

# Appendixes

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## APPENDIX A: LIST OF BANK-FINANCED MDPs, FISCAL 1998–2008

Project ID	MDP	Type	Project name	Period <sup>a</sup>	Commitment US\$ millions	Outcome	Bank performance	Borrower performance
<b>Sub-Saharan Africa</b>								
P000097	Benin I	R	Urban Rehabilitation & Management	1992–98	23	H Sat	H Sat	Sat
P035648	Benin II	R	First Decentralized City Management	1999–2005	26	Sat	Sat	H Sat
P082725	Benin III	R	Second Decentralized City Management	2006–	35	—	—	—
P000297	Burkina Faso I	R	Urban Environment	1995–2005	37	Sat	Sat	Sat
P084027	Burkina Faso II	R	Decentralized Urban Capacity Building	2007–	10	—	—	—
P064961	Burundi	W	Public Works & Employment Creation	2001–	40	—	—	—
P084002	Cameroon	R	Urban & Water Development Support	2007–	80	—	—	—
P072030	Chad	R	Urban Development	2007–	15	—	—	—
P037575	Côte d'Ivoire	W	Municipal Support	1995–2004	40	Unsat	Unsat	Unsat
P000712	Ethiopia I	R	Second Addis Urban Development	1990–99	35	Unsat	Sat	Unsat
P050938	Ethiopia II	W	Capacity Building for Decentralized Service Delivery	2003–	26	—	—	—
P074020	Ethiopia III	R	Public Sector Capacity Building	2004–	100	—	—	—
P101473	Ethiopia IV	R	Urban Water Supply & Sanitation	2007–	100	—	—	—
P057997	Gambia, The	R	Poverty Alleviation & Capacity Building	1999–2007	15	M Sat	Sat	Sat
P000910	Ghana I	R	Second Urban	1990–99	70	Sat	Sat	Sat
P000936	Ghana II	W	Local Govt. Development	1994–2003	39	Sat	Sat	Sat
P000973	Ghana III	R	Urban Environment & Sanitation	1996–2004	71	M Sat	Unsat	Unsat
P050624	Ghana IV	W	Fifth Urban	2000–04	11	Sat	Sat	Sat
P001074	Guinea I	R	Third Urban Development (APL)	1999–2005	18	Sat	Sat	Sat
P091297	Guinea II	R	Third Urban (Phase 2)	2008–	15	—	—	—
P001319	Kenya	R	Urban Transport	1996–2005	115	M Unsat	Unsat	Unsat
P001512	Madagascar I	R	Antananarivo Plain Development	1990–2000	31	M Unsat	Unsat	Unsat
P001583	Madagascar II	R	Antananarivo Urban Works Pilot	1994–99	18	Sat	Sat	Sat
P048697	Madagascar III	R	Urban Infrastructure	1997–2005	35	Sat	Sat	Sat
P001636	Malawi	R	Local Govt. Development	1992–2001	24	M Unsat	Unsat	Unsat
P001750	Mali I	R	Urban Development & Decentralization	1997–2005	80	M Unsat	Sat	Unsat
P090075	Mali II	R	Second Transport Sector	2007–	90	—	—	—
P034106	Mauritania I	W	Urban Infrastructure & Pilot Decentralization	1996–2002	14	Sat	Sat	Sat
P069095	Mauritania II	R	Urban Development Program	2002–	70	—	—	—
P001791	Mozambique I	R	Local Govt. Reform & Engineering	1993–99	23	Unsat	H Unsat	H Unsat

(Continues on the next page.)

Project ID	MDP	Type	Project name	Period <sup>a</sup>	Commitment US\$ millions	Outcome	Bank performance	Borrower performance
<b>Sub-Saharan Africa (continued)</b>								
P001806	Mozambique II	W	Municipal Development	2002–07	34	M Sat	M Sat	M Sat
P096332	Mozambique III	R	Maputo Municipal Development Program	2007–	30	—	—	—
P049691	Niger I	W	Urban Infrastructure Rehabilitation	1997–2003	20	Sat	Sat	Sat
P095949	Niger II	R	Local Urban Infrastructure Development	2008–	—	—	—	—
P002074	Nigeria I	R	Oyo State Urban	1990–99	50	Unsat	Sat	Unsat
P071340	Nigeria II	R	Lagos Metropolitan Development & Governance	2007–	200	—	—	—
P060005	Rwanda	R	Urban Infrastructure & City Management (APL)	2006–	20	—	—	—
P002365	Senegal I	W	Urban Development & Decentralization Program	1998–2005	75	H Sat	H Sat	Sat
P084022	Senegal III	R	Local Authorities Development Program	2007–	80	—	—	—
P076901	South Africa	W	Municipal Financial Management (ITAL)	2003–	15	—	—	—
P002669	Swaziland I	R	Urban Development	1995–2005	29	Sat	Sat	Sat
P095232	Swaziland II	R	Local Government	2008–	—	—	—	—
P002758	Tanzania I	R	Urban Sector Rehabilitation	1996–2005	105	H Sat	Sat	Sat
P070736	Tanzania II	R	Local Govt. Support	2005–	52	—	—	—
P002865	Togo	R	Lome Urban Development	1994–2003	26	Sat	Sat	Unsat
P002933	Uganda I	R	First Urban	1991–2000	29	Sat	Sat	Sat
P059223	Uganda II	R	Nakivubo Channel Rehabilitation	1999–2004	22	Sat	Sat	Sat
P002992	Uganda III	R	Local Govt. Development Program	2000–04	81	Sat	Sat	Sat
P044679	Uganda IV	W	Economic & Financial Management	2000–07	34	Sat	M Sat	M Sat
P078382	Uganda V	R	Kampala Institutional & Infrastructure Development	2008–	34	—	—	—
P003241	Zambia	R	Urban Restructuring	1995–2002	33	M Sat	Sat	Sat
P003294	Zimbabwe	W	Urban Sector & Regional Development	1989–2000	80	M Sat	Sat	Sat
<b>East Asia and Pacific</b>								
P003564	China I	R	Beijing Environment	1992–99	125	M Sat	Sat	Sat
P003565	China II	R	Shanghai Metropolitan Transport	1992–99	60	Sat	Sat	Sat
P003568	China III	R	Tianjin Urban Development	1992–2001	100	Sat	Sat	H Sat
P003473	China IV	R	Zhejiang Multicities Development	1993–2003	110	Sat	Sat	Sat
P003580	China V	R	Southern Jiangsu Environmental Protection	1993–2001	250	M Unsat	Unsat	Unsat
P003622	China VI	R	Second Shanghai Metropolitan Transport	1994–2001	150	Sat	Sat	Sat
P003586	China VII	R	Shanghai Environment	1994–2003	160	Sat	Sat	Sat

P003598	China VIII	R	Liaoning Environment	1995–2004	110	Sat	Sat	Sat
P003603	China IX	R	Enterprise Housing & Social Security Reform	1995–2005	350	Sat	Sat	Sat
P003602	China X	R	Hubei Urban Environment	1996–2005	150	M Sat	Sat	Sat
P003646	China XI	R	Chongqing Industrial Pollution Control & Reform	1996–2003	170	Unsat	Sat	Sat
P003599	China XII	R	Yunnan Environment	1996–2005	150	M Sat	Sat	Sat
P040185	China XIII	R	Shandong Environment	1998–2006	95	Sat	Sat	Sat
P041890	China XIV	R	Liaoning Urban Transport	1999–2006	150	M Sat	Sat	Sat
P043933	China XV	R	Sichuan Urban Environment	1999–2007	152	M Sat	Sat	M Sat
P049436	China XVI	R	Chongqing Urban Environment	2000–	200	—	—	—
P045915	China XVII	R	Urumqi Urban Transport	2001–	100	—	—	—
P056596	China XVIII	R	Shijiazhuang Urban Transport	2001–	100	—	—	—
P040599	China XIX	R	Tianjin Second Urban Development	2003–	150	—	—	—
P069852	China XX	R	Wuhan Urban Transport	2004–	200	—	—	—
P081346	China XXI	R	Liuzhou Environment Management	2005–	100	—	—	—
P081161	China XXII	W	Chongqing Small Cities Infrastructure Improvement	2005–	180	—	—	—
P075732	China XXIII	R	Second Shanghai Urban Environment (APL)	2006–	180	—	—	—
P003922	Indonesia I	R	Sulawesi—Irian Jaya Urban Development	1991–99	100	M Sat	Sat	Sat
P003943	Indonesia II	W	East Java/Bali Urban Development	1991–98	180	M Sat	Sat	Sat
P003998	Indonesia III	R	Surabaya Urban Development	1994–2001	175	H Unsat	Unsat	Unsat
P003890	Indonesia IV	R	Semarang Surakarta Urban Development	1994–2002	174	M Unsat	Sat	Unsat
P003951	Indonesia V	R	Kalimantan Urban Development	1995–2003	136	Sat	Sat	Sat
P039312	Indonesia VI	W	Second East Java Urban Development	1996–2002	117	M Unsat	Sat	Sat
P036053	Indonesia VII	W	Second Sulawesi Urban Development	1997–2003	155	Unsat	Unsat	Unsat
P055821	Indonesia VIII	W	Urban Poverty	1999–2004	100	Sat	Sat	Sat
P056074	Indonesia IX	W	Municipal Innovations	1999–2003	5	Sat	Sat	Sat
P040528	Indonesia X	R	Western Java Environmental Management	2001–06	17	M Sat	Sat	Sat
P072852	Indonesia XI	W	Second Urban Poverty	2002–	100	—	—	—
P071296	Indonesia XII	W	Urban Sector Development & Reform	2005–	45	—	—	—
P004175	Korea, Rep. of	R	Pusan Urban Transport	1995–2002	100	M Sat	Sat	Sat
P036052	Mongolia	R	Urban Services Improvement	1998–2004	17	Sat	Sat	Sat
P004592	Philippines I	W	Third Municipal Development	1992–2001	68	Sat	Sat	Sat
P048588	Philippines II	W	Local Govt. Unit Finance & Development	1999–	100	—	—	—
P064925	Philippines III	W	Support for Strategic Local Development & Investment	2006–	100	—	—	—

(Continues on the next page.)

Project ID	MDP	Type	Project name	Period <sup>a</sup>	Commitment US\$ millions	Outcome	Bank performance	Borrower performance
<b>East Asia and Pacific (continued)</b>								
P004830	Vietnam I	R	Water Supply	1997–2005	99	Sat	Sat	Sat
P004833	Vietnam II	R	Urban Transport Improvement	1999–2006	43	M Sat	Sat	Unsat
P070197	Vietnam III	R	Urban Upgrading	2004–	222	—	—	—
P082295	Vietnam IV	R	Coastal Cities Environmental Sanitation	2007–	125	—	—	—
<b>Europe and Central Asia</b>								
P094225	Armenia	R	Third Social Investment Fund	2007–	25	—	—	—
P056192	Bosnia & Herzegovina I	W	Local Development	1999–2005	15	Sat	Sat	Sat
P070995	Bosnia & Herzegovina II	W	Community Development	2001–	15	—	—	—
P057950	Bosnia & Herzegovina III	R	Solid Waste Management	2002–	18	—	—	—
P083353	Bosnia & Herzegovina IV	W	Urban Infrastructure & Service	2005–	20	—	—	—
P065416	Croatia	W	Coastal Cities Pollution Control	2004–	48	—	—	—
P008417	Georgia I	w	Municipal Infrastructure Rehabilitation	1995–2000	18	M Unsat	M Unsat	M Unsat
P050910	Georgia II	W	Municipal Development & Decentralization	1998–2003	21	M Sat	M Sat	M Sat
P077368	Georgia III	W	Second Municipal Development & Decentralization	2003–	19	Sat	Sat	Sat
P008506	Kazakhstan I	R	Social Protection	1995–2002	41	Unsat	Sat	Unsat
P008500	Kazakhstan II	R	Atyrau Pilot Water	1999–2005	17	Sat	Sat	Sat
P079259	Kosovo	W	Second Community Development Fund	2004–07	4	M Sat	Sat	Sat
P050719	Kyrgyz Republic I	R	Urban Transport	2001–05	22	Sat	Sat	Sat
P083377	Kyrgyz Republic II	W	Small Towns Infrastructure & Capacity Building	2005–	15	—	—	—
P034584	Latvia	R	Municipal Services Development	1996–2002	27	M Sat	Sat	Sat
P035802	Lithuania	R	Municipal Development	1999–2005	20	Unsat	Unsat	Sat
P035082	Poland	W	Municipal Finance	1998–2002	22	Unsat	Unsat	Unsat
P042720	Russian Federation I	R	St. Petersburg Center City Rehabilitation	1997–2002	31	M Unsat	Unsat	Unsat
P064238	Russian Federation II	R	Northern Restructuring	2001–	80	—	—	—
P069063	Russian Federation III	R	St. Petersburg Economic Development	2003–	161	—	—	—
P082018	Russian Federation IV	R	Kazan Municipal Development	2005–07	125	H Sat	Sat	H Sat
P079027	Tajikistan	R	Municipal Infrastructure	2006–	15	—	—	—
P009065	Turkey I	R	Bursa Water & Sanitation	1993–2001	130	Sat	Sat	Sat
P081880	Turkey II	W	Municipal Services	2005–	275	—	—	—
P100383	Turkey III	R	Istanbul Municipal Infrastructure	2007–	322	—	—	—
P034083	Turkmenistan	R	Urban Transport	1997–2001	34	M Unsat	Unsat	Unsat
P095337	Ukraine	R	Urban Infrastructure	2008–	140	—	—	—
P049582	Uzbekistan	R	Tashkent Solid Waste Management	1998–2006	24	Sat	Sat	Sat

Latin America and the Caribbean									
P006060	Argentina I	W	Second Municipal Development	1995–2005	210	Sat	Sat	Sat	Sat
P060484	Argentina II	R	Basic Municipal Services	2006–	110	—	—	—	—
P070448	Argentina III	W	Subnational Govt. Public Sector Modernization	2006–	40	—	—	—	—
P006104	Belize	R	Belize City Infrastructure	1994–98	20	M Sat	Unsat	Unsat	Unsat
P006190	Bolivia I	W	Municipal Development	1994–2000	42	Sat	Sat	Sat	Sat
P083979	Bolivia II	R	Urban Infrastructure	2007–	30	—	—	—	—
P006524	Brazil I	W	Minas Municipal Development	1994–2002	150	Sat	Sat	Sat	Sat
P006436	Brazil II	W	Ceará Urban Development & Water Resource	1995–2004	140	M Sat	Sat	Sat	Sat
P006562	Brazil III	W	Bahia Municipal Infrast. Dev. & Mgmt.	1997–2005	100	Sat	Sat	Sat	Sat
P081436	Brazil IV	R	Bahia Poor Urban Areas Integrated Development	2006–	49	—	—	—	—
P089013	Brazil V	R	Municipal APL: Recife	2008–	33	—	—	—	—
P006677	Chile I	W	Municipal Development	1994–98	10	Sat	Sat	Sat	Sat
P055480	Chile II	W	Second Municipal Development	1999–2005	10	M Sat	M Sat	M Sat	M Sat
P006852	Colombia I	W	Municipal Development	1991–2001	60	Sat	Sat	Sat	Sat
P006872	Colombia II	R	Bogota Urban Transport	1996–2001	65	H Sat	H Sat	H Sat	H Sat
P039291	Colombia III	R	Urban Environment (TAL)	1996–2003	20	Sat	Sat	Sat	Sat
P006861	Colombia IV	W	Urban Infrastructure Services Development	1998–2004	75	Sat	Sat	Sat	Sat
P074726	Colombia V	R	Bogota Urban Services Project	2003–	100	—	—	—	—
P082466	Colombia VI	R	Integrated Mass Transit Systems	2004–	250	—	—	—	—
P085727	Colombia VII	R	Disaster Vulnerability Reduction Project (APL 2)	2006–	80	—	—	—	—
P007123	Ecuador I	W	First Municipal Development	1991–99	104	Sat	Sat	Sat	Sat
P007128	Ecuador II	R	Environmental Management	1996–2002	15	M Sat	Unsat	Unsat	Unsat
P007292	Haiti	R	Port-Au-Prince Water Supply	1989–99	20	Unsat	Unsat	Unsat	Unsat
P064913	Honduras I	W	Natural Disaster Mitigation	2000–	11	—	—	—	—
P057859	Honduras II	R	Sustainable Coastal Tourism Project	2002–06	5	M Sat	Sat	Sat	Sat
P088319	Honduras III	W	Barrio Ciudad	2006–	15	—	—	—	—
P103881	Honduras IV	R	Water & Sanitation Program	2007–	30	—	—	—	—
P007710	Mexico I	R	Northern Border Environment	1994–2004	368	M Unsat	Unsat	Unsat	Unsat
P007612	Mexico II	R	Solid Waste	1994–2001	200	M Unsat	Unsat	Unsat	Unsat
P064916	Nicaragua	W	Natural Disaster Vulnerability Reduction	2001–	14	—	—	—	—

(Continues on the next page.)

Project ID	MDP	Type	Project name	Period <sup>a</sup>	Commitment US\$ millions	Outcome	Bank performance	Borrower performance
<b>Latin America and the Caribbean (continued)</b>								
P035740	Peru I	R	Lima Transport	2004–	45	—	—	—
P082625	Peru II	R	Vilcanota Valley Rehabilitation & Management	2005–	5	—	—	—
P078894	Peru III	W	Second Real Property Rights	2006–	25	—	—	—
P008212	Venezuela I	W	Low-Income Barrios Improvement	1992–99	40	Sat	H Sat	Sat
P008210	Venezuela II	W	Urban Transport	1994–2002	100	Sat	Sat	Sat
P040174	Venezuela III	R	Caracas Slum Upgrading	1999–2006	61	M Sat	M Sat	M Sat
<b>Middle East and North Africa</b>								
P094229	Egypt, Arab Rep. of	R	Alexandria Development	2008–	100	—	—	—
P073433	Iran, Islamic Rep. of	R	Urban Upgrading & Housing Reform	2004–	80	—	—	—
P070958	Jordan I	W	Regional & Local Development	2007–	20	—	—	—
P081823	Jordan II	R	Cultural Heritage, Tourism & Urban Development	2007–	56	—	—	—
P050544	Lebanon I	W	First Municipal Infrastructure	2000–	80	—	—	—
P050529	Lebanon II	R	Cultural Heritage & Urban Development	2003–	32	—	—	—
P005524	Morocco	R	Fes Medina Rehabilitation	1999–2006	14	Unsat	Unsat	Unsat
P005687	Tunisia I	W	Municipal Sector Investment	1993–99	75	Sat	Sat	Sat
P046832	Tunisia II	W	Second Municipal Development	1997–2003	80	M Sat	Unsat	Sat
P064082	Tunisia III	R	Transport Sector Investment	2001–	38	—	—	—
P074398	Tunisia IV	W	Third Municipal Development	2003–	78	—	—	—
P043339	West Bank & Gaza I	R	Municipal Development	1996–2003	40	Unsat	Sat	Sat
P053985	West Bank & Gaza II	R	Bethlehem 2000	1999–2004	25	M Unsat	Sat	Sat
P058683	West Bank & Gaza III	R	Second Municipal Infrastructure Development	2000–05	14	Sat	Sat	Sat
P078212	West Bank & Gaza IV	W	Emergency Municipal Services Rehabilitation	2003–06	20	M Sat	Sat	M Sat
P005907	Yemen, Republic of I	R	Sana'a Water Supply & Sanitation	1999–2003	25	M Sat	Unsat	Sat
P070092	Yemen, Republic of II	R	Taiz Municipal Development & Flood Protection	2002–	45	—	—	—
P065111	Yemen, Republic of III	R	Port Cities Development Program	2003–	23	—	—	—
<b>South Asia</b>								
P083919	Afghanistan	R	Kabul Urban Reconstruction	2005–	25	—	—	—
P009467	Bangladesh I	R	Urban Development	1988–98	48	Unsat	Unsat	Unsat
P041887	Bangladesh II	W	Municipal Services	1999–	139	—	—	—
P057570	Bhutan	R	Urban Development	2000–06	11	M Unsat	M Sat	M Sat
P009872	India I	W	Tamil Nadu Urban Development	1988–98	300	M Sat	Sat	Sat

P050637	India II	W	Tamil Nadu Second Urban Development	1999–2005	105	Sat	Sat	Sat
P083780	India III	R	Third Tamil Nadu Urban Development	2006–	300	—	—	—
P079675	India IV	R	Karnataka Municipal Reform	2006–	216	—	—	—
P010305	Pakistan I	R	Punjab Urban Development	1988–98	90	M Sat	Sat	Sat
P010478	Pakistan II	R	North West Frontier Province Community Infrastructure	1996–2003	22	M Unsats	Unsats	Unsats
P083929	Pakistan III	W	Punjab Municipal Services Improvement	2006–	50	—	—	—
P010467	Sri Lanka	R	Colombo Environment Improvement	1995–2001	39	Unsats	Unsats	Unsats

Source: World Bank data.

Note: MDP = municipal development project; R = retail; W = wholesale; — = not rated, as project not closed yet. **Ratings:** H Sat = highly satisfactory; M Sat = moderately satisfactory; Sat = satisfactory; M Unsats = moderately unsatisfactory; Unsats = unsatisfactory; H Unsats = highly unsatisfactory.

a. Entry and exit years; projects not yet closed just show entry year.



## APPENDIX B: BANKING ON MUNICIPALITIES: WORLD BANK SUPPORT IN SUB-SAHARAN AFRICA

### Bank Support

With 280 million people—36 percent of the total population—living in cities, the Sub-Saharan Africa Region is experiencing rapid urban population growth of 3.9 percent per annum. The World Bank financed 52 MDPs in this Region that were active during 1998–2008, with loan commitments of \$2.4 billion. The portfolio aimed to strengthen the management of 656 municipalities in 27 countries.

By the number of MDPs, the most active borrowers were Uganda (5 projects), Ethiopia (4), Ghana (4), Madagascar (3), Benin (3), and Mozambique (3). The following countries hosted two MDPs each: Burkina Faso, Guinea, Mali, Mauritania, Niger, Nigeria, Senegal, Swaziland, and Tanzania. Another 12 countries had just 1 each: Burundi, Cameroon, Chad, Côte d'Ivoire, The Gambia, Kenya, Malawi, Rwanda, South Africa, Togo, Zambia, and Zimbabwe. Nearly all the MDPs—more than 90 percent of the total—were thus implemented in low-income countries. The MDP portfolio covered all countries in the Region with large urban populations (15 million plus) except for the Democratic Republic of Congo and Sudan.

### Portfolio Performance

With 75 percent of projects achieving satisfactory outcomes, the Region's MDP performance was similar to that of the worldwide portfolio. In terms of Bank performance, Sub-Saharan Africa's MDPs did better, with 81 percent satisfactory, against a Bank-wide average of 78 percent satisfactory. For borrower performance, the Region lagged behind, with 69 percent satisfactory against 75 percent satisfactory Bank-wide.

**Table B.1: Summary of MDP Portfolio, 1998–2008**

Completed (number)	32
Completed MDPs (% satisfactory)	75
Ongoing MDPs (number)	20
IBRD commitments (US\$ million)	174
IDA commitments (US\$ million)	2,179
Bank commitments per completed MDP (US\$ million)	42
Commitments per ongoing MDP (US\$ million)	56
Wholesale MDPs (number)	12
Retail MDPs (number)	40
Countries served (number)	27
Municipalities served (number)	656

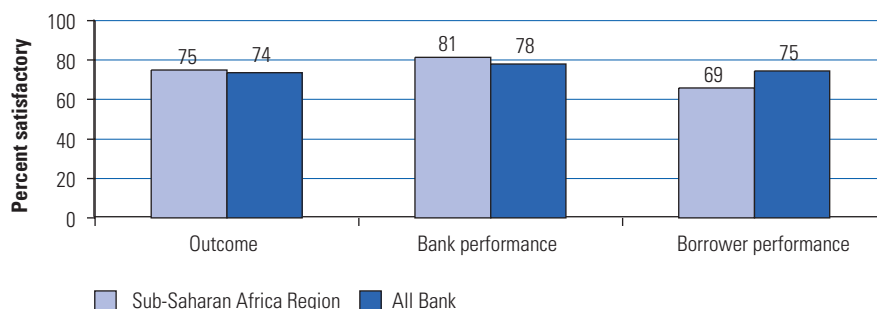
*Source:* World Bank data.

*Note:* IBRD = International Bank for Reconstruction and Development; IDA = International Development Association; MDP = municipal development project.

Of particular note were two MDPs that achieved highly satisfactory outcomes. These can serve as model operations for others to emulate.

The first, **Benin I**, helped improve urban services in the country's two largest cities, Cotonou (population 690,584) and Porto Novo (population 234,168). This result was confirmed by beneficiary assessments at completion and was helped by the introduction of delegated contract management practices. These enabled rapid processing and execution of service contracts with local small and medium-size enterprises that provided higher-quality, lower-cost urban infrastructure services and left municipal administrations more time to concentrate on their planning and programming tasks.

The second highly satisfactory MDP, **Senegal I**, was a wholesale operation that helped 67 municipi-

**Figure B.1: MDP Portfolio Performance, Fiscal 1998–2008**

Source: IEG special study.

Note: MDP = municipal development project.

palities throughout the country strengthen their financial and organizational management and improve programming of investments in urban infrastructure and services. The project achieved this through what were called “municipal contracts,” participating agreements between central and individual local governments with benchmarks for municipal reform. Currently, more than 170 municipalities across French-speaking West Africa are implementing such contracts. The short-term results of the reforms were an increased municipal capacity to invest. Over 2001–03, for instance, municipal capital investment as a share of current revenues rose from 10 to 17 percent.

Other operations with good outcomes in Sub-Saharan Africa included all five MDPs in Uganda. **Uganda I** introduced private sector participation in the municipal services of the capital Kampala (population 1.4 million). Flooding in that city was curbed thanks to **Uganda II’s** rehabilitation of the Nakivubo Channel. In providing investment funds and technical assistance to other municipalities, **Uganda III** strengthened municipal management across the country, using a wholesale approach. **Uganda IV** consolidated this approach by helping 30 municipalities tighten their management controls, deploying novel distance learning techniques to this end.

Ghana also had a string of successful MDPs. **Ghana I** brought significant service improve-

ments, notably solid waste and stronger management, to six municipalities. This success was extended to 11 more municipalities by **Ghana II**. **Ghana IV** took the wholesale model further by investing intensely in financial and technical training for the staff of 23 municipalities through the national Institute of Local Government Studies, which itself came out of the project considerably strengthened.

**Madagascar II** and **III** helped municipalities improve municipal services through local agreements with an AGETIP-style provider. By investing in sewerage and solid waste in particular, **Tanzania I** improved environmental management in eight municipalities that a later government assessment found be the best in the country. Initially conceived as a retail operation only for Niamey (population 774,237) and Dogondoutchi (population 31,767), **Niger I** was successfully broadened as a wholesale operation that, among other things, introduced new digital cartography skills into urban planning in 19 other municipalities.

Some MDPs performed poorly, however. **Côte D’Ivoire’s MDP** delivered fewer than half the service improvements planned as the country situation became more volatile and central government support for the operation waned. **Ethiopia I** failed to address the major issues of budgeting, accounting, and financial management of the client municipality of Addis Ababa (popula-

tion 2.8 million), and infrastructure investments for which demand was weak yielded inadequate returns. **Nigeria I** failed to build municipal management capabilities in Oyo State as intended, because of unresolved conflicts among the parties that led to implementation delays and cancellation of key components. **Mozambique I** did not implement the majority of the project's physical components because of procurement problems, inadequate Bank-borrower communication, and poor performance by consultants.

## Better City Planning

### More information

Particularly notable have been MDP efforts and results of obtaining better information about spatial configuration of cities. **Burkina Faso I**, for instance, helped create an information system and database for urban management based on street address mapping in the municipalities of Ougadougou (population 1.1 million) and Bobo Dioulasso (population 360,106). **Niger I** introduced a set of simple planning and programming tools covering digital cartography and the production of an atlas, initially for 2 cities but extended through a wholesale approach to 21 cities in all. Under **Ghana II**, maps were produced for 11 municipalities, leading to property valuations for twice as many properties as planned; only two municipalities ultimately developed land use structure plans on this basis.

### Monitoring and evaluation

**Swaziland I** incorporated a good M&E framework with clearly designed performance indicators that enabled a clear comparison of targeted and actual results, as well as of how far the municipalities had come from the baseline. **Mali I** also had good M&E, although its baseline references were less clear. **Uganda III** improved the evaluative capacity of the Ministry of Local Government, and **Uganda IV** helped the project implementation unit consolidate project-specific information that made it possible to undertake an evaluation of project outcomes.

**Mozambique II** and **Burkina Faso I** provided results frameworks with specific outputs and

**Table B.2: Municipal Management Focus of Region Portfolio**

Share of all MDPs with a project design focus on:	Completed	Ongoing
<b>City planning</b>		
In objectives (%)	28	15
In components (%)	44	55
<b>Municipal finance</b>		
In objectives (%)	75	35
In components (%)	56	90
<b>Service delivery</b>		
In objectives (%)	94	85
In components (%)	97	95
Number of all MDPs	32	20

Source: IEG special study.

Note: MDP = municipal development project.

outcomes, but the latter were not always measurable, and baseline information was generally missing. M&E systems of several MDPs were weakened by a focus on project outputs; this and other factors resulted in the inadequate performance of the operations. IEG found this to be case for **Guinea I**, the **Kenya MDP**, **Tanzania I**, and the **Togo MDP**.

### Urban and spatial planning

Several MDPs made important contributions to the urban planning capabilities of client municipalities. Under guidance and technical assistance through **Mali I**, five municipalities prepared strategic long-term physical and spatial plans that particularly helped them better understand the workings of the land markets in their cities. Through a wholesale approach, **Mauritania I** introduced several management instruments, including urban plans, inventories of assets, and priority investment plans that were widely accepted by the local elected officials and staff of 13 municipalities.

Through **Uganda II** and **III**, the municipality of Kampala (population 1.4 million) prepared its Drainage Master Plan and Urban Transport Improvement Strategy. Moving toward the wholesale model of MDP, **Uganda IV** helped 30 municipalities make their existing municipal planning committees more functional, resulting

in 90 percent of them preparing 3-year development plans. In **Benin I**, in addition to the successful project efforts to strengthen urban planning at the municipal level, the central government itself adopted a declaration of urban policy, through which it elaborated a coherent long-term strategy for urban planning, including its environmental and sanitary aspects.

### *Investment planning and strategies*

MDP results were thin in a Region where development projects often propose ad hoc planning and implementation arrangements beyond the formal framework of central and local government. Thus, under **Mozambique I**, the five client municipalities that had prepared urban land-use and structure plans saw none of them result in the intended municipal investment strategies.

## **Stronger Municipal Finances**

### *Better financial management*

There is considerable evidence of MDP technical assistance and support helping municipalities improve their financial reporting and management. Under **Mali I**, for instance, three of the project's five targeted municipalities set up computerized accounting. More would have been achieved had there not been a shortage of municipal staff qualified in finance and programming. This points to the need for more basic training in municipal financial management in the future.

**Uganda I** and **II** enhanced the Kampala municipality's ability to plan, manage, and execute complex investment decisions and report on them, but roles and responsibilities for executing them remained ill defined at the project's end. This retail MDP focused on one municipality that was particularly prone to political interference in day-to-day operations. **Uganda III** and **IV**, in contrast, helped a much larger number of municipalities strengthen and harmonize their planning and budgeting processes. The project-created Audit Compliance Unit in the central government provided a strong incentive for municipalities to bring their financial records up to date and make them audit compliant.

Under **Senegal I**, a wholesale operation aimed at 67 municipalities throughout the country, project audits confirmed that municipal financial budgeting was placed on a sound footing in all of them for the first time. This MDP also prepared the municipalities for incurring debt and managing debt service. In actual practice, their financial management was solid, as reflected in their being up to date in 95 percent of their loan repayments. **Tanzania I** and **Zimbabwe's MDP** helped the targeted municipalities—10 and 21, respectively—routinely prepare and deliver up-to-date and audited accounts.

### *Mobilizing own revenues*

Evidence is beginning to emerge that municipalities assisted by MDP operations strengthened their revenue mobilization, perhaps more so than unassisted municipalities, although robust evidence of control group performance remains thin. Thus, under **Uganda III** and **IV**, some 30 municipalities saw own revenues increase by 40 percent in real terms, mainly because of computer processing of financial reports that highlighted arrears and areas of lax tax effort more promptly. Under **Swaziland I**, the 4 client municipalities extended property tax collection from 65 to 80 percent of eligible properties following training of tax collectors, supervisors, and billing and finance staff. **Tanzania I** enabled municipalities to more than double their own revenues, though from a low base, over the project period with the help of modern computer mapping and accounting. The **Togo MDP** introduced improved collection procedures and penalties for nonpayment, a computerized tax registry, and transparent methods for assessing property values, but the impact of all these measures on revenue collection is not known. Technical assistance through **Benin II** enabled its three municipal clients to exceed targeted own-revenue growth. **Burkina Faso I** saw revenue collection nearly double in the country's two largest municipalities after they developed a residential tax database with the help of project technical assistance.

In contrast, elections dampened the political will to pursue energetic local tax collection in Kampala under **Uganda I** and **II**. Similar

constraints prevented the five client municipalities of **Mali I** from actually collecting revenues through a new urban tax that had been formally instituted but not acted on, leaving the municipal finances of Bamako (population 1.3 million) and Mopti (population 108,456) in deficit.

Aside from taxation itself, the municipality of Lomé (population 718,797) was able to create a new municipal agency with the help of the **Togo MDP**; this agency managed thriving local markets and collected user fees. Similar user charges enhanced the revenues of six municipalities under **Ghana I**. Progress with revenue mobilization continued among municipalities participating in **Ghana II** and **III** but slowed somewhat in the face of municipal resistance to setting user charges high enough to cover costs. Revenue performance was weak under **Nigeria I** and left municipal billing and collection machinery at the local level weak. Though **Ethiopia I** did adopt cost recovery for housing and some municipal services, it made them less affordable to the poor in the short run.

### **Municipal creditworthiness and debt management**

To date, MDPs have done little to involve municipalities in local credit markets, although more can be expected in the future as incipient markets develop.

### **Private finance participation**

Only modest results have been reported. **Swaziland MDP's** attempts to bring together local governments and private sector financial institutions did lead to some private financing of municipal services on a small scale in the capital Mbabane (population 76,218). Under **Mauritania I**, better municipal management gave more confidence for private suppliers to work with the 13 MDP municipalities in that country.

## **Improved Service Provision**

### **Investment priorities**

Of 32 completed operations, more than half reported ERRs at both appraisal and completion, the highest proportion for any Region. ERR estimates at completion ranged from 7 to 84

percent, exceeding appraisal ERRs in half the cases. Estimates of internal rates of return were more readily available for road- and water-related components. The main issues relating to ERRs were partial coverage of the investment, lack of credible data, and, still in a few cases, an apparent lack of appreciation for the importance of conducting an economic cost-benefit analysis.

**Ghana I** reported the highest ERR of 82 percent after detailed assessments showed the high impact of below-cost road improvements in the municipality of Accra (population 2.0 million) that accounted for one-third of the MDP project costs. Efficient upgrading of existing urban roads in 11 other municipalities also explained the 68 percent ERR reported for **Ghana II**, although in this case the estimate covered only 13 percent of the total project costs.

Seven more successful MDPs reported high ERRs in the 25–40 percent range. **Benin II** also yielded a 73 percent ERR, nearly five times the appraisal estimate, owing to much higher traffic volumes than expected on the urban road improvements that accounted for most of the project costs. **The Gambia MDP** reported a 38 percent ERR for road paving and drainage works in two municipalities; again, these components accounted for only about one-fifth of the total project cost. **Burkina Faso I** yielded a 33 percent ERR, thanks to the rehabilitation of urban roads and streets in the country's two main cities, components that accounted for 40 percent of project costs.

Interestingly, **Niger I** found ERRs in the 20–41 percent range for other components, such as bus stations, slaughterhouses, public latrines, and leisure parks, using a beneficiary willingness-to-pay concept. A good cost-benefit analysis through **Uganda II** that carefully identified the counterfactual and the flood-protection benefits to the municipality of Kampala of reducing building and infrastructure damage and of time savings yielded a 25 percent ERR at completion. **Tanzania I** also yielded an ERR of 25 percent, based on the benefits of road and water supply improvements across 10 municipalities, accounting for 55 percent of project costs.

Even though the Region has done the most cost-benefit analysis of all Regions, several MDPs did not include ERR estimates at completion even of municipal infrastructure and service provision components that are amenable to cost-benefit analysis. Lack of adequate data was most commonly given as the reason for not estimating ERR.

### **Procurement**

Municipalities' experience in taking charge of procurement has been mixed, but there has been progress. Implementation of **Mozambique I** was stalled by municipalities' difficulties in meeting procurement norms. In contrast, more recently **Tanzania I** gave 10 municipalities the opportunity to manage procurement effectively for the first time.

### **Operations and maintenance**

IEG found municipal clients of MDPs were beginning to give more attention to O&M. Under the **Kenya MDP**, for instance, four municipalities did more O&M because of the incentive of special funding provided by the National Road Fund. Nearly all municipal water utilities funded O&M from their own budgets under **Tanzania I** for the first time. Although **Uganda II** and **III** raised the profile of O&M in the eyes of municipalities in Kampala, the municipality was not able to raise all the revenue needed to sustain this over the long run. The sustained impact of improved municipal services under **Benin I** and **II** is only ensured if the three client municipalities continue to mobilize the necessary revenues on their own. However, municipal O&M continues to be weak in many municipalities, as the results of the **Côte d'Ivoire MDP**, **Swaziland I**, and the **Zambia MDP** showed.

### **Services—Most affected sectors**

MDPs provided a wide range of municipal services, from low-income area upgrading; to urban road and street paving and drainage works; to water and basic sanitation, other environmental improvements, and urban transport. In upgrading existing low-income areas, **Burkina Faso I** was particularly effective, using beneficiary participation. Under **Benin I**

and **II**, drainage works helped protect 403,000 people in 6 municipalities against flooding. **Ghana I** and **IV** had an impact on 11 municipalities by rehabilitating urban roads and markets while increasing opportunities for small businesses in vehicle repair and commerce.

**Senegal I** financed 421 basic infrastructure subprojects across Senegal's 67 urban municipalities and introduced systematic street address systems for the first time in 11 of them. The **Zimbabwe MDP** enabled 21 municipalities to rehabilitate urban roads and extend water supply and basic sanitation. Similar improvements to basic sanitation under **Guinea I** and **Mali I** may have contributed to a steep decline in deaths from cholera. Water metering and network improvements enabled **Swaziland I** to reduce unaccounted-for water in four municipalities. Sewage treatment under **Tanzania I** meant that the effluent quality nearly met World Health Organization standards in three municipalities. Urban transport was less of an MDP focus in Africa than in other Regions, but indirectly **Uganda II** brought considerable improvements to traffic flows in Kampala by mitigating the impact of regular flooding prior to the completion of the Nakivubo channel.

### **Services—Private provision**

MDPs made considerable efforts to engage private operators in the provision of municipal service in several countries. Some results were achieved, but there is still a long way to go. Under **Uganda I** and **III**, for instance, the fact that nearly all the infrastructure investment was privately contracted was itself a significant result for the municipality of Kampala, which had traditionally done its own work. The use of force account also ceased following **Madagascar II** and the **Zambia MDP**. **Ghana I** and **Senegal I** strengthened contractor and consulting industries within their respective countries.

The competitive private sector approach to municipal service investment received a boost under **Tanzania I**. That project, as well as **Burkina Faso I**, **Ghana III**, and **Guinea I**, provided openings for private solid waste collec-

**Box B.1: Key to MDPs Referred to in Text**

**Benin:** I—Urban Rehabilitation & Management; II—First Decentralized City Management; III—Second Decentralized City Management. **Burkina Faso:** I—Urban Environment; II—Decentralized Urban Capacity Building. **Burundi:** Public Works & Employment Creation. **Cameroon:** Urban & Water Development Support. **Chad:** Urban Development. **Côte d'Ivoire:** Municipal Support. **Ethiopia:** I—Second Addis Urban Development; II—Capacity Building for Decentralized Service Delivery; III—Public Sector Capacity Building; IV—Urban Water Supply & Sanitation. **The Gambia:** Poverty Alleviation & Capacity Building. **Ghana:** I—Second Urban Development; II—Local Government Development; III—Urban Environment & Sanitation; IV—Fifth Urban Development. **Guinea:** I—Third Urban Development (APL); II—Third Urban Development (Phase 2). **Kenya:** Urban Transport. **Madagascar:** I—Antananarivo Plain Development; II—Antananarivo Urban Works Pilot; III—Urban Infrastructure. **Malawi:** Local Government Development. **Mali:** I—Urban Development & Decentralization; II—Second Transport Sector.

**Mauritania:** I—Urban Infrastructure & Pilot Decentralization; II—Urban Development Program. **Mozambique:** I—Local Government Reform & Engineering; II—Municipal Development; III—Maputo Municipal Development Program. **Niger:** I—Urban Infrastructure Rehabilitation; II—Local Urban Infrastructure Development. **Nigeria:** I—Oyo State Urban Development; II—Lagos Metropolitan Development & Governance. **Rwanda:** Urban Infrastructure & City Management. **Senegal:** I—Urban Development & Decentralization Program; II—Local Authorities Development Program. **South Africa:** Municipal Financial Management. **Swaziland:** I—Urban Development; II—Local Government. **Tanzania:** I—Urban Sector Rehabilitation; II—Local Government Support. **Togo:** Lomé Urban Development. **Uganda:** I—First Urban Development; II—Nakivubo Channel Rehabilitation; III—Local Government Development Program; IV—Economic & Financial Management; V—Kampala Institutional & Infrastructure Development. **Zambia:** Urban Restructuring. **Zimbabwe:** Urban Sector & Regional Development.

Source: IEG.

tion operators, but a shortage of qualified local labor was a major constraint in sustaining these services. Urban road and street maintenance contracts under these projects attracted more private sector bids.

### **Income level of beneficiaries—Poverty reduction**

Altogether, 60 percent of MDPs have objectives explicitly focused on the poor and on poverty reduction. Some MDP results were quite impressive. **Benin I, Madagascar III, Niger I, and The Gambia** and **Togo MDPs** generated jobs for the poor. These jobs came through project construction and required more than 1.3 million person-days of labor-intensive employment, usually through local small and medium-sized enterprises contracted for road and drainage maintenance and other works.

Municipal services provided through **Burkina Faso I, Ghana I, Mali I, Mauritania I, Niger I, Nigeria I, and Tanzania I** all served low-income and squatter settlements through infrastructure and water and sanitation, health facilities, access roads, public lighting, school fencing, and green

spaces efforts. Under **Ghana III**, in all project cities, lower-income communities benefited: the estimated number of beneficiaries for household latrines was 60,000, for school latrines 100,000, and for public latrines 30,000. In most cases, road construction and rehabilitation opened access between the poor neighborhoods and the economic centers of the cities and improved scope for informal and small-scale income-generating activities.

### **Conclusions**

- Across Regions, MDPs in Sub-Saharan Africa have kept the greatest focus on improving the lives of the poor.
- Increasing the number of wholesale MDPs would be constrained in a Region with few higher-level agencies that are ready to take on the intermediation function that such operations require.
- Across countries, MDP performance with M&E varies considerably, pointing to opportunities for fruitful exchanges of experiences. Their performance in the use of cost-benefit analysis has been relatively good, pointing to opportunities to apply the techniques in other Regions.



## APPENDIX C: BANKING ON MUNICIPALITIES: WORLD BANK SUPPORT IN EAST ASIA AND PACIFIC

### Bank Support

East Asia and Pacific has the largest urban population of any Bank Region; 805 million people—42 percent of the total population—live in cities, and urbanization continues at a rapid pace, with the population in cities growing by 2.9 percent annually. The World Bank, through 44 municipal development projects (MDPs) active during the 1998–2008 decade, committed \$5.7 billion to urban development. This portfolio aimed to strengthen the management of 445 municipalities across 16 countries. By number of MDPs, the most active borrowers were China (23 projects) and Indonesia (12), followed by a newer MDP borrower, Vietnam (4), and an older one, the Philippines (3). In addition, Mongolia and Korea hosted 1 MDP each. Thus, nearly all of the Region’s MDPs, 86 percent, were in lower-middle-income countries. Countries in this Region with large urban populations (15 million plus) but no Bank-financed MDPs are Thailand and Myanmar.

### Portfolio Performance

On average, MDPs in the Region are strong performers, with 80 percent achieving satisfactory outcomes. Also, 90 percent had satisfactory Bank performance, and 83 percent had satisfactory borrower performance, all well above averages for the worldwide MDP portfolio.

Although no project had an outcome rating of highly satisfactory, there are numerous examples of successful MDPs in several countries in this Region that can serve as models for MDPs elsewhere. **China III**, thanks to an outstanding municipal team in the megacity of Tianjin (population 10.3 million), succeeded on several fronts, building and operating a solid waste

**Table C.1: Summary of MDP Portfolio, 1998–2008**

Completed (number)	30
Completed MDPs (% satisfactory)	80
Ongoing MDPs (number)	14
IBRD commitments (US\$ million)	4,512
IDA commitments (US\$ million)	1,158
Bank commitments per completed MDP (US\$ million)	126
Commitments per ongoing MDP (US\$ million)	136
Wholesale MDPs (number)	11
Retail MDPs (number)	33
Countries served (number)	6
Municipalities served (number)	445

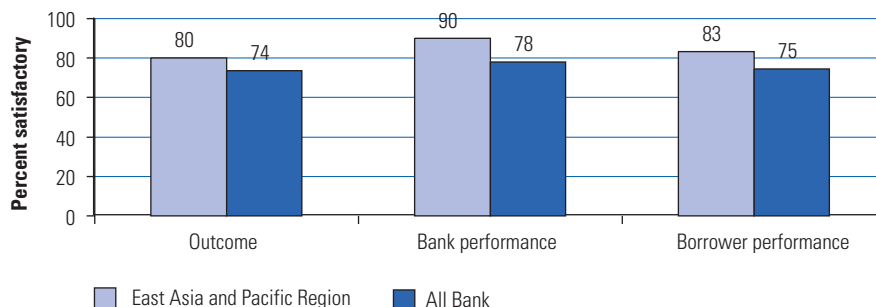
*Source:* World Bank data.

*Note:* IBRD = International Bank for Reconstruction and Development; IDA = International Development Association; MDP = municipal development project.

sanitary disposal facility that became a model for China, increasing sewage collection and treatment, improving traffic management, and consolidating municipal planning capability.

**Philippines I** was particularly successful at upgrading low-income areas by developing new local markets and in training 9,129 staff from 74 municipalities. These efforts resulted in a new municipal management style that was better adapted to the increasing responsibilities under decentralization. **China IV** got good results across the board in Zhejiang Province by improving municipal management as it related to urban planning, land development, and environment in key cities that offered among the best investment climates in China. **Indonesia V** produced good results in five municipalities in Kalimantan, particularly through the successful Kampung Improvement Program in Pontianak (population 455,173).

**Figure C.1: MDP Portfolio Performance, Fiscal 1998–2008**



Source: IEG special study.  
 Note: MDP = municipal development project.

Under **Indonesia XIX**, which focused on municipal innovations, the municipality of Bogor (population 769,000) was particularly successful in developing a lively and informative public Web site that was an online version of the earlier public information booths. There were significant environmental gains in improved water supply and sewage and solid waste disposal through **China VII** and **VIII** in Shanghai and Liaoning, respectively. Directly focused on retooling municipal management, **China IX** was effective in helping four municipalities manage the deep structural reform involving the divestiture

of enterprise housing. The **Mongolia MDP** helped develop the country’s capability to design, build, and operate urban services through the successful improvements the project brought to the water supply of the municipality of Ulaanbataar (population 844,818).

Some MDPs in the Region performed poorly. **Indonesia III** achieved little, as the repeated turnover in municipal leadership in Surabaya (population 2.4 million) undermined commitment to agreements. This led to inaction on service provision to the city that should have called for a thorough project reappraisal. **China XI** did not lead to the hoped-for reduction of air pollution by replacing old industrial plants in the municipality of Chongqing (population 32 million) because of the slow divestiture of such plants and the cancellation of the project’s credit component. Pollution did decline, but not because of the project; instead, that improvement occurred because of the slow-down of industrial activity.

**Indonesia VII** intended to improve solid waste and sewage treatment services in 41 municipalities in Sulawesi, but it was only partly implemented because of lack of government commitment and concerns over misuse of funds. This left municipalities without the management progress intended, especially in operations and

**Table C.2: Municipal Management Focus of Region Portfolio**

Share of all MDPs with a project design focus on:	Completed	Ongoing
<b>City planning</b>		
In objectives (%)	50	50
In components (%)	40	64
<b>Municipal finance</b>		
In objectives (%)	60	21
In components (%)	33	64
<b>Service delivery</b>		
In objectives (%)	90	100
In components (%)	97	93
Number of all MDPs	30	14

Source: IEG special study.  
 Note: MDP = municipal development project.

maintenance (O&M), the project's model of which was too complicated to administer.

## Better City Planning

### More information

Some MDPs in the Region improved the information available to municipalities. Under **China III**, for instance, the municipality of Tianjin (population 10.3 million) was able to develop a real-time information system for the megacity's intense traffic. Under **Indonesia IX**, Bogor's success in assembling and disseminating information on municipal services publicly on the Web is an important information system achievement.

### Monitoring & evaluation

Monitoring and evaluation (M&E) systems exhibit the weaknesses found in other Regions and sectors. Thus, under **China IV** in Zhejiang Province, an operation that excelled in many other respects, M&E did little more than count and cost the delivery of individual subprojects. **China XII**, in Yunnan Province, did a little better with monitoring the project's physical achievements, but it fell short on verifying progress on the institutional front. M&E for **Indonesia II** and **VI** ventured little beyond counting the number of subproject contracts awarded and the amount of disbursements. This meant that M&E was able to provide precise information about the number of community toilets built and their exact unit costs, but not how much those facilities were used—which proved to be very little. The Independent Evaluation Group (IEG) saw communal toilet blocks designed for 15 families being used by only 1 or 2.

**China X** in Hubei had weak M&E, as the indicators were defined too broadly to be measurable. The M&E of **China IX** suffered the classic shortcoming of not providing baseline values for 38 indicators that were selected to measure progress in divesting state-owned enterprise housing.

Even when indicators are good, M&E problems can arise. This happened when measuring water quality of the environmentally stressed Huangpo

River in Shanghai under **China VII**. Data on baseline and endline water quality were available, but the samples were drawn from different locations on the river. Furthermore, the monitoring station built under the project was not fully operational. An implementation weakness undermined the effectiveness of M&E for **China XV** in Sichuan Province, where records of measurement of the well-designed performance indicators were not systematically kept.

But even when its design is weak, M&E can be improved during implementation, as when the strong local team of **China III** in Tianjin, at its own initiative, incorporated outcome indicators to measure greater municipal management effectiveness, which had been overlooked by the initial M&E design. Finally, one of the most complete M&E systems was introduced through **Vietnam I**, where four project municipalities used indicators that covered all aspects of improvement in water supply service, ranging from physical provision to management efficiency.

### Urban and spatial planning

MDPs have achieved a lot, especially in China, where many local municipalities have embraced city planning in recent years. Thus, under **China I**, the Urban Master Plan of Beijing (population 14.9 million) incorporated for the first time environmental priorities of the municipal environmental protection bureau. **China III** helped Tianjin prepare its Master Plan and consolidate it with the indicative budget for 2005–20, again for the first time. Particularly for the city of Ningbo in Zhejiang Province, **China IV** strengthened its long-term land use planning through technical assistance and firmly embedded the conservation of historic and cultural monuments into its city center planning, now recognized as one of China's best.

On the urban transport side, two operations, **China II** and **VI**, enabled Shanghai (population 14.6 million) to improve its transport planning by providing expert input. Other countries also saw some of their city planning improve through MDP assistance. Thus, under **Indonesia X**, nine

municipalities prepared local environmental plans and strategies for the first time, one of which was the critical Drainage Master Plan for Jakarta (population 8.5 million). Through **Philippines I**, some 70 municipalities learned how to incorporate specific investments of the operation in subprojects into their local city plans.

More innovative approaches to planning did not always succeed. Under **Indonesia II** support for Integrated Urban Infrastructure Development Planning, a modernized and multisectoral approach to planning, made only modest inroads in smaller municipalities, which found it too complex and were more comfortable with the traditional sectoral approach they knew well.

#### *Investment planning and strategies*

MDPs in the Region generally did not require client municipalities to strengthen the management of their investment planning and strategies. Larger municipalities in particular often had their own investment plans in place before the MDP.

### **Stronger Municipal Finances**

#### *Better financial management*

In China, a number of municipalities improved their financial management and accounting procedures with the help of MDPs. **China III**, for instance, helped the mega-municipality of Tianjin integrate different financial networks across its very large organization, where computerization of all accounts within a local area network has now become standard. **China V** helped improve cost recovery for water supply, allowing four municipalities in southern Jiangsu Province to cover operating, if not investment, costs. The municipal audit bureau of Shanghai (population 14.6 million) was quickly able to adopt international accounting standards, as required by **China VII**.

#### *Mobilizing own revenues*

Revenue enhancement through MDPs in the Region focused particularly on increasing direct cost recovery from the project investments

themselves, rather than seeking broader improvements in general revenues. In practice, cost recovery has been as challenging in this Region as in others. **China VII** was unable to raise tariffs enough to enable five municipal sanitation companies in Liaoning Province to cover their operating costs. **China XII** did not enable the five municipal sanitation utilities in Yunnan Province to achieve full cost recovery, but there has been some progress in tariff adjustment. **China X** reported similar constraints in limiting cost recovery, but for solid waste management in Hubei Province.

Although the details are scarce, **Indonesia II** did report enhanced revenue collection among the 45 municipalities assisted by the project in East Java and Bali. Under **Indonesia IV**, however, inflation eroded effective cost recovery of municipal water utilities in Semarang (population 1.3 million) and Surakarta (population 555,308). **Mongolia's MDP** achieved a lot on the municipal finance front, but not the full financial autonomy for the municipal sanitation utility of Ulaanbataar (population 844,818) promised by the project's ambitious objectives. Nevertheless, computerized billing worked well and considerably enhanced tariff collections. **Philippines I** achieved significant results across the 74 client municipalities, especially through property tax cadastres that more than doubled assessed values; actual tax collections increased by 64 percent over the 1994–2001 project period. **Vietnam's MDP** enabled municipal water supply utilities in Hanoi (population 1.4 million) and Haiphong (population 602,695) to cover their O&M costs and even build up some reserves.

#### *Municipal creditworthiness and debt management*

This aspect of municipal management was explored on a small scale. **Philippines I's** Municipal Development Fund established a long-term credit window that loaned \$34 million to eligible municipalities. Although the lending was small scale relative to municipal needs, the credit mechanism did introduce 74 municipalities across the country to debt service management.

### *Private finance participation*

IEG found little evidence of significant effort by MDPs to enhance private finance for municipal services in the Region.

## **Improved Service Provision**

### *Investment priorities*

Some 60 percent of MDPs provided economic rate of return (ERR) estimates for project investments at appraisal and completion. They were widely used for MDPs completed in China. **China XIII** yielded a 39 percent ERR based on users' willingness to pay for sanitation services in 38 municipalities in Shandong Province. **China II** and **VII** reported ERRs of 28 percent, from the benefits of time and operating cost savings from improved traffic flows in Shanghai. **China III** led to ERRs of 23 percent Tianjin, based on benefits accruing principally from urban land development for housing and industrial uses.

But a more robust economic analysis, distinguishing new businesses from those that had simply transferred to the **China IV** project area in Shaoxing (population 421,283) in Zhejiang Province, would have evaluated the project's land development more precisely. Satisfactory ERRs in the 14–18 percent range were reported elsewhere through **Mongolia's** and **Vietnam's MDPs**, as well as **Indonesia II**. In some cases, unpersuasive reasons were given for project teams not estimating even simplified internal rates of return. Thus, excessive cost and time needed were cited as reasons for not estimating an ERR for **China VII**, despite the high cost of the project investment incurred to improve the quality of the water supply to Shanghai.

### *Procurement*

MDPs in this Region reported few significant results, as far as changes in procurement practice at the municipal level are concerned. One exception was **China III**, through which the municipality of Tianjin conducted successful international competitive bidding to establish the Shuangkou solid waste disposal site, China's first fully sanitary landfill, complete with an

onsite leachate treatment plant that became a model operation for the country.

### *Operations and maintenance*

The results of some MDPs call for municipalities to pay more attention to assuring financing for ongoing operations of existing infrastructure and municipal services. For instance, a municipal water supply system provided under **Indonesia II** for the Kintamani district of Denpasar (population 405,923) in Bali fell into disuse, as the local authorities could not afford to pay to operate the necessary pumps for more than a fraction of the time needed. In Sulawesi, **Indonesia VII's** 41 client municipalities were unable to adopt the project's "performance-oriented maintenance management systems," which they found too complicated. In Western Java **Indonesia X** saw that continuing uncertainties about the funding mechanisms for municipal waste management corporations put the project's urban environmental achievements at risk. **China XV**, completed in 2007, reported that the four beneficiary municipalities needed to raise more revenues to ensure O&M funding.

### *Services—Most affected sectors*

MDPs in this Region provided support to municipalities to improve services connected with water supply, basic sanitation, and other environmental improvements. In addition, they helped improve urban transport, through new urban roads, street paving, and drainage and traffic management measures. The upgrading of low-income areas through the introduction of basic infrastructure continues through MDPs in East Asia, but on a smaller scale than before, and elsewhere.

To improve the municipal management of water supply, MDPs made some notable achievements in China in particular. A significant environmental and public health gain for more than 8 million inhabitants of Shanghai was the result of **China VII's** provision of a safer water supply. This was done by implementing a major intake upriver in less-polluted reaches of the environmentally stressed Huangpo River, as well as

implementing mitigation measures in solid waste collection and disposal and restricting use of agricultural fertilizers to prevent runoff from further polluting the river. Major municipal water treatment plants under **China IV** improved service quality to the people living in key cities of Zhejiang Province, Hangzhou (population 1.9 million), Ningbo (population 719,867), and Wenzhou (population 865,672).

MDPs also improved basic sanitation. The innovative, low-cost, small-scale “modular” approach to sewage treatment was adopted by the municipality of Malang (population 747,000) under **Indonesia VI**. However, its success was limited, as low-income residents continued to discharge sewage without charge into storm drains, rather than paying the (modest) fee imposed by the new system.

MDPs made more progress helping municipalities improve their solid waste management, especially in the final disposal of waste. **China III** led to the building and operation of the country’s first sanitary landfill at Shuangkou near Tianjin—now considered a successful model nationwide. This experience built on earlier successful efforts to improve solid waste disposal in Beijing under **China I**. Under **China X**, the municipality of Xianfang (population 462,956) in Hubei Province succeeded in disposing of 100 percent of its collected solid waste in a sanitary landfill built by the project. **Indonesia V** introduced controlled landfills to five municipalities in Kalimantan that also closed down their earlier unsanitary dumps, which had polluted the surface water of nearby settlements.

MDPs made significant improvements to urban transport. The municipality of Shanghai was able to complete its high-capacity inner ring road under **China II**, an operation like others in the country that paid little attention to public transport. Mostly through traffic management improvements, with construction limited to widening existing streets, **China III** introduced better traffic surveillance and monitoring to the city of Tianjin. Traffic management was a priority under **Vietnam II**, too, especially through the

successful introduction of computer-controlled traffic lights in Hanoi (population 1.4 million), which led to average trip time savings of 30 percent, well above the 10 percent targeted.

Compared with other Regions, MDP coverage of slum upgrading was thin, although **Philippines I** supported investments in this area across 74 municipalities. This focus was also found under **Indonesia V** in Kalimantan. The most successful component of the latter MDP was the **Kampung Improvement Program** in five municipalities, a program component that the Bank has supported for more than two decades throughout the country. In contrast, an activity supported in East Asia but not found often elsewhere was the support under **China I** that enabled twice the coverage by Beijing’s interconnected district heating network.

#### **Services—Private provision**

Very few MDPs focused attention on expanding the role of the private sector in providing municipal services. Consequently, IEG found few examples of significant results in this area within the Region. Efforts were made through some MDPs to stimulate private commercial operations in service delivery by closing old municipal service departments and replacing them with agencies, such as the Beijing Drainage Company under **China I** and the Shanghai Public Transport Company under **China II**, but these new enterprises remained firmly harnessed to the state sector. The first steps toward a private-public partnership in water supply at the municipal level were taken in Shandong Province under **China XIII**.

#### **Income level of beneficiaries—Poverty reduction**

Few MDPs in the Region—mostly those in Indonesia and the Philippines—focused clearly on the urban poor. **Indonesia VIII**, for instance, supported 18,000 infrastructure microprojects that had been identified by participatory community development plans in low-income urban areas. **Indonesia V**, particularly through its *kampung* improvement program of upgrading low-income areas with basic services, is estimated to have benefited nearly half the population of the

**Box C.1: Key to MDPs Referred to in Text**

**China:** I—Beijing Environment; II—Shanghai Metropolitan Transport; III—Tianjin Urban Development Project; IV—Zhejiang Multicities Development; V—Southern Jiangsu Environmental Protection; VI—Shanghai Environment; VII—Second Shanghai Metropolitan Transport; VIII—Liaoning Environment; IX—Enterprise Housing and Social Security Reform; X—Yunnan Environment; XI—Hubei Urban Environment; XII—Chongqing Industrial Pollution Control and Reform; XIII—Shandong Environment; XIV—Liaoning Urban Transport; XV—Sichuan Urban Environment; XVI—Chongqing Urban Environment; XVII—Urumqi Urban Transport; XVIII—Shijiazhuang Urban Transport; XIX—Tianjin Second Urban Development; XX—Wuhan Urban Transport; XXI—Chongqing Small Cities Infrastructure Improvement; XXII—Liuzhou Environment Management; XXIII—Second Shang-

hai Urban (APL). **Indonesia:** I—Sulawesi—Irian Jaya Urban Development; II—East Java/Bali Urban Development; III—Semarang Surakarta Urban Development; IV—Surabaya Urban Development; V—Kalimantan Urban Development; VI—Second East Java Urban Development; VII—Second Sulawesi Urban Development; VIII—Urban Poverty; IX—Municipal Innovations; X—Western Java Environmental Management; XI—Second Urban Poverty; XII—Urban Sector Development and Reform. **Korea:** Pusan Urban Transport. **Mongolia:** Urban Services Improvement. **Philippines:** I—Third Municipal Development; II—Local Government Unit Finance and Development; III—Support for Strategic Local Development and Investment. **Vietnam:** I—Water Supply; II—Urban Transport Improvement; III—Urban Upgrading; IV—Coastal Cities Environmental Sanitation.

Source: IEG.

five client municipalities in Kalimantan. **Philippines I** started out with a strong focus on benefiting the poor, but this became less clear in the face of incentives for municipalities to embark on revenue-generating subprojects that would benefit higher-income groups.

### Conclusions

- In countries with unitary municipal administrations for very large cities (even megacities), such as China, the retail approach to strengthening municipal management can be an appropriate model.
- MDPs have enabled many municipalities to strengthen their management of service provision, especially for improving the urban environment. The sectoral focus varies across countries in the Region, pointing to possibilities of fruitful exchanges of successful experiences among them.
- Results in strengthening municipal finances have been less evident across this Region, calling for more MDP efforts to enhance revenue mobilization for municipalities to fund the O&M necessary to sustain the service provision achievements obtained thus far.



APPENDIX D: BANKING ON MUNICIPALITIES:  
WORLD BANK SUPPORT IN EUROPE AND CENTRAL ASIA

### Bank Support

More than 280 million people live in cities in the Europe and Central Asia Region—64 percent of the total population. Through 28 MDPs active during the 1998–2008 decade, the World Bank made commitments of \$1.7 billion. This portfolio aimed to strengthen the management of 292 municipalities in 16 countries. By number of MDPs, the most active borrowers were the Russian Federation (4 projects), Bosnia and Herzegovina (4), Georgia (3), Turkey (3), Kazakhstan (2), and the Kyrgyz Republic (2). The remaining 10—Armenia, Croatia, Kosovo, Latvia, Lithuania, Poland, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan—hosted 1 MDP each. Thus, half of the Region’s MDPs were in upper-middle-income countries. Countries in the Region with large urban populations but no Bank-financed MDPs are Romania and Belarus.

### Portfolio Performance

Sixty-three percent of completed MDPs achieved satisfactory outcomes, and the percentage of satisfactory Bank and borrower performance was a little higher. These figures are somewhat below the Bank-wide averages.

Among successful cases in the Region’s portfolio, **Russia IV** stands out for its outcome rating of highly satisfactory. The project considerably strengthened the financial management of the newly created municipality of Kazan (population 1.2 million) by helping local officials organize and unify municipal accounts, debts, and other obligations. The municipality turned a deficit into a small surplus. Outstanding payables, a major problem at the outset, were substantially reduced. Two-thirds of the project funding was used for urgent repairs to abandoned and

Completed (number)	16
Completed MDPs (% satisfactory)	63
Ongoing MDPs (number)	12
IBRD commitments (US\$ million)	1,496
IDA commitments (US\$ million)	207
Bank commitments per completed MDP (US\$ million)	36
Commitments per ongoing MDP (US\$ million)	94
Wholesale MDPs (number)	6
Retail MDPs (number)	22
Countries served (number)	16
Municipalities served (number)	292

*Source:* World Bank data.

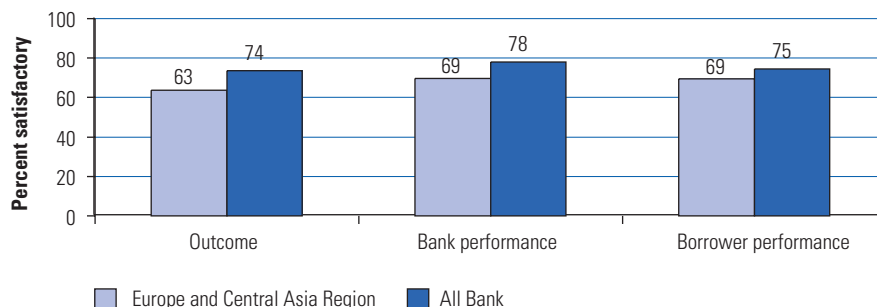
*Note:* IBRD = International Bank for Reconstruction and Development; IDA = International Development Association; MDP = municipal development project.

derelict schools and health centers, bringing them back into full use. Kazan considerably improved its asset management, divesting some unnecessary inventory. Real estate assets remaining on the municipal books are now leased at 90 percent of their market values, up from 50 percent prior to the project.

Other successful examples included **Bosnia and Herzegovina I**, which helped develop a municipal credit market as intended. In the process, it strengthened financial management both by the municipalities and by five commercial banks that entered this market for the first time, making 28 loans for \$13.3 million.

**Turkey I** helped improve the efficiency of water use in municipalities by substantially improving worker productivity per connection as well as the bill-collection ratio. The **Kyrgyz Republic** project

**Figure D.1: MDP Portfolio Performance, Fiscal 1998–2008**



Source: IEG special study.  
 Note: MDP = municipal development project.

was successful in separating road planning, budgeting, and contract administration from road construction, as intended, and it helped the municipalities of Jalalabad, Bishkek, and Osh set up their own passenger transport authorities to plan, contract, and monitor the private provision of local services. **Georgia III** helped nine municipalities, housing three-quarters of the country’s urban population, to become creditworthy and particularly increased the effectiveness of their delivery of street paving and water supply services.

At the same time, three MDPs turned in a weak performance. The **Poland MDP** had little impact

on the development of a commercial credit market for municipal investment. Its performance was undermined by a 1999 Finance Law that prevented municipal borrowing, and the project disbursed very little. The **Kazakhstan** project failed to promote efficient municipal management of social assets divested by state-owned enterprises, mainly because the project gave insufficient attention to the financial challenges the municipalities faced. The **Lithuania MDP** did not strengthen municipal management, as intended, because the Association of Local Authorities of Lithuania, slated as the executing agency for the project, lacked the necessary capability and resources to perform this function effectively.

**Table D.2: Municipal Management Focus of Region Portfolio**

Share of all MDPs with a project design focus on:	Completed	Ongoing
<b>City planning</b>		
In objectives (%)	25	33
In components (%)	56	67
<b>Municipal finance</b>		
In objectives (%)	75	25
In components (%)	75	92
<b>Service delivery</b>		
In objectives (%)	88	83
In components (%)	81	92
Number of all MDPs	16	12

Source: IEG special study.  
 Note: MDP = municipal development project.

**Better City Planning**

*More information*

Few MDPs in the Region aimed specifically to strengthen information systems for municipal management and planning. But the need for such information was acute in **Georgia** in the mid-1990s; three successive MDPs in that country introduced computer equipment and made municipal information more transparent under the law. However, much progress remains to be made, and Georgia can learn from other good experiences, such as Chile’s Information System on Municipalities. **Russia I** successfully created a territorial information and analytic system for land, real estate, and infrastructure and a developer’s manual, both of which have

had a positive impact on the housing market and have become valuable references for potential foreign investors and other parties.

### **Monitoring and evaluation**

M&E design in MDPs, as for many other projects, was often weak because it focused on the delivery of component outputs rather than achieving project outcomes. Even some output indicators were not always clear or measurable, lacking baseline and endline (target) data. This prevented M&E implementation and use as a feedback mechanism to inform and improve project performance. M&E in the **Latvia** and **Kosovo** projects did not distinguish between output and outcome indicators. These projects especially lacked those indicators that could measure actual institutional improvements against those planned and relied too heavily on users' opinions, expressed through beneficiary assessments. Performance indicators could not be measured for lack of data—for example, on municipal action plans in the **Kyrgyz Republic MDP** or on municipal finances under the first Georgia MDP. During **Georgia II** and **III**, M&E focused more on management information on municipalities, and this information slowly became available in the country. The lack of baseline data undermined the effectiveness of M&E in the **Turkey MDP**, which did not explicitly cite preproject levels of pollution in the Sea of Marmara, for instance.

The **Kazakh MDP's** M&E could not capitalize on technical assistance relating to financial management methods and was unable to produce monitoring data on a continuous basis to measure its operating performance. **Russia IV** in Kazan, in contrast, incorporated a strong M&E system, whose design included easy-to-measure indicators such as municipal debt and level of targeted cash-transfer subsidies that were also part of the conditions of tranche release of the structural adjustment design of this loan.

### **Urban and spatial planning**

Most MDPs in the Region did not include significant urban planning activities. An exception was **Russia I** in St. Petersburg, which drafted several

laws to aid the planning process in improving the availability of serviced land. The laws had yet to be ratified at the time of project completion.

### **Investment planning and strategies**

By training 550 staff in 30 municipalities, **Kosovo's MDP** helped prepare five-year rolling financial plans for the first time and incorporated community inputs through participatory processes. The **Kyrgyz Republic MDP** helped Jalalabad and Bishkek municipalities prepare plans for financing and contracting urban road building, which was separate from the construction itself.

## **Stronger Municipal Finances**

### **Better financial management**

Several MDPs achieved positive results in this area. Among the most notable was **Russia IV** in Kazan, where project technical assistance helped local staff unify the municipal accounts for the first time and make them more transparent. Among other things, computerized accounts allowed Kazan's employees to receive their salaries on time.

Other experiences show that equipment, technical assistance, or training alone is not enough to ensure better financial management. Initially, municipalities made limited use of computing equipment provided through **Georgia I**. **Uzbekistan's MDP** did not lead to improved financial management by the municipal solid waste utility, despite the technical assistance provided. The actual modernization of municipal management did not occur in the **Turkmenistan's MDP** without the widely expected devolution of responsibilities to the local level. Under the **Kazakhstan** project, municipal water utilities did not implement modern financial management techniques, for which training was provided, because of discontinuities in leadership. Similar weaknesses in the **Latvia MDP** were partly overcome by twinning the Daugavpils city water utility with the water works of the city of Tampere in Finland.

### **Mobilizing own revenues**

The Region's MDP portfolio obtained some good results in this area. Technical assistance through

Bank supervision of **Russia IV** helped Kazan find alternative sources of revenue, which were urgently needed, as large federal transfers were soon to lapse. Municipalities participating in **Georgia II** increased own-source revenues by 11 percent during 1998–2002, compared with a decrease of 16 percent for other municipalities, thanks in part to the incentives to become creditworthy.

The **Kyrgyz Republic MDP** helped establish urban road funds and raised taxes threefold on private vehicles. The **Uzbekistan MDP** did not succeed in establishing a stable self-financing mechanism for solid waste management through planned tariff adjustments, although a last-minute reprieve prevented the operation's collapse. Specific cost recovery from MDP investments themselves obtained good results in the **Turkey MDP**, where the Bursa municipal water and sanitation utility successfully maintained tariffs at levels sufficient to meet its financial obligations.

#### ***Municipal creditworthiness and debt management***

Under **Georgia I** the Municipal Development Fund of Georgia became Georgia's main funding source for municipalities and an instrument for strengthening municipal management. Today the fund has become the government's principal agency for financing major development programs beyond just municipal development. The latest **Georgia III** project saw 9 municipalities, home to 73 percent of the urban population, become creditworthy, also giving some of them access to additional concessional funding. Under the previous **Georgia II**, some municipalities had overborrowed and defaulted on their loan repayments.

Technical assistance to 32 municipalities and, most significantly, to 5 commercial banks under **Bosnia and Herzegovina I** helped municipalities become more creditworthy by increasing revenue collections and helping banks understand their debt portfolio better. The government supported a similar approach under the **Kyrgyz Republic MDP**, partly in the hope of reducing the financial burden of subsidies. The

potential foreign exchange risk inherent in external funding of municipal credit does not appear to have constrained municipal creditworthiness in the Region. In Poland, with memories of that country's recent high inflation, commercial banks tried unsuccessfully to transfer this risk to equally reluctant municipalities, stalling project implementation. But in most other countries, central governments and their agents have been willing to assume this risk.

#### ***Private finance participation***

To date, MDP efforts and results in getting private finance into municipal services have been limited. Poland's project did not succeed in channeling private bank funds into municipalities because of the overall project failure. Private funding of Tashkent's solid waste management under **Uzbekistan's MDP** could not proceed while the operation continued to operate at a loss. Private funding of Kazan's water utility under **Russia IV** was held back because the public operator received support from other donors.

#### ***Improved Service Provision***

##### ***Investment priorities***

As in other Regions and sectors, few MDPs gave much attention to estimating ERRs, either at appraisal or at completion. To be eligible for project financing, **Bosnia and Herzegovina I** did require participating municipalities to demonstrate that subprojects achieved at least 12 percent ERR, but information on the actual rates achieved was not systematically monitored. After a poor start in neglecting ERR estimates in its earlier projects, **Georgia III** ensured that all subprojects met minimum rates of return. The **Kyrgyz Republic MDP** also reported, thanks to huge savings in operating costs, high ERRs for its urban road investments in Bishkek, Jalalabad, and Osh.

Although the project itself was barely implemented, the **Poland MDP** did lead commercial banks to require that municipalities' proposals for subprojects meet minimum ERR requirements. Unconvincing reasons for the lack of ERR estimates in this Region are similar to

those given in other Regions, such as Bank guidelines not requiring them for emergency projects and lines of credit.

### **Procurement**

Several MDPs gave municipalities a first opportunity to become involved in the competitive procurement of works and services, with some positive results. Under **Russia IV**, Kazan municipality voluntarily adopted local competitive bidding—not required with a structural adjustment loan—which resulted in lower-price contracts. Sole-source purchasing was reduced from 55 percent of total to 25 percent, which was better than the target of 35 percent.

The **Uzbekistan** project introduced international competitive bidding to Tashkent municipality that resulted in significant cost savings in the acquisition of a new fleet of 270 solid waste collection vehicles. **Georgia III** enabled municipalities to play a greater role in procurement than had been possible under the earlier operations, although local management there still needs to be strengthened more. More centralized political arrangements in some of the Region's countries leave procurement as a government responsibility.

### **Operations and maintenance**

There was little evidence of MDP attention to ongoing O&M. In the **Kyrgyz Republic MDP**, however, each participating municipality had to adopt a prioritized five-year road maintenance program for its urban roads and streets. The **Uzbekistan MDP** established a repair and maintenance depot, generously equipped with spare parts at the outset, to keep the fleet of new solid waste collection vehicles on the road. Under the **Latvia MDP**, the lack of such a facility put the vehicles of one major Riga bus company at risk.

### **Services—Most affected sectors**

Among all activities undertaken, the projects performed best in improving services and related infrastructure, especially for urban street paving and drainage, neighborhood upgrading, and basic sanitation and other environmental improvements. **Georgia II** successfully completed 89

subprojects in 11 municipalities, with two-thirds of project investment in Tbilisi and three-fourths of investments in road rehabilitation and water supply. The greatest improvements were in urban road paving and clearing blocked drainage that caused periodic flooding.

Under **Georgia I**, during the country's post-independence phase, infrastructure and services were preserved and improved for power, heating, and water. The Tbilisi Metro, which is used by 90 percent of the city's population, was "rescued" through the emergency funding of signaling systems and spare parts. Dysfunctional sewerage systems in the municipalities of Batumi and Poti were restored to working order, though service levels were still short of desired goals. Restoring heating to hospitals and school buildings in five municipalities allowed continued operation throughout the winter.

The **Kazakhstan** project allowed the water utility to supply good quality drinking water to 37,000 people in two municipalities. The project's cleanup of sewage spills had an immediate health impact: between 1999 and 2002, the number of dysentery cases fell from 83 to 8, and typhoid cases fell from 83 to 0. According to the beneficiary assessment of the **Kosovo MDP**, 90 percent of respondents felt that the 115 (mostly school and water supply) subprojects implemented in 30 municipalities did respond to their needs; 84 percent were satisfied with results that they felt helped reduce water-borne diseases.

The **Kyrgyz Republic** project exceeded its target by substantially improving 105 kilometers of roads, making the municipalities of Jalalabad, Bishkek, and Osh more accessible. **Latvia's MDP** helped improve drinking water quality, and untreated water was no longer being discharged into the Daugava River. The **Lithuania MDP** contributed only modestly to improvement in conditions of municipal service infrastructure, but it did help reduce street lighting energy costs in Vilnius. The **Turkmenistan** project helped increase bus and trolley services in Ashgabat, fully meeting targets, as well as contributing to enhanced reliability and frequency of services.

**Box D.1: Key to MDPs Referred to in Text**

**Armenia:** Third Social Investment Fund Project. **Bosnia and Herzegovina:** I—Local Development Project; II—Community Development Project; III—Solid Waste Management Project; IV—Urban Infrastructure & Services Project. **Croatia:** Coastal Cities Pollution Control Project. **Georgia:** I—Municipal Infrastructure Rehabilitation Project; II—Municipal Development Project; III—Second Municipal Development & Decentralization Project. **Kazakhstan:** I—Social Protection Project; II—Atyrau Pilot Water. **Kosovo:** Second Community Development Fund. **Kyrgyz Republic:** I—Urban Transport Project; II—Small Towns Infrastructure & Capacity Building Project. **Latvia:** Municipal Services Development Project. **Lithuania:** Municipal Development Project. **Poland:** Municipal Finance Project. **Russia:** I—St. Petersburg Center City Rehabilitation Project; II—Northern Restructuring Project; III—St. Petersburg Economic Development Project; IV—Kazan Municipal Development Project. **Tajikistan:** Municipal Infrastructure Project. **Turkey:** I—Bursa Water & Sanitation Project; II—Municipal Services Project and Istanbul Municipal Infrastructure Project; III—Turkmenistan Urban Transport Project. **Ukraine:** Urban Infrastructure Project. **Uzbekistan:** Tashkent Solid Waste Management Project.

Source: IEG.

Wastewater collection systems and networks with 80 percent treatment were put in place in Bursa city under **Turkey I**, which led to increased service coverage between 1993 and 2000—from 93 percent to 97 percent of the population for water supply and from 73 percent to 82 percent for sewerage. Over the same period, unaccounted-for water fell from 65 percent to 45 percent. **Uzbekistan** obtained positive environmental results by helping restore Tashkent's solid waste management system. For the most part, the environmental impacts of roads, water, and solid waste subprojects of **Georgia I–III** were positive, especially through improving air and water quality in the poorer neighborhoods of the beneficiary municipalities.

#### **Services—Private provision**

Private provision of services was relatively low among this Region's MDPs. The **Kyrgyz Republic MDP** helped three municipalities—Jalalabad, Bishkek, and Osh—establish passenger transport authorities and plan, contract, and monitor the private provision of services. Construction is now awarded to private contractors, and major equipment has been sold to the private sector.

Under **Turkey I**, the Bursa Metropolitan Municipality contracted waste collection and landfill operations to private contractors. It also promoted private participation for meter

reading, billing, and invoicing. The **Turkmenistan MDP** helped increase private participation of the suburban and intercity transport to 70 percent, but greater effort could have been made at deregulation, to allow greater competition. Under the **Uzbekistan** project, an international tender in 2003 for the private operation of Makhstrans's Chilanzar and Shaihantaur districts of Tashkent failed to yield any bids because of doubts about the profitability of the operations without subsidies.

#### **Income level of beneficiaries—Poverty reduction**

Only four MDPs have explicit poverty-reduction objectives. The **Kosovo MDP** broadly met its Regional poverty goals. The project directed the majority of its social services toward the disabled, women, and youth and generated 26,188 days of temporary employment. But there is less evidence on outreach to other vulnerable groups such as widows, victims of conflict, inhabitants of remote villages, and so forth.

Under **Russia IV** in Kazan, the newly created Municipal Department of Social Protection identified eligible poor recipients through the municipality's new computerized database of 23,900 assisted families to replace earlier untargeted subsidies with direct cash payments, which also produced an overall savings to the municipality.

Several "one-stop shops" were created to provide these services to the beneficiaries.

### Conclusions

- By continuing to do more wholesale MDPs that emulate the successful cases in this Region, positive MDP impact can be broadened to benefit more municipalities.
- New MDPs could make better and more intensive use of simple ERR estimates to determine investment priorities and measure efficiency of results.
- M&E of new MDPs needs to be stronger than in the past, especially in measuring the achievement of objectives through quantified baselines and targets.



## APPENDIX E: BANKING ON MUNICIPALITIES: WORLD BANK SUPPORT IN LATIN AMERICA AND THE CARIBBEAN

### Bank Support

Latin America and the Caribbean is the most urbanized of the Bank's Regions. Currently, some 435 million people, 78 percent of the total population, live in cities. The urban population now grows at only half the annual rate of the 1970s.

During the past decade (1998–2008), the World Bank had a portfolio of 36 active MDPs and committed \$2.6 billion to them. The Region's MDPs aimed to strengthen the management of 1,098 municipalities in 13 countries. The most active borrowers were Colombia (7 projects), Brazil (5), Honduras (4), Venezuela (3), Peru (3), and Argentina (3). Mexico, Ecuador, Chile, Bolivia, Nicaragua, Haiti, and Belize had 1 or 2 projects each. Half the MDPs were in higher-middle-income countries; the other half—except Haiti (low-income)—were in lower-middle-income countries. The Region's MDP portfolio covered all countries in the Region with large urban populations.

### Portfolio Performance

The Region's MDP portfolio has a strong performance record, with 86 percent of completed operations rated satisfactory. This Region reports the best MDP performance among the six Bank Regions.

An outstanding performer, rated highly satisfactory, was **Colombia II**. It successfully strengthened the capacity of institutions in charge of planning, managing, and maintaining urban transport infrastructure in Bogotá (population 7.1 million). This MDP lowered sector administration costs from 17 percent in 1996 to 10 percent in 1998, and road maintenance costs

**Table E.1: Summary of MDP Portfolio 1998–2008**

Completed MDPs (number)	21
Completed MDPs (% satisfactory)	86
Ongoing MDPs (number)	15
IBRD commitments (US\$m)	2,485
IDA commitments (US\$m)	166
Commitments per completed MDP (US\$ million)	86
Commitments per ongoing MDP (US\$ million)	56
Wholesale MDPs (number)	16
Retail MDPs (number)	20
Countries served (number)	13
Municipalities served (number)	1,098

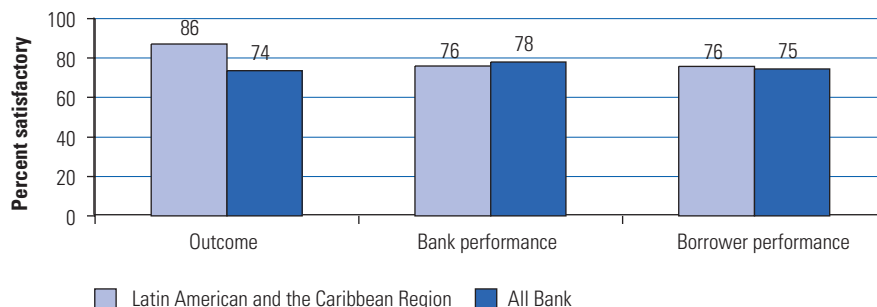
*Source:* World Bank data.

*Note:* IBRD = International Bank for Reconstruction and Development; IDA = International Development Association; MDP = municipal development project.

were lowered by 77 percent, despite a sevenfold increase in the network between 1996 and 1999.

**Venezuela I** introduced basic infrastructure on a large scale to low-income barrios in 45 municipalities across the country, benefiting 66,000 poor families; this was 43 percent above target. The project exposed these municipalities to lending operations for the first time, supporting their financial management and revenue growth through detailed technical assistance. **Colombia I** and its follow-on **Colombia IV** together helped create a local credit market among 179 municipalities around the country, although municipal demand for credit was weaker than expected. Municipalities with conservative financial administrations were reluctant to take on debt, and other creditworthy borrowers had alternative sources of credit. Between them, **Brazil I** and **III**, in the states of Minas Gerais and Bahia, respectively, brought technical assistance for improving

**Figure E.1: MDP Portfolio Performance, Fiscal 1998–2008**



Source: IEG special study.  
 Note: MDP = municipal development project.

financial management to 179 municipalities, each using a wholesale arrangement through their state intermediaries.

Among the most important physical results obtained were improvements in the urban environment that were attained through basic sanitation investments financed by the projects. Valuable results in the form of a nationwide municipal information system came from **Chile II**. A wholesale operation on a larger scale involving 77 municipalities, the **Bolivia MDP** helped strengthen administrative and financial controls. It also focused physical investment on basic sanita-

tion in the poorer municipalities, especially in the Beni region. **Ecuador I** successfully helped make the fiscal transfers to municipalities more transparent, as intended, while helping improve the administrative efficiency of 99 municipalities throughout the country.

In contrast, three MDPs had unsatisfactory outcomes. The **Haiti** operation (retail) failed to expand the water supply to the capital Port au Prince or make it more efficient. Water metering targets were not met, and illegal consumption continued unabated. Most of the loan for **Mexico I** was cancelled, as six municipalities on the U.S. border region were unprepared to meet the project’s environmental requirements, in compliance with the norms of the North American Free Trade Agreement. Deteriorating national economic conditions undermined the ability of **Mexico II** to finance the modern municipal solid waste landfills, although there was some progress in improving municipal planning of solid waste management, thanks to project technical assistance that went ahead. The Bank was slow to restructure the project, which resulted in the cancellation of 70 percent of the loan.

**Better City Planning**

*More information*

There were few instances in the Region of MDPs generating or using information for planning. Chile was a notable exception. **Chile I** and **II**

**Table E.2: Municipal Management Focus of Region Portfolio**

Share of all MDPs with a project design focus on:	Completed	Ongoing
<b>City planning</b>		
In objectives (%)	43	33
In components (%)	24	87
<b>Municipal finance</b>		
In objectives (%)	71	20
In components (%)	43	47
<b>Service delivery</b>		
In objectives (%)	90	60
In components (%)	95	87
Number of all MDPs	21	15

Source: IEG special study.  
 Note: MDP = municipal development project.

launched and consolidated the National System for Municipal Information (SINIM), which has reported about the situation and performance through more than 250 indicators for all 345 municipalities since 2000. Available over the Internet, SINIM covers local finances, administration, health and education services, spatial planning, poverty, other social indicators, as well as geographic characteristics of all Chile's municipalities. But **Colombia III** failed to create a national environmental information system based on municipalities, because the Ministry of the Environment did not play the coordination role expected of it. **Brazil I** and **III**, in the respective states of Minas Gerais and Bahia, implemented similar databases at the state level and helped individual municipalities build their own information systems.

Most progress in compiling information was made by extending and consolidating local property tax registers, or cadastres. **Colombia II** improved these to such an extent that it exceeded its target of updating 4.5 million title registers by 57 percent. At the municipal level, performance in using the additional information for strong taxation flows varied.

### **Monitoring and evaluation**

As in other Regions—and other sectors, too—MDPs in this Region obtained at best modest results in designing, implementing, and using M&E. The usual culprits were found: focus mainly on outputs rather than outcomes, lack of baseline data to compare against actual achievements, and inadequate collection of data on actual project performance.

Under **Argentina I**, a well-conceived logframe with performance indicators was established at midterm review for infrastructure works, but a similar effort for institutional development was less successful. Under **Brazil II**, the M&E framework to verify the achievement of project objectives was weak. Under **Brazil III**, three years after Board approval, the Bank and borrower agreed to adopt a set of indicators to monitor outputs and outcomes. However, actual outcome data appeared infrequently and

seemed inconsistent, providing only anecdotal evidence of increased tax-collection rates, improved health conditions, and improved access to water and sanitation services.

Under **Chile I**, a lack of M&E on outcomes meant that claims of strengthened municipal management as a result of project technical assistance on information technology could not be substantiated. Even **Chile II**, which otherwise excelled in providing information for planning, did poorly on M&E. Its design included 18 performance indicators, but these were mostly about the delivery of outputs, such as the number of municipalities served and the number of technical assistance contracts made. The two indicators that came closest to monitoring achievement of project objectives were those that considered municipal own-source revenues and municipal operational surpluses.

**Honduras** also lacked explicit and quantifiable indicators able to demonstrate progress toward sustained coastal tourism in the project region. For **Mexico II**, the logframe developed during supervision was specified only in broad terms. The Implementation and Completion and Results Report cites several examples of project outputs used to justify conclusions on outcomes. **Venezuela II** lacked appropriate performance indicators altogether, but **Venezuela III** paid more attention to the design of the M&E system. However, it was barely used, as baseline data were not collected because of lack of inadequate resources.

### **Urban and spatial planning**

Although nine MDPs had objectives focused on strengthening municipal planning, there is little evidence of what was actually achieved. **Colombia III** led to the preparation of 17 municipal environmental plans and the incorporation of environmental aspects into land-use plans.

### **Investment planning and strategies**

IEG found limited evidence of achievements in this area. One reported instance was **Argentina I**, which helped many municipalities plan cost-effective investment programs.

## Stronger Municipal Finances

### *Better financial management*

The majority of MDPs in this Region aimed to improve municipalities' financial management, starting with better accounting and financial reporting systems. On balance, the results from these efforts have been positive, sometimes with valuable demonstration effects on municipalities that were not part of the projects. **Bolivia I** helped 77 municipalities strengthen their financial control systems.

**Brazil I** in Minas Gerais provided technical assistance for financial management to about 50 municipalities, a good number but well short of the ambitious plans to cover all urban municipalities in the state. Under **Chile I**, municipal practices and technical capacity have been improved, and equipment (computers, communications, drivers' license testing) has been updated. Similar improvements were reported under **Mexico I**. In addition, **Venezuela I** provided on-the-job learning opportunities for 45 municipalities to manage credit operations for the first time.

### *Mobilizing own revenues*

Through technical assistance, **Bolivia I** municipalities improved their resource mobilization. **Brazil II** reported that 26 municipalities assisted by the project increased their own revenues more than other municipalities, but IEG found the statistical significance of this evidence questionable.

More significant is that own revenues for project municipalities grew faster than higher-level transfers over the 2001–03 period. Under **Brazil III**, a survey indicated that the majority of participating municipalities increased efficiency in financial management and tax administration and showed a sustained increase in the collection of property taxes and services between 1996 and 2000. Under **Ecuador I**, of a random sample of 99 municipalities, 53 percent had doubled revenues in real terms over the project period.

### *Municipal creditworthiness and debt management*

Several MDPs successfully introduced municipal-

ities to credit operations, providing them with assistance for managing such operations. In particular, **Colombia I** and **IV** effectively established a local credit market with the official Local Development Fund, called FINDETER; this currently has a credit rating of AAA, refinancing commercial bank loans to municipalities to fund their investments in infrastructure and services. One municipality, Pereira (population 0.4 million), was able to issue bonds that were oversubscribed, and another (Barranquilla, population 1.4 million) was able to pay off its short-term debt thanks to project advice on portfolio management.

**Brazil I, II, and III** enhanced the credit management capabilities of poor municipalities especially, as did **Ecuador I**. But such efforts to consolidate local credit in the Region have been thwarted in recent years by national efforts to control fiscal deficits at the local level. In Chile, borrowing by municipalities is forbidden altogether.

### *Private finance participation*

Progress in this direction was not widely achieved through MDPs. **Colombia IV**, however, helped municipalities increase water, gas, and solid waste tariffs, for instance, making some services profitable for private investors. This situation continues to this day, although services are less affordable to the poor. Average household expenditure on basic sanitation rose by 204 percent between 1997 and 2003. Attempts to stimulate private funding and operation of municipalities made little headway under **Brazil I and III**, mainly because of a lack of interest by the municipalities themselves. **Venezuela II** found a similar reluctance toward privatization of urban transport.

## Improved Service Provision

### *Investment priorities*

About half the completed MDPs reported ERR estimates at appraisal and completion. High ERRs (34–42 percent) at completion were estimated for basic sanitation and slum upgrading investments under **Venezuela III** and **Brazil I and III**.

Strong ERRs (29–34 percent) were also reported for municipal urban transport investments under **Colombia II** and **Venezuela II**. MDPs that did not report internal rates of return at completion included **Mexico I** and **II**, **Ecuador I** and **II**, **Argentina I**, and **Honduras II**. Operations such as these, which included investment in municipal infrastructure and services, would have been amenable to simple estimates of ERRs that would have informed the evaluation about performance efficiency.

### Procurement

With long histories of decentralized municipal responsibilities, many municipalities have significant experience with managing procurement. Nevertheless, **Brazil II** did introduce 49 poorer municipalities in the state of Ceará to handling competitive procurement for works. Similarly, **Venezuela I** helped 45 municipalities learn to manage procurement themselves as decentralization gathered pace in that country.

### Operations and maintenance

Although municipalities are typically responsible for O&M of infrastructure and services within their jurisdictions, few MDPs paid attention to this aspect of municipal management. One exception was **Venezuela I's** provision of technical assistance and training to participating municipalities for carrying out urban road maintenance activities, affecting 360 kilometers of pavement. Another was **Venezuela III**, which tried to build up local O&M capabilities but came up against municipalities' unwillingness to curtail investments by allocating more resources to O&M, especially at times of financial crisis in the capital Caracas (population 1.8 million).

### Services—Most affected sectors

As in other Regions, the most popular services provided through MDPs included urban transport, slum upgrading, basic sanitation, solid waste management, and other urban environmental improvements.

Municipalities were able to improve urban transport through MDPs across the Region. **Colombia II**, for instance, brought the very

successful *Transmilenio* bus-operated public transport to Bogotá (population 7.2 million), leading other municipalities, including Barranquilla (population 1.4 million), Pereira (population 0.4 million), and Cali (population 2.4 million), to plan similar bus projects. There was also interest from other countries. Through financing and training of 250 municipal staff, **Venezuela II** enabled municipalities to make simple traffic management improvements such as road signals, intersection improvements, and rationalization of bus routes to reduce traffic congestion. In **Belize**, street and traffic improvements—including traffic signal systems, improved street drainage, widened sidewalks for pedestrians, and bicycle lanes—had a positive impact on road safety.

According to two surveys made at the completion of **Brazil III**, respiratory and intestinal diseases were reduced in municipalities in Bahia state in low-income areas where street paving had reduced dust particles and basic sanitation had prevented the pollution of the water supply by sewage. In contrast, sewage treatment remains a major challenge in the Region. Pereira is still without sewage treatment for its 440,000 inhabitants, who live in an ecologically sensitive zone, despite the successful participation of the municipality in several projects, including **Colombia I**. Similar shortcomings in final sewage treatment were evident under **Brazil I**, which nevertheless brought other basic sanitation improvements to 150 municipalities in the state of Minas Gerais. The introduction of the final disposal and treatment facilities for solid waste proved challenging under **Mexico I**, where deteriorating macroeconomic conditions meant that only three of the seven facilities intended were built, and only partially.

Other urban environmental improvements introduced by MDPs included, in **Colombia II**, controls over discarding used tires and batteries, as well as the reduction of noise pollution by urban traffic through the deployment and use of new monitoring equipment. Other MDPs helped reinforce municipal management of the urban environment. Thus, **Colombia III** helped 17 municipalities prepare environmental plans, and

**Box E.1: Key to MDPs Referred to in Text**

**Argentina:** I—Second Municipal Development; II—Basic Municipal Services; III—Subnational Government Public Sector Modernization. **Belize:** Belize City Infrastructure. **Bolivia:** I—Municipal Development; II—Urban Infrastructure. **Brazil:** I—Minas Municipal Development; II—Ceará Urban Development & Water Resource; III—Bahia Municipal Infrastructure Development & Management; IV—Bahia Poor Urban Areas Integrated Development; V—Recife Municipal APL. **Chile:** I—Municipal Development; II—Second Municipal Development. **Colombia:** I—Municipal Development; II—Bogota Urban Transport; III—Urban Environment; IV—Urban Infrastructure Services Development; V—Bogota Urban Services Project; VI—Integrated Mass Transit Systems; VII—Disaster Vulnerability Reduction Project. **Ecuador:** I—First Municipal Development; II—Environmental Management. **Haiti:** Port-au-Prince Water Supply. **Honduras:** I—Natural Disaster Mitigation; II—Sustainable Coastal Tourism Project; III—Barrio Ciudad; IV—Water & Sanitation Program. **Mexico:** I—Solid Waste; II—Northern Border Environment. **Nicaragua:** Natural Disaster Vulnerability Reduction. **Peru:** I—Lima Transport; II—Vilcanota Valley Rehabilitation & Management; III—Second Real Property Rights. **Venezuela:** I—Low-Income Barrios Improvement; II—Urban Transport; III—Caracas Slum Upgrading.

Source: IEG.

the **Ecuador MDP** helped 23 municipalities establish specific Environmental Management Units within their municipal administrations.

#### **Income levels of beneficiaries—Poverty reduction**

About one-third of MDPs in the Region had objectives explicitly focused on assisting the urban poor. Even for **Argentina I**, an MDP that was not specifically poverty focused, about one-fifth of the beneficiaries were poor. **Bolivia I**, which emphasized beneficiary participation in the choice of investments, made most investments in municipalities where poor people lived, such as in the Beni region of the Amazon.

Under **Brazil I**, municipalities in Minas Gerais state invested in lower-standard basic sanitation and upgrading only of interest to lower-income groups. **Brazil III** went one stage further in urban poverty mapping of the changes brought about by municipal investment in street paving, provision of drainage, and water supply and sanitation; however, the mapping was discontinued because of lack of resources. The poverty impact of **Colombia I's** work with 179 municipalities can be inferred from national data, which show that service coverage for those in the lowest quintile of income distribution improved significantly between 1993 and 2003, from 80 percent to 91 percent for electricity, 77

percent to 83 percent for basic sanitation, and 18 percent to 33 percent for fixed-line telephones. **Colombia II** survey data showed that most users of the *Transmilenio* urban transport system in Bogotá are within the two lowest quintiles.

#### **Conclusions**

- Doing more wholesale MDPs and scaling them up is likely to yield positive results in a Region where 100 percent of wholesale MDPs obtained satisfactory outcomes.
- More can be done to disseminate the good MDP practices in the Region. Globally, municipalities in other Regions could benefit from this experience in municipal information systems, municipal creditworthiness and financial management, urban transport, and poverty reduction. Within the Region itself, the Bank is poised to share MDP experiences among borrower countries. Finally, within individual countries, national and state authorities have opportunities to share and exchange experiences among municipalities from different parts.
- Successful experience from other Regions can be put to good use in those areas where shortcomings have been noted in the Region, such as in M&E, private financing of municipal services, O&M, and key environmental services, such as sewage and solid waste disposal and treatment.

## APPENDIX F: BANKING ON MUNICIPALITIES: WORLD BANK SUPPORT IN THE MIDDLE EAST AND NORTH AFRICA

### Bank Support

About 180 million people live in cities in the Middle East and North Africa Region, about 57 percent of the total population. During the decade 1998–2008 the World Bank had a portfolio of 18 MDPs spanning 8 countries in the Region. The Bank commitments of \$845 million focused on strengthening the municipal management of 379 municipalities in Tunisia (4 projects), West Bank and Gaza (4), the Republic of Yemen (3), Jordan (2), Lebanon (2), the Arab Republic of Egypt (1), the Islamic Republic of Iran (1), and Morocco (1). More than 70 percent of the projects are in lower-middle-income countries, 17 percent in low-income countries, and 11 percent in upper-middle-income countries. The Region's portfolio covered all countries in the Region with large urban populations (15 million plus) except for Algeria.

### Portfolio Performance

Some 63 percent of completed MDPs in the Region achieved satisfactory outcomes. Bank performance was also satisfactory 63 percent of the time. These ratings are below Bank-wide averages. In contrast, 88 percent of MDPs have satisfactory borrower performance, well above the Bank average. The disconnect reflects good efforts by the borrower in West Bank and Gaza, where exogenous factors of conflict prevented commensurate project outcomes.

The strongest performing MDPs in the Region, each awarded satisfactory ratings for their outcomes and Bank and borrower performance, were in Tunisia and the West Bank and Gaza. **Tunisia I**, a wholesale operation assisting 257 municipalities throughout the country, produced

**Table F.1: Summary of MDP Portfolio, 1998–2008**

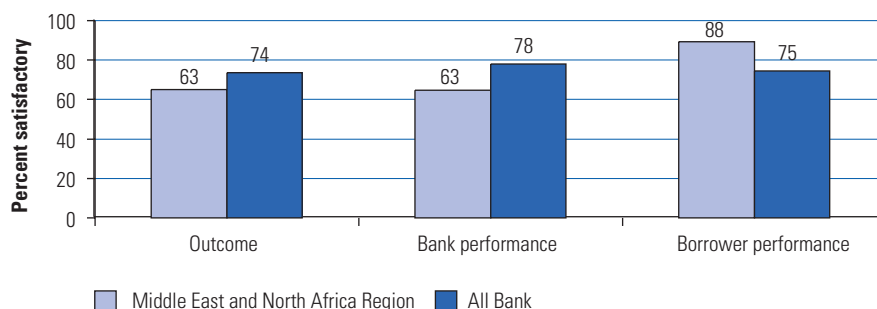
Completed (number)	8
Completed MDPs (% satisfactory)	63
Ongoing MDPs (number)	10
IBRD commitments (US\$ million)	652
IDA commitments (US\$ million)	94
Bank commitments per completed MDP (US\$ million)	37
Commitments per ongoing MDP (US\$ million)	55
Wholesale MDPs (number)	6
Retail MDPs (number)	12
Countries served (number)	8
Municipalities served (number)	379

Source: World Bank data.

Note: IBRD = International Bank for Reconstruction and Development; IDA = International Development Association; MDP = municipal development project.

excellent results that continue more than eight years after completion. Not only did MDP-participating municipalities increase their own revenues more than other municipalities, but the participants also produced a current surplus that was twice the target. The project helped the remote municipality of Kasserine (population 82,000) upgrade the Ezzouhour district of town and kept it in good condition through careful maintenance, sometimes involving local residents.

**West Bank and Gaza III** succeeded in meeting more modest objectives that focused on repairing municipal infrastructure damaged during the *intifada* rather than providing completely new services. Despite the difficult circumstances of its implementation, the project succeeded in making timely and effective repairs, thanks in part to strong and enthusiastic local leadership.

**Figure F.1: MDP Portfolio Performance, Fiscal 1998–2008**


Source: IEG special study.

Note: MDP = municipal development project.

Weaker performance was turned in by the **Morocco MDP**, which failed to improve the housing stock of the ancient city of Fez (population 964,891) as intended. Public-to-private leverage of investments for the rehabilitation of the Medina is likely to remain at a 1:1 ratio, well below the projected target of 1:13. However, the Fez municipality was consolidated through the amalgamation of six local governments around the time of project restructuring in 2003, and municipal management improved on the technical but not the financial side. **West Bank and Gaza I** also performed poorly. The start-up was at the time of the 2000 *intifada* and the Israeli

military response to it. Because of events beyond the control of the project, the MDP was unable to assume any effective role in the national system of central and local government that the project hoped to constitute.

## Better City Planning

### More information

MDPs in the Region rarely set out to make more information available for municipal management. The best results were obtained under **Tunisia I**, although they could have been made more widely available to the municipalities themselves to help them improve their management. Instead, detailed information on municipal financial performance remained in the hands of the national Municipal Funding and Support Agency. A newer operation, **Jordan I** aims to improve information on municipal finances at the national level, as well as information for asset management at the municipal level, too.

### Monitoring and evaluation

There is little information on the extent to which M&E frameworks were designed and used in projects in this Region. Wherever performance indicators were available, they mostly related to outputs (in the form of delivery of project components) rather than outcomes (in the form of achievement of project objectives). Even in such cases, baseline data were rarely available.

**Table F.2: Municipal Management Focus of Region Portfolio**

Share of all MDPs with a project design focus on:	Completed	Ongoing
<b>City planning</b>		
In objectives (%)	25	20
In components (%)	38	30
<b>Municipal finance</b>		
In objectives (%)	50	20
In components (%)	75	92
<b>Service delivery</b>		
In objectives (%)	100	70
In components (%)	100	80
Number of all MDPs	8	10

Source: IEG special study.

Note: MDP = municipal development project.

The **Republic of Yemen I**, for instance, did not have baseline data on before-project conditions to track the impact of new pipelines and household connections on improving water supply. In **Tunisia II's** M&E, the chosen performance indicators measured project outputs, such as the provision of project technical assistance, rather than moving toward the project objective of increasing the efficiency of public sector management at the municipal level, for which no baseline condition or targets were specified in the project design. IEG estimated that this project alone accounted for one quarter of all municipal investments in the country during the 1997–2003 period of its implementation. Despite this high profile, M&E was unable to show what impact the project had, only the levels of municipal services in the country as a whole.

**West Bank and Gaza IV** operated under the very difficult circumstances of the *intifada*. In the rush to plan and deliver emergency services at the outset, baseline indicators were not adequately set up. Overall, there was a persistent inadequacy of information about government processes, including budget and transfer data that should have improved under the project.

### **Urban and spatial planning**

Little was achieved in strengthening municipal planning capabilities in the Region. Under **West Bank and Gaza I**, three municipalities prepared three-year development plans for the first time.

### **Investment planning and strategies**

This too was not a common feature of MDPs in the Region. **Tunisia II** required 76 municipalities to prepare investment plans to be eligible for project funding of municipal infrastructure, but it is not clear how many actually did prepare them.

## **Stronger Municipal Finances**

### **Better financial management**

Under **Tunisia I** and **II** during 1993–2003, financial management by many of the 257

municipalities assisted by the projects improved, which led to better financial results. Stronger financial management was initially the outcome of rapid loan disbursements to finance priority local investments, which then progressed to the adoption of computerized accounting in 32 municipalities for the first time and to three-year budgeting and of outsourcing municipal services.

The municipality of Ariana (population 237,395) became one of the country's top 10 tax-collection districts—it ranks 23rd in population—after making its own tax administration more efficient, following intense training its officials had at the new municipal training center specially created by the project. Altogether, 10,000 local and central government staff received project training that covered more than 50 percent of all municipal staff in Tunisia at the time.

Under **Republic of Yemen I**, municipal management of the local water supply became a reality as the water authority of Sana'a (population 1.9 million) became a fully autonomous corporation able to cover operating costs for the first time in this sector; this also happened in 12 other municipalities. Municipal financial management began to improve under **West Bank and Gaza II**, as local governments began to institute solid waste collection fees, for instance, but the deteriorating security situation after 2000 stalled further progress.

### **Mobilizing own revenues**

**Tunisia I** produced excellent results that continue to this day. Not only did participating municipalities increase their own revenues more than other municipalities, but the participants produced current surpluses that were twice the target. In the municipality of Monastir (population 64,222), for instance, municipal own revenues as a share of the total rose from 30 percent to 38 percent between 1991 and 1998. Resources for Tunisian municipalities enabled them to finance more investments than initially expected. Under **Tunisia II**, several municipalities were able to use these additional revenues to pay off short-term debts and build up net

savings. **Morocco's MDP** helped improve cost recovery and contributed to mobilizing internal and external resources in a nondeficit, noninflationary way to help finance minor investments by the municipality of Fez. This was a positive result for a project that otherwise failed to achieve its objectives.

#### ***Municipal creditworthiness and debt management***

**Tunisia I** introduced 257 municipalities to the management of credit. As the agency responsible for implementing the project and collecting municipal debt service, the Municipal Funding and Support Agency saw its own creditworthiness enhanced when it obtained a credit rating of AA+ and successfully issued its own bonds in the local market, to the value of \$23.5 million.

#### ***Private finance participation***

Only a few of the Region's MDPs assigned a specific role for private sector funding to help strengthen municipal management. Apart from the bond issue under **Tunisia I**, there is little evidence of a concerted effort by MDPs in the Region to stimulate private funding of municipal services at all. Even under that project, only minor private financing occurred at the municipal level, such as for detailed service design work for historic sites in Monastir. Significant private participation in municipal water authority in Sana'a has yet to occur as the **Republic of Yemen I** had hoped. Under **West Bank and Gaza II**, private financiers on whom the project design had initially relied to fund some municipal investments shied away as the conflict worsened in 2000.

### **Improved Service Provision**

#### ***Investment priorities***

Only two MDPs used estimates of ERRs to assess the priority of the project investments at appraisal and to measure the efficiency of project achievements at completion. Following careful analysis at completion, the **West Bank and Gaza III** yielded a very high ERR of 55 percent, exceeding even the appraisal estimate of 47 percent.

Project improvements to road and water infrastructure in 10 municipalities that accounted for 76 percent of all project costs generated very strong benefit streams, when compared with the dire without-project counterfactual. At completion, **Republic of Yemen I** yielded a 28 percent ERR (up from 25 percent at appraisal) that demonstrated the significant benefits obtained when municipal water supply shifts from high-cost tanker delivery to low-cost network provision. As well as demonstrating the positive results of the projects themselves, these examples demonstrate the feasibility of estimating ERRs even in the most challenging circumstances.

#### ***Procurement***

There is little evidence of municipalities taking charge of procurement in a Region where this has largely remained a responsibility of central government authorities. Under **Republic of Yemen I**, delays were caused by the division of procurement responsibilities between the autonomous water authority for the municipality of Sana'a and the Ministry of Energy and Water. The ministry finally oversaw the international competitive bidding for the works, which led to cost savings at the outset, but these were offset by unfavorable foreign exchange rate movements.

#### ***Operations and maintenance***

There were mixed results in this Region. Under **Tunisia I**, for example, the remote municipality of Kasserine (population 82,000) upgraded the Ezzouhour district of town and kept it in good condition through careful maintenance, sometimes involving local residents. But performance at the municipal level can vary under the same project. Thus, officials of the municipality of Ariana (population 237,395) saw the advantages of neglecting routine maintenance in upgraded areas. They felt that leaving drains blocked and pavement broken gave them a better chance of receiving central government aid to finance a complete replacement. The main shortcoming of the otherwise successful **Republic of Yemen I** was its inability to provide for adequate ongoing O&M of the facilities built under the project.

### **Services—Most affected sectors**

Municipal infrastructure and services constituted the most numerous objectives in MDPs of the Region. The sectors for which MDPs sought strengthened municipal management in the Region included low-income neighborhood upgrading, urban street paving and drainage, water supply and basic sanitation, as well as other environmental improvements such as solid waste management.

MDPs achieved mixed results in upgrading and urban street and road improvements. **West Bank and Gaza I**, for instance, attended to planned rehabilitation work as well as subsequent damage caused by conflict. This would be done through 54 damage repair subprojects in 9 municipalities, sometimes exceeding targets, as in the case of 184 kilometers of roads built against a target of 100 kilometers. However, later border closures prevented the use of physical assets, which would deteriorate through lack of upkeep. **West Bank and Gaza III** successfully completed two road projects (13.2 kilometers) and rehabilitated 67 kilometers of roads. These improvements reduced travel costs and times by almost 50 percent in the project area.

**West Bank and Gaza IV** reached 61 municipalities through 2,200 subprojects in water and sanitation, roads, electricity, and solid waste, but the full extent to which this augmented services is not fully known. Under **Tunisia I**, the number of subprojects financed and their outlay exceeded expectations by 250 percent and 50 percent, respectively, but their impact on service levels was not fully documented. Improved streets gave people better access to their homes and businesses, as well as providing drainage and proper public lighting in central and residential areas of the client cities. A participatory approach adopted by many municipalities encouraged communities to contribute to the costs of some improvements, as IEG saw in Kasserine; there, 50 community leaders met with local officials to identify the priority investments for their own neighborhoods. This dialogue appears to have

developed greater understanding of the need for cost recovery. Twice as much in direct taxation was collected in Kasserine after the project as before.

**Republic of Yemen I** helped improve the living conditions in the Akama neighborhood of Sana'a by reducing raw sewage flooding in residential areas, thanks to 7,500 additional households being connected to the sewerage system, seven times the original target. Water supply also increased, though not as much as targeted, because only 5,000 households of the targeted 18,500 were connected. However, despite replacing 21,500 water meters and rehabilitating 30 kilometers of pipelines, the project did not succeed in reducing unaccounted-for water.

**West Bank and Gaza II** constructed or rehabilitated 64 kilometers of water lines (as well as 77 kilometers of roads, which was several times the original targets), but it is not clear if this was due to any dilution in design criteria. **West Bank and Gaza III** expanded the water network in several small settlements that reported 90 percent of their population receiving a 24-hour piped water supply. The extent of this achievement cannot be fully evaluated, however, for lack of baseline data about the level of before-project service, or even data on the population served.

### **Services—Private provision**

MDPs in the Region did not put much emphasis on increasing the private provision of municipal services, and there was little progress where such attempts were made. Under **Republic of Yemen I**, the intended private management of the Sana'a water agency had yet to be implemented and the government remained uncommitted. Under **West Bank and Gaza II**, renewed conflict in 2000 precluded any increase in private sector participation.

The otherwise very successful **Tunisia I** made little progress in improving the incentive framework for building partnerships with the private sector and municipalities. Under **Morocco's MDP**, both the government's commitments for the rehabilitation process and

**Box F.1: Key to MDPs Referred to in Text**

**Arab Republic of Egypt:** Alexandria Development. **Islamic Republic of Iran:** Urban Upgrading & Housing Reform. **Jordan:** I—Regional & Local Development; II—Cultural Heritage, Tourism & Urban Development. **Lebanon:** I—First Municipal Infrastructure; II—Cultural Heritage & Urban Development. **Morocco:** Fes Medina Rehabilitation. **Tunisia:** I—Municipal Sector Investment; II—Second Municipal Development; III—Transport Sector Investment; IV—Third Municipal Development. **West Bank and Gaza:** I—Municipal Development; II—Bethlehem 2000; III—Second Municipal Infrastructure Development; IV—Emergency Municipal Services Rehabilitation. **Republic of Yemen:** I—Sana’a Water Supply & Sanitation; II—Taiz Municipal Development & Flood Protection; III—Port Cities Development Program.

Source: IEG.

projections for leveraging private sector investments fell far short of expectations during the project period, and it appears too early to assess whether projections made at project closing will be realized to any significant extent.

#### **Income level of beneficiaries—Poverty reduction**

There was no explicit focus on the income levels of beneficiaries or on poverty reduction in most MDPs in the Region. Even in the few cases where this was directly or indirectly attempted, the results fell short of targets. **West Bank and Gaza IV** managed to create 270,000 person-days of employment for unskilled workers, but this was short of the target of 400,000, after some of the resources allocated to employment generation were transferred to service provision instead.

Under **Morocco’s MDP**, only 20 percent of the beneficiaries were classified as poor. Under **Tunisia I**, there was no clear focus on poverty

reduction. Several stakeholders, especially in the municipalities themselves, appeared to be unfamiliar with the Bank’s mission relating to poverty reduction and saw no contradiction in project investment being made in higher-income areas.

#### **Conclusions**

- Development programs in the Region can make more use of municipalities as partners in service provision, even where central governments prefer to retain overall responsibility themselves.
- Robust evidence from the Region shows that MDPs can improve the performance of municipal finance, and the potential for strengthening this dimension of municipal management appears to be under-exploited.
- Frequent claims that M&E and ERR exercises are too complex and costly to implement in volatile country conditions are not borne out by experience in this Region, where a few experiences have been quite successful.

## APPENDIX G: BANKING ON MUNICIPALITIES: WORLD BANK SUPPORT IN SOUTH ASIA

### Bank Support

Although South Asia is one of the world's less urbanized regions, more than 431 million people, 29 percent of the total population, live in the Region's cities. Through just 12 MDPs active during the past decade (1998–2008), the World Bank committed \$1.3 billion. This small portfolio aimed to strengthen the management of 146 municipalities in 6 countries. By number of MDPs, the most active borrowers were India (4 projects); Pakistan (3); and Bangladesh (2); Afghanistan, Bhutan, and Sri Lanka hosted 1 each. Thus, all but two of the Region's MDPs were in low-income countries. With an urban population of 4.5 million—16 percent of the total—Nepal was the only large country in the Region not to host an MDP.

### Portfolio Performance

Only three of the seven completed MDPs in this Region (43 percent) achieved a satisfactory outcome, making this the weakest of the Bank's Regional MDP portfolios. Only four of them had satisfactory ratings for both Bank and borrower performance.

The only fully satisfactory completed operation in the portfolio was **India II**, which set up a municipal development fund that financed investments by municipalities in the southern state of Tamil Nadu. This operation built on more than 20 years of continuous Bank assistance to the urban development of Tamil Nadu and its capital Chennai. By introducing computerized accounting and modern financial management methods, **India II** helped 45 municipalities in the state prepare "corporative development plans" to help determine their priority investments. This support also helped Tamil Nadu's

**Table G.1: Summary of MDP Portfolio, 1998–2008**

Completed (number)	7
Completed MDPs (% satisfactory)	43
Ongoing MDPs (number)	5
IBRD Commitments (US\$ million)	671
IDA Commitments (US\$ million)	673
Commitments per completed MDP (US\$ million)	88
Commitments per ongoing MDP (US\$ million)	146
Wholesale MDPs (number)	4
Retail MDPs (number)	8
Countries served (number)	6
Municipalities served (number)	146

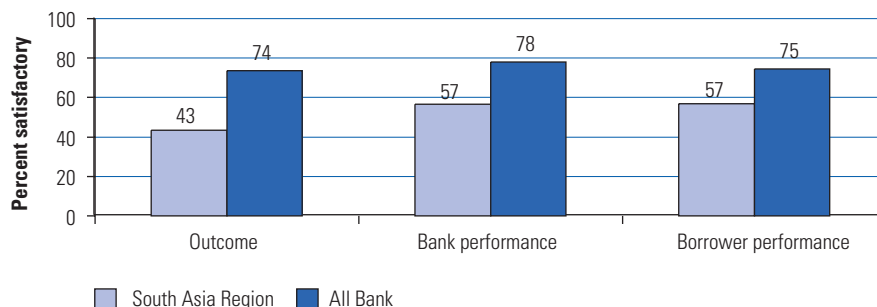
Source: World Bank data.

Note: IBRD = International Bank for Reconstruction and Development; IDA = International Development Association; MDP = municipal development project.

second-largest city Madurai (population 909,908) successfully issue municipal bonds for the first time, to finance an inner ring road.

Several MDPs performed poorly. Implementation of **Bangladesh I** was hostage to land-acquisition problems and a lack of coordination between borrower agencies, resulting in resettlement not complying with Bank guidelines. In addition, municipal financial management remained weak. **Sri Lanka's MDP** suffered from poor design that did not take into account the public opposition to the project's plans for solid waste disposal. The design was also based on an incomplete understanding of the baseline water quality of the polluted Beira Lake in the capital Colombo (population 2.3 million) that the project aimed to improve. The municipal management in Colombo barely changed as a result of the project.

**Figure G.1: MDP Portfolio Performance, Fiscal 1998–2008**



Source: IEG special study.  
 Note: MDP = municipal development project.

**Pakistan II** did not succeed in the Northwest Frontier largely because efficiency criteria for selecting subprojects and financing them were outweighed by political factors that determined the choices made. **Bhutan’s MDP** did not succeed primarily because the design overestimated the management capabilities of local municipalities.

### Better City Planning

#### More information

**India II** provided technical assistance to 50 municipalities, called urban local bodies in Tamil

Nadu. As a result, 46 local municipalities have prepared city corporate plans with a mapping of urban infrastructure using important baseline data. However, these plans have yet to become key drivers of local municipal development, even though they have facilitated municipal access to loans by the Tamil Nadu Urban Development Fund, itself established by an earlier MDP project. The need for systematic data collection is now better appreciated; in fact, the State Municipal Administration and Water Supply Department plans to assist local municipalities prepare a human development index for such basic services as water supply, sanitation, health, poverty alleviation, and access to basic needs.

**Table G.2: Municipal Management Focus of Region’s Portfolio**

Share of all MDPs with a project design focus on:	Completed	Ongoing
<b>City planning</b>		
In objectives (%)	29	0
In components (%)	0	67
<b>Municipal finance</b>		
In objectives (%)	57	60
In components (%)	43	60
<b>Service delivery</b>		
In objectives (%)	100	100
In components (%)	100	100
Number of all MDPs	7	5

Source: IEG special study.  
 Note: MDP = municipal development project.

Under the **Sri Lanka MDP**, the Colombo master plan benefited from the project’s provision of a geographic information system for the Urban Development Authority, but little expertise was passed on to the Colombo municipality that is responsible for cadastral and land-use applications for the geographic information system.

#### Monitoring and evaluation

M&E was weak in MDPs. Its weakness came from too much focus on the delivery of project outputs and too little on project impacts gained through achieving the MDP objectives. This M&E shortcoming was even evident in the otherwise well-performing **India II**, which gave little attention to measuring the achievement of municipal service improvements, let alone the

impact on beneficiaries. For instance, a completed bus stand was treated as fully achieved, even though it had not started functioning because it did not have the necessary official permits. Even targets that had measurable goals did not have baseline data to compare against.

However, some evaluation studies carried out at the end of **India II** to inform the follow-up project did provide useful information on urban environmental indicators. Some of the larger municipalities collect regular and reliable information on service status and achievements, such as water supply per capita per day, though this is still not typical of most municipalities in the state. In **Pakistan II**, too, the M&E system was overly focused on inputs and outputs, and even data that were collected were not used to improve implementation.

Under the **Sri Lanka MDP**, the lack of baseline data on the original condition of the Beira Lake water and the absence of systematic monitoring of changes to it made it impossible to assess properly the results obtained through the project.

### **Urban and spatial planning**

Apart from the update to the Colombo master plan under the **Sri Lanka MDP**, there was not much evidence of MDP impact on this in the Region.

### **Investment planning and strategies**

**India II** in Tamil Nadu provided consultant technical assistance to and facilitated exchanges among 45 municipalities to help each prepare corporate plans that set out their investment priorities for the following 10 years.

## **Stronger Municipal Finances**

### **Better financial management**

Significant efforts to improve financial management were mainly confined to India and Bhutan, with positive results in India but less so in Bhutan.

**India I** and **II** helped strengthen local municipal capacity in finance and accounting, including computerization. This occurred through training (35 freestanding courses) for finance and account-

ing officials, as well as for elected representatives. This training helped most local municipalities adopt the accrual accounting system and computerize the collection of municipal taxes and fees. Now the collection performance of several local municipalities can be monitored in real time, making information quickly accessible for decision makers at the municipal and state level. Compliance has become easier to monitor, and users find it easier to pay their taxes.

Under the **Bhutan MDP**, financial reporting during implementation was weak and was made worse by lack of technical support within the country for the computerized financial management system that had been customized for the project. On a related matter, much needs to be done to build financial systems for cost recovery.

### **Mobilizing own revenues**

Under **India I**, Tiruchirapalli municipality (population 775,484) reported an increase of 60 percent in revenue between fiscal 2004 and 2005. The municipality used the additional revenue to undertake new infrastructure investments of its own, such as the water supply in the Srirangam area. The Madurai municipality increased property tax collections by 20 percent during fiscal 2004–05, compared to 6 percent for the previous year. In terms of direct cost recovery from MDP investment, there is little evidence of significant results in the Region.

Under **India I**, little was done to simplify procedures for revising bus fares or to strengthen the transport corporation in Chennai (population 4.3 million), which continued to be a loss-making entity, unable to invest in or expand services. Under **Bangladesh I**, the cost-recovery component through Agrani Bank loans was cancelled, and the property tax collection system remained unchanged.

### **Municipal creditworthiness and debt management**

**India II** encouraged municipalities in Tamil Nadu to become creditworthy to have better access to loans awarded by the Tamil Nadu Urban Development Fund (TNUDF). Under this arrangement,

local municipalities were given easy access to discuss and access the TNUDF's knowledge base of innovative funding, for which there was a high demand. By March 2005, 39 percent of TNUDF's portfolio related to investments in bridges and roads, 38 percent to sewerage and sanitation, and 17 percent to water supply.

The state's second largest city, Madurai (population 909,908), went one step further. With technical assistance provided through the project, the municipality issued bonds to raise funds to pay for the construction of an inner ring road that today yields \$1.4 million per annum in toll charges.

### *Private finance participation*

MDPs in this Region did little to achieve private financing of projects. **India I** and **II** came closest by encouraging the TNUDF to create near-market conditions for municipal investment that would begin to interest private financiers. But **India I** failed to promote the intended private participation of shelter and land development in the slums of Chennai because of the lack of interest on the part of private developers.

### *Improved Service Provision*

#### *Investment priorities*

Estimates for ERRs were rarely made for MDPs in the Region. One exception was **Bhutan's MDP**, which yielded a 25.8 percent ERR at completion, according to government estimates.

#### *Procurement*

As in other Regions, MDPs involved local municipalities more in preparing and sometimes fully managing procurement. Although some shortcomings were still reported, the procurement experience of **Pakistan I** highlighted the effectiveness of spot checks, especially in the municipality of Lahore (population 6.3 million), on the good faith of bids. Such checks helped prevent insider trading and the formation of local cartels.

Under the **Sri Lanka MDP**, both the municipality of Colombo and the national authorities perfected their skills in prequalifying bidders, so that tenders always included high-quality techni-

cal solutions. The **Bhutan MDP** introduced competitive procurement for municipal works for the first time in that country, even though municipal capacity in this area remains weak.

### *Operations and maintenance*

MDPs in the Region rarely addressed municipal responsibilities for O&M, and this neglect remains an ongoing concern. Thus, the benefits from physical works under **Bangladesh I**, for instance, are unlikely to be sustained because of continued neglect of maintenance. Despite progress in improving sewerage under **Pakistan I**, there too municipalities' O&M is adequate. As result, the uncollected waste accumulating in sewers and drains undermines the benefits of the upgrading that was done.

### *Services—Most affected sectors*

MDPs in India, Bhutan, Bangladesh, Pakistan, and Sri Lanka helped improve urban services and related infrastructure. In Tamil Nadu, **India I** and **II** contributed positively to services, infrastructure, and security in slums and made some improvements to urban roads and transport services. The projects improved living conditions in 489 slums (against a target of 590), housing 76,000 people—or 5 percent of the slum population—in the 10 largest agglomerations in the state. This was done by providing paved pathways, drains, streetlights, public fountains and baths, and tenure security. Beneficiaries reported health improvements and greater social acceptance. There were some shortfalls in transport services: only 4 of 10 depots and 7 of 10 terminals were completed. The widening of the inner ring road in Chennai was only partially completed because of difficulties in acquiring necessary land. For the transport corporation in Chennai, 1,595 bus chassis were procured, but they could not all be used because of financial constraints.

Under **Pakistan I**, about 300,000 low-income people in Lahore, Gujranwala, Sialkot, and Multan benefited from slum upgrading. In Lahore, 21 major roads were improved and new street lighting and traffic signals were installed. But the construction of stabilization ponds for sewage treatment in Lahore was deferred for a

later project. **Pakistan II's** upgrading reportedly reached 90 communities with 550,000 beneficiaries and engaged in road construction that saved travel time and improved environmental conditions, but evidence for these assertions was not always clear. They must be in doubt, given the reports of lack of coordination among stakeholders and of failed project infrastructure that had to be rebuilt prematurely.

Following **Bangladesh I**, 90 percent of slum dwellers in three Dhaka slums (Islambagh, Raulpur, and Shaheednagar) reported improved living conditions through construction of 482 latrines. But the project faced implementation shortfalls, again because of difficulties in acquiring land. The **Bhutan MDP** helped improve the quality of life in 10 towns through enhancements to water supply and other urban infrastructure, although the results were short of targets. The project experience enabled municipalities there to participate in the environmental screening of subprojects. Under the **Bhutan MDP**, there was improved interaction between central and local governments on the environmental screening of urban investments. A beneficiary survey revealed that 73–83 percent of respondents in 3 towns considered the water supply to have improved, but this result has to be set against surveys in towns that were not covered by the project that also reported similar improvements.

The **Sri Lanka MDP** did not improve solid waste management in Colombo, despite the city building a large-scale compost operation, which the Bank had initially suggested was not the best technical solution to the problem. The project had greater success in reducing wastewater pollution in the Beira Lake catchment area. An industrial waste system was completed under the project, and several lakeside dwellings were hooked up to the sewerage system.

### **Income levels of beneficiaries—Poverty reduction**

There is evidence that the modest results of the Region's MDP portfolio did nevertheless bring some benefits to the poor. **Pakistan II** aimed to reach low-income groups in the Northwest

### **Box G.1: Key to MDPs Referred to in Text**

**Afghanistan:** Kabul Urban Reconstruction. **Bangladesh:** I—Urban Development; II—Municipal Services. **Bhutan:** Urban Development. **India:** I—Tamil Nadu Urban Development; II—Tamil Nadu Second Urban Development; III—Karnataka Municipal Reform; IV—Third Tamil Nadu Urban Development. **Pakistan:** I—Punjab Urban Development; II—Northwest Frontier Province Community Infrastructure; III—Punjab Municipal Services Improvement. **Sri Lanka:** Colombo Environment Improvement.

*Source:* IEG.

Frontier Province, but the effectiveness of poverty targeting was unclear because of political interference in beneficiary identification. Improvements in living conditions cannot be attributed to the project.

Under **India I**, a cross-subsidy from the sale of a small number of lots for middle- and higher-income households helped finance a number of serviced plots for the poorest households, which included common open spaces that made best use of the land available. Under **India II**, benefits reached the poor through slum upgrading in particular. Also an integrated sanitation program provided public complexes with toilets and washing areas in underserved areas such as slums. Beneficiaries—who are typically poor—reported a substantial improvement in their quality of life. As a result, open defecation was reported to have decreased by 80 percent.

### **Conclusions**

- The positive experiences of **India I** and **II**, involving almost 20 years of continuous Bank assistance to urban development in the state of Tamil Nadu, suggest that adapting a wholesale, step-by-step approach to a particular context over a sustained period can yield positive results.
- **India II** has contributed to improving urban infrastructure services in Tamil Nadu, directly through projects funded by TNUDF and indirectly through capacity building in municipalities that have made additional infrastructure investments using their own funds.

- Even in projects that otherwise perform weakly, municipal management can be strengthened by increasing the responsibilities of local government for procurement of works and goods, as experience in Bhutan and Sri Lanka showed. To minimize risks, spot checks can be necessary, such as those made in **Pakistan I**.

### Principles

As a meta-evaluation, this assessment was designed to assemble and review existing IEG evaluation findings about Bank support for MDPs from Project Performance Assessment Reports (PPARs) and IEG Reviews of Implementation Completion Reports (ICR Reviews). As such, it is analogous to a literature review, where the literature in this case consists of previous IEG assessments, particularly in PPARs.

The 1998–2008 period of the review, chosen for its immediate relevance to ongoing work in this area, encompasses a portfolio of all MDPs completed since 1998, as well as those still ongoing. MDPs that *exited* between 1998 and 2008 generally have an ICR, a self-evaluation prepared by the Bank’s Operations Region, and an ICR Review, an independent assessment done by IEG based on the ICR. About one-third of the *closed* MDPs were approved within the same decade; the approvals of the remaining two-thirds in some cases dated as far back as 1988. This study considered all MDPs that were completed since 1998 and those that are still ongoing.

### Municipalities and Cities

The study used the online World Gazetteer database in Germany, which contains details of more than 167,000 named municipalities. Records include census populations, geographic coordinates of location, and the type of local authority, in English and in the local language. In extracting municipality-level population figures from this database, IEG found that 31,000 larger municipalities, each having 12,500 or more inhabitants, were home to 3.25 billion people, approximately half the world’s population, and

very close to the 50 percent now reported to live in urban areas.

The correspondence is not exact, however, for three reasons. First, a larger urban municipality with an extensive jurisdiction might contain some rural inhabitants on its periphery, especially if the jurisdiction is large. Second, because concepts of urban population vary from country to country, a local definition of “urban” may not always be comparable with the criterion used in this study. Third, it will not be the case of a single metropolitan area composed of multiple municipal jurisdictions—in such cases, there would be one city, yet many municipalities. IEG’s methodology may overstate the number of cities, because it counts peripheral rural populations in larger municipalities as urban. To ensure that estimates of the number of cities are reliable, IEG triangulated the results with estimates of the urban population from the World Development Indicators. The calibration at the country level confirmed IEG estimates for this study to be within  $\pm 10$  percent of the World Development Indicators estimates.

### The MDP Portfolio

The study portfolio of MDP operations was identified through an internal Bank database. As a first cut, IEG identified 231 operations classified by one of the Bank’s four related activity codes: #71 Municipal Management, #72 Municipal Finance, #73 Municipal Services, and #74 Subnational Government Administration. Then IEG conducted a keyword search for projects without these codes, but with the words *municipal* (and variants), *city/cities*, *local government*, and *local authorities* to identify projects that worked closely with municipalities and cities, but

not classified as such by one of the Bank's activity codes.

Next the study team eliminated 68 of these operations after finding that they did not have municipal management objectives or components despite the activity coding. That left 163 MDP projects.

IEG sent the preliminary listings (by Region) of this portfolio to Bank urban staff in each Operational Region, requesting that they help identify any Type I and Type II errors in the lists by pointing out operations that had been included that were not MDPs, and other operations that were MDPs but were not in the lists. Thanks to excellent responses, IEG was able to exclude some projects that did not fully meet the criterion of a direct focus on improving municipal management. IEG could also include additional projects overlooked in its first search, ones that lacked a municipal activity code but that were focused on strengthening municipal management. As a result of this dialogue with the Regions, 14 projects were dropped from the portfolio and 41 projects were added, resulting in a portfolio of 190 MDPs.

The final study portfolio of 190 MDPs included 114 *closed* MDPs and 76 *ongoing* MDPs. IEG project reviews are only available for *closed* MDPs, of course. *Entry* MDPs have not yet been evaluated by IEG, nor will they be through this study. But they are considered in the present study, where they stand as evidence of the lessons of evaluated *closed* MDPs being carried forward.

About 92 percent of the MDPs in the portfolio are mapped to the Sustainable Development Network. Sixty-six percent are mapped to the Urban Sector Board, with 12 percent to the Water Sector Board, 9 percent to the Transport Sector Board, and 5 percent to the Environment Sector Board.

### IEG Evaluations

During fiscal 1998–2008, IEG completed 17 PPARs—all in different countries, covering 24 MDPs, about one-fifth of completed MDPs. The MDPs chosen for the PPARs were not randomly

selected. When choosing them, IEG applied various considerations: providing input for IEG thematic studies and Country Assistance Evaluations as well as ensuring that all six Bank operating Regions were covered.

Criteria for selection of the 24 MDPs chosen for IEG field review through PPARs were varied. As far as this study itself is concerned, the most relevant criterion was to use the PPAR as an input. This applied to **The Gambia MDP, Tanzania I, Indonesia II, VI, and IX, Russia IV, and India I and II**. Others were chosen to feed into IEG Country Assistance Evaluations, including **Georgia I, II, and III and Colombia I and IV**. Some were selected from countries where IEG evaluations of urban projects had been thin, namely **China III, IV, and VII, Sri Lanka, and Uzbekistan**. The remaining projects were part of IEG's regular program of PPAR assessments.

Prior to this study and as per normal practice, IEG carried out 114 desk ICR reviews, covering 100 percent of the completed MDPs. From the ICR Reviews, information on the objectives, components, and lessons of each operation were compiled into the study database.

### Municipal Management Themes

To identify whether an MDP supported one of the study's three municipal management themes, IEG conducted keyword searches of the objectives formulated for each operation. When the appropriate keyword was found, the MDP was classified as being focused on the particular theme in question. For each theme, the following key words (in parentheses) were used: (i) *city planning* (plan\*, strateg\*, program\*, \*tech\*, \*inst\*, \*train\*, \*capa\*, \*manag\*); (ii) *municipal finances* (finance\*, fund\*, budget\*, fin\*/manag\*); and (iii) *service provision* (service, infras\*, water, env\*). Because the three are not mutually exclusive categories, it was possible for an individual MDP to focus on more than one theme at the same time.

IEG adopted a similar procedure to identify the relevance of the design of an MDP, through similar keyword searches of the description of a

project's components. As with the focus on objectives, an MDP's design could cover more than just one of the study's themes.

### **Levels of Assessment of MDP Portfolio**

The most intensive assessment in this study, presented in the main report, was based on earlier evaluation findings of the 24 MDPs reviewed by PPARs. The study also looked more broadly, reporting the findings in the Regional

annexes to this report, at evaluation findings of all 114 completed MDPs for which there are ICR Reviews. Finally, the study also considered, without evaluation, the 76 ongoing MDPs, in order to review how the current portfolio continues to address the issues raised by this evaluation. Among other things, the different sets of MDPs explain the discontinuous nomenclature of individual MDPs in the main report and the extra countries and MDPs referred to in the annexes.