamchi Water Supply Project	1
28.	1966 Urban and Environmental Improvement Project	1
29.	2058/59 Integrated Development of Basic Urban Services in Provincial Towns	1
Pakistan		
30.	1854 North-West Frontier Province Urban Development Sector Project	1
31.	2060/61 Southern Punjab Basic Urban Services Project	0
Papua New Guinea		
32.	1812 Provincial Towns Water Supply and Sanitation Project	1
Philippines		
33.	1658 Clark Area Municipal Development Project	5
34.	1665 Metro Manila Air Quality Improvement Project	3

Country/ Loan No./ Project Title			Questionnaires Filled Out
34.	1746	Pasig River Environmental Management and Rehabilitation Sector Development Program	1
35.	1843	Mindanao Basic Urban Services Sector Project	2
36.	2012	MWSS New Water Source Development Project	1
37.	2063	Development of Poor Urban Communities Sector Project	1
PRC			
39.	1692	Suzhou Creek Rehabilitation Project	1
40.	1797	Tianjin Wastewater Treatment and Water Resources Project	3
41.	1985	Hebei Province Wastewater Management Project	6
42.	1995	Harbin Water Supply Project	1
43.	1996	Wuhan Wastewater Management Project	1
Samoa			
44.	2026	Sanitation and Drainage Project	0
Sri Lanka			
45.	1575	Third Water Supply and Sanitation Project	1
46.	1632	Urban Development and Low Income Housing Sector Project	0
47.	1993	Secondary Towns and Rural Community-based Water Supply and Sanitation Project	4
Uzbekistan			
48.	1842	Urban Water Supply Project	0
Viet Nam			
49.	1514	Second Provincial Towns Water Supply and Sanitation Project	1
50.	1880	Third Provincial Towns Water Supply and Sanitation Project	1
51.	1702	Ho Chi Minh City Environmental Improvement Project	1
52.	2034	Central Region Urban Environmental Improvement Project	10
Total			88

GMS = Greater Mekong Subregion, MWSS = Metropolitan Waterworks and Sewerage System, PRC = People's Republic of China.

Note: Loan 1990-VIE credit facility has not yet commenced; Loan 2117-BAN is in the process of setting up project offices.

^a Loan 1826-IND was previously not included in the list of ongoing urban sector loans.

Source: Questionnaire survey of all urban sector projects ongoing by June 2005, for this study.

URBAN SECTOR PROJECTS APPROVED FROM JULY 1993 TO JUNE 2005
REPORTS AND RECOMMENDATIONS OF THE PRESIDENT FOR URBAN SECTOR PROJECTS BETWEEN
MID-1993 AND MID-2005

No.	Loan Number	Country	Project Title	Project Cost		Date Approved
				Estimate (\$ million)	Loan (\$ million)	
Pre-USS (July 1993 to June 1999)						
Water Supply, Sanitation, and Solid Waste Management						
1.	1250	RMI	Majuro Water Supply Project	0.80	0.70	09-Sep-93
2.	1260	PAK	Urban Water Supply and Sanitation Project	95.80	72.00	04-Nov-93
3.	1264	BAN	Second Water Supply and Sanitation Project	43.00	31.00	16-Nov-93
4.	1267	LAO	Northern Provincial Towns Water Supply and Sanitation Project	16.30	13.00	18-Nov-93
5.	1269	PHI	Municipal Water Supply	72.00	43.20	25-Nov-93
6.	1273	VIE	Ho Chi Minh City Water Supply and Sanitation Rehabilitation Project	81.00	65.00	29-Nov-93
7.	1313	PRC	Dalian Water Supply Project	379.70	160.00	20-Sep-94
8.	1326	THA	Chonburi Water Supply Project	65.00	38.50	18-Oct-94
9.	1361	VIE	Provincial Towns Water Supply and Sanitation Project	82.50	66.00	17-Aug-95
10.	1389	RMI	Majuro Water Supply and Sanitation Project	11.60	9.20	29-Sep-95
11.	1459	FSM	Water Supply Sanitation Project	13.30	10.60	19-Sep-96
12.	1468	CAM	Phnom Penh Water Supply and Drainage Project	35.80	20.00	26-Sep-96
13.	1472	PHI	Small Towns Water Supply Sector Project	83.00	50.00	30-Sep-96
14.	1490/91	PRC	Anhui Municipal Wastewater Treatment Project	336.00	140.00	26-Nov-96
15.	1514	VIE	Second Provincial Towns Water Supply and Sanitation Project	92.00	69.00	27-Feb-97
16.	1527	INO	Capacity Building of Water Supply Enterprise for Water Loss Reduction	119.40	66.00	17-Jul-97
17.	1528	THA	Nong Khai-Udon Thani Water Supply Project	85.50	50.00	21-Aug-97
18.	1539	PAK	Korangi Wastewater Management Project	101.00	70.00	18-Sep-97
19.	1544	PRC	Zhejiang-Shanxi Water Supply Project (Phase I)	518.00	100.00	24-Sep-97
20.	1560	MON	Provincial Towns Basic Urban Services Project	8.50	6.80	30-Sep-97
21.	1575	SRI	Third Water Supply and Sanitation Sector Project	121.00	75.00	06-Nov-97
22.	1636	PRC	Fuzhou Water Supply and Wastewater Treatment Project	192.20	102.00	30-Sep-98
23.	1640	NEP	Melamchi Water Supply (Engineering) Project	6.75	5.00	10-Nov-98
24.	1648	KIR	Sanitation, Public Health, and Environment Improvement	12.80	10.24	08-Dec-98
Subtotal				2,572.95	1,273.24	

No.	Loan Number	Country	Project Title	Project Cost		
				Estimate (\$ million)	Loan (\$ million)	Date Approved
Multisector						
25.	1240	NEP	Kathmandu Urban Development Project	0	12.00	29-Jun-93
26.	1292	INO	Eastern Islands Urban Development Sector Project	142.00	85.00	21-Dec-93
27.	1362	LAO	Vientiane Integrated Urban Development Project	27.70	20.00	17-Aug-95
28.	1367	PHI	Regional Municipal Development Project	64.20	30.00	30-Aug-95
29.	1376	BAN	Secondary Towns Infrastructure Development Project II	82.90	65.00	19-Sep-95
30.	1383/84	INO	Sumatra and West Java Urban Development Sector Project	334.00	200.00	26-Sep-95
31.	1410	THA	Samut Prakarn Wastewater Management Project	687.00 ^a	230.00 ^b	7-Dec-95
32.	1415/16	IND	Karnataka Urban Infrastructure Development Project	132.00	105.00	14-Dec-95
33.	1448	VAN	Urban Infrastructure Project	12.80	10.00	27-Jun-96
34.	1511	INO	Metropolitan Bogor, Tangerang & Bekasi Urban Development (Sector) Project	228.00	80.00	19-Dec-96
35.	1525	LAO	Secondary Towns Urban Development Project	38.50	27.00	26-Jun-97
36.	1587	INO	Metropolitan Medan Urban Development Project	198.20	116.00	08-Dec-97
37.	1599	PHI	Subic Bay Area Municipal Development Project	37.00	22.00	19-Dec-97
38.	1625	BHU	Urban Infrastructure Improvement Project	8.20	5.70	30-Jul-98
39.	1632	SRI	Urban Development and Low Income Housing (Section) Project	100.00	70.00	24-Sep-98
40.	1647	IND	Rajasthan Urban Infrastructure Development Project	362.00	250.00	03-Dec-98
41.	1658	PHI	Clark Area Municipal Development Project	41.80	24.30	15-Dec-98
	Subtotal			1,809.30	1,352.00	
Others						
42.	1323	PAK	Sukkur Bridge		45.00	29-Sep-94
43.	1549/1550/ 1551	IND	Housing Finance Project (NHB/HUDCO/IDFC)	1,150.00	300.00	25-Sep-97
44.	1663	PHI	Metro Manila Air Quality Improvement		200.00	03-Dec-98
	1664	PHI	Metro Manila Air Quality Improvement		22.87	
	1665	PHI	Metro Manila Air Quality Improvement		71.00	
45.	1572	INO	Capacity Building in Urban Infrastructure Management Project	70.00	42.00	04-Nov-97
	Subtotal			1,220.00	680.87	
	Total for all Sectors Pre-USS			5,602.25	3,306.11	

No.	Loan Number	Country	Project Title	Project Cost Estimate (\$ million)	Loan (\$ million)	Date Approved
Post-USS (July 1999 to June 2005)						
Water Supply, Sanitation, and Solid Waste Management						
1.	1692	PRC	Suzhou Creek Rehabilitation Project	876.00	300.00	29-Jun-99
2.	1710	LAO	Water Supply and Sanitation Sector Project	25.00	20.00	16-Nov-99
3.	1725	CAM	Provincial Towns Improvement Project	26.30	20.00	17-Dec-99
4.	1755	NEP	Small Towns Water Supply Sanitation Sector Project	53.90	35.00	12-Sep-00
5.	1812	PNG	Provincial Towns Water Supply and Sanitation Project	23.30	15.34	14-Dec-00
6.	1820	NEP	Melamchi Water Supply Project	464.00	120.00	21-Dec-00
7.	1832	COO	Waste Management Project	3.10	2.20	17-Jul-01
8.	1842	UZB	Urban Water Supply Project	65.50	36.00	27-Sep-01
9.	1880	VIE	Third Provincial Towns Water Supply and Sanitation Project	98.00	60.00	13-Dec-01
10.	1907	MON	Integrated Development of Basic Urban Services In Provincial Terms Project	26.50	20.10	06-Aug-02
11.	1985	PRC	Hebei Province Wastewater Management Project	165.34	82.36	19-Dec-02
12.	1993	SRI	Secondary Towns & Rural Community Based Water Supply and Sanitation	100.00	60.29	16-Jan-03
13.	1995	PRC	Harbin Water Supply	399.50	100.00	11-Mar-03
14.	1996	PRC	Wuhan Wastewater Management Project	193.60	83.00	25-Apr-03
15.	2012	PHI	MWSS New Water Source Development Project	4.97	3.26	14-Oct-03
16.	2013	CAM	Provincial Towns Improvement Project Supply		6.26	28-Oct-03
17.	2034	VIE	Central Region Urban Environmental Improvement Project	96.00	44.00	08-Dec-03
18.	2046	IND	Urban Water Supply and Environmental Improvement in Madhya Pradesh	303.50	200.00	12-Dec-03
19.	2055	FIJ	Suva-Nausori Water Supply and Sewerage Project	72.40	47.00	18-Dec-03
20.	2058/59	NEP	Kathmandu Valley Water Services Sector Development Program/Project	15.00	15.00	18-Dec-03
21.	2119/20	AZE	Urban Water Supply and Sanitation Project	39.90	30.00	07-Dec-04
	Subtotal			3,051.81	1,299.82	
Multisector						
22.	1702	VIE	Ho Chi Minh City Environmental Improvement Project	100.000	70.00	07-Oct-99
23.	1704	IND	Karnataka Urban Development and Coastal Environmental Management	251.400	175.00	26-Oct-99
24.	1719/1720/ 1721	IND	Urban and Environmental Infrastructure Facility Project (HUDCO/CICI/IDFC)		200.00	17-Dec-99

	Loan Number	Country	Project Title	Project Cost		Date Approved
				Estimate (\$ million)	Loan (\$ million)	
25.	1742	KGZ	Community-Based Infrastructure Services Sector Project	45.00	36.00	08-Jun-00
26.	1797	PRC	Tianjin Wastewater Treatment and Water Resources Protection Project	340.70	130.00	11-Dec-00
27.	1813	IND	Calcutta Environmental Improvement Project	360.00	250.00	19-Dec-00
28.	1834	LAO	Vientiane Urban Infrastructure and Services Project	37.00	25.00	23-Aug-01
29.	1843	PHI	Mindanao Basic Urban Services Sector	60.00	30.00	27-Sep-01
30.	1854	PAK	North-West Frontier Province Urban Development Sector Project	30.00	20.80	08-Nov-01
31.	1947	BAN	Urban Governance and Infrastructure Improvement (Sector) Project	87.00	60.00	28-Nov-02
32.	1966	NEP	Urban and Environmental Improvement Project	37.50	30.00	10-Dec-02
33.	1994	LAO	Small Towns Development Sector Project	20.00	16.00	28-Jan-03
34.	2026	SAM	Sanitation and Drainage Project	10.00	8.00	27-Nov-03
35.	2060/61	PAK	Southern Punjab Basic Urban Services Project	128.60	90.00	18-Dec-03
36.	2063	PHI	Development of Poor Urban Communities Sector Project	48.80	30.50	18-Dec-03
37.	2072/73	INO	Neighborhood Upgrading and Shelter Sector Project	126.50	88.60	19-Dec-03
38.	2117	BAN	Secondary Towns Integrated Flood Protection Project – Phase 2	128.88	80.00	02-Dec-04
39.	2151	IND	Multisector Project for Infrastructure Rehabilitation in Jammu and Kashmir	358.00	250.00	21-Dec-04
Subtotal				2,169.38	1,589.90	
Others						
40.	1745/1746	PHI	Pasig River Environmental Management and Rehabilitation Sector Development Program	150.00	175.00	20-Jul-00
41.	1759/61	IND	Housing Finance II Project	517.00	120.00	21-Sep-00
42.	1847	MON	Housing Finance Sector Loan	24.00	15.00	18-Oct-01
43.	1990	VIE	Housing Finance Project	51.80	30.00	20-Dec-02
44.	2024	PRC	Xi'an Urban Transport	762.00	270.00	27-Nov-03
Subtotal				1,504.80	610.00	
Total for all Sectors Post-USS				6,725.99	3,499.72	
Total for all Sectors in the Study Period				12,328.24	6,805.83	

AZE = Azerbaijan, BAN = Bangladesh, BHU = Bhutan, CAM = Cambodia, COO = Cook Islands, FIJ = Fiji Islands, FSM = Federated States of Micronesia, HUDCO = Housing and Urban Development Corporation Limited, ICICI = ICICI Limited, IDFC = Infrastructure Development Finance Company Limited, IND = India, INO = Indonesia, KGZ = Kyrgyz Republic, KIR = Kiribati, LAO = Lao People's Democratic Republic, MON = Mongolia, MWSS = Metropolitan Waterworks and Sewerage System, NEP = Nepal, NHB = National Housing Bank, No. = number, PAK = Pakistan, PHI = Philippines, PNG = Papua New Guinea, PRC = People's Republic of China, RMI = Republic of the Marshall Islands, SAM = Samoa, SRI = Sri Lanka, THA = Thailand, USS = Urban Sector Strategy, UZB = Uzbekistan, VAN = Vanuatu, VIE = Viet Nam.

^a At appraisal, total project cost was estimated at \$507.00 million. At the time of the approval of the supplementary loan, estimated project cost had increased to \$687.00 million).

^b Includes a supplementary loan (Loan 1646-THA) amounting to \$80.00 million, approved 3 December 1998.

Note: The actual period periods compared are from 28 June 1993 to 27 June 1999 (pre-USS) and 28 June 1999 to 27 June 2005 (post-USS).

Source: Asian Development Bank's internal databases.

LIST OF ALL URBAN SECTOR RELATED TECHNICAL ASSISTANCE GRANTS

**Table A3.1: Advisory Technical Assistance Grants for the Urban Sector
From Mid-1993 to Mid-2005**

Year	No.	Country	Advisory Technical Assistance	Total (\$)
1993	1916	PRC	Institutional Strengthening of the Environmental Protection Bureaus in Tangshan and Chengde Municipalities	450,000
1993	1958	MAL	Urban Transport Planning	600,000
1993	1980	BAN	Institutional Strengthening of Pourashavas for Urban Water Supply and Sanitation Services	450,000
1993	1999	VIE	Institutional Strengthening of HCMC Water Supply Company	600,000
1993	2000	VIE	HCMC Water Supply Master Plan	600,000
1993	2012	BAN	Khulna-Jessore Drainage Rehabilitation	920,000
1993	2016	INO	Private Sector Participation in Urban Development (Bandung and Semarang)	600,000
1993	2015	PRC	Urban Environmental Improvement Planning	480,000
1993	2040	VIE	Ho Chi Minh City Environmental Improvement Planning	600,000
1994	2098	IND	Urban Sector Profile	400,000
1994	2148	VIE	Urban Sector Strategy Study	300,000
1994	2198	KIR	Integrated Urban Plans and Program Study	385,000
1994	2202	IND	Capacity Building for Improved Infrastructure Dev. in Selected Municipality in Karnataka State	600,000
1994	2212	PRC	Beijing Urban Transport	715,000
1994	2211	PRC	Capacity Building of the Beijing Industrial Hazardous Waste Management Center	425,000
1994	2210	PRC	Capacity Building of the Beijing Municipal Environmental Protection Bureau and Affiliated Agencies	600,000
1994	2246	BAN	Study of Urban Poverty in Bangladesh	190,000
1994	2254	PHI	MWSS Operational Strengthening Study	600,000
1995	2281	CAM	Urban Development Strategy Study	500,000
1995	2302	PRC	Symposium on Urban Transport	100,000
1995	2319	TUV	Urban Planning and Environment Management	310,000
1995	2368	IND	Institutional Strengthening of Karnataka Urban Infrastructure Finance Corporation	100,000
1995	2376	VIE	Community Environmental Health Improvements for the Provincial Towns	500,000
1995	2401	PHI	MWSS Privatization Support	582,000
1995	2456	PRC	Pilot Environmental Plans for Selected Medium-Size Cities	537,000
1995	2471	IND	Resource Mobilization Study for Local Governments in Karnataka	300,000
1995	2502	PHI	Private Sector Participation in Urban Development	500,000
1996	2596	VAN	Urban Growth Management Strategy for Port Vila	600,000
1996	2639	PAK	Urban Institutional Strengthening	100,000
1996	2729	PRC	Industrial Pollution Investigation and Assessment in Town and Village Enterprises	600,000
1997	2751	PRC	Capacity Building of Wastewater Treatment Operations in Anhui Province	400,000
1997	2805	INO	Strengthening of Urban Waste Management Policies and Strategies	600,000
1997	2804	PRC	Build-Operate-Transfer (BOT) Chengdu Water Supply	600,000
1997	2837	INO	Capacity Building for Private Sector Participation in Urban Development	850,000
1997	2881	MON	Capacity Building for the Provision of Urban Services in Provincial Towns	825,000
1997	2906	PRC	Leadership Training on Urban Environmental Management in Key Cities	600,000
1997	2959	VIE	Preparation of a Development Strategy for the Central Region of Viet Nam	898,000
1997	2972	LAO	Support for Urban Development Administration Authorities	500,000
1997	2893	PRC	Hohhot Urban Development	430,000
1997	2833	IND	Strengthening Housing Finance Institutions	600,000
1998	2893	PRC	Hohhot Urban Development (Supplementary)	150,000
1998	2726	PRC	Water Quality Management Planning for Suzhou Creek (Supplementary)	400,000
1998	2998	NEP	Urban Water Supply Reforms in Kathmandu Valley	800,000
1998	3022	BHU	Capacity Building in the Urban Sector	500,000
1998	3053	BAN	Promoting Good Urban Governance in Dhaka	150,000

Year	No.	Country	Advisory Technical Assistance	Total (\$)
1998	3096	PRC	Urban Policy Workshop	150,000
1998	3124	PAK	Urban Sector Strategy Study	150,000
1998	3130	PAK	Water Resources Strategy Study	650,000
1998	3067	IND	Restructuring State-Level Housing Institutions	500,000
1999	3185	NEP	Institutional Strengthening of Kathmandu Metropolitan City	450,000
1999	3196	PHI	National Urban Policy Framework	150,000
1999	3209	IND	Strengthening Institutional Capacities for Urban Infrastructure Finance and Development	500,000
1999	3226	BAN	Urban Sector Strategy	150,000
1999	3243	FIJ	Urban Sector Strategy Study	670,000
1999	3272	NEP	Urban Sector Strategy	200,000
1999	3297	BAN	Urban Transport and Environmental Improvement	645,000
1999	3324	IND	Community Participation in Urban Environmental Improvement	150,000
1999	3326	INO	Urban Sector Development in a Decentralizing Environment	600,000
1999	3331	LAO	Capacity Building for Urban Development Administration Authorities	600,000
1999	3344	IND	Strengthening Microfinance Institutions for Urban and Environmental Infrastructure Finance	500,000
1999	3377	PRC	Urban Poverty Study	410,000
1999	3379	IND	Strengthening Disaster Mitigation and Management at the State Level	1,000,000
2000	3586	IND	Building HUDCO's Capacity for Lending to Community-Based Finance Institutions	150,000
2000	3475	PHI	Institutional Strengthening of Housing and Urban Development Sector	150,000
2000	3480	IND	Reducing Poverty in Urban India	300,000
2000	3566	SAM	Capacity Building for Urban Planning and Management	500,000
2000	3521	PRC	Assessment of Small and Medium Cities Urban Infrastructure Development	150,000
2000	3487	VIE	Low Income Housing and Secondary Towns Urban Development Needs Assessment Study	500,000
2000	3447	PRC	Strengthening Urban Solid Waste Management	600,000
2001	3673	PRC	Pro-Poor Urban Heating Tariff Reforms	850,000
2001	3645	THA	Planning for Sustainable Urbanization	500,000
2001	3703	PHI	Capacity Building for the Regulatory Office of Metropolitan Waterworks and Sewerage System	800,000
2001	3749	PRC	National Guidelines for Urban Wastewater Tariffs and Management Study	700,000
2001	3729	UZB	Capacity Building for Urban Water Supply	600,000
2001	3770	IND	Support for Improvements in the Accounting System of the Calcutta Municipality Corporation	150,000
2001	3784	IND	Conservation and Livelihood Improvement in the Indian Sundarbans	450,000
2002	3860	SAM	Implementation of the Urban Planning and Management Strategy	400,000
2002	3902	IND	North Eastern Region Urban Sector Profile	150,000
2002	4003	BAN	Supporting Urban Governance Reform	400,000
2002	3848	PHI	Metro Manila Solid Waste Management	1,250,000
2003	4162	IND	Urban Sector Review and Strategy	480,000
2003	4086	IND	Capacity Building for Project Management and Comm. Mobilization in Madhya Pradesh	520,000
2004	4402	PRC	Heating Supply for Urban Poor in Liaoning Province	500,000
2004	4352	MON	Developing an Urban Development and Housing Sector Strategy	350,000
2004	4335	PRC	Town-Based Urbanization Strategy Study	750,000
2004	4415	AFG	Kabul Air Quality Management	450,000
2004	4518	IND	Capacity Building for Kerala Sustainable Urban Development	500,000
2004	4497	IND	Capacity Building for Municipal Service Delivery in Kerala	800,000
2005	4604	PRC	Nanjing Water Utility Long-Term Capital Finance in Commercial Markets	550,000

AFG = Afghanistan, BAN = Bangladesh, BHU = Bhutan, CAM = Cambodia, FIJ = Fiji Islands, HCMC = Ho Chi Minh City, HUDCO = Housing and Urban Development Corporation Limited, IND = India, INO = Indonesia, KIR = Kiribati, LAO = Lao People's Democratic Republic, MAL = Malaysia, MWSS = Metropolitan Waterworks and Sewerage System, MON = Mongolia, NEP = Nepal, PAK = Pakistan, PHI = Philippines, PRC = People's Republic of China, SAM = Samoa, THA = Thailand, TUV = Tuvalu, UZB = Uzbekistan, VAN = Vanuatu, VIE = Viet Nam.

Source: Asian Development Bank's internal databases.

Table A3.2: Project Preparatory Technical Assistance Grants

Year	No.	Country	Project Preparatory Technical Assistance	Total (\$)
1993	1911	LAO	Vientiane Integrated Urban Development	600,000
1993	1335	NEP	Bagmati Command Area Development (Supplementary)	16,000
1993	1513	PHI	Manila North-East Water Supply (Supplementary)	48,000
1993	1917	PRC	Beijing Environmental Improvement	600,000
1993	1952	VAN	Urban Infrastructure	536,000
1993	1977	IND	Urban Infrastructure Development	600,000
1993	2009	INO	Industrial Pollution Control in Cimahi	590,000
1993	2006	PAK	Second Urban Water Supply and Sanitation	500,000
1993	2014	THA	Wastewater Management and Pollution Control in Samut Prakarn	600,000
1994	2070	COO	Integrated Urban Infrastructure	455,000
1994	2074	PAK	Sukkur Bridge	100,000
1994	2094	INO	Second West Java and Sumatra Urban Development Sector	100,000
1994	2146	VIE	Second Provincial Towns Water Supply and Sanitation	550,000
1994	2185	INO	Java Flood Control	900,000
1994	2187	PRC	Anhui Municipal Wastewater Treatment	283,000
1994	2262	KAZ	Almaty Air Quality Study	100,000
1994	2263	PHI	MWSS Water Supply Improvement Study	582,000
1994	2272	PHI	Small Towns Water Supply and Sanitation Sector	100,000
1995	2280	CAM	Urban Water Supply and Sanitation	600,000
1995	2292	THA	Nongkai-Udonthani Water Supply and Sanitation	600,000
1995	2303	THA	Bangkok Metropolitan Region Wastewater Management Action Plan and Feasibility Study	600,000
1995	2327	PAK	Bahawalpur Division Area Development	600,000
1995	2373	IND	Rajasthan Urban Infrastructure Development	600,000
1995	2396	LAO	Secondary Towns Integrated Urban Development	600,000
1995	2410	BAN	Urban Poverty Reduction	600,000
1995	2412	INO	Development of Madrasah Aliyahs	600,000
1995	2445	PRC	Xian-Xianyang-Tongchuan Environment Improvement	500,000
1995	2480	SAM	Integrated Urban Development	552,000
1995	2511	PRC	Zhejiang-Shanxi Water Conservancy	1,000,000
1995	2515	INO	Preparation of Metropolitan Medan Urban Development	100,000
1996	2581	PHI	Infrastructure Improvement of Subic Bay Area Municipalities	800,000
1996	2582	MON	Provincial Towns Basic Urban Services	600,000
1996	2592	CAM	Stung Chinit Water Resource Development	800,000
1996	2655	INO	Metropolitan Bandung Urban Development	600,000
1996	2666	BHU	Urban Infrastructure Improvement	400,000
1996	2689	CAM	Integrated Urban Development	800,000
1996	2711	LAO	Small Towns Water Supply and Sanitation	500,000
1996	2666	BHU	Urban Infrastructure Improvement	400,000
1996	2700	IND	Housing Finance Facility	100,000
1997	2770	PRC	Fuzhou Water Supply and Wastewater Treatment	598,000
1997	2790	VIE	Ho Chi Minh City Environmental Improvement	600,000
1997	2791	SRI	Urban Development and Low-Income Housing	1,100,000
1997	2803	PHI	Pasig River Environmental Management and Rehabilitation	800,000
1997	2806	IND	Karnataka Coastal Environmental Management and Urban Development	800,000
1997	2807	PHI	Clark Area Municipal Development	600,000
1997	2816	BAN	Third Urban Development	600,000

Year	No.	Country	Project Preparatory Technical Assistance	Total (\$)
1997	2666	BHU	Urban Infrastructure Improvement (Supplementary)	100,000
1997	2835	PHI	Metro Manila Air Quality Improvement	150,000
1997	2903	THA	Border Towns Urban Development	800,000
1997	2928	PAK	Quetta Water Supply and Environmental Improvement	900,000
1997	2936	IND	Urban and Environmental Infrastructure Fund	400,000
1997	2940	PAK	North West Frontier Province Urban Development	950,000
1998	3021	PHI	Mindanao Urban Planning and Basic Services Sector	1,000,000
1998	3025	PRC	Suzhou Creek Environmental Rehabilitation	965,000
1998	3049	PRC	Zhejiang-Shanxi Water Supply (Phase II)	540,000
1998	3055	FIJ	Suva-Nausori Water Supply and Sewerage	800,000
1998	3059	NEP	Small Towns Water Supply and Sanitation	600,000
1998	3085	COO	Urban Infrastructure	750,000
1998	3088	INO	Development of Rural-Urban Linkages	890,000
1998	3089	IND	Calcutta Environmental Improvement	1,000,000
1999	3291	PHI	Development of Poor Urban Communities	850,000
1999	3333	LAO	Vientiane Urban Infrastructure and Services	600,000
1999	3364	NEP	Urban Environmental Improvement	750,000
2000	3440	UZB	Urban Social Infrastructure Development	720,000
2001	3646	INO	Urban Poverty Reduction	800,000
2001	3804	INO	Private Sector Participation Development Facility for Urban Infrastructure	600,000
2001	3809	VIE	Central Region Urban Development	1,000,000
2001	3690	BAN	Urban Governance and Infrastructure Improvement	350,000
2001	3760	PHI	Metro Manila Urban Services for the Poor	1,000,000
2001	3802	PAK	Southern Punjab Basic Urban Services	800,000
2001	3685	MON	Integrated Development of Basic Urban Services in Secondary Towns	700,000
2001	3759	IND	Integrated Urban Development in Madhya Pradesh	1,000,000
2001	3774	AZE	Urban Water Supply and Sanitation	740,000
2002	3646	INO	Urban Poverty Reduction (Supplementary)	160,000
2002	3291	PHI	Development of Poor Urban Communities (Supplementary)	150,000
2003	4182	IND	Urban Clean Fuel	995,000
2003	4106	IND	Kerala Sustainable Urban Development	1,000,000
2004	4515	IND	Preparation of the Jammu and Kashmir Urban Infrastructure Development Project	500,000
2004	4361	INO	Urban Air Quality Improvement Sector Development Program	700,000
2004	4348	IND	North Eastern Region Urban Development	1,000,000
2004	4385	PRC	Guangxi Nanning Urban Infrastructure Development	560,000
2004	4377	LAO	Northern and Central Region Water Supply and Urban Development	200,000
2004	4530	IND	Karnataka Urban Infrastructure Development III	400,000
2004	4531	SRI	Greater Colombo Wastewater	850,000
2004	4533	BHU	Urban Infrastructure Development	600,000
2004	4534	PAK	Sindh Basic Urban Services	795,000
2004	4535	BAN	Secondary Towns Water Supply and Sanitation	800,000
2005	4578	PAK	Mega City Development	150,000

AZE = Azerbaijan, BAN = Bangladesh, BHU = Bhutan, CAM = Cambodia, COO = Cook Islands, FIJ = Fiji Islands, IND = India, INO = Indonesia, KAZ = Kazakhstan, LAO = Lao People's Democratic Republic, MON = Mongolia, MWSS = Metropolitan Waterworks and Sewerage System, NEP = Nepal, PAK = Pakistan, PHI = Philippines, PRC = People's Republic of China, SAM = Samoa, SRI = Sri Lanka, THA = Thailand, UZB = Uzbekistan, VAN = Vanuatu, VIE = Viet Nam. Source: Asian Development Bank's internal databases.

Table A3.3: Regional Technical Assistance Grants

Year	No.	Country	Regional Technical Assistance	Total (\$)
1993			None	
1994	5611	Regional	Megacities Management in Asia and the Pacific	550,000
1995	5662	Regional	Impact Evaluation Study of Bank Assistance in the Urban Dev. and Housing Sector	400,000
1995	5646	Regional	Regional Study on Urban Infrastructure Finance	480,000
1996			None	
1997	5764	Regional	Enhancing Municipal Service Delivery Capability in Selected DMCs	550,000
1997	5728	Regional	Chiang Rai-Kunming Road Improvement via Lao People's Democratic Republic	600,000
1998			None	
1999	5846	Regional	Development of the Cities Data Book for the Asian and Pacific Region	400,000
2000	5926	Regional	Public-Private Community Partnerships in Urban Services for the Poor	550,000
2001	6016	Regional	Clean Air Initiative for Asian Cities	150,000
2002	6026	Regional	Promoting Urban Poverty Reduction through Participation in the Cities Alliance	670,000
2003	6016	Regional	Clean Air Initiative for Asian Cities (Supplementary)	92,020
2003	6121	Regional	Rural, Urban and Subregional Linkages in the Mekong Region	400,000
2003	6130	Regional	Study of Urban Violence in Asia: Towards More Effective Urban Upgrading	150,000
2003	6151	Regional	ADB's Participation in the Cities Alliance	350,000
2004	6016	Regional	Clean Air Initiative for Asian Cities (Supplementary)	466,500
2005	6240	Regional	Special Evaluation Study on Urban Sector Strategy and Operations	150,000

ADB = Asian Development Bank, DMC = developing member country.

Source: Asian Development Bank's internal databases.

Table A3.4: Japan Fund for Poverty Reduction Grants

Year	No.	Country	Japan Fund for Poverty Reduction	Total (\$)
2000	9003	PHI	On-Site Urban Upgrading for Vulnerable Slum Communities of Payatas	1,000,000
2000	9002	PNG	Low-Cost Sanitation, Community Awareness and Health Education Program	1,740,000
2000	9004	PHI	Off-Site and Off-City Relocation of Vulnerable Slum Communities of Muntinlupa	1,000,000
2002	9021	IND	Rainwater Harvesting and Slum Development in Rajasthan	1,900,000
2002	9022	PHI	Strategic Private Sector Partnerships for Urban Poverty Reduction in Metro Manila	3,600,000
2002	9023	CAM	Income for the Poor through Community-Based Environmental Improvements in Phnom Penh	1,000,000
2003	9035	LAO	Solid Waste Management and Income Generation for Vientiane's Poor	1,000,000
2004	9054	UZB	Affordable Services and Water Conservation for the Urban Poor	1,500,000
2004	9058	VIE	Expanding Benefits of the Poor through Urban Environmental Improvements	1,000,000
2005	9065	INO	Enriching Lives of the Urban Poor through Food Fortification	1,750,000
2005	9074	INO	Seismically Upgraded Housing in Nanggroe Aceh Darussalam and North Sumatera	2,000,000

CAM = Cambodia, IND = India, INO = Indonesia, LAO = Lao People's Democratic Republic, PHI = Philippines, PNG = Papua New Guinea, UZB = Uzbekistan, VIE = Viet Nam.

Source: Asian Development Bank's internal databases.

URBAN SECTOR NEEDS

1. Well-managed urbanization taking place in well-regulated economies facilitates sustained economic growth and thereby promotes broad social welfare gains. The agglomeration of economic activities through the urbanization process contributes to growth through (i) raising the productivity of outputs and employment; (ii) mobilizing saving and allowing accumulation of wealth in the form of real estate; and (iii) increasing fiscal flows, with cities providing the largest share of tax revenues. However, policy and regulatory weaknesses can compromise the potential for beneficial development through urbanization, and poorly managed urbanization results in suboptimal use of public and private resources, failure of economic gains to be widely distributed, and significant social and environmental costs. Efficient urban growth is further compromised by inadequate, poorly distributed and poorly maintained infrastructure and services, and inadequate cost recovery for services provided.

2. The development needs of the urban sector in the Asia and Pacific region span the full range of activities, infrastructure, services, and facilities required to (i) improve the efficiency of cities as places to invest and work in, and (ii) improve the condition of cities as places in which to live and prosper. Improved governance and regulatory environments are required to iron out urban market distortions and attract capital. Administrative reform and capacity building is required to improve urban planning and management, and to ensure that cities develop efficiently and maximize their development potential. Improved and extended infrastructure, utilities, and services are required to support both economic development and improved quality of life.

3. In both low-income (Asian Development Fund) and medium-income (ordinary capital resources) countries, there is a need to address the requirements of the urban poor for decent living conditions and access to work so that they too can enjoy the benefits of economic growth. Poverty has many dimensions, in addition to material deprivation, Asia's urban poor suffer from the cumulative deprivation which results from squalid living conditions and poor access to services. Urban poverty is manifested not only in economic stress resulting from unemployment and low paying jobs, but in a poor quality of life as a result of inadequate and insecure access to shelter, education, health services, and infrastructure. The urban poor are exposed to environmental hazards and risks, have weak family support and coping mechanisms, and are highly vulnerable to economic and market changes. Poverty is compounded by the high levels of environmental stress in cities—a function of rapid growth, industrialization, inadequate and ineffective waste management and disposal systems, and increasing vehicle densities. Notwithstanding the negative impact on quality of life, the economic impact of pollution in Asian cities, in terms of loss of productivity, has been estimated at between 1% and 5% of their city gross domestic product (GDP).

4. Addressing these needs requires intervention on a number of fronts. Firstly, national governments need to work with the newly empowered local governments in improving the policy and regulatory environment to (i) encourage efficient and effective urban development, and (ii) create the conditions for greater private sector investment in urban infrastructure and service provision. This requires policy reform and institutional change; the development and implementation of improved regulation; incentive systems; and strengthened relationships among local government, the private sector, and civil society.

5. Secondly, there is a need for the strengthening of local governments to better equip them to support efficient, effective, and sustainable urban development. This demands that local governments address issues such as promotion of the local economy, improved access to

private capital, reform in development planning and promoting effective real estate markets, and increased preparedness in disaster prevention and mitigation. To achieve this requires a range of interventions including institutional strengthening, support for improved urban governance, organizational reform, and human resource development. Improved urban management efficiency and sustainability also requires (i) municipal finance reform, (ii) enhanced cost recovery for services, (iii) improved urban planning and regulation, and (iv) the mobilization of private-sector resources for expanded and improved infrastructure and service provision.

6. Thirdly is the need for improved urban infrastructure and services. This requires both improved management and dramatic increases in investment. There are a variety of estimates for infrastructure financing requirements for Asia, the most recent of which were prepared for the *Connecting East Asia: A New Framework for Infrastructure*.¹ Such estimates are necessarily highly approximate since the relationship between the supply of infrastructure and services, its impact on growth, and the further demand this growth places on infrastructure provision, is complex. In 2004, conservative estimates suggested that in Asia and the Pacific, expenditures of about \$400 billion per year on infrastructure (both capital requirements and operating costs) would be required for the next 25 years to sustain current levels of growth.²

7. A model to predict future infrastructure demand in all sectors (net of requirements for rehabilitation) calculated that infrastructure investment needs for all developing countries (World Bank member developing countries) over the period 2005–2010 amounted to \$465 billion per year or 5.5% of developing countries' GDP (including both capital and maintenance requirements).³ A similar methodology, adopted for East Asia⁴ and extended to include all Asian Development Bank developing member countries (DMCs) over the same period, indicates a requirement of \$230 billion per year, again including both capital and maintenance costs, and covering the following sectors: (i) electricity generation and supply, (ii) telephone landlines, (iii) telephone mobile, (iv) paved intercity roads, (v) rail lines, and (vi) access to improved water supply and sanitation. This methodology is based on infrastructure stock trends, using real demand data from eight Asian countries for which data is available, and adjusting for economic growth and geographic variables to extend this analysis to other countries within the same income group. Costs of increasing infrastructure stock, and for associated maintenance requirements, are based on best practice unit costs derived from the actual cost of infrastructure and service provision, and are reduced to an average cost per capita per year for middle-income and low-income economies to derive the total funding requirement.⁵

8. To estimate approximate urban development financing requirements, a similar methodology was used excluding power, telecommunications, railways, and intercity roads; and including solid waste management and slum upgrading. The same best practice unit costs were used for water supply and sanitation, and similar figures were derived for solid waste management and slum upgrading based on recent field data⁶ (Table A4.1). This analysis suggested that total financing requirements for just water supply, sanitation, solid waste

¹ Asian Development Bank, Japan Bank for International Cooperation, World Bank. 2005. *Connecting East Asia: A New Framework for Infrastructure*. Washington DC.

² World Bank. 2004. *World Bank Development Report 2004*. Washington DC.

³ Fay, Marianne and Tito Yepes. 2003. Investing in Infrastructure: What is Needed from 2000–2010? *World Bank Working Paper No. 2545*. Washington DC: World Bank.

⁴ People's Republic of China, Indonesia, Lao PDR, Malaysia, Mongolia, Papua New Guinea, Philippines, Thailand, Viet Nam, Cambodia, Fiji Islands, Kiribati, Marshall Islands, Federated States of Micronesia, Myanmar, Palau, Samoa, Solomon Islands, Timor-Leste, Tonga, and Vanuatu.

⁵ The figures for the People's Republic of China and Malaysia are adjusted slightly from the middle-income country figure to provide a better fit with observed data.

⁶ Figures taken from recent urban development projects with components in these sectors.

management, and slum upgrading in urban areas will be \$25 billion per annum (Table A4.2). Demand for additional urban roads and mass transit systems is difficult to estimate. However, based on past urban investment patterns on urban roads and highways, this number doubles to \$50 billion per year if urban roads are included. Demand for mass transit systems is yet harder to assess. However, megacities and large cities across the region are going to find investment in such systems increasingly necessary as cities expand and traffic volumes exceed the carrying capacities of urban road networks. Even based on the conservative assumption that 100 kilometers of rail mass transit system are constructed annually across the region, this adds a further \$10 billion per annum to the urban funding requirement.

9. Excluding electricity, intercity roads and rail, and telecommunications, it is estimated that the DMCs will need to spend about \$60 billion per annum on the development of urban infrastructure and services between 2006 and 2010 in the infrastructure sectors of water supply, sanitation, solid waste management, slum upgrading, urban roads, and mass transit systems.

Table A4.1: Best Practice Unit Costs

Sector	Unit	Unit Cost (\$)	
		Capital	Maintenance/Year as % of Stock Value
Water Supply	Per connected household	400	3
Sanitation	Per connected household	700	3
Solid Waste Management	Per household served	120	5
Slum Upgrading and/or Urban Renewal	Per household upgraded	300	3
Urban Road	Per km of 4 lane highway	650,000	2
Mass Transit	Per km of underground or elevated railway	100 million	5

km = kilometer.

Sources: Fay, Marianne and Tito Yepes. 2003. Investing in Infrastructure: What is needed from 2000 to 2010? *World Bank Paper No. 3102*. Washington DC: World Bank; *Expenditures on Infrastructure in East Asia Region, 2006–2010* (for Asian Development Bank-Japan Bank for International Cooperation-World Bank East Asia Pacific Infrastructure Flagship Study, February 2005); This special evaluation study's estimates of urban roads and mass transit costs.

10. Overall, the funding requirements for infrastructure translate to 6.9% of GDP for the People's Republic of China, 3.6% for other middle-income countries, and 6.3% for low-income countries. While this analysis is useful in providing some indication of the likely funding requirements—both for national and urban infrastructure and services—these service costs can ultimately only be met either directly by consumers through service tariffs, or indirectly by taxpayers through subsidies. Financiers, whether the private sector or official lenders or donors, can only change the time profile of user charges or taxes through loans or equity—which eventually must be repaid or remunerated.

Table A4.2: Expected Infrastructure Expenditure for Asia: Total and Urban Sector^a

Country	Country Classification by Income ^b	Infrastructure Expenditures (\$ per person per annum)				2003 Population (Million)		Expected Annual Expenditure Needs Per Country (\$ million)	
		Total ^c		Urban Sector ^a		Total ^d	Urban ^e	Total	Urban Sector ^a
		48.0	22.0	22.0	6.7	22.2	6.7	1,065.6	147.4
Afghanistan	Low income	48.0	22.0	22.0	6.7	22.2	6.7	1,065.6	147.4
Azerbaijan	Lower-middle income	90.0	21.0	21.0	4.3	8.2	4.3	741.1	90.3
Bangladesh	Low income	48.0	22.0	22.0	37.0	133.4	37.0	6,403.2	814.0
Bhutan	Low income	48.0	22.0	22.0	0.7	0.7	0.7	35.2	0.0
Cambodia	Low income	48.0	22.0	22.0	2.5	13.3	2.5	637.8	55.0
China, People's Republic of	Lower-middle income	90.0	21.0	21.0	498.0	1,292.3	498.0	116,307.0	10,458.0
Cook Islands					0.0	0.0	0.0	0.0	0.0
Fiji Islands	Lower-middle income	90.0	21.0	21.0	0.8	0.8	0.8	74.8	0.0
Hong Kong, China	High income						6.8	0.0	0.0
India	Low income	48.0	22.0	22.0	301.3	1,068.0	301.3	51,264.0	6,628.6
Indonesia	Lower-middle income	90.0	21.0	21.0	94.7	215.0	94.7	19,353.9	1,988.7
Kazakhstan	Lower-middle income	90.0	21.0	21.0	8.3	14.9	8.3	1,341.8	174.3
Kiribati	Lower-middle income	90.0	21.0	21.0	0.1	0.1	0.1	8.0	0.0
Republic of Korea	High income					47.8	40.0	0.0	0.0
Kyrgyz Republic	Low income	48.0	22.0	22.0	1.7	5.0	1.7	240.5	37.4
Lao PDR	Low income	48.0	22.0	22.0	1.2	5.7	1.2	272.6	26.4
Malaysia	Upper-middle income	97.0	19.0	19.0	14.7	25.1	14.7	2,429.9	279.3
Maldives	Lower-middle income	90.0	21.0	21.0	0.3	0.3	0.3	25.7	0.0
Federated States of Micronesia,	Lower-middle income	90.0	21.0	21.0	0.1	0.1	0.1	9.7	0.0
Mongolia	Low income	48.0	22.0	22.0	2.5	2.5	1.4	120.0	30.8
Myanmar	Low income	48.0	22.0	22.0	53.2	53.2	14.4	2,554.6	316.8
Nauru								0.0	0.0
Nepal	Low income	48.0	22.0	22.0	3.2	24.2	3.2	1,161.6	70.4
Pakistan	Low income	48.0	22.0	22.0	50.6	146.0	50.6	7,005.6	1,113.2
Palau	Upper-middle income	97.0	19.0	19.0	0.0	0.0	0.0	2.0	0.0
Papua New Guinea	Low income	48.0	22.0	22.0	5.6	5.6	1.0	269.8	22.0
Philippines	Lower-middle income	90.0	21.0	21.0	81.1	81.1	49.7	7,299.0	1,043.7
Marshall Islands	Lower-middle income	90.0	21.0	21.0	0.1	0.1	0.1	5.3	0.0
Samoa	Lower-middle income	90.0	21.0	21.0	0.2	0.2	0.2	16.1	0.0
Singapore	High income					4.2	4.3	0.0	0.0
Solomon Islands	Low income	48.0	22.0	22.0	0.5	0.5	0.5	24.4	0.0
Sri Lanka	Lower-middle income	90.0	21.0	21.0	19.3	19.3	4.6	1,732.7	96.6
Taipei,China					22.6	22.6	0.0	0.0	0.0

Country	Country Classification by Income ^b	Infrastructure Expenditures (\$ per person per annum)		2003 Population (Million)		Expected Annual Expenditure Needs Per Country (\$ million)	
		Total ^c	Urban Sector ^a	Total ^d	Urban ^e	Total	Urban Sector ^a
Tajikistan	Low income	48.0	22.0	6.6	1.7	315.5	37.4
Thailand	Lower-middle income	90.0	21.0	64.0	12.7	5,756.3	266.7
Timor-Leste	Low income	48.0	22.0	0.8		37.3	0.0
Tonga	Lower-middle income	90.0	21.0	0.1		9.1	0.0
Turkmenistan	Lower-middle income	90.0	21.0	6.3	2.2	566.9	46.2
Tuvalu				0.0		0.0	0.0
Uzbekistan	Low income	48.0	22.0	25.7	9.4	1,233.6	206.8
Vanuatu	Lower-middle income	90.0	21.0	0.2		18.7	0.0
Viet Nam	Low income	48.0	22.0	80.9	20.7	3,883.3	455.4
Total				3,397.0	1,193.1	232,222.5	24,405.4

^a Urban sector expenditure in this table is confined to water supply, sanitation, solid waste management, and slum upgrading in urban areas.

^b Country Classification, World Bank Data, and Statistics.

^c Tito Yepes. 2005. *Expenditure on Infrastructure in East Asia Region, 2006–2010*. ADB-JBIC-World Bank East Asia Pacific Infrastructure Flagship Study.

^d Asian Development Bank Statistical Database System.

^e World Bank. 2005. *2005 World Development Indicators*. Washington DC.

ASIAN DEVELOPMENT BANK'S LENDING TO THE URBAN SECTOR

Table A5.1: Urban Sector Loans by Country, 1993–2004
(\$ million)

Country	1993		1994		1995		1996		1997		1998		1999		2000		2001		2002		2003		2004		Total	
	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.		No.
AZE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	30.0	2	30.0
BAN	1	31.0	0	0.0	1	65.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	60.0	0	0.0	1	80.0	1	80.0
BHU	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	5.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
CAM	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	20.0	0	0.0	0	0.0	0	0.0	0	0.0	1	6.3	0	0.0
COO	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.2	0	0.0	0	0.0	0	0.0
FIJ	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	47.0	0	0.0
FSM	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
HKG	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
IND	0	0.0	0	0.0	2	105.0	0	0.0	3	300.0	1	250.0	4	375.0	3	370.0	0	0.0	0	0.0	0	0.0	1	200.0	1	250.0
INO	1	85.0	0	0.0	2	200.0	1	80.0	3	224.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	88.6	0	0.0
KGZ	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	36.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
KIR	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	10.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
KOR	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LAO	1	13.0	0	0.0	1	20.0	0	0.0	1	27.0	0	0.0	1	20.0	0	0.0	0	0.0	1	25.0	0	0.0	1	16.0	0	0.0
MAL	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
MON	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	15.0	1	20.1	0	0.0	0	0.0
MYA	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NEP	1	12.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	155.0	0	0.0	0	0.0	1	30.0	2	15.0	0	0.0
PAK	1	72.0	1	45.0	0	0.0	0	0.0	1	70.0	0	0.0	0	0.0	0	0.0	0	0.0	1	20.8	0	0.0	2	90.0	0	0.0
PHI	1	43.2	0	0.0	1	30.0	1	50.0	1	22.0	4	318.2	0	0.0	2	175.0	1	30.0	1	30.0	0	0.0	2	33.8	0	0.0
PNG	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	15.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
PRC	0	0.0	1	160.0	0	0.0	1	28.0	1	100.0	1	102.0	1	300.0	1	130.0	0	0.0	0	0.0	1	82.4	3	453.0	0	0.0
RMI	1	0.7	0	0.0	1	9.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SAM	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	8.0	0	0.0
SIN	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SOL	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SRI	1	40.0	0	0.0	0	0.0	0	0.0	1	75.0	1	70.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	60.3	0	0.0
THA	0	0.0	1	38.5	1	150.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
UZB	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	36.0	0	0.0	0	0.0	0	0.0
VAN	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
VIE	1	65.0	0	0.0	1	66.0	0	0.0	1	69.0	0	0.0	1	70.0	0	0.0	1	60.0	1	30.0	1	44.0	0	0.0	0	0.0
Total	9	361.9	3	243.5	10	645.2	6	198.6	14	943.8	11	841.1	8	785.0	10	881.3	7	189.0	5	222.5	18	1,061.9	4	360.0	105	6,733.8

Amt = amount; AZE = Azerbaijan; BAN = Bangladesh; BHU = Bhutan; CAM = Cambodia; COO = Cook Islands; FIJ = Fiji Islands; FSM = Federated States of Micronesia; HKG = Hong Kong; China; IND = India; INO = Indonesia; KIR = Kiribati; KOR = Republic of Korea; LAO = Lao People's Democratic Republic; MAL = Malaysia; MON = Mongolia; MYA = Myanmar; NEP = Nepal; PAK = Pakistan; PHI = Philippines; PNG = Papua New Guinea; PRC = People's Republic of China; RMI = Republic of the Marshall Islands; SAM = Samoa; SIN = Singapore; SOL = Solomon Islands; SRI = Sri Lanka; THA = Thailand; UZB = Uzbekistan; VAN = Vanuatu; VIE = Viet Nam.

Source: Asian Development Bank's internal databases.

Table A5.2: Annual Urban Lending by Country
(\$ million)

Year	AZE	BAN	BHU	CAM	COO	FIJ	FSM	HKG	IND	INO	KIR	KOR	KGZ	LAO	MAL	MON	MYA	NEP	PAK	
1968										7.2										
1969																				
1970																				
1971								21.5		8.8										
1972										31.3										
1973																				
1974														6.1		13.0				
1975								20.0		11.5				6.0						
1976										1.15										
1977								20.50												
1978																				
1979										40.3										
1980								20.0		32.0										
1981										74.8										
1982		14.4																		
1983										36.7										
1984																				
1985										172.6										
1986																				
1987			3.3																	
1988										175.0										
1989		24.2								120.0										
1990		43.0								39.0										
1991		91.5								253.0										
1992		55.0								158.4				9.6						
1993		31.0								85.0				9.5						
1994														13.0						
1995		65.0								200.0				20.0						
1996										80.0										
1997										224.0										
1998											10.2									
1999																				
2000										375.0										
2001										370.0										
2002		60.0																		
2003																				
2004		80.0																		
Grand total	30.0	464.1	9.0	46.3	2.2	56.6	10.6	82.0	1,850.0	1,792.0	10.2	522.9	36.0	146.1	104.5	41.9	36.0	217.0	565.5	

Year	PHI	PNG	PRC	RMI	SAM	SIN	SOL	SRI	THA	UZB	VAN	VIE	Grand Total
1968													7.2
1969													
1970						8.3							8.3
1971													8.8
1972													58.9
1973									19.6			4.6	37.2
1974													68.8
1975													36.8
1976		13.5				23.6							60.3
1977													60.0
1978	49.0	5.4											78.4
1979					15.1				68.0				170.5
1980	42.8						1.65		20.0				144.4
1981	46.0												223.0
1982													59.6
1983	39.3												198.8
1984									168.9				94.0
1985													421.5
1986													55.2
1987													36.5
1988													195.6
1989	156.4												461.2
1990	22.0												104.0
1991	31.4							20.0					475.5
1992		11.3	70.0					27.0	70.3				416.5
1993	43.2		85.0	0.7				40.0				65.0	361.9
1994			160.0						38.5				243.5
1995	30.0			9.2					150.0				645.2
1996	50.0		28.0										198.6
1997	22.0		100.0							10.0			943.8
1998	318.8		102.0					75.0	50.0				841.1
1999	175.0	15.4	300.0					70.0	80.0				785.0
2000			130.0										881.4
2001	30.0									36.0			189.0
2002			82.36										222.5
2003	33.8		453.0		8.0			60.3					1,061.9
2004													360.0
Grand Total	1,157.1	45.6	1,510.0	9.9	8.0	47.0	1.65	292.3	665.3	36.0	10.0	408.6	10,214.7

AZE = Azerbaijan; BAN = Bangladesh; BHU = Bhutan; CAM = Cambodia; COO = Cook Islands; FIJ = Fiji Islands; FSM = Federated States of Micronesia; HKG = Hong Kong, China; IND = India; INO = Indonesia; KIR = Kiribati; KOR = Republic of Korea; KGZ = Kyrgyz Republic; LAO = Lao People's Democratic Republic; MAL = Malaysia; MON = Mongolia; MYA = Myanmar; NEP = Nepal; PAK = Pakistan; PHI = Philippines; PNG = Papua New Guinea; PRC = People's Republic of China; RMI = Republic of the Marshall Islands; SAM = Samoa; SIN = Singapore; SOL = Solomon Islands; SRI = Sri Lanka; THA = Thailand; UZB = Uzbekistan; VAN = Vanuatu; VIE = Viet Nam.

Source: Asian Development Bank's internal databases.

FINDINGS FROM ALL 51 PROJECT COMPLETION REPORTS FOR URBAN SECTOR PROJECTS, ISSUED BETWEEN MID-1998 AND MID-2005

1. **Success Ratings.** Thailand and the People's Republic of China (PRC) have had the highest success rates for completed projects. Comparing urban sector projects with and without project preparatory technical assistance (PPTA), projects preceded by a PPTA were not significantly more successful than projects not preceded by a PPTA (81% versus 79% of all projects with project completion reports [PCRs] were rated successful).¹ So far, urban sector projects administered by resident missions have not been ranked more successful than projects administered by staff in headquarters.

2. **Project Support by the Asian Development Bank.** Comparing the average number of mission days needed for urban sector projects and all Asian Development Bank (ADB) projects (according to the Special Evaluation Study on Project Cost Estimates²), there was little difference: fact-finding took around 50 days and appraisal lasted around 70 days in both cases. Project administration missions took around 150 days.³

3. **Disbursement Ratios.** Amounts disbursed were on average 84% of the loans for the 51 completed projects with PCRs, somewhat similar to the average for all projects (footnote 2). Large amounts of ADB loans were cancelled or lapsed when the loan was closed, both in the urban sector and in all other sectors. Other Operations Evaluation Department studies have pointed out the problems with estimating project cost accurately (footnote 2), and the effects of certain contingent problems, such as local currency devaluations against the US dollar in the 1990s, which have contributed to loan cancellations. The ADB-wide phenomenon of loan cancellations also points to certain systemic problems that ADB loans face in general, that are unrelated to the specific features of the urban sector. However, some sector influence was evident, since water supply, sanitation, and waste management (WSSWM) projects fared worse than the other categories, at 76% disbursements; multisector projects (88%) and other urban sector projects did relatively better (86%).

4. **Scope Changes.** Multisector projects had an average of 9.2 scope changes per project, water supply 5.5, and other types of projects 2.0. Projects had more major scope reductions than scope additions. From the special evaluation study on project cost estimates (footnote 2), it is clear that the number of scope changes officially sanctioned by ADB is usually between one and two per project, so that it can be concluded that when the project ends, there is usually a different set of outputs from that which was set as the target at the project approval stage. This is especially the case for the multisector projects.

5. **Time Overruns.** Forty-five of the 51 projects had time overruns, and the average duration of an urban sector project was 6.9 years compared to an intended duration of 4.8 years. This was not very different from the average for all ADB supported projects: 4.8 years versus 6.6 years (footnote 2). WSSWM projects had especially long delays between appraisal and actual loan effectiveness. The reasons are unclear. Comparing the relative prevalence of

¹ The reasons were not investigated. More projects without a project preparatory TA may have been follow-up projects; projects without a project preparatory TA may have had a better standard of preparation by the Executing Agency.

² ADB. 2004. *Special Evaluation Study on Project Cost Estimates*. Manila.

³ Table 37 of the Annual Report on Loan and Technical Assistance Portfolio Performance for the Year Ending 31 December 2004 shows that from 1998–2004, project administration missions averaged 19.4 person-days per project. With an average actual project duration of 7 years (footnote 2), the total number of project administration mission days per project is approximately 136 days on the average.

reasons for time overruns, delays caused by land acquisition were much more prevalent in urban sector projects than in other types of projects, as well as delays caused by slow progress with works, slow start-up, and government inaction. Other project delays, such as those resulting from procurement activities, policy approvals, consultant progress, contractor progress, ADB inaction, and calamities, were similar to those in other sectors. Thirty-five percent of the PCRs mentioned that there were problems with project design, which reduced the success of the project; this was mostly the case with multisector projects (47%) but also WSSWM projects (27%). Twenty percent of the projects had problems caused by unanticipated decentralization processes in various developing member countries.

6. **Land Acquisition and Resettlement.** Land acquisition led to problems in two thirds of the multisector projects where land was to be acquired, and half of the WSSWM projects where it was acquired. Issues with land acquisition were often underestimated, partly because of unforeseen project delays which set in motion a vicious cycle. Sixty-one percent of projects had a land acquisition cost component, a percentage much higher than for other types of projects. Resettlement was needed in 14 projects (27%), and in about half of the cases, it proved to be a much larger issue than foreseen—again mainly in multisector projects and much less so in WSSWM projects. Resettlement, particularly in the PRC, was implemented successfully, involving almost 40,000 people in four projects. Outside the PRC, the experiences were more varied, mostly because of delays and, in two cases, court action (Loan 942-BAN[Sf]⁴ and Loan 1154-PNG).⁵

7. **Loan Covenants.** The average number of covenants in the urban sector projects was 28, with little difference between the averages for multisector, WSSWM, and other urban sector projects. Compliance with loan covenants was on average 80%, with no differences between the averages for the different types of projects. Partly complied with covenants were generally between 5% and 8%; noncompliance was around 6%–7%. Compliance with loan covenants was overall highest in the PRC at 88%. Commonly, the covenants not complied with pertained to nonrevenue water reduction, financial targets, and benefit and monitoring evaluation report preparation and submission.

⁴ Loan 942-BAN(SF): *Dhaka Urban Infrastructure Improvement Project*, for \$24.2 million, approved 12 January 1989.

⁵ Loan 1154-PNG: *Transport Infrastructure Development Project*, for \$30.0 million, approved 14 January 1992.

COUNTRY CASE STUDIES: PEOPLE'S REPUBLIC OF CHINA, INDIA, AND PHILIPPINES

A. People's Republic of China (PRC)

1. The Government of the People's Republic of China (PRC) does not see a need for borrowings from the Asian Development Bank (ADB) higher than \$1.5 billion–\$1.7 billion per year, and transport and energy have traditionally been the major ADB-supported sectors. A senior official at the Ministry of Finance stated to the study team that the PRC did not regard itself as dependent on ADB financing for the urban sector; sufficient project finance was currently available from state and commercial banks in the country. The ministry and municipal borrowers were looking to ADB for significant added value in support of knowledge generation and transfer to address the PRC's formidable urbanization challenges. ADB's added value currently left a lot to be desired and could not always justify the transaction costs that PRC governments incurred when dealing with ADB loans. Right or wrong—and it was corroborated by subsequent interviews with stakeholders and a questionnaire survey that other stakeholders held a more positive view of ADB's added value—the perception at the center may limit the potential for expansion of ADB's lending to the urban sector. Nevertheless, the urban sector has been one of the four sectors for which the PRC borrows, as it evolved from its early focus on mitigating severe environmental pollution in cities and addressing pressing problems, such as restoring city or district heating systems.

2. **Urbanization in the PRC.** The PRC's degree of urbanization has doubled in the last 25 years. In 2005, it reached 42% of the population. With 536 million urbanites, the number is larger than the combined urban population of the next four largest urban developing member countries (DMCs): India, Indonesia, Pakistan and the Philippines. By 2015, the expectation is that urbanization will have crossed the internationally still modest 50% line, and that 700 million Chinese will then live in cities.¹ The PRC has 663 statutory cities, 60 of which have populations above 1 million, and over 20,000 statutory towns. The 60 largest cities, with 12% of the population, produced 34% of non-farming gross domestic product (GDP) in 2005.

3. **Government Response.** The PRC started paying more attention to the urbanization challenge by the end of the 1990s. The PRC's Tenth Five-Year Plan (2001–2005) diverted from earlier policies, which promoted efforts to reduce cities' attraction to rural migrants. Promoting small town-based urbanization became one of the five key policy thrusts. Urbanization in the PRC follows different patterns from many other countries. Rural migration to cities has been more controlled because of mandatory urban registration and restricted access to social safety nets in places other than where rural people have been registered. The dominant enterprise structure of vertically integrated state-owned enterprises has historically localized supply chains within cities. The policy of allocation of inner urban land to state-controlled enterprises at no cost meant that, up until very recently, there had been little economic incentive for these firms to relocate to lower-cost suburban sites. This hampered suburbanization and caused a high degree of congestion and pollution in inner cities.

4. **Problems with Urbanization.** Apart from air and water pollution, which continue to be serious urban problems in the PRC, traffic congestion and water shortages are serious negative externalities of PRC urbanization. The Ministry of Water Resources has reported that 420 out of 658 cities had water shortages, 110 of these severe. Fifty-three percent of monitored sections of the seven key river systems in the PRC had water quality unsuitable for normal water treatment

¹ United Nations. 2004. *World Urbanization Prospects: The 2003 Revision*. New York: Department of Economic and Social Affairs, Population Division.

processes or irrigation. Despite the huge investments in domestic wastewater infrastructure in urban areas directed by the state council at the start of the millennium, it is likely that surface and groundwater quality will deteriorate further in many cities because of nonpoint pollution in areas outside the purview of municipal monitoring and control. Land consumption has also become a more serious issue. Concerns over rampant conversion of agricultural land have triggered periodic inspections and clampdowns by the Ministry of Natural Resources and Lands. However, the basic problem is that, under the current fiscal system in the PRC, leasing of land-use rights accounts for a large proportion of local government financing. Municipal solid waste will increasingly contribute to consumption of suburban land, and to air and water pollution. The World Bank estimates that waste generation in PRC cities will grow from 195 million tons in 2005 to 306 million tons in 2015. These estimates do not include waste generated in the expanding suburban areas.

5. **Land Markets in the PRC.** The PRC is different from non-transition DMCs in that it owns all city land. In large cities such as Shanghai, the model of auctioning the long-term leasing of land to companies has facilitated the financing of much of the modern inner city infrastructure and the road corridors. Unfortunately, in many other cities, the absence of fully-functioning land markets typical of transition economies still constrains the availability of serviced land, drives up the price of available land, and hence limits the location choices of enterprises and households. In core cities, the old practice of designating land-use rights to state-owned enterprises is changing, but in many places this does not happen fast enough to respond to new demands for land. Maximizing agglomeration benefits to metropolitan regions in the PRC will require both the removal of constraints to town-based urbanization and better management of the metropolises. There is considerable scope for policy development and the associated capacity and institution building.

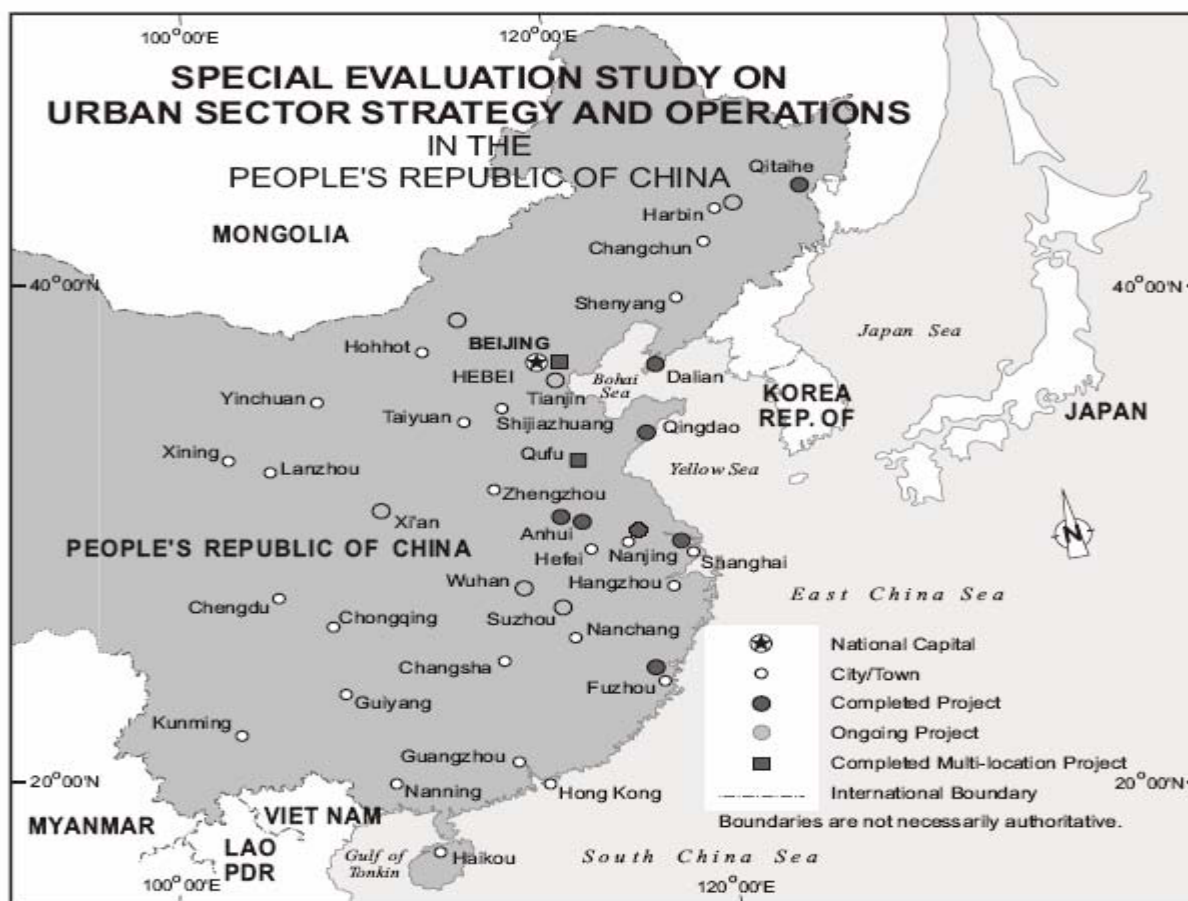
6. **Capital Investment Requirements for the PRC's Urban Regions.** An ADB advisory technical assistance (TA) on public infrastructure investment policy in the PRC² has estimated capital investment requirements, based on data available for 1999. The TA estimated that capital investment in urban infrastructure would climb from just under 2% of GDP in 1999 to 2.3% in 2010, and 2.7% in 2020. Approximately \$50 billion of new annual capital investment was projected in 2010 for water supply, wastewater treatment, solid waste, power, and roads in PRC's urban areas; rising to \$100 billion per year by 2020. Recurrent investment in operations and maintenance would incur an additional \$25 billion per year.

7. **ADB's Lending Operations.** Compared to other DMCs, the PRC started borrowing from ADB for the cofinancing of urban operations relatively late. The first loan in the PRC was for a large bridge in Shanghai in 1991. Since then, urban sector lending for the PRC accounts for about a quarter of all ADB's urban sector lending to DMCs—a figure that may seem large but is still lower than the PRC's share of total urban population in ADB's DMCs, which is 42%. On a per capita basis, India has borrowed about 26% more than the PRC for the urban sector.³ So far, 12 projects (with loans totaling \$1,513 million) have been completed, 6 of which in water supply, sanitation, and waste management (WSSWM). Nine projects are ongoing (including 6 in WSSWM) with loans totaling \$994 million, and 11 are under preparation with indicative loan amounts totaling \$1,221 million, 9 of which will be WSSWM or multisector. The location of the projects is indicated in Figure A7.1.

² ADB. 2002. *Strengthening Public Infrastructure Investment Policy in PRC: Strategic Options for Central, Provincial and Local Governments*. Final Report by Chreod Ltd. on TA 3253-PRC. Manila (also published by China Finance and Economic Publishing House, Beijing, 2004).

³ India: \$6.34 per capita, PRC: \$5.02 per 2005 urban resident, over the period 1985–2005.

Figure A7.1: Urban Lending in the People's Republic of China



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Notes: 1990 (year of approval) completed projects: Loan 1082-PRC: Shanghai Nanpu Bridge Project, for \$70.0 million, approved 28 May 1991; Loan 1188-PRC: Shanghai Yangpu Bridge Project, for \$85.0 million, approved 17 November 1992; Loan 1313-PRC: Dalian Water Supply Project, for \$160.0 million, approved 20 September 1994; Loan 1490-PRC: Anhui Environmental Improvement Project for Municipal Wastewater Treatment, for \$28.0 million, approved 26 November 1996; Loan 1636-PRC: Fuzhou Water Supply and Wastewater Treatment Project, for \$102.0 million, approved 30 September 1998; Loan 1205-PRC: Qingdao Environmental Improvement Project, for \$103.0 million, approved 10 December 1992; Loan 1491-PRC: Anhui Environmental Improvement Project for Industrial Pollution Abatement, for \$112.0 million, approved 26 November 1996; Loan 1328-PRC: and Qitaihe Thermal Energy and Environmental Improvement Project, for \$165.0 million, dated 27 October 1994; 1990 (year of approval) multi-location projects (completed): Loan 1544-PRC: Zhejiang-Shanxi Water Supply Project (Phase I), for \$100.0 million, approved 24 September 1997; Loan 1270-PRC: and Tangshan and Chengde Environmental Improvement Project, for \$140.0 million, approved 25 November 1993; 1990 (year of approval) ongoing projects: Loan 1692-PRC: Suzhou Creek Rehabilitation Project, for \$300.0 million, approved 29 June 1999; 2000 (year of approval) ongoing projects: Loan 1797-PRC: Tianjin Wastewater Treatment & Water Resources Protection Project, for \$130.0 million, approved 11 December 2000; Loan 1985-PRC: \$82.36 million, approved 19 December 2002; Loan 1985-PRC: Hebei Province Wastewater Management Project, for \$82.36 million, approved 19 December 2002; Loan 1995-PRC: Harbin Water Supply Project, for \$100.0 million, approved 11 March 2003; Loan 1996-PRC: Wuhan Wastewater Management Project, for \$83.0 million, approved 25 April 2003; and Loan 2024-PRC: Xi'an Urban Transport Project, for \$270.0 million, approved 27 November 2003.

8. The indications are that ADB is reducing its urban orientation in favor of other sectors, contrary to the World Bank which is increasingly concentrating on urban sector lending. The

41. Overall, ADB approved \$1,791 million in loans to the urban sector in the Philippines from 1975 to 2003: \$66 million from 1975 to 1979, \$285 million from 1980 to 1989, \$905 million from 1990 to 1999, and \$239 million from 2000 to mid-2005. In addition, ADB provided a total of 33 TA grants to the Philippines urban sector from 1973 to 2005, amounting to \$15.7 million. A total of \$5.5 million was provided from 1973 to 1992; \$10.2 million from 1993 to 2005. From 1993 to 2002, ADB provided the Philippines with 19 grant-based TA, 7 of which were advisory TAs and 12 project preparatory TAs.

42. **Past Experience.** Over the past 6 years, ADB issued PCRs for five completed projects: (i) Metropolitan Cebu Water Supply Project (the Cebu project);¹⁷ (ii) Municipal Water Supply Project (MWSP);¹⁸ (iii) Manila South Water Distribution Project (the Manila project);¹⁹ (iv) Angat Water Supply Optimization Project (the Angat project);²⁰ and (v) one integrated urban development project, the Subic Bay Area Municipal Development Project (the Subic project).²¹ The projects were approved between 1989 and 1997 and completed between 1999 and 2003. Project duration from appraisal to completion ranged from 6 to 13 years. All projects had significant delays. The Angat project was delayed by 7 years while the Manila project was delayed by 6 years. For other projects, the delays were less and more similar to the overall average for ADB-supported projects (2 years). The projects were hampered by slow action by the Government in terms of slow approval of contracts, granting of excavation permits, approval of variation orders, protracted signing of loan agreements, and changes in government regulations (e.g., the Department of Public Works and Highways no longer allowed large water pipes on existing bridges). The Cebu and Manila projects encountered delays because of (i) land acquisition and right-of-way problems (Cebu and Manila projects), (ii) design changes resulting from the privatization of water distribution (Manila project), and (iii) the legal dispute over the use of fiberglass pipe materials, which lasted 6 years (Manila project). Risk assessment and better project management could have averted the delays or at least mitigated the negative effects. Other causes of delays were related to security issues, delayed signing of memorandums of agreement with subdivisions for service connections, and technical factors.

43. Thirty-three percent of the loans was cancelled, which is a significantly higher average than for other urban loans in the last years. The Angat project had the biggest unused amount at \$48 million. The cancellations were because of (i) significant depreciation of the local currency, (ii) deletion of project components (especially the Subic and Angat projects); (iii) limited project outputs due to delays (the Manila Water project); and (iv) PIUs financing part of the project from their respective funds (MWSP and Angat projects).

44. Nevertheless, the PCRs indicated that the projects had contributed significantly to institutional strengthening and capacity building of participating agencies, e.g., in corporate planning, preparation of water tariff plans, computerization of billing and collection systems, and Non Revenue Water reduction programs. The training programs conducted under the Subic project were considered to have improved the capabilities of the local government units (LGUs) and Department of Interior and Local Government staff participating in the project. Under the Angat project, ADB provided an advisory TA for the institutional strengthening of Metropolitan Waterworks and Sewerage System (MWSS). This consisted of the review and computerization of the customer accounting system, computerization of the fixed asset and inventory

¹⁷ Loans 1056-PHI and 1057-PHI: *Metropolitan Cebu Water Supply Project*, for \$16.0 million and \$6.0 million, respectively, approved 29 November 1990.

¹⁸ Loan 1269-PHI: *Municipal Water Supply Project*, for \$43.2 million, approved 25 November 1993.

¹⁹ Loan 1150-PHI: *Manila South Water Distribution Project*, for \$31.4 million, approved 19 December 1991.

²⁰ Loan 986-PHI: *Angat Water Supply Optimization Project*, for \$130.0 million, approved 14 November 1989.

²¹ Loan 1599-PHI: *Subic Bay Area Municipal Development Project*, for \$22.0 million, approved 9 December 1997.

management system, and preparation and implementation of a training program in technical and financial management. However, in this case, most of the staff who were trained left and joined the concessionaires.

45. The PCRs noted that project design and formulation were generally sound for all the projects, except the Subic project, which was the only project prepared through project preparatory TA. The PCR identified a number of problems with the project environment in the Philippines: (i) a large amount of political influence —effective measures to mitigate the influence of a dominant political leader were not built into the project; (ii) changing development priorities, as LGUs frequently changed their development priorities even after urban infrastructure plans had been prepared; (iii) inability to provide counterpart funds, as LGUs and water utilities could not provide counterpart funds when needed, and several subprojects had to be cancelled; and (iv) LGU borrowing capacity was less than the level expected by ADB, which limited the number and size of subprojects that could be funded. In the Subic project, there were also design problems: (i) alternative funding sources were not identified during project preparation, (ii) the chosen project approach did not allow for flexibility to replace cancelled subprojects because of the LGUs' changing priorities, (iii) subprojects were poorly prepared, and (iv) added complexity was caused by the inclusion of a water supply component which could have been included under another ongoing ADB-funded project. This addition necessitated the involvement of another EA, which further complicated project execution and implementation.

46. The PCRs rated the MWSP successful while the Angat and Cebu projects were rated partly successful. The Manila and Subic projects were rated unsuccessful. These are the only projects rated unsuccessful among all ADB urban projects.

47. **World Bank Experiences.** Some other international financing institutions seem to be facing fewer problems than ADB in their urban program in the Philippines. The World Bank has funded a number of urban projects over the last 30 years, ranging from slum upgrading and sites and services projects (such as the Tondo Foreshore and Dagat-Dagatan Projects [Urban I and II])²² in the 1970s, to integrated urban infrastructure (such as the Metro Manila Infrastructure, Utilities and Engineering Project [Urban III],²³ Regional Cities Development Project [Urban IV],²⁴ and Municipal Development Project I, II, and III)²⁵ in the 1980s and 1990s. In 2005, the World Bank funded the Local Government Finance and Development Project,²⁶ LGU-Urban Water and Sanitation Project,²⁷ and the Water Districts Development Project.²⁸ It also launched the City Development Investment Project in partnership with the League of Cities and the Cities Alliance.

48. An impact evaluation report on the Municipal Development Project (MDP) (footnote 22 [i]) model provided some conclusions that could be of interest to the design of new ADB-supported projects: (i) MDP operations supported reforms at the local government level and, as a result, participant LGUs increased their fiscal autonomy and mobilized more

²² Under the (i) Manila Urban Development Project I, for \$32.0 million, approved 27 May 1976; and (ii) Urban Development Project II, for \$32.0 million, approved 21 December 1978.

²³ Under the Urban Development Project III, for \$72.0 million, approved 25 March 1980.

²⁴ For \$67.0 million, approved 31 March 1983.

²⁵ Municipal Development Project, for \$40.0 million, approved 5 June 1984; Municipal Development Project II, for \$40.0 million, approved 14 December 1989; Third Municipal Development Project, for \$68.0 million, approved 31 March 1992.

²⁶ For \$100.0 million, approved 23 March 1999.

²⁷ For \$23.3 million, approved 15 December 1998.

²⁸ For \$56.8 million, approved 9 September 1997.

resources than nonparticipants; (ii) MDP was able to attract revenue-generating projects; (iii) a demand-driven, competitive selection process was found to be more efficient and effective than a top-down, preselected beneficiary approach; (iv) subproject investment packages should be limited to what can be prepared, completed, and evaluated over a 3-year period—the term of local officials (mayors); (v) subprojects should address the most basic needs first, and should be on a scale compatible with the technical capacity and financial resources of the LGUs; (vi) LGU applicants should be required to show a development plan and asked to explain how the proposed subproject would contribute to the development plan; (vii) LGUs with completed projects should be required to set aside agreed amounts for maintenance; and (viii) covenants regarding institutional and fiscal reforms should be a prerequisite for subsequent, larger loans.

49. **Experiences with Ongoing ADB-Supported Projects.** ADB currently administers loans for six urban sector projects: 2 multisector LGU development projects (Clark Area Municipal Development Project²⁹ and Mindanao Basic Urban Services Sector Project³⁰); 2 urban environmental projects (Metro Manila Air Quality Improvement Sector Development Project³¹ and Pasig River Environmental Management and Rehabilitation Sector Development Project³²); 1 water supply project (MWSS New Water Source Development Project³³); and 1 shelter and poverty reduction project (Development of Poor Urban Communities Sector Project³⁴). The Pasig River Project, Metro Manila Air Quality Project, and Development of Poor Urban Communities are the first of their kind in the Philippines.³⁵

50. The total estimated cost of the six ongoing projects amounts to \$393.8 million, of which \$238.4 million is funded through ADB loans. An additional \$300 million in policy loans have been conditionally offered to the Government of the Philippines as part of two projects: the Manila Air Quality Project and the Pasig River project. In contrast, especially with projects in the PRC, progress with four out of the six projects has been disappointing, as illustrated in Box A7.3.

Box A7.3: Disappointing Progress with ADB-Supported Projects in the Philippines

Clark Area Municipal Development Project experienced a significant decrease in project scope and loan amount, with three loan cancellations over the project period. Over 80% of the original loan amount has been cancelled because of the withdrawal of half the target beneficiaries and the reduction in the number of subprojects from 24 to 7.

The **Metro Manila Air Quality Improvement Sector Development Program** was extended for 3 years (2003–2006) to allow the completion of the subprojects of several implementing agencies, but cumulative commitments to date are only 32%, with disbursements of 24%.

The **Pasig River Environmental Management and Rehabilitation Sector Development Project** was scheduled to be completed in July 2005. As of end February 2006, cumulative contract awards and

²⁹ Loan 1658-PHI: *Clark Area Municipal Development Project*, for \$24.3 million, approved 15 December 1998.

³⁰ Loan 1843-PHI: *Mindanao Basic Urban Services Sector Project*, for \$30.0 million, approved 27 September 2001.

³¹ Loan 1663-PHI: *Metro Manila Air Quality Improvement Sector Development Program (Policy Loan)*, for \$200.0 million, approved 16 December 1998.

³² Loan 1745-PHI: *Pasig River Environmental Management and Rehabilitation Sector Development Program*, for \$100.0 million, approved 20 July 2000.

³³ Loan 2012-PHI: *Metropolitan Waterworks and Sewerage System (MWSS) New Water Source Development Project*, for \$3.26 million, approved 14 October 2003.

³⁴ Loan 2063-PHI: *Development of Poor Urban Communities Sector Project*, for \$30.5 million, approved 18 December 2003.

³⁵ Though the World Bank has financed shelter projects in the 70s to the 80s, these were largely national government led projects with minimal LGU and community support and participation.

disbursements were only 24% and 16% of the net loan amount, respectively. Contract awards and disbursements are expected to improve with the construction of the Sewage Treatment Plant, increase in number of Environmental Preservation Areas, and possible implementation of an Urban Renewal Area.

The **Mindanao Basic Urban Services Sector Development Project** was hampered by a slow start. Projected cumulative commitments for 2005 are 25%; disbursements are 18%. Commitments and disbursements may pick up as the local government unit pipeline gathers pace, and implementation of subprojects starts. By July 2005, 6 subprojects had been completed, 7 were ongoing, 5 were going through bidding for civil works, and 5 had subloan agreements approved. Executing agencies and the Asian Development Bank expect that only 68% of the loan may be utilized by the loan closing date.

MWSS New Water Source Development Project has cumulative commitments of 18% and cumulative disbursements of 1%, but this is a small technical assistance loan which is expected to disburse the loan proceeds without much difficulty in 3 years. Projected cumulative commitments for 2005 are 55% and disbursements are 40%.

The **Development of Poor Urban Communities Sector Project** became effective by April 2004. It has a robust and promising pipeline which is currently in various stages of processing and preparation. The estimated cost of the pipeline projects exceeds the loan proceeds. If the pipeline materializes into actual projects, the loan proceeds could easily be disbursed before the loan closing date.

MWSS = Metropolitan Waterworks and Sewerage System.

Source: Special evaluation study field visits in the Philippines, July–September 2005.

51. **Client Views on Added Value and Costs of ADB Involvement.** Discussions with officials and staff of the EAs and implementing agencies (IAs) of these 6 projects likewise provided this study with a mixed picture regarding ADB involvement in their projects.

52. Five of the six EAs saw ADB's primary contribution in the field of support for infrastructure provision, which it was deemed in a good position to do because it could package TA with the loans. Three EAs acknowledged that ADB projects were generally better designed than locally prepared projects, although they were sometimes too optimistic about project inputs and outcomes.

53. **Views on Institutional Arrangements.** A main issue was ADB's failure to identify the appropriate organizations and institutional arrangements for the projects. Five EAs argued that, although ADB's approach was innovative, ADB was insufficiently familiar with the bureaucracy of the Philippines, and overestimated the Government's capacity to apply the approach. Four of the six project managers believed that the projects were conceptualized and driven by the ADB agenda, instead of their respective agencies. Paradoxically, despite the close proximity of ADB to most of the projects, ADB was not viewed as sufficiently receptive to ideas from government agencies, and not flexible enough to support changes in project design and scope. The requirement to adhere to pre-set targets from country strategies was considered a factor explaining this.

54. Three project agencies pointed to ADB's tendency to make institutional arrangements complex. One EA stated that its project was prepared for implementation by another line agency but ADB had insisted on a different arrangement, so a new interagency institution was established. This subsequently made management too complex.

55. Three agencies also viewed the projects as having too many components. They suggested that ADB should simplify projects rather than complicate them with multiple components. In the Philippines, multicomponent projects are often difficult to plan, coordinate,

and move within a common implementation schedule. They also suggested that projects should be unbundled and sequenced rather than simultaneously implemented.

56. Officers from one project suggested that ADB should be more careful in choosing or inviting financial intermediaries. The financial intermediary for this project was not suited for the project since it had limited grassroots presence and no incentive for its branches to work on small development projects. The intermediary's focus on huge commercial operations was viewed as a constraint. LGU officials agreed that government financial institutions (GFIs) were primarily banks, and could not be assumed to have the inclination and capability to support protracted and costly project preparation processes and intensive capacity building exercises. They observed that GFIs do not differentiate between commercial clients and LGUs or communities, which puts LGUs and communities at a disadvantage with respect to stringent collateral requirements and fee structures.

57. Officials and staff from three EAs suggested that innovative but untested project concepts should be implemented as a pilot rather than a full-scale project. In a number of projects, agencies have been slowed down by the difficulty of planning and implementing a new project, especially when it required the involvement of a number of IAs.

58. While many EAs and IAs agreed with the project development objectives, they readily admitted that they often had different priorities and a divergent agenda. One EA recommended a more intensive coordination effort as part of the project preparation process, to ensure the commitment of EAs and IAs to the projects in future.

59. Officials and staff from three LGU-focused projects suggested that subsequent LGU projects should be designed to conform to the implementation experience and performance of the intended IAs. They pointed out that projects that involve local governments and/or communities, such as a resettlement or poverty reduction project, require a much longer preparation time to allow for extensive consultations with stakeholders, for capacity building, and for promoting broad and committed support for the project. They pointed to their respective projects, which have been hampered by short pipelines that affect loan disbursement performance. However, such projects have been designed as regular projects which are programmed for implementation over the usual 5-year period.

60. **Administrative Complexities.** Apart from issues related to design and institutional assessments, EA representatives interviewed also criticized ADB's administrative processes. Officials and staff of four of the six projects observed that ADB-funded projects have a lengthy approval process, which should be shortened drastically to enable local agencies to respond promptly. They added that the ADB's stringent safeguard policies, voluminous documentation requirements, and lengthy processes are serious factors which affect their projects. An official of a financial intermediary noted that an LGU withdrew a project because the resettlement plan would cost more than the project itself.

61. Project staff, on the other hand, suggested that there could be greater ADB presence at project sites and the local level. They observed that this can greatly boost project promotion among potential clients, facilitate project coordination, and promptly resolve project issues. The significant value of ADB, as an additional source of pressure on usually supra-local decision makers, was acknowledged.

62. Two financial intermediaries cited the high cost of doing business with ADB, particularly the high commitment fees, in relation to project delays. They believed they were at a

disadvantage because the projects were slow-moving by their nature, and disbursed in small tranches. They observed that they had not been involved in project preparation.

63. Officials of LGUs now borrowing through GFIs suggested that ADB should lend to them directly. The terms and conditions of a loan obtained through a GFI were viewed as exorbitant, because of the fees and charges in addition to the interest on the loan. Aside from the Internal Revenue Allotment intercept in case of non-repayment, they had to provide the project site and all other revenues as collateral.

64. LGU officials were not aware why ADB was involved in the selection of consultants for the feasibility study and the detailed design, when these were funded from local sources. They saw this as eroding their autonomy, although in many other countries, such ADB involvement was seen as positive. Officials from an EA and an IA observed that their consultants did not fit the requirements of their projects, and were more supportive of ADB than the client agencies. These officials also observed that the consultants were not familiar with the socio-political-cultural environment and did not appreciate its dynamic.

65. One project official observed that LGUs are a difficult market for ADB for the following reasons: (i) short term of office; (ii) continuity of agreements from one local administration to another is difficult; (iii) weak capacity of staff, which necessitates lengthy and costly capacity building and TA support; (iv) aversion of many small LGUs to borrowing because of the perceived political backlash it can cause; and (v) limited financial resources of most LGUs.

66. **Solutions Offered.** Local governments will be increasingly at the forefront of dealing with urban development. Respondents mentioned that if ADB wants to be relevant, it should combine its financial support with more institutional and capacity development support. New partnerships could be built, e.g., with the League of Cities. Since it is also a political institution with leadership changes, as a result of local elections, it may be necessary to support the establishment of a subsidiary institution as the technical arm of the League of Cities. This could be set up jointly by the League of Cities and the League of Municipalities with equity contributions from its membership. This technical arm or local development institute could (i) be made responsible for providing capacity building and TA to local governments; (ii) build a pipeline of local projects; (iii) channel ADB's TA grants; (iv) manage a local government data bank; and (v) be managed professionally through a long-term contract with external institutions such as research foundations, academic institutions, training consortia, or nongovernment organization networks.

COMPARISON OF QUESTIONNAIRE SURVEY FINDINGS IN PEOPLE'S REPUBLIC OF CHINA, INDIA, AND PHILIPPINES

1. The findings of the country studies are reinforced by the questionnaire returns received from project directors and project implementation unit (PIU) managers. There were 10 responses from 6 projects in India, 13 from 6 projects in the Philippines, and 12 from 5 projects in the People's Republic of China (PRC).¹ There was a fair amount of consensus in client views on the perceived added value and cost of Asian Development Bank (ADB) involvement. The responses did not often deviate significantly from those of other countries. Most clients saw benefits of ADB involvement, and this is no different in the three case study countries. Except perhaps for the PRC, clients saw relatively more problems with the involvement of national systems and stakeholders in the project than ADB and its systems.

2. **Advantages of ADB Involvement.** The project directors and managers in all three countries were similar in their appreciation of the steady supply of funds that ADB involvement means, and the good and transparent procurement processes. There was somewhat less consensus on the quality of project design and ADB's persuasion powers vis-à-vis higher level decision makers (India was more positive than the other two). For the Philippines, the security of project administration and salaries, as a result of ADB loan funding, was the only advantage mentioned less often.

3. **Capacity Development.** A previous Operations Evaluation Department (OED) special evaluation study (SES) on the Role of PIUs² noted that the use of PIUs, and particularly the nature of their staffing, varied between countries. Depending on whether there were internal deputations from the parent agencies, or externally obtained staff in the PIUs, the levels of substitution of regular agency staff and hence the degree of capacity erosion varied. Urban sector projects in the Philippines were mostly staffed by regular agency staff and funded by the regular government budget rather than loan proceeds. Policy decisions taken in 2003 regarding the consolidation of PIUs may be starting to become effective, and a process of capacity development strengthened. There were, however, more complaints in the Philippines about lack of staff in the agencies, which may be why respondents highlighted more implementation problems than elsewhere. Respondents from the Philippines reported (i) more cases of underpaid, and (ii) demoralized project staff than respondents from India and the PRC. PRC respondents mainly reported (i) lack of interest and/or incentive of staff to move to the project area; (ii) insufficient capacity, qualifications, and experience of staff; and (iii) short tenure of senior staff in the agency. Indian respondents mainly reported (i) lack of agency staff, (ii) high staff turnover, and (iii) short tenure of senior staff in the project.

4. **Implementation Problems Encountered.** Many more implementation problems were mentioned by respondents from the Philippines than by those from India or the PRC. Philippine respondents highlighted delays in government decisions, insufficient government budget made available to the projects, and interference from politicians with decisions already taken. Respondents also registered more problems on the ADB side, which is surprising given that communication with ADB should in principle be easier because the projects are close to ADB headquarters. The respondents complained, in particular, about the enforcement of the ADB agenda (e.g., resettlement, environment, participation, etc.), which may be due in part to the innovative and experimental nature of some of the projects in the Philippines. Delays in ADB responses and decisions, difficult forms and procedures, and excessive paperwork were noted.

¹ The findings are tabulated in Supplementary Appendix H.

² ADB. 2005. *Special Evaluation Study on the Role of Project Implementation Units*. Manila.

Excessive paperwork was also a serious issue for Indian respondents, apart from improper staffing by consultants recruited for the project (a paradox given that Indian responses saw good benefits from the involvement of consultants). The overly complex nature of projects was emphasized in the Philippines, coupled with a lack of effective monitoring systems. Lastly, urban projects in the Philippines seemed to engender more opposition from civil society or private sector parties than in other places.

5. Indian respondents highlighted the lack of effective coordination, difficult government systems and procedures, and high and rising cost of land or other issues with acquisition of land or right-of-way. Respondents from the PRC highlighted relatively fewer ADB-related problems than others, although delays in ADB responses and difficult procedures and systems were noted.

6. **Irregularities and Corruption.** The survey of project directors included two questions regarding perceptions and experience with irregularities and corruption. The answers are summarized in Table A8. The large majority of respondents (70 out of 78) reported no experience of irregularities or corruption. Taken at face value, this is a positive finding. However, given the nature of the questions and the position of the respondents, some caution is needed in interpreting the data. A small number of respondents (less than 5 out of 78) reported incidents of irregularities or corruption, or that such situations had been dealt with. There is some evidence that ADB's policies, procedures, and oversight are better able to guard against corruption than nationally funded projects. About 44% of the respondents (34 out of 78) expressed this view. This view was reported more frequently by respondents from the PRC, India, and the Philippines (19 out of 33), which were visited for the country studies undertaken for this evaluation, than by respondents from other countries (15 out of 45). It is important to note that the field visits took place before the questionnaire was completed. A small number of respondents (5) felt that, because of their size, ADB projects were more prone to attempts at corruption than smaller, nationally funded projects. Although more detailed studies would be required to confirm the general proposition, it is encouraging that the survey responses did provide some evidence that ADB projects were regarded generally less prone to corruption and irregularities than domestically funded projects. This would be an important issue to consider as part of the broader debate about the use of country systems.

Table A8: Affirmative Replies to Questions on Irregularities and Corruption
(no. of respondents)

	India	Philippines	PRC	Others	Total
Number of valid responses	9	13	11	45	78
ADB project confronted with more attempts at corruption than nationally funded projects	0	0	2	3	5
ADB project better able to guard against corruption than nationally funded projects	5	7	7	15	34
No experience with irregularities or corruption	7	11	11	41	70
Project staff have suspected irregularities	0	2	0	1	3
Project staff have witnessed attempts at corrupt practices	0	0	0	3	3
Written allegations of irregularities have been made	1	1	0	3	5
Written allegations of corruption have been made	0	0	0	2	2
Irregularities have been dealt with	2	1	0	1	4
Written allegations of corruption have been dealt with	1	0	0	2	3

ADB = Asian Development Bank, PRC = People's Republic of China.

Sources: Questionnaire survey response by project directors and project managers, July–October 2005; 78 responses were given in 88 questionnaire returns.

INNOVATION AND EFFICIENCY INITIATIVE AND OTHER POLICY AND BUSINESS PROCESS INITIATIVES, WITH COMMENTS ON RELEVANCE FOR URBAN SECTOR

Innovation and Efficiency Initiative	Opportunity/Benefit to DMC/EA	Threat/Risk to DMC/EA
<p>A. Cost Sharing and Expenditure Eligibility Introduction of a more flexible determination of cost sharing limits based on sector, client, and TA or project characteristics. (The old policy made it possible to fund all foreign exchange costs irrespective of the total cost sharing limit. Financing of local currency cost was limited.)</p> <p>Expansion of the eligible expenses ADB can finance to include land acquisition or right-of-way</p> <p>Expansion of the eligible expenses ADB can finance to include payments for taxes and duties (to a "reasonable" degree)</p> <p>Expansion of the eligible expenses ADB can finance to include payments for transport, insurance, late payment penalties, bank charges, food expenditures, leasing, interest during construction on non-ADB loans, and secondhand goods</p> <p>Expansion of the eligible expenses ADB can finance to include payments for resettlement assistance charges</p> <p>Retroactive financing of up to 20% of project amount for eligible expenses incurred up to 12 months before project signing</p>	<p>Reduction in complexity of cost estimating and project financial planning. Reduction in complexity of project administration, reimbursement, cost control, and auditing. Opportunity for EAs to obtain additional loan finance to cover components of projects on a 100% direct payment or reimbursement basis, so that dependence on erratic government releases or cofinancing sources is reduced and the project can speed up implementation. Reduction in project delays by increased use of local currency imprest accounts. Greater flexibility; more secure access to (loan) funds may increase speed of land purchase and thereby also reduce risk of land cost escalation when government funds are not quickly or easily released. Increases in speed of land acquisition may speed up project implementation and thereby reduce overall costs and increase economic rates of return. Reduction in complexity of reimbursement of costs on which taxes are already levied. Reduction in claims for exemptions and thereby simplification of financial management tasks in projects. Simplification of financial management, accounting, and reimbursement control. Increased eligibility of expenditures may remove practical bottlenecks to project implementation when funds for the items mentioned have to be obtained from other, sometimes less responsive, sources. Leasing can be akin to a rental agreement, which may be advantageous; currently, project cars are often purchased and offices are specially constructed, which is expensive. Removal of practical bottlenecks in conducting resettlement activities, which are by their nature delicate enough, without added financial complexities. Very important measure to smoothen transition from preparation to implementation of project, thereby speeding up the project.</p>	<p>Increase in country debt and debt of local governments with national governments.</p> <p>Loss of intrinsic linkage of ADB loan to project's foreign exchange cost reduces lending discipline and increases pressure from EAs on Borrower (usually Ministry of Finance).</p> <p>Exposure to foreign exchange risk for local currency expenditures (if loan is not in local currency).</p> <p>Possible additional inflationary pressures on land cost where loan funds used since these will be seen as an opportunity by EAs, with the Borrower guaranteeing the repayment of loan. Inclusion of land opens ADB up to complex legal issues, such as tenure and community rights.</p> <p>The clause regarding the reasonableness of the taxes could cause confusion. EA's advantage of "tax-free" cheap goods and services is terminated with this new rule. Makes ADB more expensive and less attractive to the EA. Increased eligibility of "overhead" type of expenditures may lead to lower due diligence, less prudent behavior, lower thresholds, and ultimately higher cost of project. Lack of experience with leasing agreements in many DMCs.</p> <p>Increase in financing for resettlement costs may have reputation risks for ADB in cases where the process is controversial and/or not well managed. Project may ultimately not be approved, or approved with conditionalities that DMC/EA does not want.</p>

Innovation and Efficiency Initiative	Opportunity/Benefit to DMC/EA	Threat/Risk to DMC/EA
Expansion of the eligible expenses ADB can finance to include recurrent cost	This further improves flexibility of project implementation phase and its transition to operational phase.	Funding recurrent costs beyond capital investment project is restricted by ADB's Charter. Cost recovery and sustainability of project may suffer when not applied prudently.
Financing plan to do away with foreign and local currency split and show only level of ADB partner finance (government, other international financial corporation, bilateral, commercial bank). Imprest accounts to be made available in local (convertible) currency or foreign currency	Greater ease of project cost estimating Greater emphasis on financing plan is beneficial for appropriate appraisal of project. Greater flexibility in project management and payment of eligible costs	None. Imprest accounts may lead to big unspent amounts sitting idle and yielding interest accruing to banks.
B. Pilot Financing Instruments and Modalities (approved for a period of 3 years, as from August 2005) Establishing a multitranche debt finance facility to: (i) target discrete components of large stand-alone projects, (ii) tranches of sector investment programs over a longer time frame, (iii) financial credit lines, and (iv) guarantees. Suitable mainly for sector investment projects and programs, and for large projects with discrete components.	Reduce commitment fee burden Reduce cost and time of repeat processing Positive balance sheet impact for local governments (reduced commitment fees) Positive balance sheet impact for nonsovereign borrowers so that more cofinancing funds can be accessed. The Medium Term Fiscal Framework will help counter ADB's approval culture by shifting the focus from processing to execution or implementation. Direct access by local governments to ADB funds Cheaper funds with greater local control over their use Stimulant to accelerating reforms at local government level, particularly for public utilities with sound financial management systems and good governance. Will provide for potential demonstration of good practices. Reduced risk to local utilities and local governments from foreign exchange fluctuations.	Annual approval of new tranches may not be smooth by either lender or borrower. Annual tranches preparation process may turn out to be onerous. Risk of indebtedness of local governments, public utilities, and state-owned enterprises. Need for due diligence and independent risk assessment may cause delays. Involvement of Credit Risk Management Unit in ADB brings extra transaction cost. ADB crowds out other investors. ADB interest conditions may be more disadvantageous compared to government banks and other local banks. May only provide a palliative if applied to projects where there are fundamental problems of cost recovery—delaying the need for hard choices on tariff.
Provision for debt finance to subsovereign and nonsovereign public sector financing on a nonrecourse or limited recourse basis will allow ADB to better finance projects at the provincial and municipal level and of state-owned enterprises, provided that it is accompanied or preceded by reforms	Applicable to fundamentally sound projects with high development impact but weak financing plans. Useful where exchange rate fluctuation or project delays have impacted negatively on commercial performance of utility. Leverage of additional development funds from commercial banks	None.
Introduction of local currency financing for public sector institutions	Reduced financial burden of projects with short implementation periods, where disbursement rate is of	No incentive to cancel excess loan provisions or speed up project implementation.
Introduction of refinancing products to help restructure or expand projects involving public or private sector assets or assets under public-private partnerships	Introduction of new forms of cofinancing through active financial syndications and risk sharing with commercial financing partners in the public and private sector designed to take advantage of ADB's credit enhancement instruments to develop collaboration and risk-sharing partnerships	None.
Review of options to provide greater flexibility in the application of the commitment fee , with a view to		

Innovation and Efficiency Initiative	Opportunity/Benefit to DMC/EA	Threat/Risk to DMC/EA
<p>reducing its burden, and the disincentive to borrow which it currently represents</p>	<p>necessity initially slow, and where implementation suffers unavoidable delays.</p>	<p>In some circumstances, could increase the risk of flawed tendering processes – greater opportunities for corruption.</p>
<p>C. Revisions to Procurement Guidelines (under preparation) Streamlining: including abbreviated bidding process, granting greater authority to borrowers to run the bidding process and permitting ex-post review of advertisements and bidding documentation Harmonization: closer convergence of ADB guidelines to those of the World Bank Greater transparency through extending coverage of procurement guidelines and increasing award information dissemination Innovation and modernization, through offering borrowers a greater choice in procurement practices Reduce procedural review and transfer greater responsibility for such review to regional departments and resident missions</p>	<p>Shorter contract processing times Shorter tender periods reducing overall implementation period Less onerous and time-consuming requirement for contract review by ADB Opportunity for capacity development in procurement Greater reliance on national competitive bidding shortens bidding process, makes it simpler for countries in which English is not a widely spoken language. Greater reliance on national competitive bidding will, in the end, increase project implementation capacity of private sector. (Reliance on international competitive bidding had the effect of reducing the internal competition as only a few national companies would generally be short-listed.)</p>	<p>In some circumstances, greater flexibility could increase the risk of flawed tendering processes – greater opportunities for corruption. In some circumstances, could reduce the quality of project implementation, especially where local equipment and goods is lower. Need for capacity enhancement in EA and resident missions.</p>
<p>D. Revisions to Policies and Procedures on the Use of Consultants (under preparation) Introduction of fixed budget selection of consultants for simple assignments Introduction of least-cost selection of consultants for simple and routine assignments Introduction of selection based on consultant's qualifications for small assignments Introduction of Framework Contract selection under a two-stage engagement process; and, for longer-term frameworks, on country, theme, or sector basis with drawdown for specific tasks Introduction of performance-based contracts under the project performance management system Extensive use of lump-sum contracts, where clearly defined outputs are required</p>	<p>Greater flexibility for engagement of consultants should add to greater flexibility in response to demands, and greater speed in this response. Extended use of lump sum contracts will reduce work for the financial controllers.</p>	<p>In some circumstances, greater flexibility could increase the risk of flawed tendering processes – greater opportunities for corruption. In some circumstances, could reduce the quality of project implementation, especially where local experience is more limited. Experience with delegating TA recruitment to EAs is not favorable. Possibility of additional delays in recruitment.</p>
<p>E. Policy on Supplementary Financing (approved November 2005) Revision of the existing policy has made it simpler to prepare for the borrowing of additional loan funds from ADB on account of changes in the financing plan, for example due to currency fluctuations which make a larger loan necessary, or changes in cofinancing arrangements during project implementation.</p>	<p>Simplifies documentation needed for new report and recommendation of the President and/or supplementary loan approval, and thereby speeds up approval of supplementary financing. Quick response from ADB to unforeseen currency problems Makes it easier to get approval for loan supplement needed on account of currency fluctuations (depreciation of dollar, etc.), thereby reduces chances of too conservative cost estimating with large contingencies.</p>	<p>Risk that cost estimate will be less detailed and precise.</p>

Innovation and Efficiency Initiative	Opportunity/Benefit to DMC/EA	Threat/Risk to DMC/EA
<p>Revision of the existing policy has made it simpler to prepare for borrowing additional loan funds from ADB on account of changes needed in the investment plan of the project during its implementation, such as scope changes or the desire to replicate successful components that are easily replicable, to increase impact of project.</p>	<p>Makes it easier to plan conservatively for components related to social issues, governance, capacity, and institutional development, for which financing is more difficult to predict. Urban projects generally need significant soft components; sector projects and multisector projects need more flexibility than usual. Policy will contribute to shift to more programmatic, demand-driven model of project financing, responsive to needs.</p> <p>Multisector projects have more components than other types of projects, and will benefit from flexibility in project financing. Successful components, such as slum improvement or road rehabilitation, could be expanded in accordance with needs.</p>	<p>Risk is that project will become vulnerable to political pressures for scope changes and scope additions, diluting the original focus of the project, leading also to waste of loan funds</p>
<p>F. The Middle Income Country/OCR Partnership Framework and ADB reform agenda (measures under discussion within ADB)</p>		
<p>Clean Development Mechanism</p>		
<p>Mainstreaming Regional Cooperation</p>		
<p>Emergency Response Facility</p>		
<p>Cluster TA facility</p>		
<p>Systems for Multi-Year Indicative Planning Figures</p>		
<p>Increasing the cap on the proportion of program loans under OCR operations (current guideline is up to 20% on 3-year rolling average)</p>		
<p>Review of graduation policy</p>		
<p>Reclassification and Retirement of Thematic and Sector Policies (removal of all mandatory elements from sector policies and integration under safeguard policies)</p>		
	<p>Option to trade carbon dioxide emission rights gained from the environmental investment (already operational)</p> <p>Simplified process and documentations for regional cooperation</p> <p>Reserve of OCR headroom to permit fast response without redeploying resources from the committed loans</p> <p>Single TA facility to cover multiple advisory TA activities</p> <p>Timely response to advisory requirements</p> <p>Substantial reduction of TA processing time</p>	<p>Less well prepared TA papers.</p>
<p>This guideline, although not followed strictly so far by ADB (program lending has been higher than 20% in last years), may promote conversion to further programmatic lending.</p> <p>Plans to remove guidelines on ADB's cost-sharing ratio; if approved, may allow larger loan share in project cost</p> <p>Greater clarity in ADB on what is allowed, not allowed, and prioritized.</p>	<p>Disbursement from program lending is slow, especially for second and third tranches.</p> <p>Effectiveness of program lending variable.</p> <p>ADB funding crowding out other funding sources.</p> <p>Strategies becoming a straitjacket, reducing flexibility.</p>	

ADB = Asian Development Bank, DMC = developing member country, EA = executing agency, MDG = Millennium Development Goal, OCR = ordinary capital resources, TA = technical assistance.

Source: Special Evaluation Study on Urban Sector Strategy and Operations.

LESSONS FROM URBAN SECTOR EXPERIENCE

A. Asian Development Bank Lessons Regarding Project Process

1. Project completion reports (PCRs) and project performance audit reports (PPARs) provide sections on issues and lessons, and these are the main source for the summary in this appendix. The most frequently repeated key lessons as to preparation and implementation processes are categorized in Box A10.1.

Box A10.1: Lessons

Ownership. It is crucial to establish clear client and beneficiary ownership of a project if it is to be successfully implemented and sustainably operated.

Simplicity of Implementation Arrangements. It is important to make clear and simple implementation arrangements to facilitate smooth and timely project implementation— minimizing the number of executing agencies (EAs) and implementing agencies (IAs).

Weak Implementing Agencies. For weak implementing agencies, success is dependent on the amount of TA support and the effectiveness of this support in building local capacity. In cases where substantial devolution of additional responsibilities to local governments has taken place, more capacity development is required than usual.

Resolve Issues Early. It is important to resolve difficult issues at project appraisal rather than somewhere into project implementation—such as land acquisition.

Costing. Dealing with existing city infrastructure means that accurate costing is difficult, and higher contingencies are needed or higher degree of flexibility in allowing scope changes.

Risks. Risk analyses and mitigation strategies should be included at the time of project design.

Cofinancing. While the use of cofinancing—particularly for “soft” components like capacity building technical assistance (TA)—is good in supporting project sustainability, there is a need to ensure that complete agreement and commitment by co-financiers is reached and in place prior to project implementation. With an increasing number of projects relying on cofinancing arrangements, counterpart funds need to be available in a timely manner.

Pacing of TA. Care must be taken to ensure that the technical assistance is paced in such a way as not to exceed the absorptive capacity of the agencies supported. This infers a longer time frame for advisory TA than has often been allowed.

Policy Reform. Policy reform around issues of privatization, corporatization, and commercialization take time as they often involve the need to induce attitudinal changes or inculcate more commercialized orientation in government employees—this takes time and needs extensive software support.

Decentralization. Local governments used to reliance of central government subventions have to be oriented in their new role as autonomous service providers. The Asian Development Bank (ADB) should help to wean local government officials off continued reliance on centralized government support, and help them take responsibility for their own service provision and associated finances.

Number of Components. In countries with low investment in the urban sector, it may have high marginal impact to include more projects components if the demand is high; in countries with complementary investment in the urban sector, including social safety nets within cities for the poor, it may be wise to limit the components to those absolutely necessary.

Multisector Projects. A number of project completion reports (PCRs) contend that the multisector approach to urban development support by ADB is most suitable for medium- sized cities, i.e., those with populations of between 100,000 and 500,000. The rationale is that such cities are large enough to handle multisector projects and small enough to enable such projects to be truly integrated and make a major impact, e.g., on environmental improvement. In smaller cities, where urban dynamics are not so strong, the integrated modality is not so appropriate, while in megacities, their size makes it difficult to establish synergies between subcomponents. Thus, in these cases, the focus should be placed on single sector projects or a group of components within a specific subsector (e.g., water supply, sanitation, and waste management [WSSWM]; or urban transport). The institutional landscape in such megacities also lends itself to this type of approach (i.e., the availability of larger, more capable operating departments).

Sector Projects. Sector projects need to pay more attention to preparation of subproject appraisal reports for individual towns and cities as, in the past, the success rate has been lower.

Source: Special Evaluation Study on Urban Sector Strategy and Operations.

2. Multisector projects have not proved to be less efficient than single component projects per se. The decision to fund a multisector project with many components versus one with few components but implemented in more cities, should take into account (i) historical facts: single component projects tend to be easier to implement (unless they are in fact sector projects with many project sites); (ii) country conditions; (iii) optimal synergies between project components: linking underground drainage to needed urban road rehabilitation, linking water supply to wastewater treatment, and linking storm water drainage to solid waste disposal systems to avoid clogging of open drains; and (iv) demand from clients. Many multisector projects addressing urban problems in a comprehensive manner have advantages as they target city governments and can exert influence beyond the narrow physical and/or sector level.

B. Project Preparatory Technical Assistance (PPTA) and Advisory Technical Assistance (ADTA) Grants

3. **PPTAs.** Key success factors and drawbacks often identified in PCRs for PPTAs are summarized in Tables A10.1 and A10.2.

Table A10.1: Factors Contributing to the Success of PPTA Projects

No.	Factor
1.	Ownership of the PPTA by the executing agency, thus, full engagement with the consultant in carrying out the work.
2.	Thorough analysis of institutional and organizational factors of relevance to smooth implementation.
3.	Active supervision of activities by ADB staff to ensure that outputs are in line with requirements for preparation of the report and recommendation of the President.
4.	Regular donor coordination meetings to ensure convergence between expectations of clients, ADB and other stakeholders.

ADB = Asian Development Bank, PPTA = project preparatory technical assistance.

Source: Special Evaluation Study on Urban Sector Strategy and Operations.

Table A10.2: Factors Limiting the Success of PPTA Projects

No.	Factor
1.	ADB's PPTAs are usually short, so the scope for full and comprehensive stakeholder participation and demand-driven component selection is limited.
2.	The Government often needs time to implement the PPTA's advice on institutional arrangements.
3.	ADB staff members are often overloaded with work and do not have sufficient time for adequate supervision of PPTAs.
4.	Many consultants lack the capacity to engage in meaningful institutional and organizational analysis (apart from the frequent lack of time available for this).

ADB = Asian Development Bank, PPTA = project preparatory technical assistance.

Source: Special Evaluation Study on Urban Sector Strategy and Operations.

4. **ADTAs.** Some important factors identified for advisory (capacity building) TAs are similar to those applying to PPTAs (Tables A10.3 and A10.4).

Table A10.3: Factors Contributing to the Success of ADTA Projects

No.	Factor
1.	Strong commitment of the client, ensuring full ownership, full engagement with consultant, and involvement of committed counterpart staff.
2.	Maintenance of strong coordination at all stages of TA implementation with all stakeholders, especially coordination with state planning units, if the ADTA is designed to lead to a pipeline.
3.	Involvement in the TA of government staff who are stable in the job, willing to learn, and paid a decent salary; and therefore have no compelling reason to continuously seek alternative employment or job transfers.
4.	Active supervision of activities by ADB staff to ensure that activities and outputs are appropriate and useful, and consultants receive adequate support.
5.	TA timing which is well synchronized with the Government's sector focus and priorities.
6.	Provision of external training or study tours where ADTA involves identification of projects for investment, to ensure government staff are able to see for themselves the advantages of certain innovations, prior to implementation.
7.	Good assessment of the availability and capability of the Government's counterpart staff involved in the TA, and prior to inviting the consultants for contract negotiations.

ADB = Asian Development Bank, ADTA = advisory technical assistance, TA = technical assistance.

Source: Special Evaluation Study on Urban Sector Strategy and Operations.

Table A10.4: Factors Limiting the Success of ADTA Projects

No.	Factor
1.	ADB TA projects need a long time to be scheduled, achieve internal approval, and organize deployment of consultants.
2.	ADTAs are usually short, so the scope for sustained capacity building is rather limited.
3.	The recipient's absorptive capacity can be limited and response time can be long.
4.	ADB's TA administrators lack time, continuity, and mission resources.
5.	There is often a lack of coordination with other donors, leading to duplication of TA, cross-purpose TAs, or situations in which an opportunity is missed due to unavailability of funds.
6.	Change management is complex and takes time. This applies especially to ADTAs which look at options for privatization, corporatization, or commercialization of municipal utilities and services.
7.	Many government staff are low-paid. Although they benefit from an ADTA, they tend to seek employment opportunities elsewhere and, when they succeed, their enhanced skills are lost to government.
8.	There is often a lack of sustained dialogue with clients once an ADTA is complete, to support continuation of the results of the TA. This is due, in turn, to ADB's frequent staff transfers and work overload.

ADB = Asian Development Bank, ADTA = advisory technical assistance, TA = technical assistance.

Source: Special Evaluation Study on Urban Sector Strategy and Operations.

C. Asian Development Bank Lessons Regarding Various Urban Issues and Subsectors

5. Lessons on project issues from recent PCRs and PPARs are summarized in Table A10.5.

Table A10.5: Lessons from Urban Sector Projects

Issue	Lesson
Tariff setting	(i) Tariff setting and collection of user charges is vital to system sustainability. (ii) Good tariff work at national level can have strong positive implications on sector performance. (iii) Covenants are often vital for project sustainability but too many covenants make monitoring and enforcement more difficult—often resulting in poor compliance.
Setting up new urban bodies	Institutional strengthening should be given more emphasis when working with new EAs/IAs, and in technology transfer. A strong internally staffed project office and active EA are keys to a project's success and should be emphasized in future projects.
Poverty reduction targets in projects	Poverty reduction targets should be set at country level. Sometimes, they can be usefully specified in project proposals but the proposals do not need to depend on it, as the relation between economic progress and poverty reduction is complex.
Crowding out of state or local banks by more ADB lending	(i) In the larger DMCs, ADB's contribution to the sector is so small that this is not a problem. With smaller clients, the domestic banking sector is not well established and does not wish to lend to local governments. (ii) The principles for ADB lending to urban sector should be: (a) poverty reduction relationship, (b) need for a substantial foreign exchange component, (c) need for long-term loan that others do not wish to supply, (d) catalytic effect, and (e) no other bank wants to take the lead in financing.
The complexity of IUDPs	IUDPs involve the delivery of services across several subsectors, a number of levels of government, and involvement of the private sector and community stakeholders. Thus, they require well thought-out policy frameworks and clear institutional roles and responsibilities. Greater integration is required between IUDP components, they need to be more responsive to client needs, and make provision for operation and maintenance and better use of performance indicators. They should be focused on fewer subsectors to reduce the number of EAs and IAs.

ADB = Asian Development Bank, DMC = developing member country, EA = executing agency, IA = implementing agency, IUDP = integrated urban development project.

Source: Special Evaluation Study on Urban Sector Strategy and Operations.

6. Some recent lessons from PCRs and PPARs regarding various urban subsectors are in Table A10.6.

Table A10.6: Lessons regarding Various Urban Subsectors

Issue	Lesson
Water Supply	(i) Nonrevenue water reduction and financial targets for revenue-generating projects should be realistic and translated into specific activities with monitoring milestones. (ii) When there is lower capacity utilization on account of reduced actual demand and low utility tariffs inadequate to cover operating and capital costs, the project scope and corresponding costs should be scaled down accordingly. (iii) Given relatively standard designs of water supply systems, varied local conditions need to be factored in. It should be made mandatory for the PPTA to include the collection of hydrological data for at least 2 years, before the design is proposed. (iv) Potable water required in smaller quantities is better delivered when distributed in bottles through public-private sector participation. (v) Communal water association schemes can be an appropriate intermediate delivery program for water supply to the poorer population until they are able to secure

Issue	Lesson
Sanitation	<p>individual connections, hence, should be promoted more strongly.</p> <p>(i) For water and wastewater projects, there is a need for the project population to be well informed about the necessity and benefits of chlorination and for the need for wastewater drainage to be juxtaposed to water supply improvements, and to assist in acceptance of tariffs.</p> <p>(ii) Wastewater treatment and disposal have often been unsustainable in countries such as Pakistan and Indonesia. Clear responsibilities for wastewater management and setting and collection of user charges need to be established and institutionalized.</p> <p>(iii) Sewage treatment projects need to make sure that sewerage pipe networks are sufficiently connected to households to make optimal use of the created capacity.</p>
Solid waste management	<p>(i) It is inappropriate for the Government to borrow funds for more than 20 years to finance the purchase of equipment with a life of 5 years, particularly handcarts and containers. This should be done from local funds.</p> <p>(ii) Local governments need to make appropriate provisions in their annual budgets to build up reserves for the replacement of equipment.</p> <p>(iii) Dump sites can be run in an efficient and sanitary manner, only if the city is committed and staff members are sufficiently trained to manage and operate them.</p> <p>(iv) Solid waste dump sites designed without proper environmental controls cause environmental damage to the surrounding areas over the long term.</p> <p>(v) Properly functioning systems are appropriate for greater private sector participation, where collections and the management and operation of the final disposal sites could easily be contracted out for improved service delivery.</p>
Drainage and flood control, water management	<p>The integrated approach was assessed as appropriate for Bangladesh, which is prone to frequent flooding, particularly in low-lying areas inhabited by the poor. However, the flood protection works and drainage components used about 75% of project funding, leaving only a small allocation for slum improvement, solid waste management, and sanitation. Given the urban upgrading challenges still facing Bangladesh, a separate intervention focused on these problem areas might have been appropriate.</p>
Integrated environmental improvement	<p>Pollution is responsible for both economic costs and quality of life poverty. Integrated environmental improvement interventions which reduce both the economic costs of pollution and quality of life poverty should be given high priority. This requires institutional coordination and strengthening, as such interventions almost always involve cross-sectoral and cross-border responsibilities.</p>
Urban transport	<p>(i) Urban transport improvements are important in promoting urban efficiency and offer high economic rates of return, yet ADB has had only limited involvement in the urban transport subsector. Opportunities exist for ADB to work with the private sector on Build-Operate-Transfer, Build-Own-Operate, and similar Public-Private-Partnership approaches to provision of urban transportation facilities.</p> <p>(ii) Urban highway investments focusing on missing links can help create opportunities, reducing poverty by saving time for bus passengers in the city. They are a suitable investment category for ADB, provided specific attention is paid to the poverty reduction aspect. The size of the effect depends on the number of buses and vans relative to the total number of vehicles on the road. Equally important are bus ticket prices and the number of poor people traveling by bus.</p> <p>(iii) The potential adverse effects of new roads on environment and traffic accidents are less dependent on road expansion per se than on specific measures taken to mitigate these effects.</p> <p>(iv) To optimize the benefits of projects, primary road construction in urban areas must be assessed carefully in the context of necessary supporting distributor roads and comprehensive land use management.</p>

Issue	Lesson
Public housing, Land development, urban renewal, housing finance, land administration/ tenure/ regulation	<p>(i) Indirect housing support for the poor, by developing affordable and sustainable housing credit, improving land transfer mechanisms, making land use controls more effective, and legalizing informal settlements, can play an important role in improving access to land and shelter for the urban poor.</p> <p>(ii) Low-income housing projects should allow cross-subsidization of mortgages between lower and higher income groups for the purpose of resource generation. Similarly, borrowers should share a higher share of the project cost to encourage cost recovery from those willing and able to pay.</p> <p>(iii) Land acquisition systems which strain implementation can be made more flexible through the approval of up-front purchase of all land and provision of funds in a lump sum, from central government sources, among others.</p> <p>(iv) Housing finance projects generally disbursed before schedule, conditional upon a strong housing institution, well established demand, and a well thought-out product.</p> <p>(v) Housing finance projects need intermediaries that are able to onlend to beneficiaries without imposing an excessive spread on the interest rates.</p> <p>(vi) Direct assistance in spatial planning and land management has not been entirely successful. A more effective approach would be for ADB to support the public sector in its enabling role in the creation of effective urban land markets, which can facilitate the private sector in providing affordable land and shelter for the urban poor.</p> <p>(vii) Land pooling has delivered significant social and economic benefits. Proper risk analysis during design and adequate community participation during implementation are vital for its success.</p>
Slum improvement	Comprehensive upgrading of major low-income areas in terms of slum improvement, sanitation, and solid waste management components can lead to significant quality of life poverty reduction.
Market development bus terminal, slaughter-houses	These are generally constructed by local governments as revenue-generating projects. Construction and operation of such facilities is not a core function of local government and could be better handled by the private sector.
Urban finance, municipal taxation	Urban infrastructure cannot be maintained unless the local government efficiently collects property tax. It is important to build community awareness on the importance of local taxation through education campaigns.
Institutional/ capacity development, and other soft components	Projects implemented by local governments generally need substantial soft components to deal with capacity development, institutional development, public awareness raising, and information dissemination.

Source: Special Evaluation Study on Urban Sector Strategy and Operations.

D. Lessons from World Bank Sector Evaluations

7. Three recent evaluations¹ of its urban sector program by the World Bank, two published in 2003 and one in 2005, yield some findings and lessons of interest to ADB's urban sector operations.

8. **Overall Finding.** The overall performance of the World Bank's urban development portfolio has, for most of its life, generated performance which is above the World Bank's average for all sectors. Furthermore, working with the urban indicators database of the United

¹ (i) World Bank. 2003. *Improving the Lives of the Poor Through Investment in Cities*. Washington DC; (ii) World Bank. 2003. *Efficient, Sustainable Service for All? An OED Review of the World Bank's Assistance to Water Supply and Sanitation*. Washington DC; (iii) World Bank. 2005. *Thirty Years of World Bank Shelter Lending: What Have We Learned*. Draft report. Washington DC.

Nations Human Settlements Programme (UN-HABITAT), the World Bank determined that there were significantly greater improvements in “livability” (service provision, improved social indicators) in cities that had benefited from bank-financed projects, compared with those that had not.

9. **Urban Development.** The 2003 urban development evaluation concluded that key lessons on maintaining a strong portfolio and good performance are to (i) build on previous operations, (ii) involve beneficiaries in all stages of projects, and (iii) avoid straining borrower’s resources and implementation capacity. Like the Operations Evaluation Department’s 1997 evaluation, the problem found to constrain project performance most was overestimation of the institutional capacity of executing and implementing agencies. Correspondingly, improved project performance and outcomes were associated with projects with strong borrower ownership, and which were based on strong beneficiary (and borrower) involvement in project identification, formulation, and design. One further interesting finding of the evaluation was that projects completed in more urbanized countries (58% urban) were 81% satisfactory compared to a satisfactory rating of only 59% in the group of countries with low urbanization rates (below 34%). Not surprisingly, as gross domestic product (GDP) is strongly correlated with urbanization, the same relationship holds with GDP. The finding shows the importance of greater urban development experience in determining the success of urban projects and reinforces the argument for building on success with existing clients, already noted by ADB’s Urban Sector Strategy of 1999. However, no correlation was found between the performance of projects preceded by economic and sector work and those without, those with cofinancing and those without, and those with a poverty focus and those without.

10. The evaluation recommended more systematic reporting of results from city to sector and strategic levels, by moving towards a system that incorporates performance indicators. It also recommends the (i) revision of the business strategy to provide specific targets against the four strategic pillars of livability, good governance, bankability, and competitiveness; and (ii) development of a better understanding of the competitiveness pillar (which is seen to be performing poorly) through the preparation of operational guidelines.

11. **Water Supply, Sanitation and Waste Management.** A review published in 2003 (footnote 1 [ii]) focusing on the World Bank’s performance in its Water Supply and Sanitation (WSS) sector found that portfolio performance, although improving, had remained below average and that the World Bank has had limited success in promoting deep and lasting regulatory and pricing reform in the sector. The study concluded that private sector participation, where it was promoted under World Bank-supported projects, by and large showed promising results in terms of coverage and quality of service but that it could not be the panacea to the sector’s structural problems. The study’s findings pointed to the need for (i) clarifying and consistently implementing the World Bank’s pricing policy in the WSS sector, (ii) country-focused sector strategies geared to the achievement of the Millennium Development Goals, and (iii) a pragmatic approach to private sector participation.

12. **Housing.** Somewhat different from ADB’s more recent experiences with housing finance, the shelter study of 2005 (footnote 1 [iii]) concluded that World Bank lending for shelter had been a very strong performer. It had one of the highest percentages of satisfactory outcomes of any sector in the World Bank, with more than 90% of the projects undertaken in the past decade, and 84% of total lending for the entire 34 years of lending deemed to have achieved satisfactory outcomes. The strategy exploited opportunities by building on recent successes and improvements in the policy environment, while simultaneously addressing the remaining weaknesses and constraints on the sector. The review concluded that (i) the reach of

housing finance should be cautiously expanded, (ii) there should be support toward improving the financing and targeting of housing subsidies (ii) the World Bank should become more responsive to its borrowers and other donors, (iii) there should be a focus on reinvigorating and retargeting World Bank support towards for low-income housing, and (iv) the World Bank should improve its understanding of urban land markets and slum conditions.

LESSONS DRAWN FROM 51 PROJECT COMPLETION REPORTS ISSUED BETWEEN 1998 AND 2005 IN THE URBAN SECTOR

A. Issue: Ineffective Project Design in Multisector and/or Multicity Projects

1. **Lesson in 18 Project Completion Reports (PCRs).**¹ Decentralization of responsibility and ownership, and/or participation by beneficiaries, community, and private sector participation in project development fosters project ownership, thus ensuring adequate operation and maintenance, which depends on both budgetary and non-budgetary factors.

2. **Lesson in 10 PCRs.**² Implementation delays and scope changes result from appraisal cost estimates being based on poor preliminary designs, unreliable cost base data, lack of details on design and design standards, and utilization of new technology in the country amidst lack of experience and appropriate data. Project technical details should be thoroughly assessed at the design stage because of their implications for actual project costs, their impact on other components, and the possibility of mismatch with real local conditions.

3. **Lesson in 8 PCRs.**³ Too diverse a geographic and subsector coverage, coupled with inadequate project preparation, can lead to poor project performance. Project design and loan

¹ ADB. 2000. *Project Completion Report on the Central Java and D.I. Yogyakarta Urban Development (Sector) Project in Indonesia*. Manila (Loan 1198-INO); ADB. 1999. *Project Completion Report on the Metropolitan Cebu Water Supply Project in the Philippines*. Manila (Loans 1056-PHI[Sf] and 1057-PHI[Sf]); ADB. 1998. *Project Completion Report on the Botabek Urban Development Project in the Philippines*. Manila (Loan 1077-INO); ADB. 1998. *Project Completion Report on the Bandar Lampung Urban Development in Indonesia*. Manila (Loan 1078-INO); ADB. 2001. *Project Completion Report on the Bogor and Palembang Urban Development Project for Indonesia*. Manila (Loan 1111-INO); ADB. 2000. *Project Completion Report on the Secondary Towns Infrastructure Development Project in Bangladesh*. Manila (Loan 1059-BAN[Sf]); ADB. 2001. *Project Completion Report on the Kathmandu Urban Development Project in Nepal*. Manila (Loan 1240-NEP[Sf]); ADB. 2001. *Project Completion Report on the Urban Development Sector in Sri Lanka*. Manila (Loan 1204-SRI[Sf]); ADB. 2000. *Project Completion Report on the Second Water Supply and Sanitation Project in Sri Lanka*. Manila (Loan 1235-SRI[Sf]); ADB. 2004. *Project Completion Report on the Ebeve Health and Infrastructure Project in the Republic of Marshall Islands*. Manila (Loan 1694-RMI[Sf]); ADB. 2004. *Project Completion Report on the Majuro Water Supply and Sanitation Project in the Republic of Marshall Islands*. Manila (Loan 1389-RMI[Sf]); ADB. 2004. *Project Completion Report on the Fuzhou Water Supply and Wastewater Treatment Project in the People's Republic of China*. Manila (Loan 1636-PRC); ADB. 1999. *Project Completion Report on the Karachi Sewerage Project in Pakistan*. Manila (Loans 1001-PAK[Sf] and 1002-PAK[Sf]); ADB. 2003. *Project Completion Report on the Anhui Environmental Improvement Project for Municipal Wastewater Treatment*. Manila (Loan 1490-PRC); ADB. 1998. *Project Completion Report on the Dhaka Urban Infrastructure Improvement Project in Bangladesh*. Manila (Loan 942-BAN[Sf]); ADB. 1998. *Project Completion Report on the Secondary Cities Urban Development (Sector) Project in Indonesia*. Manila (Loans 983-INO[Sf] and 984-INO[Sf]); ADB. 2001. *Project Completion Report on the Secondary Towns Integrated Flood Protection Project in Bangladesh*. Manila (Loan 1202-BAN[Sf]); and ADB. 2000. *Project Completion Report on the Dalian Water Supply Project in the People's Republic of China*. Manila (Loan 1313-PRC).

² ADB. 2002. *Project Completion Report on the Chonburi Water Supply Project in Thailand*. Manila (Loan 1326-THA); ADB. 2002. *Project Completion Report on the Vientiane Integrated Urban Development Project in the Lao People's Democratic Republic*. Manila (Loan 1362-LAO[Sf]); Loans 1001-PAK[Sf] and 1002-PAK[Sf] (footnote 1); Loan 1235-SRI[Sf] (footnote 1); ADB. 2001. *Project Completion Report on the Qingdao Environmental Improvement Project in the People's Republic of China*. Manila (Loan 1205-PRC); Loan 1694-RMI[Sf] (footnote 1); Loan 1389-RMI[Sf] (footnote 1), ADB. 2004. *Project Completion Report on the Second Water Supply and Sanitation Project in Bangladesh*. Manila (Loan 1264-BAN[Sf]), ADB. 1998. *Project Completion Report on the Southern Provincial Towns Water Supply in the Lao People's Democratic Republic*. Manila (Loan 1122-LAO[Sf]; and ADB. 2000. *Project Completion Report on the Northern Provincial Towns Water Supply and Sanitation Project in the People's Republic of China*. Manila (Loan 1267-LAO[Sf]).

³ Loan 1240-NEP(Sf) (footnote 1); ADB. 2003. *Project Completion Report on the Urban Infrastructure Project in Vanuatu*. Manila (Loan 1448-VAN[Sf]); ADB. 2004. *Project Completion Report on the Subic Bay Area Municipal Development in the Philippines*. Manila (Loan 1599-PHI); ADB. 2005. *Project Completion Report on the Sumatra Urban Development Sector in Indonesia*. Manila (Loan 1383-INO); ADB. 2005. *Project Completion Report on the*

size must consider the size, capacity, and experience of the executing and implementing agencies, as well as the population of the project area, so as not to overreach technical, administrative, and management capabilities.

4. **Lesson in 7 PCRs.**⁴ Unexpected complications in coordination often occur for large projects with a large number of subprojects (multicomponent and multi-executing agency projects). Simple implementing arrangements would facilitate successful project implementation. This requires clear delineation of the roles and responsibilities of each participating agency to avoid overlaps and project management conflicts (especially over maintenance of project facilities). To mitigate political influence, some decisions should be delegated to the lower levels of the organization, e.g., field and/or resident engineers, or through local rather than central-level coordination.

5. **Lesson in 4 PCRs.**⁵ At the outset, accurate and thorough demand analysis (price elasticity of demand) and user surveys for willingness and ability to pay should be carried by the proponent and/or implementing agencies. Delays and implementation problems are caused by overly optimistic and/or ambitious demand estimates for multisector projects.

B. Issue: Frequent Non-Attainment of Targets

6. **Lesson in 9 PCRs.**⁶ Financial targets for revenue-generating projects, covenants, and Non Revenue Water reduction in water projects should be realistic and translated into specific activities with monitoring milestones. As financial covenants can preclude effective monitoring, since they concern operating decisions and actions that occur after project completion, enforcement of good financial management practices during implementation should be looked at more closely.

7. **Lesson in 3 PCRs.**⁷ Privatization and corporatization of public utilities which are vital to improved financial sustainability are complicated processes and may not be influenced by one loan project. Privatization is critical for the successful and viable operation of utilities in small island communities.

West Java Urban Development Sector Project in Indonesia. Manila (Loan 1384-INO); Loan 1389-RMI(SF) (footnote 1); ADB. 2003. *Project Completion Report on the Melamchi Water Supply (Engineering) Project in Nepal.* Manila (Loan 1640-NEP[Sf]); and ADB. 2004. *Project Completion Report on the Angat Water Supply Optimization in the Philippines.* Manila (Loan 986-PHI).

⁴ Loan 1599-PHI (footnote 3); Loan 1198-INO (footnote 1); Loans 1056-PHI(SF) and 1057-PHI(SF) (footnote 1); Loans 983-INO(SF) and 984-INO(SF) (footnote 1); ADB. 2003. *Project Completion Report on the Municipal Water Supply Project in the Philippines.* Manila (Loan 1269-PHI); ADB. 2002. *Project Completion Report on the Rehabilitation and Upgrading of Water Supply Systems Sector Project in Malaysia.* Manila (Loan 1197-MAL); and Loan 1202-BAN(SF) (footnote 1).

⁵ Loan 1198-INO (footnote 1); Loan 1077-INO (footnote 1); ADB. 2003. *Project Completion Report on the Second Urban Development Project in Pakistan.* Manila (Loan 1004-PAK[Sf]); and Loan 1267-LAO(SF) (footnote 2).

⁶ Loans 1056-PHI(SF) and 1057-PHI(SF) (footnote 1); Loan 1197-MAL (footnote 4); ADB. 2004. *Project Completion Report on the Manila South Water Distribution Project in the Philippines.* Manila (Loan 1150-PHI); Loan 986-PHI (footnote 3); ADB. 2004. *Project Completion Report on the Ho Chi Minh City Water Supply and Sanitation Project in Viet Nam.* Manila (Loan 1273-VIE[Sf]); and Loan 1384-INO (footnote 3). Financial: Loan 1202-BAN(SF) (footnote 1); ADB. 2003. *Project Completion Report on the Provincial Towns Basic Urban Services Project in Mongolia.* Manila (Loan 1560-MON[Sf]); and Loan 1448-VAN(SF) (footnote 3).

⁷ Loan 1197-MAL (footnote 4); ADB. 1999. *Project Completion Report on the Low-Income Housing Development Project in Sri Lanka.* Manila (Loan 1096-SRI[Sf]); and Loan 1694-RMI(SF) (footnote 1).

C. Issue: Inadequate Technical and Managerial Support

8. **Lesson in 5 PCRs.**⁸ Lack of formal input of consulting services at some points in project implementation can slow progress or cause problems in implementation. In-house capabilities of executing agencies and implementing agencies (and procurement procedures) should be thoroughly reviewed and the necessary assistance provided to fill skills gaps and build capacity to prevent problems on procurement, financial performance, land acquisition, tender and bid evaluation, etc.

D. Issue: Lack of Public Awareness of the Project

9. **Lesson in 7 PCRs.**⁹ There is a need to strengthen mechanisms to elicit support for urban infrastructure provision and maintenance, by articulating the benefits. The community needs to be made aware, through a more vigorous public campaign, of the need for operation and maintenance to ensure an adequate and reliable urban infrastructure and services (water supply, flood protection, drainage, and solid waste management project components).

⁸ ADB. 1999. *Project Completion Report on the Rehabilitation and Upgrading of Vientiane Water Supply Project in the Lao People's Democratic Republic*. Manila (Loan 1190-LAO[SF]); ADB. 2002. *Project Completion Report on the Dhaka Integrated Flood Protection Project in Bangladesh*. Manila (Loan 1124-BAN[SF]); Loan 1122-LAO(SF) (footnote 2); Loan 942-BAN(SF) (footnote 1); and Loan 1240-NEP(SF) (footnote 1).

⁹ Loan 1202-BAN(SF) (footnote1); Loan 1235-SRI(SF) (footnote 1); ADB. 2003. *Project Completion Report on the Third Urban Water Supply in Papua New Guinea*. Manila (Loan 1211-PNG); Loan 1640-NEP(SF) (footnote 3); Loan 1269-PHI (footnote 4); Loan 1313-PRC (footnote 1); and Loans 1056-PHI(SF) and 1057-PHI(SF) (footnote 1).